Building innovative public transit for the future

Microtransit in New Haven

City Services and Environmental Policy Committee
June 1, 2023
Microtransit Overview

- “Flexible” On-demand Transit service
- Routes and Schedules vary based on demand.
- Vehicles range from vans, shuttles, or buses.

Source: Via Transportation
CTDOT Microtransit Grant

Grant overview
- Pilot program to develop and operate on-demand microtransit service.
- City lead applicant
- GNHTD, NHPA, Tweed and Via as partners.
- Timeline: Nov 2023- October 2025 (2 years). Possibility of two 1-year extensions.
- Covers development and operation costs.
- CTDOT will fund 5-7 grants.

Eligible Applicants
Municipalities, transit districts and COGs throughout the state of CT.
- Applicants required to procure necessary vehicles, software and labor to operate service.
- CTDOT recommends applications partner with a service provider if they don’t plan to operate all aspects of service in house.

Key Requirements
- Must be a new service, i.e., not an expansion of the existing microtransit service.
- Program to be designed to operate for up to two years, with service scalable based on demand.
- Additional requirements- Software, Customer service and Marketing plans, Performance monitoring and reporting.
New Haven Transit Needs

**Lack of Mobility Options**
- 1/3 City households are zero-car households.
- Only 12% use transit.
- Almost 21-25% of Black/Latino households that do not own cars vs to 10% of white households.

**Heavy SOV Usage**
- 60% of residents drive to work alone.
- Increased emissions, reduced air quality and increased congestion.
- Asthma in New Haven's school district (14.7%) vs. Statewide (14%).

**Socio-demographic discrepancies**
- 49% of New Haven residents are low-income vs. 23% statewide
- Significant income, life expectancy, and health disparities in Historically Disadvantaged Neighborhoods
- Life expectancy gap of 12 years in Disadvantaged neighborhoods compared to other New Haven neighborhoods.
Service Goals and Benefits

1. Expand mobility access and economic opportunities for all New Haven residents

   Primarily focus on historically disadvantaged communities, including The Hill, West River, Dwight, Edgewood, Beaver Hills, Dixwell, & West Rock

2. Align with local, regional, and statewide transportation and climate objectives

   Alignment with City Climate Emergency Resolution and Statewide initiatives (Executive Order 21-3, Connecticut Clean Air Act, Transportation and Climate Initiative Program).

3. Facilitate regional transit connectivity with access to Tweed & regional transit hubs

   Service between Downtown transit/parking hubs and Tweed Airport. Provide critical first and last-mile connections between transit hubs.
New Haven Demographics and Areas of Opportunity

**Major Takeaways**

- There are multiple overlapping areas in which a large number of households have one or zero cars and are below the federal poverty threshold.

- Microtransit demand will likely be highest in Fair Haven, Downtown New Haven, East Rock, Newhallville, Edgewood, and The Hill.

---

1. US Census American Community Survey, 2019
Proposed service design

Service Zone Details

Zone shown here is 5.6 sq miles

Proposed vehicle count: 6 total including 2 WAV

Rides are available anywhere within the outlined service zone

Also covers points of interest for pick up/drop off outside of the zone:
- Tweed New Haven Regional Airport
- Union Station & Garage
- Temple Street Garage
- State Street Station & Garage
- Air Rights Garage
- Yale University (Old Campus)
- Long Wharf Maritime Center
- Hotel Marcel/IKEA
- District NHV

Cost
- ~1.75$/trip. Overall costs subsidized by higher demand trips to/from Tweed (~10/trip).
- Potential for fare-free for individuals experiencing low-income, students, and people over the age of 60.
- Transfers to fixed routes for free.

Population: 47,000
Jobs: ~53,000
People in Poverty: 25%
People with Disabilities: 13%
Non-white population: ~78%
Car-Free Households: 27%
### Proposed service design

**Booking model:** On-Demand

**Full day operating hours:** 7am-9pm Monday-Sunday

**Estimated Demand**
350+ rides/day

**Walking:**
Door-to-door for seniors and mobility-impaired individuals
Corner-to-corner for others

<table>
<thead>
<tr>
<th>Service Design Parameter</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand</td>
<td>~350 rides daily</td>
</tr>
<tr>
<td>Avg. Wait Time</td>
<td>~10-15 mins</td>
</tr>
<tr>
<td>Fleet Size</td>
<td>6</td>
</tr>
<tr>
<td>Average Utilization Rate</td>
<td>~4.0-5.0</td>
</tr>
<tr>
<td>Peak Utilization Rate</td>
<td>~9.5 - 10.0</td>
</tr>
<tr>
<td>Service Hours</td>
<td>Monday-Sunday, 7am - 9PM</td>
</tr>
</tbody>
</table>
Microtransit App

- Download App-> Register->Open app->Request Ride
- Real-time tracking of vehicle for pickup. SMS alerts.
- Payments through App, Web page, Cash or Phone Booking.
- Multi-modal connectivity for fixed route journey planning is natively included.
- Accessibility features for people with disabilities.