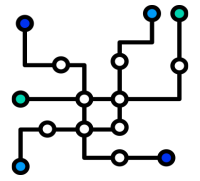


SMART

GRANTS PROGRAM



CAT EV Zonal Microtransit Project

Chatham Area Transit Authority

PROJECT PARTNERS

Savannah Area Chamber of Commerce
Savannah Economic Development Authority
Georgia Ports Authority
Deloitte
Pendleton Group
ESRI

Amalgamated Transit Union (ATU)
Thomas and Hutton Engineering Gulfstream
Association of Commuter Transportation
Georgia Planning Association
Savannah Logistics Technology Innovation Corp.
NUMO Alliance (New Urban Mobility)

Georgia Department of Transportation
Savannah Technical College
Savannah State University
Georgia Power
Georgia Tech Research Corporation
City of Savannah
Chatham County



PROJECT CHALLENGE

By integrating fixed route and paratransit with ODMTS, CAT aims to enhance transit efficiency, especially in historically underserved areas. Through community partnerships and utilizing an ATU workforce, the prototype provides a scalable model using EVs for improved connectivity, addressing first/last mile issues. This holistic approach combines workforce training, mobile apps, web monitoring, and optimization algorithms, offering potential for wider adoption in medium to smaller transit systems.

IMPACT

The project will cover zonal areas located within CAT's operating area of 438 sq mi located within Savannah, Chatham County, and parts of Garden City, GA. The current focus on fixed routes leaves historically disadvantaged areas lacking connectivity. With this prototype, CAT plans to operate in microtransit zones, targeting Justice40 communities and Historically Disadvantaged Communities to improve access to services and jobs, leveraging existing infrastructure. This initiative aims to alleviate mobility and financial barriers, enhancing equitable transportation options and connectivity for underserved populations.

CURRENT STATE OF THE ISSUE

14.4% of households in Chatham County live in poverty, with 7.3% lacking access to a vehicle. Only 11.4% of historically disadvantaged areas in the county have access to transit within 0.5 miles, limiting access to 65,900 nearby jobs. 91.8% of county residents, including lower-income individuals, have access to a smartphone. Expanded microtransit access using this technology can improve transit reach.

POLICY QUESTIONS

1. How can on-demand multimodal transportation systems (ODMTS) models be made adaptable and resilient while modernizing legacy fixed route and paratransit systems? 2. How does the "curb to curb" approach tackle first/last mile challenges and enhance system connectivity? 3. What strategies can be employed to integrate ODMTS with other advanced transportation technologies and systems?

STAGE 1 OUTCOMES

Enhanced accessibility for historically disadvantaged communities through expanded transit services. Heightened efficiency on fixed routes by optimizing routes and streamlining travel for all commuters. Minimized wait times for paratransit users by transitioning to microtransit ODMTS, ensuring prompt and reliable transportation for all passengers.

STAGE 2 VISION

Expanding to Stage 2 involves broadening zonal deployment and integrating with paratransit via ODMTS using EV microtransit vehicles. Anticipated impacts include greater coverage, reduced congestion, improved accessibility, and enhanced efficiency, benefiting a wider demographic and promoting sustainable urban mobility.