Current Situation
While transit service can cover the core of most trips, users often need other means to complete the first and last portion of their journey, such as getting from home to the transit stop or from a stop to the final destination. This gap in transit service is called the first-mile last-mile (FMLM) problem, and it is one of the possible barriers for the many people who rely on transit as their primary mode of transportation. Small buses are one of several microtransit solutions that agencies can use to fill this gap, by offering a shared ride service that can operate on demand or on an established route. In 2019, Gainesville’s Regional Transit System (RTS) began microtransit service in East Gainesville with three routes serving a geographically dispersed, low-income population that standard bus routes cannot easily serve. Microtransit fills a vital need, but many communities have found it difficult to develop a sustainable microtransit service and have been forced to suspend it.

Research Objectives
University of Florida researchers evaluated the microtransit pilot program in East Gainesville and provided recommendations to achieve long-term stability of services.

Project Activities
The researchers examined microtransit services in five U.S. communities comparable to Gainesville. Each one was examined for lessons learned and application to Gainesville’s situation. Then, to understand Gainesville’s current microtransit service, the research team analyzed a variety of data to gather insights. Trip data from RTS were used to document microtransit use in 2020. Interviews with community leaders were used to gauge their understanding and expectation of the service. Community members, both microtransit users and non-users, were surveyed using paper or online forms. The surveys covered travel behavior and patterns, knowledge of microtransit services, and demographic information, thus allowing comparison of the travel behavior between users and non-users. The researchers also reviewed RTS’s Transit Development Plan, which is required every five years, and the data used to prepare that plan. Finally, a geospatial analysis was conducted of possible areas for expansion of microtransit service in Gainesville.

The spatial analysis confirmed that the microtransit service was operating in the most appropriate areas of Gainesville. Researchers found that users were generally satisfied with the service, but they identified specific weaknesses such as hours of operation and frequency and range of service. The researchers provided suggestions for expansion of microtransit throughout the city, based on further spatial analyses, with recommendations for balancing microtransit and traditional transit in new service areas. The researchers outlined financial, contextual, geographical, and demographic considerations necessary to overcome future challenges and to build a sustainable microtransit service.

Project Benefits
The results of this project will aid transit agencies in providing microtransit services that improve transportation access and equity for underserved neighborhoods.

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