

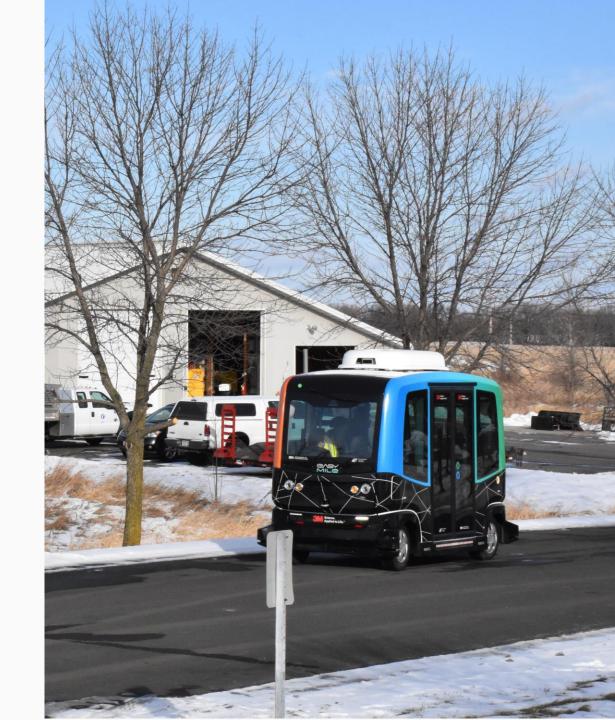
Autonomous Shuttle for First- and Last-Miles Connection to Transitways

John Doan, Public Works



# MnDOT AV Shuttle Winter Testing

- State RFP in 2017 for AV bus supplier
- Selected EasyMile EZ10 shuttle
- 4-day public demo on Nicollet Mall Jan 25-28, 2018
- MnDOT offered local governments opportunity to test for other use cases



#### Specifications of EZ10 Shuttle



- All electric
- Up to 12 passengers, with wheelchair accessible ramp
- Lower-speed vehicle (25 mph max)
- Level-4 autonomy: Can operate without driver on pre-mapped route
- Transported over 230k people in 20 countries, logged over 75k miles with 100% safety record
- \$250-\$300k to purchase, plus annual software and maintenance license



#### EZ10 Shuttle Video

• <a href="https://drive.google.com/file/d/0B3-uKJ1jD9mcVThLQzNNaEM0VWM/view">https://drive.google.com/file/d/0B3-uKJ1jD9mcVThLQzNNaEM0VWM/view</a>



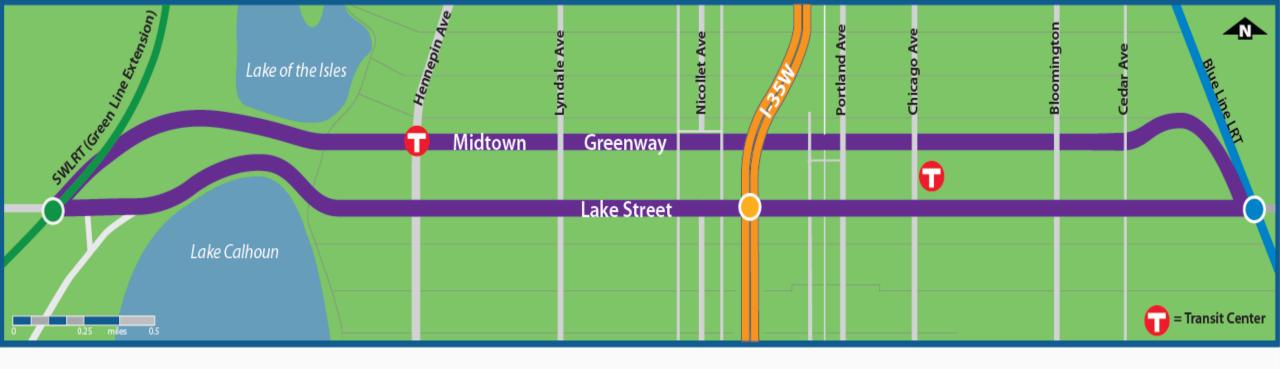


#### First- and Last-Miles Use Case

- Challenges to extending ridership beyond ½-mile walkshed and 1-mile bikeshed
- Limited park-and-ride options in urbanized areas
- Overcoming bad weather
- Serving riders with limited mobility







# Midtown Greenway Case Study

- Acquired by HCRRA for future transit in 1993
- Grade-separated corridor connecting Blue, Orange and future Green lines



#### Proposed Demo

- 2-to-3 block circulator on Greenway
- 3 days (April 20-22), up to 6 hours per day
- Human operator on board at all times
- Capped at 12 mph
- Operating on one-directional bike lane in mixed bike and pedestrian traffic









## BAR Key Elements

- Partnership agreement: With MnDOT, with NTE budget of \$50k
- In scope: Vehicle sublease, trained operator, mapping, testing, evaluation
- Public engagement: Stakeholder work group, free rides during demo





## Taking Action Now

- Positions Hennepin County as a leader
- Gives us first-hand experience with the technology
- Informs our long-range planning
- Lets us help shape the future of mobility



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