2022 Strengthening Mobility and Revolutionizing Transportation (SMART) Grant

February, 2023



2022 Strengthening Mobility and Revolutionizing Transportation (SMART) Grant

New funding opportunity established by BIL/IIJA

- \$100 million annually for FY2022-2026
- Provides grants to eligible public sector agencies to conduct demonstration projects focused on advanced smart community technologies and systems in order to improve transportation efficiency and safety

SMART is divided into two stages

- Stage 1: Planning and Prototyping
- Stage 2: Implementation
- Only recipients of Stage 1 grants will be eligible for Stage 2 grants

SMART targets projects demonstrating:

• Coordinated automation, connected vehicles, sensors, systems integration, delivery/logistics, innovative aviation, smart grid, traffic signals



2022 SMART Stage 1 Proposal

Cleveland Complete Corridor Project

- Design and prototype an intelligent, cloud-based adaptive traffic signal system that provides nextgeneration transit and emergency vehicle priority based on cellular-based AVL technology
- Incorporate optical sensor-based bicycle and pedestrian detection and near-crash identification
- Use existing AVL and cellular communication hardware on vehicles
- Facilitate dynamic signal phasing to benefit multimodal users and increase safety
- Create generic smart signal specifications that can be installed throughout the city and in other
 jurisdictions to increase mobility equity through improved multimodal safety and efficient, reliable
 transit.
- Supports transit riders, walkers, and bike riders; Vision Zero objectives; and specs for future capital projects

Applicant team

- Cleveland State University
- Greater Cleveland Regional Transit Authority
- City of Cleveland



2022 SMART Stage 1 Proposal

- Funding request: \$1,820,500 for planning and prototyping
 - Traffic signal upgrades (networking and receivers)
 - Optical intersection sensors
 - Necessary software
 - CSU faculty expertise
 - Performance reporting and evaluation
- Pilot Location(s)
 - 1-2 corridors with frequent transit service, identified safety issues, notable bicycle and pedestrian demand, and frequent usage by emergency vehicles
 - Final pilot locations will be confirmed based on the status of relevant capital projects when the pilot commences and updated community data.
 - Preliminary pilot locations:
 - West 25th Street from Detroit Avenue to MetroHealth Drive
 - Kinsman Avenue from East 75th Street to East 140th Street
- Decisions from US DOT are anticipated in the first half of 2023



Questions?



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