

Project: [Using Microtransit Electric Low Speed Vehicles as a Means for Improving Quality of Life in Miami-Dade County](#)

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Summary

The services provided by public transportation systems increase the mobility and accessibility options of a community. In addition, transit improvements are one of the transportation demand strategies for enhancing community livability, as they offer affordable transportation alternatives and help reduce traffic congestion. Public transportation can provide access to employment, health, educational, and other services that improve the livability of communities. Therefore, implementing additional public transportation services will foster economic development and offer residents, workers, and visitors a full range of transportation choices that will result in an improved quality of life. The transportation services provided by local communities help in the creation of livable communities. They help transport people daily to jobs, affordable housing, schools, shopping, and health care facilities.

The main objective of this scope of work is to conduct a study of microtransit service using electric low-speed vehicles in Miami-Dade County and the impact they have on the quality of life of in the community. To achieve this, the FIU research team proposes a series of work tasks that include developing a work plan, conducting a literature review, data collection, data analysis, and preparing the final report.

In Miami-Dade County, local services are provided by trolleys, community buses, and shuttles that are supported by a major regional transit system that includes rail and bus services. Other transportation services used by the local communities include services from Transportation Network Companies (TNCs) like Uber or Lyft and microtransit service providers such as Freebee or U-Ride which serve areas not well covered by fixed-route transportation services. This study concentrates on the microtransit services in Miami-Dade operated with electric lowspeed vehicles used within several local communities. Lessons learned from these systems will be documented to assess their impact on quality of life of the communities they serve. Microtransit has been defined as private multi-passenger transportation service that provides transit-like service, but with smaller vehicles. Microtransit can provide service as fixed-route or on-demand and typically relies on technology and dynamic routing. This mode of transportation can fit somewhere between private and public transportation to cover areas that are not effectively serviced by public transit. In addition, microtransit can be useful to address both the first mile/last mile problem and fill the gap of providing mobility to areas not reached by

conventional public transportation. These microtransit services in Miami-Dade County appear to be well accepted with the increasing ridership. It is also expected that the number of microtransit vehicles and overall service will increase in the future as more municipalities in Miami-Dade explore this relatively new transportation service. The service is commonly offered to a community free of charge to passengers, which provides a viable transportation option that improves the quality of life. This research study includes background information that describes the goal of this project in terms of the impact that this transportation service has on the quality of life. As part of the literature review, existing papers, articles, and reports are reviewed and summarized to gain a better understanding of this subject. This study is enhanced by collecting data and information from the 8 current microtransit services to evaluate the effectiveness of the service and their community impact. The data and information were processed and analyzed to identify the key success elements and challenges in the operation of microtransit in Miami-Dade. The document concludes with a summary discussion of lessons learned and suggestions for future research.

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