



CONNECT MID-HUDSON TRANSIT STUDY

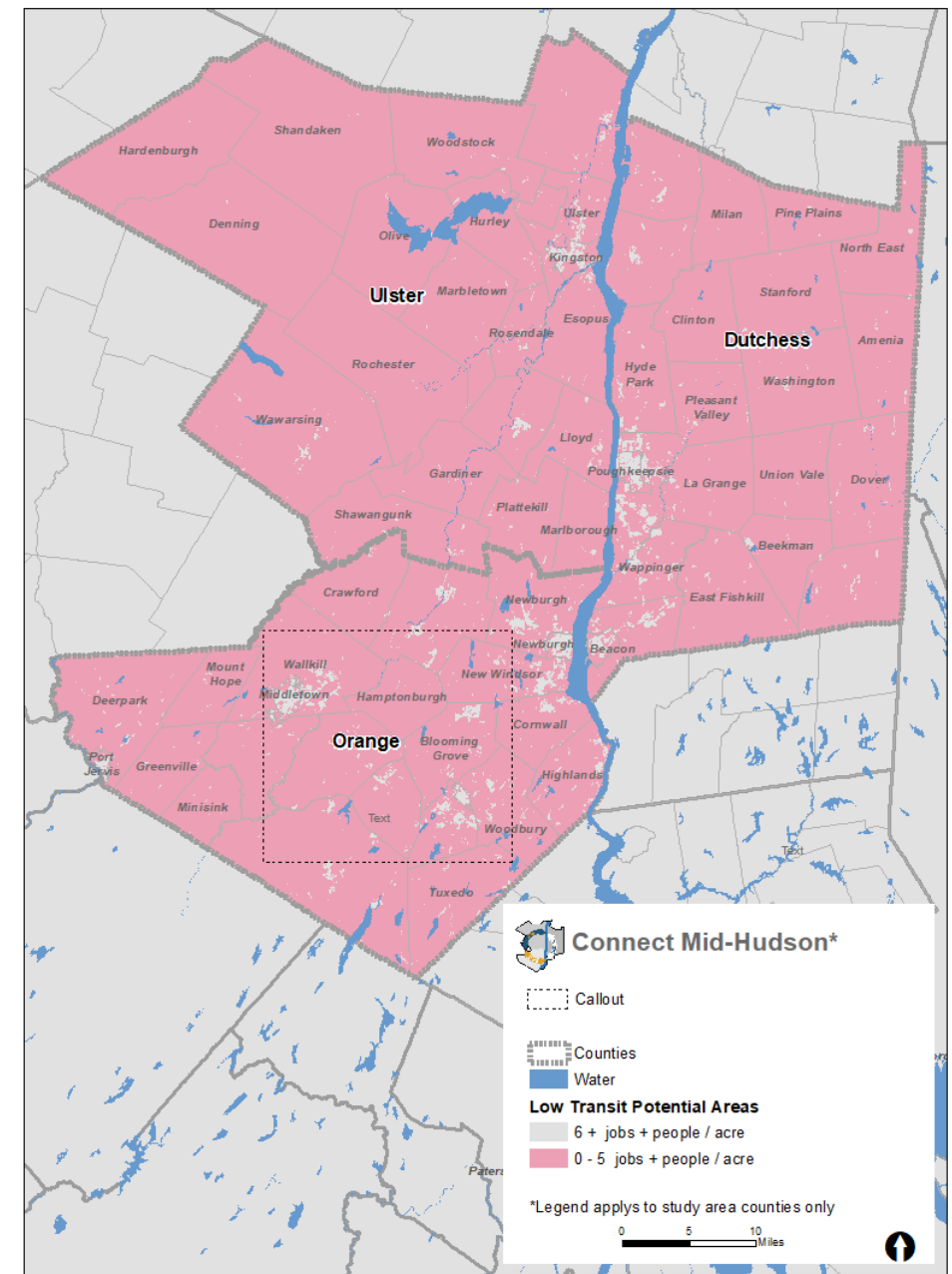
MICROTRANSIT OPPORTUNITY ANALYSIS



Use Cases

■ Low Transit Potential

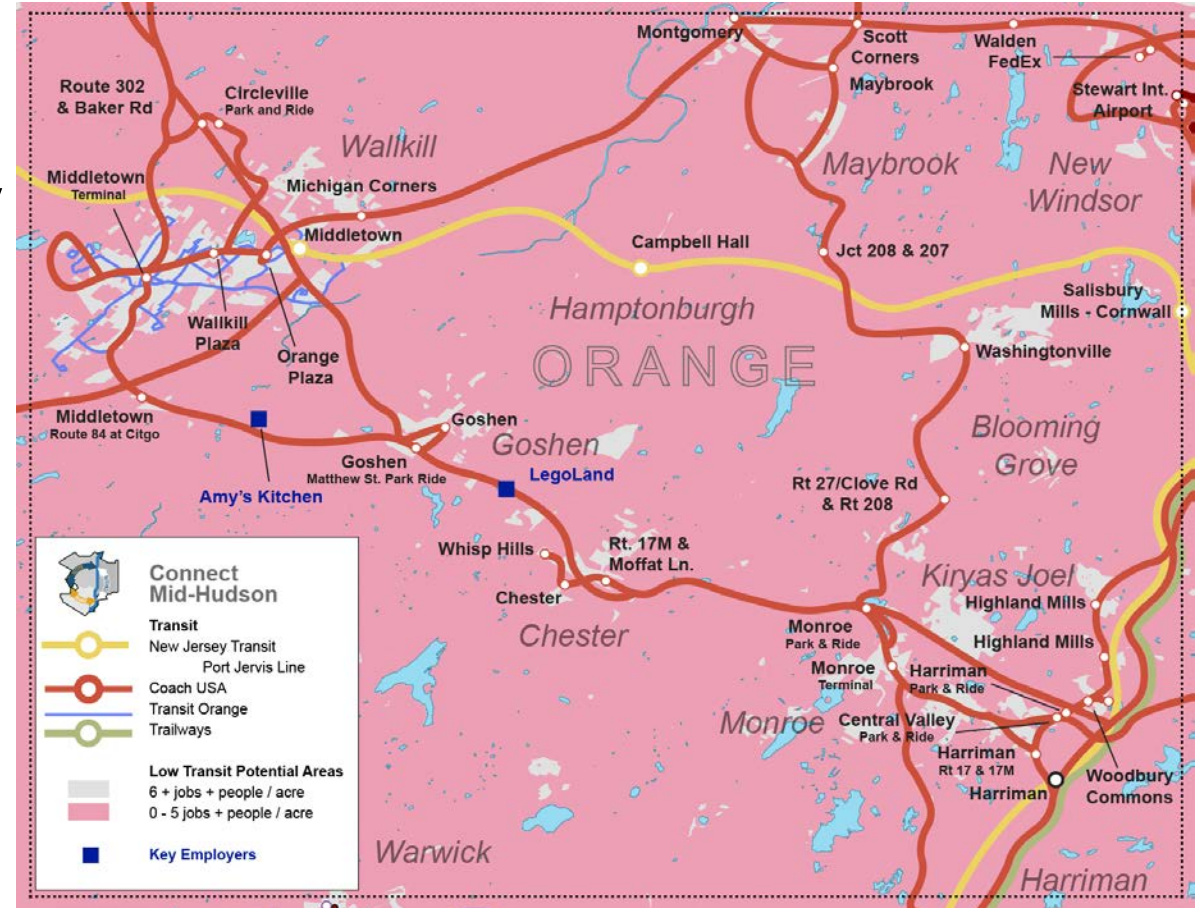
- Much of the study area has fairly low fixed-route transit potential due to low density
- Even in low-density areas, there are pockets of employment, housing, retail, and services that transit users may wish to access
- New developments are often drawn to low-density areas
 - These may eventually justify extensions of fixed-route service, but microtransit can serve as a gauge of the market for transit



