

Research Project Name: Beyond Technological Optimism: Digital divide between older adults' mobility needs vs.

available technology solutions at varying urban densities

Recipient/Grant (Contract) Number: Florida A&M University; Stony Brook University

Center Name: Rural Safe Efficient Advanced Transportation (R-SEAT) Center

Research Priority: Improving Mobility of People and Goods

Principal Investigator(s): Anil Yazici

Project Partners: -

Research Project Funding: \$87,608 (Federal request); \$46,518 (Non-Federal cost share)

Project Start and End Date: 6/1/2023 to 12/31/2024

Project Description: The objective of this project is to compare the aging population's mobility needs and available technology solutions at varying urban densities in order to identify strategies to bridge the digital divide and improve mobility options for older adults.

Majority of aging population's health and quality of life issues (e.g., social isolation) can be traced back to the reduced mobility with physical and cognitive decline, particularly in highly automotive dependent communities/regions. With the emergence of the "smart city" concept, researchers and practitioners suggest various technology solutions (e.g., use ondemand transportation apps through smart phones) to alleviate the aging adults' mobility issues. Such technological optimism generally ignores the facts that older adults (like other demographics) 1) may not have the access to certain technologies for various reasons (economic, physical, cognitive) and 2) may have different mobility needs depending on the region and/or community that they live. For instance, healthy older adults living in NYC metropolitan area may only need traveler info mobile app to coordinate their walking and transit trips, whereas in automobile dependent (especially rural) areas on-demand app can be the only option. Understanding the landscape of needs vs. solutions is an important step to identify the follow up actions to make technology available and useful to all segments of the society, including aging population.

In order to address this research need, Long Island (LI) provides the perfect data collection and technology test bed because 1) LI encompasses the whole spectrum of 1) urban density, i.e., highly urban (NYC on the West) to rural (agricultural fields on the East) density and 2) multimodal mobility, i.e., from transit-rich NYC to transit desert on the East. With the help of Suffolk County Office of the Aging, community organizations like OLA of Eastern Long Island, and PI Yazici's contacts via his aging-population-focused NSF project, the proposed project will reach out to older adults through surveys and interviews.

US DOT Priorities: This project aligns with the USDOT the strategic objective of transformation

Outputs:

A draft report was prepared about the mobility services and their coverage across Long Island, NY

Outcomes/Impacts:

• Findings of this research led to international collaborations on mobility and older adults' quality of life during PI Yazici's Fulbright project on older adults in Spain

Final Research Report: N/A