

## Lyn Erickson

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**Subject:** Autonomous guideways is the solution to Metro Area Transit

**From:** peter <[peter@turfroboots.us](mailto:peter@turfroboots.us)>

**Sent:** Tuesday, November 3, 2020 1:13 AM

**To:** TPBcomment <[tpbcomment@mwcog.org](mailto:tpbcomment@mwcog.org)>

**Subject:** Autonomous guideways is the solution to Metro Area Transit

Planning Board members,

With WMATA ridership down 87% due to COVID, we need to look at transit solutions for a post COVID world.

We are proposing [autonomous guideways](#) to replace at grade they are 1/10 the cost of BRT and 1/50th the cost of light rail.

Elevated autonomous guideways are 1/2 the cost of BRT and 1/10 the cost of light rail.

Guideways have 1/3 the operating cost of light rail and a bit less for BRT.

Autonomous guideways are not new. The [Morgantown PRT](#) (personal rapid transit) has been running non-stop since 1975 with no accidents. Service was suspended this fall due to COVID.

This is a newer [PRT guideway at Heathrow airport](#).

Our system is different in that it has single and two passenger pods that are lighter and lower cost and provide true point-to-point no-wait service. Our headways will start at 7 seconds and reduce to as low as 1/5 seconds once the system has been rigorously tested.

Using forced air to flush pods and UVC lights to sanitize Pod surface our system is COVID safe.

We presented this proposal to MCDOT's BRT team to replace first their MD355 line and eventually all 90 miles of the proposed Flash BRT service. We are proposing the same solution for the proposed Baltimore light rail. Where for the cost of one 14 mile Red Line we can build a 140 mile city wide transit grid. Because these guideways have no interaction with street traffic or pedestrian they will meet Vision Zero goals now not some time in the future.

We also would like to build guideways for the Southern Maryland SMRT light rail right-of-way as well as every BRT, street car and light rail system proposed by your member jurisdiction.

Because this technology is unfamiliar to your respective DOTs, we want the COG Transportation planning board to create a test track center to share the cost related to developing and testing the system. We are prepared to refund all monies expended on the project from sales of the system to jurisdictions not part of the proposed co-op.

Below is a vacant test track in Montgomery County that can be used immediately it is currently under review for development and has the current alignment of the Corridor Cities Transitway run through the site. So it would make a good site to integrate the guideways into the development with multiple connectors to make access to the guideway far more accessible than conventional transit.

One great feature of our guideways is that don't the 27' right-of-ways for BRT or 38' right-of-ways for light rail. Our grade level guideways have 10' right-of-ways and the elevated version just have pylons every 60 feet. Jurisdictions gets more housing, bike paths, green, employment and commercial space. Plus the addition property that comes with the added development.

Once [autonomous vehicles are perfected](#) to the point that the can be allowed in mixed traffic our pods can come off the guideway and deliver rider to their doorsteps.

[Robert James](#), our lead CAV design consultant has been develop smart highways and autonomous vehicle since build the first smart highway at Virginia Tech in the late 90s.

We recently design the specifications for the [NYC Port Authority's autonomous bus pilot project in Lincoln tunnel](#). He has many autonomous vehicle project in the works mostly in the NYC and New Jersey area.

We are a robotics company in Gaithersburg Maryland and have been developing [autonomous mower](#) and [weeding robots](#) with 1 cm accuracy. We are porting this technology and Robert UWB 5G connected vehicle technology to the guideway system.

Quickly advancing technology of autonomous vehicles is over whelming for local jurisdiction and even state DOT staffs. It make sense to band together to share costs to properly vet these technologies and develop a comprehensive plan to roll out these technologies. COG is the natural entity to be the conduit for this effort.

But implementing autonomous technology on a very controlled environment like our guideways, most of the advantages of CAV technology can be realized today.

