### **3 Revolutions Policy Conference**

Tara Lanigan, May Mobility March 4, 2021

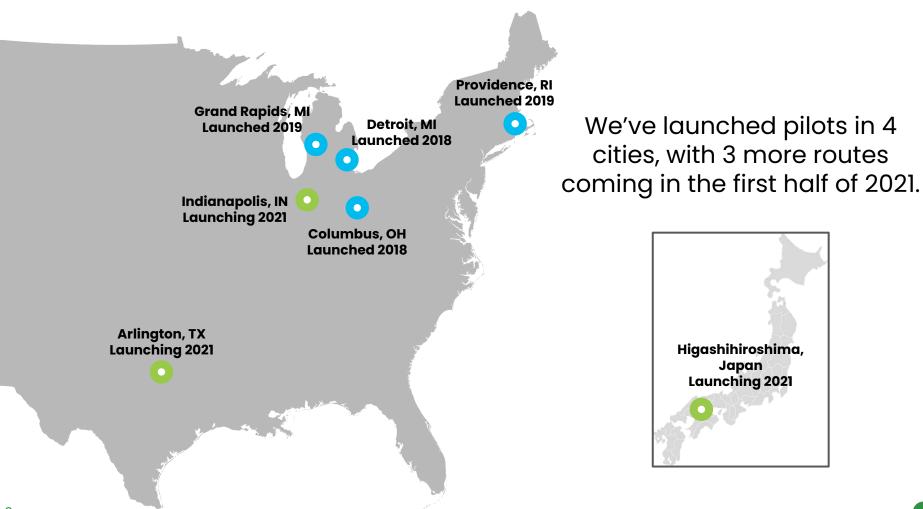
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May Mobility is developing and deploying **self-driving technology** to support a safer, greener, more accessible world.

We operate **fleets of autonomous shuttles** running our own self-driving software for downtown areas, campuses, and residential communities.





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### May Mobility's Wheelchair Accessible Shuttle

- Polaris GEM vehicle platform
- Floor-mounted restraints (Q-Straints) secure the wheelchair at the four corners of the cabin
- Retractable lap and shoulder belt for passenger securement
- Ramp lowers to the ground automatically using a winch from its stowing position
- Triple redundant latch securement



# Challenges and Opportunities

- Retrofitting vs. purpose-built vehicles
- Partnerships & local engagement
- Long-term planning
- Low-income communities
  - Neighborhoods of focus
  - Rural communities



## **Inclusive Design Challenge**



The Inclusive Design Challenge asked researchers and innovators to develop solutions to create and enable accessible automated vehicles, solving access barriers for people with physical, sensory, and cognitive disabilities.

https://youtu.be/w2D9rJexYnI



Ann Arbor Automated Accessibility May Mobility & University of Michigan Transportation Research Institute (UMTRI)

Independent Safety for Wheelchair Users in AVs

For this project, the research team will install an automated wheelchair docking system meeting specifications for a universal docking interface geometry (UDIG). This concept allows any wheelchair with attachment hardware meeting the UDIG specifications to dock with any vehicle equipped with anchoring hardware meeting the UDIG specifications. The team will also include an automated seatbelt donning-system with its docking system. The research team intends to present their automated wheelchair docking and restraint system within a wheelchair-accessible electric hybrid minivan for their Stage II demonstration.



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# Mobility