Use Cases - Potential Pilot Project

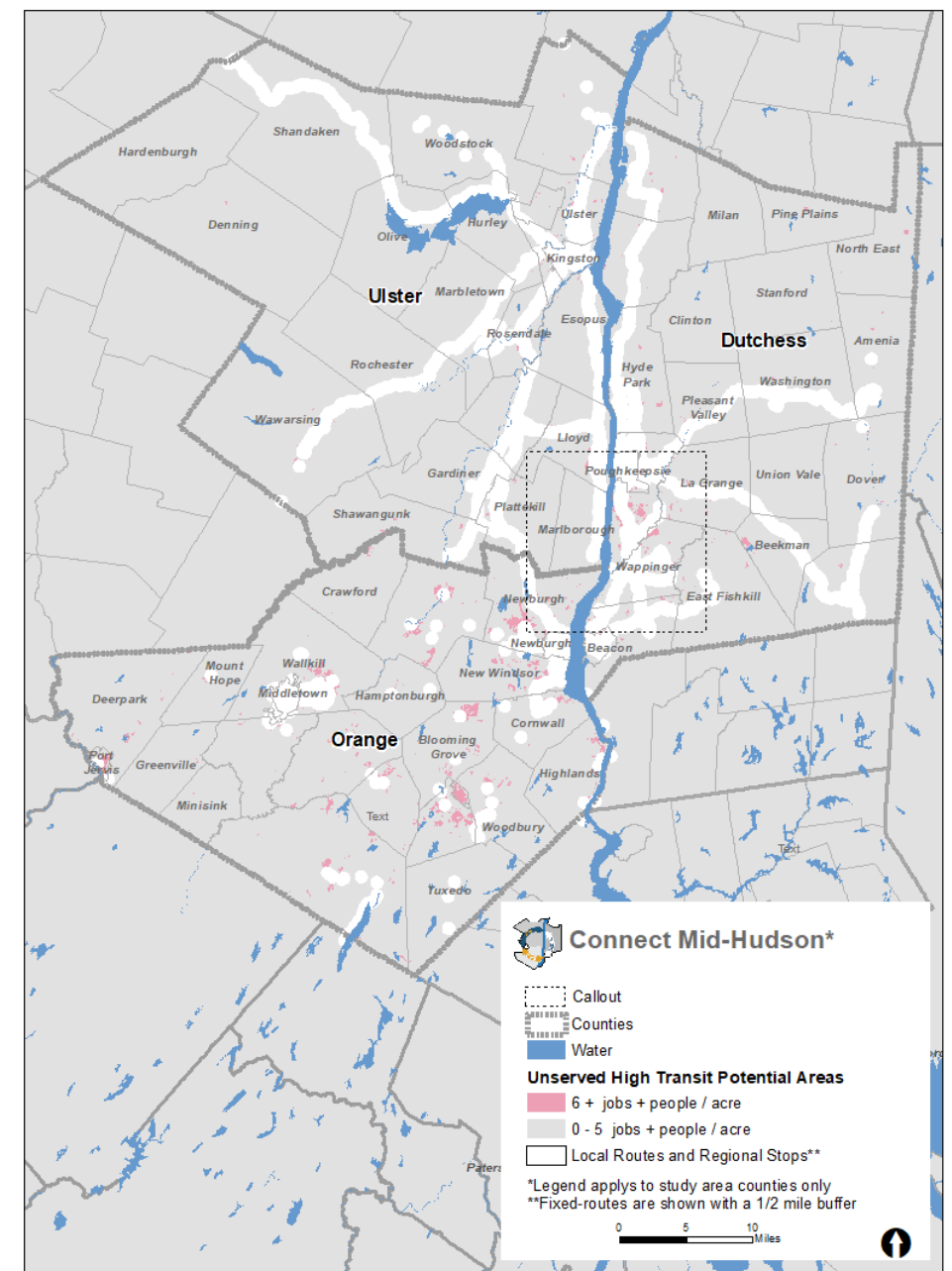
■ Low Transit Potential

- US-6 / RT 17 corridor between Middletown and Thruway is a mix of higher-density clusters and low-density areas
- Seeing major new developments including LegoLand and Amy's Kitchen
- Bookended by rail stations and served by commuter services
- Microtransit could provide local trips and first mile/last mile connections