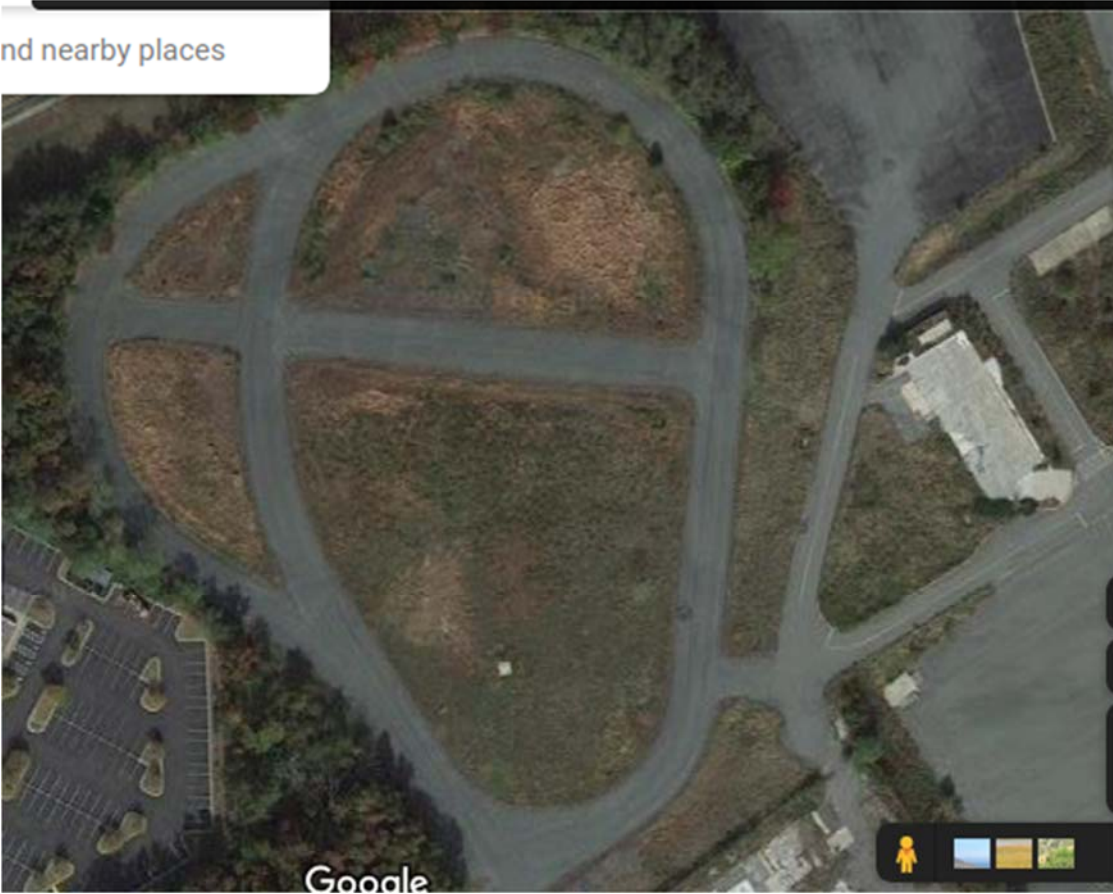
I can be contacted to discuss our plan for the region at 240 938-8439.

Peter James

Crystal clear Automation, LLC

Old Montgomery County Public Safety Training Academy

nd nearby places



November 18, 2020

Hon. Kelly Russell  
Chair, National Capital Region Transportation Planning Board  
President Pro Tem, Frederick Board of Aldermen

Re: Agenda Items #10, 11: Visualize 2045 Technical Input Solicitation and Performance Measures

Dear Chair Russell,

We commend TPB for adding questions to the project Technical Inputs Solicitation regarding support for regional goals on equity, activity centers, and greenhouse gases. We ask that TPB further strengthen the solicitation with questions on these TPB/COG priorities, more directly tie in the priorities from the Long Range Plan Task Force, and better incorporate the RTPP goals into the plan Performance Measures.

- ***Under Promote Regional Activity Centers, add:***
  - ***Does this project begin or end at a High-Capacity Transit Station or improve non-auto travel within the Station Area?*** Transit-Oriented Communities were identified as a policy focus area of both TPB and the COG board this year. In addition, the draft 2030 Climate and Energy Action Plan specifically prioritizes high-capacity transit station areas for housing and job growth. Many regional activity centers lack high-capacity transit, so this question is an essential link to TPB's and COG's priorities.
- ***Under multiple goals, including Operational Effectiveness and Safety, Travel Options, Activity Centers, and the Environment:***
  - ***Is this project expected to reduce auto Vehicle Miles Traveled and increase non-SOV mode share?*** Multiple goals and strategies in TPB and COG plans cite the need to reduce VMT and increase mode shares for transit, walking and biking. The Regional Transportation Priorities Plan, Region Forward, Visualize 2045, and both the 2017 and 2030 Climate and Energy Action Plans all include these objectives. The first question regarding RTPP goals asks the project sponsor to identify all travel mode options that this project provides, enhances, supports or promotes. However, TPB must also ask the sponsor to demonstrate that the project would reduce vehicle miles traveled and offer a substantial shift in travel mode to non-SOV modes.

### **TPB "Aspirational Objectives" should be direct requirements**

Instead of simply providing more information on how projects "support or advance" TPB Aspirational Initiatives, the solicitation document should ask specifically, **"Does the project support and advance the TPB Aspirational Initiatives?"** The TPB should also cease calling these "aspirational initiatives" and explicitly identify these as priority planning goals. (although we will continue to express concerns about the worst performing of the initiatives, express toll lanes).

### **Linking the RTPP and Performance Measures and Tracking**

Visualize 2045 needs to better incorporate the RTPP questions into the Performance Based Planning and Programming measures. The 2018 plan mostly uses federally required metrics that fall short. For example, the safety goals only refer to highway and transit safety but do not address general roadway safety where most pedestrians and bicyclists, the most vulnerable system users, are at risk. Tracking important priorities like greenhouse gas emission reductions, access to transit, mode share, VMT, and

equitable access to jobs and services need to be incorporated in the plan and online dashboard (see [here](#) and [here](#) for clearly presented regional indicator tracker examples from Twin Cities and Denver).

Sincerely,

Stewart Schwartz  
Executive Director

Bill Pugh  
Senior Policy Fellow