



Town Council
Kathy Strom, *Mayor*
Linna Barnes, *Vice Mayor*
Patricia Burda, *Secretary*
David Lublin, *Treasurer*
Al Lang, *Community Liaison*

**Supplemental Comments on the County's
Proposed Changes to the Purple Line Functional Master Plan
Submitted by the Town of Chevy Chase
February 12, 2010**

The potential advent of the Purple Line light rail poses particular mitigation challenges to the Town of Chevy Chase due to the extremely narrow right of way adjacent to the Town's northern border.

The Town's Mitigation Advisory Group, made up of nine residents of the Town, has carefully reviewed and considered the State's proposal to put the light rail tracks on the south side of the right of way adjacent to the Town's northern boundary. Based on this review, we conclude that the State itself does not have sufficient or convincing data to recommend such a change. The results of the conceptual engineering that MTA is presenting and on which it urges the County to base its amendment of the Functional Master Plan are flawed. Therefore, we believe it is imperative that the County delay any action to amend the Functional Master Plan to accommodate the change of the light rail/Trail alignment at this time.

We submit these comments today to explain our position to the County and to supplement our earlier comments submitted on December 10, 2009.

Background: For the area adjacent to the Town's northern border, the County's Purple Line Functional Master Plan as amended in January 1990 calls for a pedestrian trail, easily accessible to residential properties on the south side of the right of way, which would safely co-exist with a single track trolley line on the northern, more commercial side of the right of way. The State is now asking that the Master Plan be amended again to include double-tracking and has proposed moving the Trail to the north side of the right of way, putting the light rail vehicles closer to the Town and its Edgevale neighbors. There is no proposal to change the alignment in other parts of the line between Bethesda and Silver Spring; the Trail will stay to the south side of the right of way further to the east of the Town where a crossover is proposed to occur.

The Town's Mitigation Advisory Group has met with Purple Line project manager Mike Madden and State consulting engineers to discuss the State's rationale for this proposal. The Advisory

Group then spent considerable time reviewing all reports and technical amendments recommended by the State. Our comments are based on the Advisory Group's findings following this careful review.

The Right of Way Adjacent to the Town: While recognizing that the Town is only one of several communities that border the 16-mile transit line, the segment of the line that abuts the northern boundary of the Town is unique and thus bears additional scrutiny.

- The right of way is exceptionally narrow (32 feet) near several Town homes on Elm Street where it then enters a tunnel; the rest of the right of way is only 66 feet. The southern portion of this has a very steep grade and drop-off along a large percentage of the right of way and a creek that is part of the Chesapeake Bay Watershed is at the base of that drop-off. Near Lynn Drive, the 66 foot right of way is tightly wedged between commercial buildings and an apartment complex on one side and Town homes within feet of the right of way boundary on the other. In general, there are only single family residential properties to the south of the right of way while a large part of the north side is commercial.
- Into that narrow right of way, the State proposes to place two light rail train tracks, catenary wires and poles, a pedestrian paved trail with safety buffers on both sides, an extensive ADA compliant ramped portion of the Trail that will be approximately two blocks long, and plantings, sound barriers, and retaining walls. The State has acknowledged that all trees will be removed within the right of way and that the canopy trees cannot be replaced. Finally, they have noted they will need easements on Town properties to accommodate the areas of disturbance associated with the construction of the rail line (i.e., more trees and plantings will be removed on private property to allow for construction).
- The State also proposes running the trains at maximum speeds of 50 mph within this right of way at 6-minute headways during rush hour (as a consequence, trains will pass through the right of way every 3 minutes). There are homes (not just yards, but actual houses) in the Town that will be literally within feet of trains running at those speeds; the same is true of Edgevale east of the Town.
- Additionally, one of the two access points for the Town to the Trail is proposed at Lynn Drive. The State's current proposal calls for an at-grade crossing to the Trail on the north side and to Montgomery Avenue and East-West Highway beyond. Unlike areas where the light rail will run on streets, following posted speed limits and traffic signage, *State engineers have stated that trains will be passing this access point at 45 mph.* That means that people will have to first traverse tracks with trains going that speed every 3

minutes to access the Trail or to make this crossing. That includes the numerous teenagers who use this crossing to get to Bethesda Chevy Chase High School, often in the dark morning hours.

Comments on the State's Rationale: MTA states that the primary reason for placing the Trail on the north side is to maximize the vertical and horizontal separation between the Trail and the trackbed, which MTA says would provide a better "trail experience." The decision seems not to be based on specific engineering or cost analyses. MTA says that locating the Trail to the north of the trackbed better follows the existing elevation of the surrounding land and keeps the Trail three to four feet above the trackbed, where possible.

But it is counterintuitive to locate a recreational trail close to a barren commercial strip instead of alongside a leafy residential community. Many Trail users have contacted the Town on this issue, in unanimous agreement that walkers, bikers, baby strollers and leashed dogs all prefer some semblance of the shaded trail they have enjoyed for years. Only a southern alignment for the Trail would provide that.

Likewise, it is unclear why the State couldn't/wouldn't provide an elevated Trail on the south side. Major re-grading of the area will occur in any event. We wholeheartedly agree with the planners' desire to provide a good and safe Trail experience, yet we conclude that a well-designed Trail alignment on the south side is capable of making the Trail experience better than or at least as good as a northern Trail alignment and is cost-comparable and a better environmental choice.

The MTA contractor's recommendation acknowledged that the Trail location on the north side of the right of way in Chevy Chase would cause the residents to lose the direct access to the Trail and would place the transitway closer to the residences on the south side. The Town believes that losing a more direct (and thus safer) access and placing the transitway closer to the residences will cause materially different safety and environmental consequences without substantially reducing the cost of construction. Denying the Town's 1,020 residences along with the residences of Edgevale direct access to a treasured recreational Trail and placing a transitway closer to those residences is hardly in line with the new federal policy of funding major transit projects that make communities more "livable".