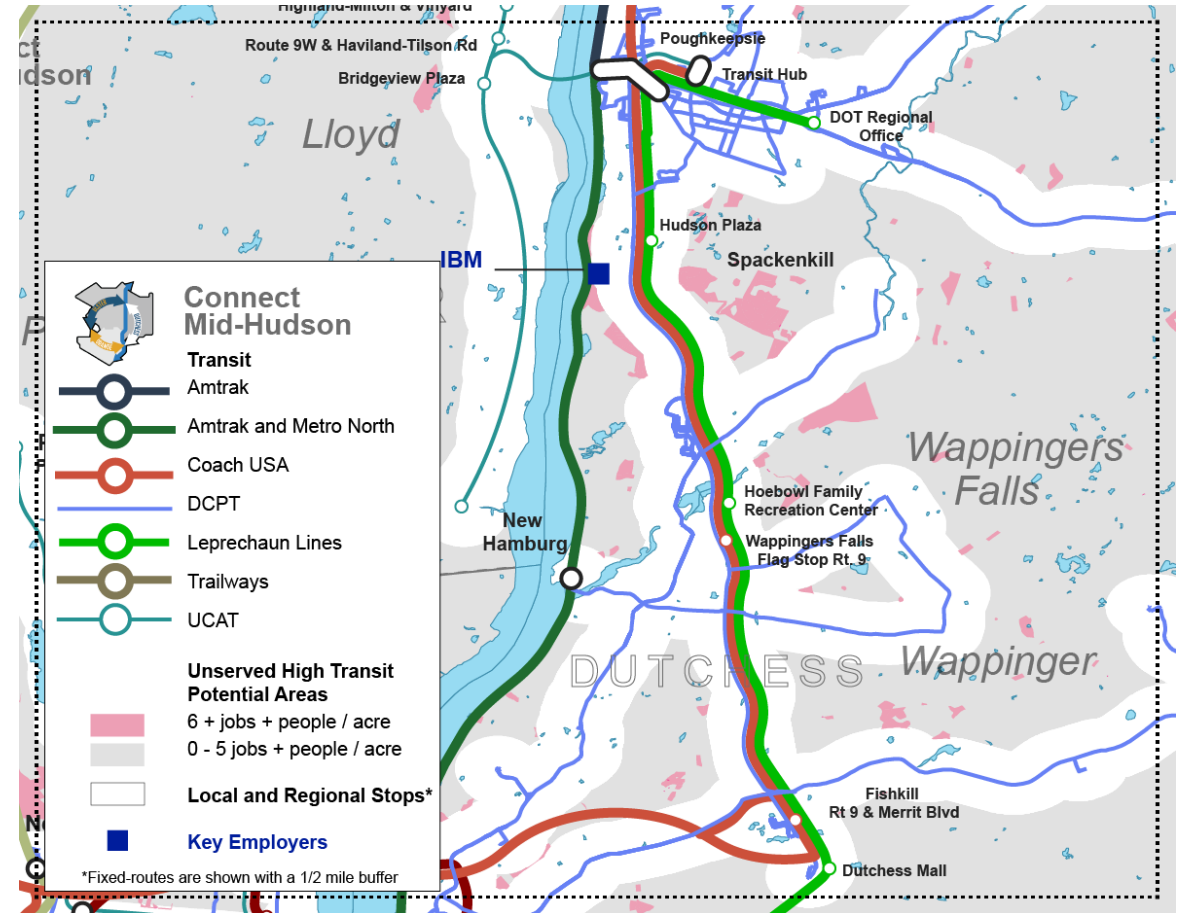
Use Cases

- Unserved by Fixed-Route Service
 - The coverage area of local fixed-route service generally extends up to ½ mile from the route itself
 - Most transit riders walk to and/or from their transit stop on at least one end of their trip
 - Maximum comfortable walk distance depends on the pedestrian environment and ranges from ¼ to ½ of a mile
 - Some unserved areas have fairly high transit potential
 - Microtransit could gauge the market



