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Transportation Mobility Assessment and Recommendations for Smart City Planning

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Current Situation

Transit agencies work very hard under tight constraints to provide services that connect places where people live with where they work, shop, and play. Increasingly, planning for public transit is based on careful studies of travelers' needs, determined by surveys and other types of community engagement. Public transit is the main mode of transportation for many citizens that do not own a car, but public transit is valuable for all citizens because when people choose public transportation, they help to reduce congestion and

public transportation, they help to reduce congestion and pollution as well as reducing personal vehicle costs like fuel.

Research Objectives

University of Florida researchers developed and implemented a Community-Based Participatory Research (CBPR) methodology for developing transportation mobility plans by assessing the needs of travelers in the community.

Project Activities

The researchers applied the CBPR methodology to address the fulfillment of the Five A's of senior-friendly transportation as identified by the Beverly Foundation and



Using microtransit to fill gaps in the transit system is one of the solutions recommended in this project.

National Volunteer Transportation Center: availability, accessibility, affordability, acceptability, and adaptability. The CBPR methodology establishes a means for engaging all parties in a community-based study. For this study, the researchers defined five steps to achieve their CBRP goals: (1) synthesis of data relevant to the two neighborhoods in the study, (2) recruiting and engaging a community advisory group, (3) qualitative data collection and focus groups, (4) quantitative data collection and neighborhood surveys, and (5) synthesis of information collected, close-out, and strategies for continued engagement.

Two neighborhoods in Gainesville, Florida, were selected for study on the basis of their contrasting demographics and patterns of transit usage, which was confirmed and quantified by the synthesis of demographic data. In each community, the CBRP methodology established by the researchers was implemented, including the community advisory board, data collection, surveys, and focus groups. An important insight the researchers gained was the value of the community advisory group, which they stressed could not be "overestimated."

Despite the neighborhoods' differences, the study revealed common mobility challenges such as a desire for more alternative transportation options, communication with public transit agencies, a connectivity between available transportation options and accessibility, availability, and affordability needs in the communities. The study period was during COVID-19 precautions, which prompted the researchers to ask about both general and specific emergency preparedness. They found a general lack of well-defined strategies for responding to emergency situations.

To address the mobility challenges, the study recommended effective outreach and engagement with the residents and emphasized a strong network of transit services, including feasible microtransit options. Finally, the study recommended that the transportation needs of aging populations should be examined and addressed.

Project Benefits

Studies of this type lay the foundation for better transit services and better relationships between transit agencies and the communities they serve.

For more information, please see www.fdot.gov/research/.