

**DOCKETED**

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*Comment Received From: Stephen Hamilton  
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**ATNs fit your mandate**

pdf doc with comment uploaded

*Additional submitted attachment is included below.*

California Energy Commission – Climate Innovation Program – Docket 22-ERDD-02  
Program Update Workshop – Nov 2, 2023  
Comment by Stephen Hamilton, founder Citytram, LLC  
Comment:

Citytram, LLC is a startup company developing Autonomous Transit Network systems, and struggling to raise the considerable needed funds.

Autonomous Transit Network products are an excellent fit for the objectives of this program. They offer the potential for energy efficient 0-emissions public transportation. The research and demonstration was done by the US DOT, and deployment can be funded by leveraging DOT funds. What is missing is the funding for commercialization (product development to build an industry), and venture capital is unlikely to provide that funding.

- ATNs are simply intelligent combinations of already existing technologies, so risk associated with scientific research and discovery is eliminated.
- The concept has already been demonstrated, multiple times. In 1975 the Urban Mass Transit Administration (today's FTA) opened the Morgantown WV Group Rapid Transit system, which has operated since. Heathrow airport opened a Personal Rapid Transit system in 2011 which still operates.
- ATNs can significantly reduce the emissions associated with transportation, potentially to zero when deploying solar generation for self powering.
- They provide a way to electrify transportation that does not add burden to the existing grid, increasing resiliency of that grid
- They can provide an opportunity for additional forms of resiliency – storm resilient power distribution and/or communications utilities.
- They are perhaps the only plausible way to achieve VisionZero objectives.
- Because the vehicles move only on-demand, have smaller aero-dynamic drag, and avoid wasteful start-stop movements and excessive idling, they can be 2x to 3x more energy efficient than EVs.
- Currently only Ultra Global PRT (UK) is still operational, and has operating ATN sites, and responds to new bids. Only 2 other companies – 1 in Mexico and 1 domestically – are in development or construction of their first site. This makes it difficult for cities to commit to these systems.
- Some cities are still taking that risk – Atlanta AACIDs, San Jose (SJC-Diridon), Miami (2019 Beach Corridor RFP)
- Without such commitments, and in light of the large capital amounts needed for product development and the long development and sales cycles, and the political uncertainties in city commitments to deploy infrastructure, venture capital funds (even those with climate focus) are reluctant to invest. Even the most far sighted VCs stay away from infrastructure, and focus on better use of existing roads (Uber, Lyft, micro-mobility, etc) or air facilities (eVTOLs).
- The federal government (DOT) no longer funds basic transit R&D (except that which is solicited and incremental). DOT has been captured by the automobile and mass transit industries.

This is an opportunity for California to make a highly leveraged investment. Grant funds for ATN suppliers to develop their products will get those companies closer to marketable systems. This will open the door for VCs to risk less for a shorter time period to get those products available. The increased number of available products will make it possible for more cities to commit. Many/most of

these deployments will be funded through the normal DOT planning process, which brings dollars into the local communities. As local infrastructure, these deployments add to local employment.

Learn about ATN technology here

<https://citytram.org/resources>

and here

PRT Quick look [2 min]

<https://youtu.be/lfMzERCydBk>

(A very quick introductory look at Personal Rapid Transit)