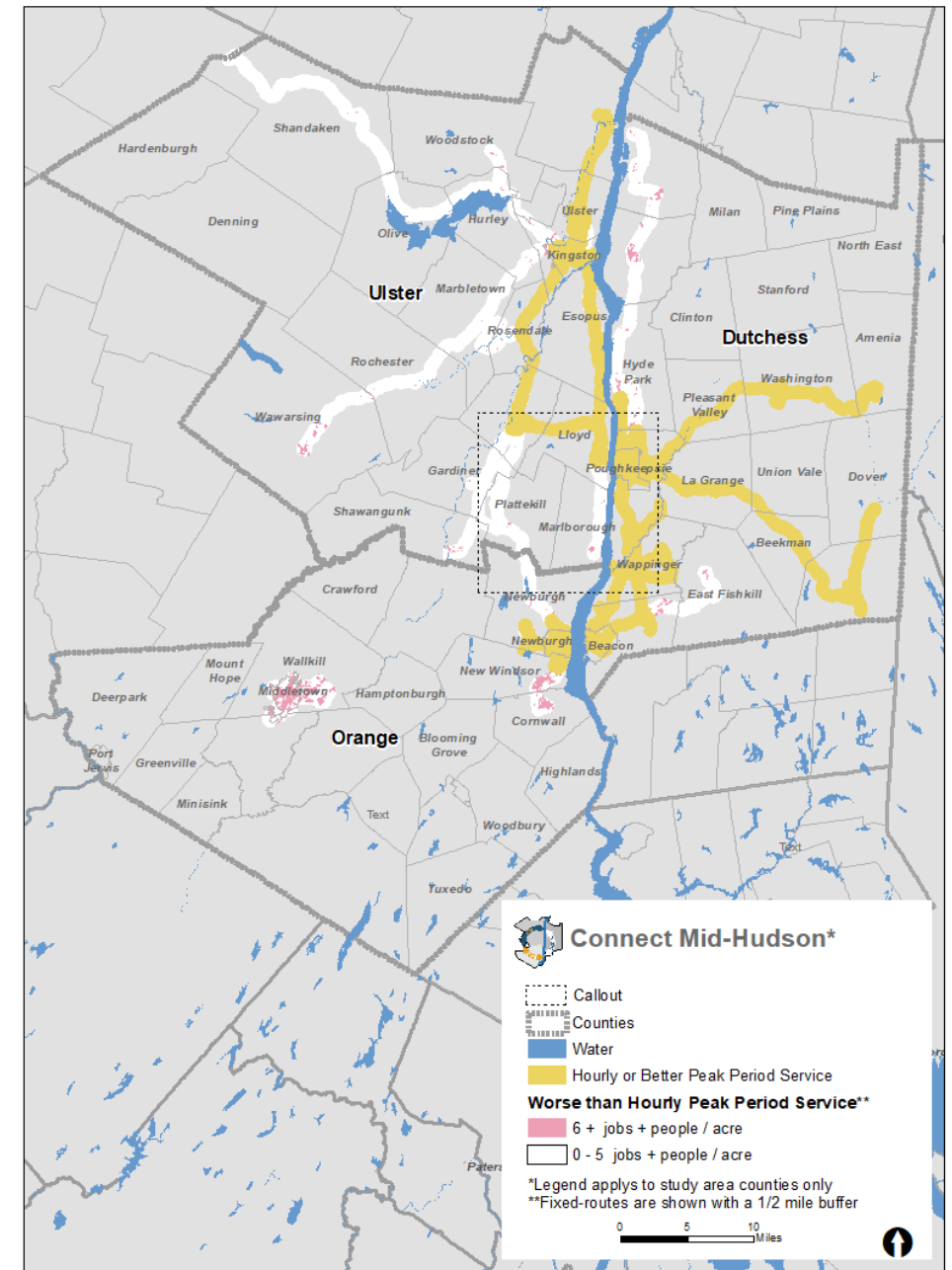
Use Cases – Potential Pilot Project

- Unserved by Fixed-Route Service
 - Spackenkill Hamlet in Poughkeepsie has moderate transit potential, but is mostly beyond the reach of local fixed-route service
 - Travel patterns of Spackenkill residents may not align with the available transit network
 - Transit service is mostly north-south on US-9 corridor
 - Travel patterns of residents are likely east-west with destinations including IBM and Hudson Plaza
 - Microtransit could provide local trips and first mile/last mile connections



