

Hi, my name is Jason Makstein and Live in North Potomac and have great interest in this plan and its implementation. -----

The parts in the document I am most supportive about are expanding access to metro (including extending the red line further upcounty), the section on MARC up county, and Frederick County rail possibilities.

For a long time, the upcounty and mid county in general have been plagued by a lack of transit.

What I wish that the planning board and the county council would consider is that the CCT BRT plan has a lot of limitations. I would like to see a study done about how we could look at using PRTs (personal rapid transit) and give this growing technology corridor something special that will get a lot of use in the area as well as bring in many more new businesses while helping to enhance the reach of existing businesses.

In the purple line study, cost estimates were \$835 million for PRT, \$1.6 billion for Light Rail (which we know now was a major underestimate), and \$1.2 billion for BRT. This makes PRT estimate cheaper than BRT by 43.7% allowing many more miles to be covered using the same cost. (\*1 – see reference at end). Some estimates put them at even lower cost.

I picture a PRT network that goes similar to the proposed coordor connectors but also encompasses Shady Grove Metro, Rio, Crown, Old Town Gaithersburg, Lakeforest Mall, Kentlands, Montgomery Village, Watkins Mill area, NIST, all the new housing in the Seneca corridor, tons of current and new major businesses with the bio tech companies.

I would like to see raised guideways for PRTs with safe walking, biking, rolling paths underneath them to make the most efficient use of land space.

I believe that people in our area who are much more used to be dependent upon lower occupant vehicles would be more likely to adopt this sort of environmentally sound transit solution over BRTs. This would be a draw that

would also be greatly reducing miles driven with fully electric PRTs while providing more space for other modes underneath the PRTs.

If you look at the big picture, even without any rail extension, we could connect 10's or 100's of thousands of new people to the Shady Grove Metro system without cars. There is massive amounts of new housing coming (and already there) around all of the areas mentioned above and we could connect it all to the existing large walkable areas. It would also be able to connect to the future Crown High School.

Lastly, I have also attached a picture of a possible PRT CCT (\*2) by taking one of the maps of BRT CCT from the Corridor Forward site and adding some additional pieces that I was thinking. In the future it could be expanded out in directions or have additional lines off the main ones to get to more housing that does not have access to it.

You'll note that the proposed PRT hits a lot more places and more equity focus areas than the currently proposed BRT because we can presumably do more with the same amount of resources.

\*1 –

Here is the cost estimate from Purple line done here. [\(PDF\) Comparative Analysis of Personal Rapid Transit as an Urban Transportation Mode \(researchgate.net\)](#)

This document also provides a great outline about the benefits to using or looking at using PRT for this section of transit.

## Cost

The capital cost estimation of the PRT system, seen in Table 1, uses Carnegie and Hoffman's approximation of \$44 million per mile of bidirectional guideway (2). The right-of-way and site work costs for the PRT use the figures from the Purple Line's medium investment light rail alternative. Those costs are originally \$154.20 million dollars combined, but they are multiplied by 0.75 to account for the narrower PRT right-of-way, which is less than half as wide as LRT (8). The estimated total cost for the PRT Purple Line is \$835.49 million compared with the \$1.6 billion for the LRT version (locally preferred alignment) and \$1.2 billion for the BRT version [high investment alignment (7, 8)]. On the basis of such estimates, the Purple Line project could greatly decrease its capital costs if built as a PRT. Cost estimation can be a difficult component of transit projects, owing to the variability in land, labor, and component costs. The limited number of completed PRT projects amplifies the difficulty of approximating cost. Using the capital cost figures of currently operating PRTs may be inaccurate, for they are small in scale compared with those of the PRT version of the Purple Line. The latter requires large stations capable of handling large loads.

\*2 – See next page – Equity focus areas in the blue shading