Additional Town Concerns:

Along with the safety and access issues addressed above, the Town has significant concerns regarding noise and vibrations. The *Noise and Vibration Technical Report* of the AA/DEIS and the information provided to date does not provide sufficient data to allow the County or the Town to understand the noise impacts of the Purple Line on the Town. A south Trail alignment

would be inherently quieter and is key to mitigating noise and vibration impacts. But the Town has serious concerns about the State's noise study; an attachment to this report details these concerns. In short:

- It appears 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."
- It appears MTA did not take a single sound measurement within the Town of Chevy Chase, but simply assumed the Town is ordinarily as noisy as East-West Highway near Montgomery Avenue and Jones Bridge Road near Connecticut Avenue.
- It appears MTA assumed that trains will run down the center of the right-of-way rather than on a track, which understates noise reaching the Town.
- The *Technical Report* appears to assume single-tracking where MTA now proposes double-tracking. The *Report* states that a headway of 6 minutes means 10 trains per hour, not 20 trains per hour, which would occur with double tracking and therefore understates the noise reaching the Town by a further 3 dB(A). Since the noise model has not been made available to the Town, this simple error cannot be ruled out.
- It also appears the MTA underestimates noise emission from light-rail trains. It counts on the trains being quieter than the manufacturers themselves specify. MTA's 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.

The Town of Chevy Chase therefore requests that the State conduct new studies of noise and vibration using alignments individually optimized for the Trail being north or south of the tracks adjacent to the Town. 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. The County also needs these studies and more complete engineering details to make an informed decision on whether to amend the Purple Line Functional Master Plan.

Conclusion:

While the primary objectives of the Town of Chevy Chase are to ensure that the transit project in its entirety, the rail and the Trail, provides our Town residents (and Trail users) with a safe and environmentally benign transit alternative, we are cognizant and respectful of the goals of the entire 16-mile line. We firmly believe, however, that switching the alignment for this area

and putting the Trail on the south side in this narrow right of way will not impact the functionality of the entire line – but it does have significant impact on the “livability” of our community.

In summary, the Town of Chevy Chase asks that at this time the County deny the State’s request to amend the Purple Line Functional Master Plan to change the alignment of the train and Trail in the right of way adjacent to the Town until the State conducts sufficient preliminary engineering on *both* alternatives with the Trail fully optimized and elevated on both alignments. This preliminary engineering will give the County, the State and the Town the information we all need to compare the consequences, costs and trade-offs of each alignment.

Sent via email

February 10, 2010

Mr. Michael Madden
Project Manager
Maryland Transit Administration
mmadden@mtamaryland.com

Dear Mike –

The Town's Mitigation Advisory Group has carefully studied the *Noise and Vibration Technical Report* of the AA/DEIS and other information provided to us by the State in the context of the train/trail alignment question. Because so many of the State's conclusions about noise and vibration seem to us to be unsubstantiated or unclear, we ask that the State undertake additional noise studies on both alignments. The following issues illustrate the need for further noise studies:

1. **Not a single sound measurement was taken within the Town of Chevy Chase.** The 60 dB(A) of ambient noise attributed to the Town was synthesized from two uncharacteristic points elsewhere: the intersection of Montgomery Avenue with East-West Highway ("B") and near Connecticut Avenue at the intersection of the Columbia Country Club with Jones Bridge Road ("N-10A"). The interpolation within the Town was justified because of "similar traffic and geographic conditions" that prevail both along the Capital Crescent Trail within the Town and at these two sampled points. We do not believe that this is correct. If measured in accordance with the *FTA Handbook*, ambient day-night Ldn noise in the Town of Chevy Chase would be less than 50 dB(A), not 60.
2. **The 24 hour Ldn values cited for parks are suspiciously loud.** The lowest residential value measured, an Ldn of 53 dB(A), is remarkably high. We therefore have concerns about the calibration of the microphones employed by the contractor providing the noise analysis.
3. **The *Technical Report* appears to assume single-tracking, where MTA assumes double-tracking.** A headway of 6 minutes means 10 trains per hour, not 20 trains per hour. The noise reaching the Town would thereby be +3 dB(A) higher than claimed in the *Technical Report*. Since the noise model has not been available to the Town, we would appreciate your ruling out the possibility of this simple error.
4. **The *Technical Report* confuses a noise mitigation strategy** (walls next to the train) **with eliminating noise *per se***, ignoring oblique reflections and diffraction from walls, thus understating noise emissions by 4dB(A) and overstating noise suppression by 1 or 2 dB(A).
5. **The *Technical Report* assumes markedly quieter trains than the manufacturers themselves specify.** We could not tell what model and vendor of light rail vehicle was assumed for the source of noise emissions, but noise

levels cited by the report are far lower than light-rail manufacturers (Bombardier FLEXITY, Kawasaki LRV Series 100) provide in their specification data.

6. **The *Technical Report* does not appear to account for noise from** braking, decelerating, accelerating, cross-overs, turning, canyon effects from Bethesda buildings, and focusing effects from entering the tunnel. In aggregate, these emissions will add several decibels unaccounted for in the Technical Report.
7. **The *Technical Report* assumes that trains run down the center of the ROW rather than on a track, which understates noise reaching the Town** by 3 to 4dB(A) if the tracks are aligned South and the Trail North.
8. **The treatment of vibration and low-frequency noise is insufficient.**

We would appreciate your response to these concerns and, even more important, the State's commitment to completing more thorough noise studies on both alignments.

Mary Anne Hoffman
Chair, Purple Line Mitigation Advisory Group

Pat Burda
Councilmember