Use Cases

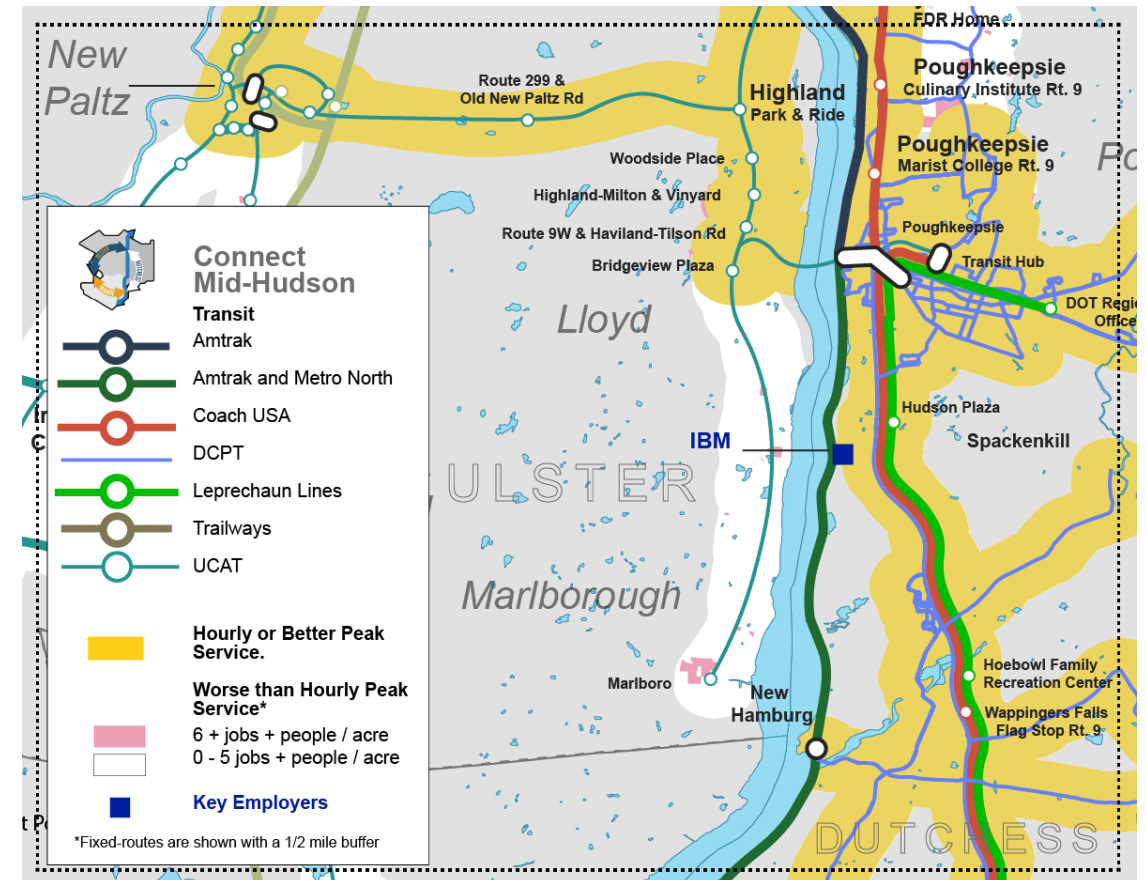
- Poorly Served by Fixed-Route Service
 - Transit systems have to find the right balance between coverage and frequency due to limited resources
 - Frequency is often determined by performance, but low-frequency service also has very limited appeal to riders
 - Microtransit can provide broader coverage than fixed-route service, but can also reduce wait times compared to low-frequency routes



Use Cases – Potential Pilot Project

■ Poorly Served by Fixed-Route Service

- UCAT KPL Route serves Kingston, Poughkeepsie, and Marlboro
 - 7 weekday roundtrips, but only 2 extend to Marlboro
- Service south of Highland is likely better suited to microtransit service
 - Fairly low-density, but with pockets of moderate transit potential in Marlboro, Milton, and Highland (as well as Poughkeepsie)
- Pilot project including Highland and Poughkeepsie could reveal preferences between modes among riders



Case Studies – FLEX by CDTA (Albany Region, NY)

■ Background / Purpose

- CDTA was looking for a way to provide supplemental service in poorly served areas between strong transit corridors (US-20 and RT 5)
- 6-month pilot program began January 3rd
- Service uses 2 Ford Transit vans owned and operated by CDTA
 - 8 passenger seats
 - 2 wheelchair spots
- Service available from 6AM to 9PM on weekdays and 10AM to 6PM on Saturdays
- Technology platform provided by TransLoc
 - Smartphone app for reservations
 - Call-in option available as well



Case Studies – FLEX by CDTA (Albany Region, NY)

■ Service Characteristics

- Fare-free during pilot phase
- Target wait time of 15-20 minutes
- 16 square mile zone
 - Includes retail (Crossgates Mall, Colony Center, etc.), office parks (Corporate Circle, etc.), and residential
 - Also includes out-of-zone “pins” (UALbany, Albany International Airport, etc.)

