

Vermont Statewide Microtransit Study

PROJECT TITLE

Vermont Statewide Microtransit Study

STUDY TIMELINE

Final Report: May 2023

INVESTIGATORS

Vermont Public Transportation Association (VPTA)

Vermont Department of Transportation (VTrans)

VTRANS CONTACTS

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KEYWORDS

Microtransit; Rural; Small Town

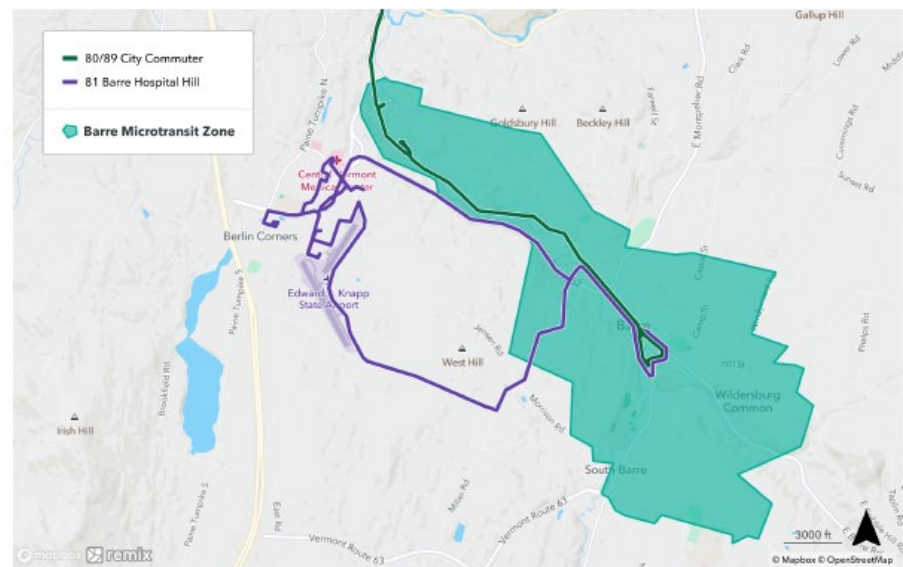


More information about the VTrans Research Program, including additional Fact Sheets, can be found at:
<http://vtrans.vermont.gov/planning/research>

Introduction or Problem Statement

Microtransit, also known as on-demand transit, is a technology-enabled transit system that dynamically routes vehicles based on real-time passenger demand. While demand-response transit has existed for decades, often in the form of Dial-a-Ride and other paratransit services, microtransit has grown in popularity just in the last few years. The key difference is that microtransit is technology driven and encourages riders to book trips through a mobile phone app, allowing on-demand booking in addition to pre-booking. For this project, a total of twelve studies were conducted across Vermont, investigating the potential for microtransit to serve diverse communities in areas covered by six different transit agencies.

Service Zone



Methodology or Action Taken

Each Study included an analysis of existing conditions, such as an analysis of demographics in the area and an assessment of existing transit services (if any). Alternatives were developed based on this analysis, with guidance from each agency partner along with VTrans. Microtransit alternatives were designed to improve local mobility and promote regional connectivity through transfers to other transit services where possible. Some service alternatives considered replacing, supplementing, or modifying fixed routes, while others considered introducing transit to previously unserved areas. Demand estimates were developed for each microtransit alternative based on Via's internal demand model along with the analysis of existing transit in the zone. Using the demand estimates, the performance of each microtransit service alternative was simulated with outputs like the number of vehicles required to meet expected levels of demand, projected service efficiency, and measures of customer experience.

Conclusions or Next Steps

Some communities are better suited for microtransit transit than others. It was found that service categories small town, demand response, and rural are suitable for microtransit while service categories urban and tourism are sometimes suitable. Many technology features are also recommended for microtransit services in Vermont, such as intermodal capabilities, fixed-route bus referral, and commingling. Vermont can also realize several benefits from statewide coordination of microtransit services like knowledge sharing, overhead costs, and marketing and customer awareness. The final report for this project also contains other recommendations for Vermont.

Potential Impacts and VTrans Benefits

Microtransit services are typically open to anyone to use for any trip purpose. This is unlike some paratransit or other dial-a-ride services that limit trips to seniors or people with disabilities or to medical appointments. Microtransit can be used for shopping, recreational trips, regular work commutes, medical visits, or any other trip purpose. Wheelchair-accessible vehicles ensure the microtransit service is accessible for people with disabilities. Microtransit can often complement an existing paratransit service by offering an alternative that has fewer restrictions such as advanced booking requirements, therefore reducing the demand for paratransit services. With many areas in Vermont being rural and small towns, microtransit can provide a relatively efficient form of coverage and allow smaller fleets to serve larger areas. In small towns, microtransit can connect customers with regional fixed-route services for trips between towns. The recommendations provided can help Vermont citizens to connect with one another and businesses.
