

2019

MDOT MTA

Recent Grant Awards & Submissions

IDEA Grant Program

- Innovations Deserving Exploratory Analysis
- Biannual awarded grant program
- 5 categories:
 - Highway
 - Rail
 - Reliability
 - Rail Safety
 - Transit



Transportation Research Board

MDOT MTA's IDEA Submission

- **Two-phases:** 1) Closed-course testing 2) Mixed-use testing in off-peak and peak commuting hours
- **Budget:** \$224,850
- **Timeline:** 12 months
- **Goals:** Increase transit revenue, improve safety, and increase MARC ridership
- This was the *first* successful HAV IDEA Transit application



Project Stakeholders



- MDOT MTA Office of Innovation, Prime Applicant
 - MARC Commuter Train
 - MDOT MTA Real Estate
 - MDOT MTA Transit Police
 - MDOT MTA Safety
 - MDOT MTA Customer Service
- STEER Tech, Project Vendor
 - Automated technology firm
 - Maryland Small business



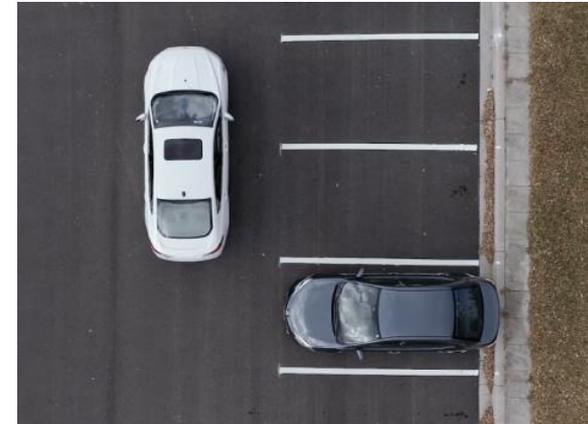
1) Send the car

Passengers exists vehicle and engages STEER app to command car to park itself



2) Automated Vehicle Launches

Upon exiting vehicle, car will drive itself into a designated parking spot



3) Fetch Car

When ready to depart, car is summoned through the STEER app for passenger pick up

Testing Location



Phase I:
Closed Lot
Testing Area

Phase II:
Mixed Lot
Testing Area

Dorsey MARC
Station

North to Baltimore >

< South to Wash. DC

“What’s the connection to transit?”

- MDOT MTA’s MARC Commuter train system carries over **9 million passengers** per year with **40+ stations**
- Depending on the station, passengers sometimes walk close to a mile from their parking spot to the station platform (Halethorpe, Brunswick, W. Baltimore, etc.)
- National Safety Council estimates there are **50,000+ crashes and 500+ deaths per year** in parking lots alone
- This pilot project will allow MDOT MTA to test the potential to increase ridership through space efficiencies from AVP, improved passenger experience, and the ability to minimize safety risks



Project Schedule

Project
Planning

Comms
Development

Phase I

4 weeks of testing

Phase II

8 weeks of testing

TRB Reporting Requirements

April

May

June

July

Aug

Sept

Oct

Nov

Dec

Jan '20

Feb

Mar

Project Status

- April 11th MDOT MTA Project Stakeholders met at STEER Tech HQ for a Safety Demonstration
- Emergency responders from Howard County and Maryland Transit Police were in attendance
- The goal was to review project details, vehicle technology, and discuss incident scenario planning
- STEER Tech conducted a mixed-use demonstration including interactions with both pedestrians and vehicles
- STEER Tech employees shared all the different options to disengage the vehicle in case of an incident



MDOT MTA ADS Grant

No Two Neighborhoods Are Alike

- Four different demonstrations in varying locations over the course of four years
- Utilizing multiple automated shuttles to transport passengers to nearby MDOT MTA transit connections
- The goal is to uncover the challenges and opportunities of integrating ADS technology with existing transit infrastructure