■ Funding

- General operating funds for pilot
- Exploring FTA Integrated Mobility Innovation Grant for second zone



Case Studies – FLEX by CDTA (Albany Region, NY)

■ Findings / Lessons Learned

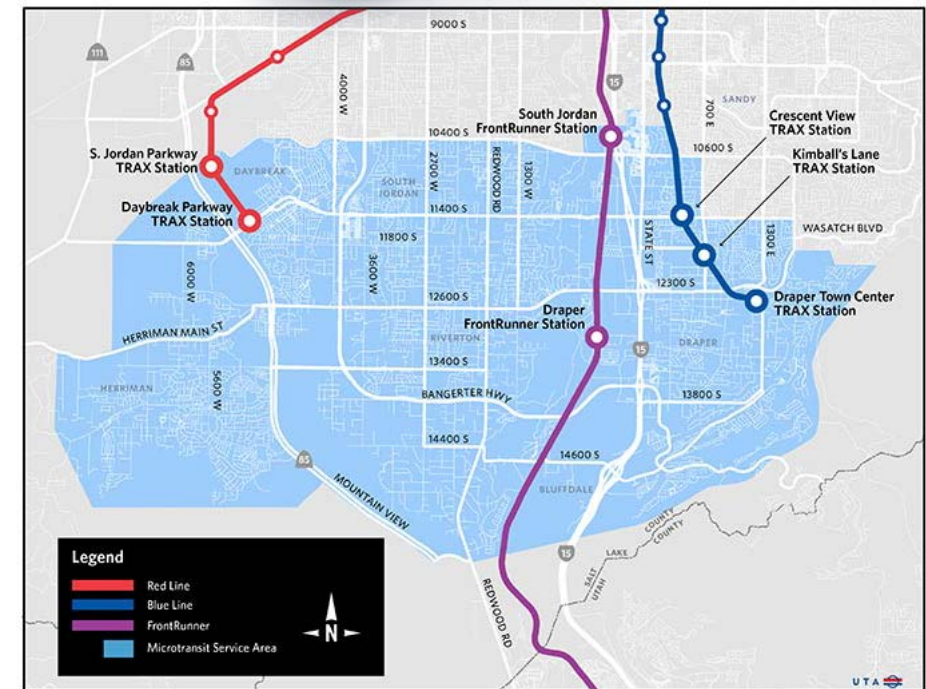
- 3 riders in first week of service; now up to 80 rides a day after 2.5 months
- Diverse trip types
 - Trips within the zone for errands, shopping, etc.
 - Commuting trips including first/last mile connections with fixed-routes
 - All existing fixed-route service has remained in operation
- Important to keep a balance between adding pins and keeping zone a reasonable size
 - Considering adding another vehicle
 - Considering prioritizing certain trip types with software



Case Studies – UTA On Demand (Salt Lake Region, UT)

■ Background / Purpose

- UTA was looking for a better way to serve a large area (65 square miles) with limited resources
 - Fixed-routes serve only half of the households in the service area
 - Deviated fixed-routes required two-hour advance reservations and were not very productive
- 12-month pilot program began November 2019
- Service uses 16 Mercedes Metris vans owned and operated by Via (turn-key operation)
 - 6 passenger seats (some wheelchair accessible)
- Service available from 6AM to 9PM on weekdays
- Technology platform provided by Via
 - Smartphone app for reservations
 - Call-in option available as well



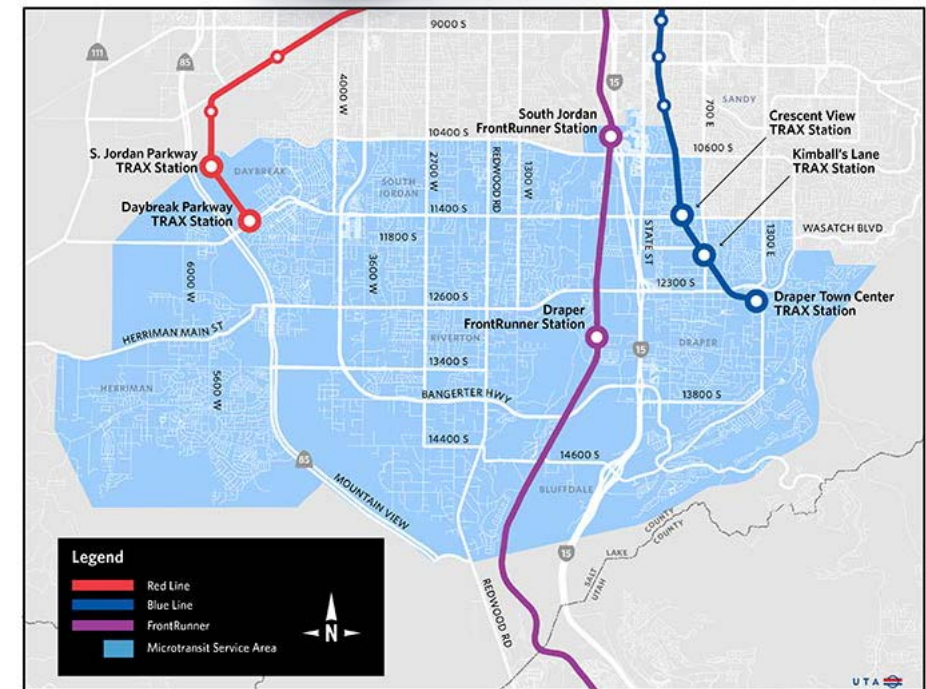
Case Studies – UTA On Demand (Salt Lake Region, UT)

■ Service Characteristics

- \$2.50 one-way fare (same as local service)
 - Paid by app/phone; no cash accepted
 - Transfers from other routes and passes accepted by selecting transfer/pass in the app and presenting ticket/pass upon boarding
- Maximum wait time of 25 minutes
- Operates corner-to-corner
 - App directs rider to pick-up location

■ Funding

- UTA began receiving additional funding in 2019 from a sales tax increase dedicated to transit



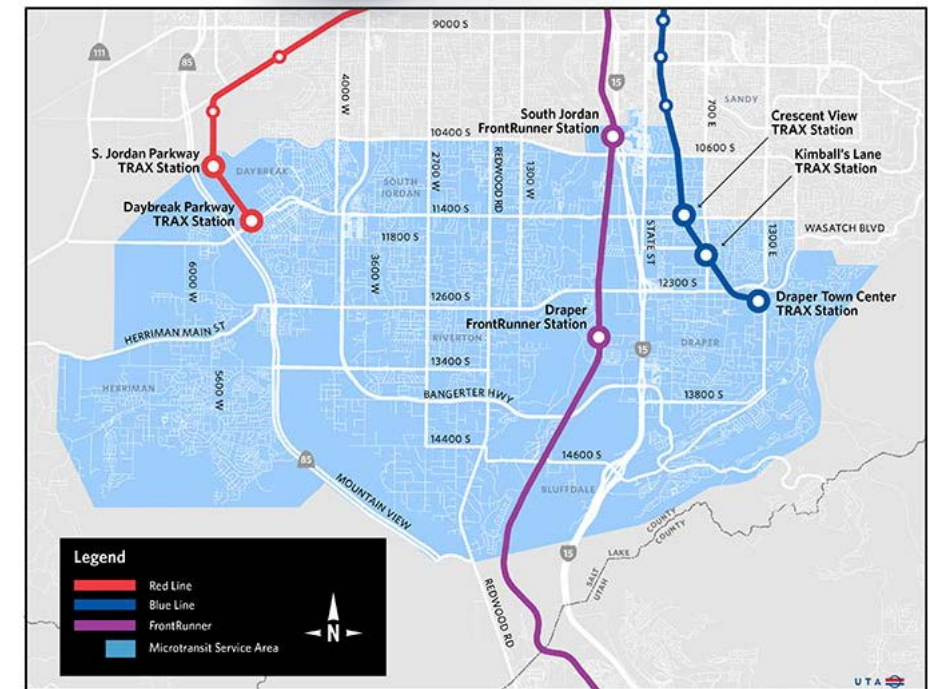
UT)

View Station
Hall's Lane Station
ATCH BLVD
Town Center Station
UTA

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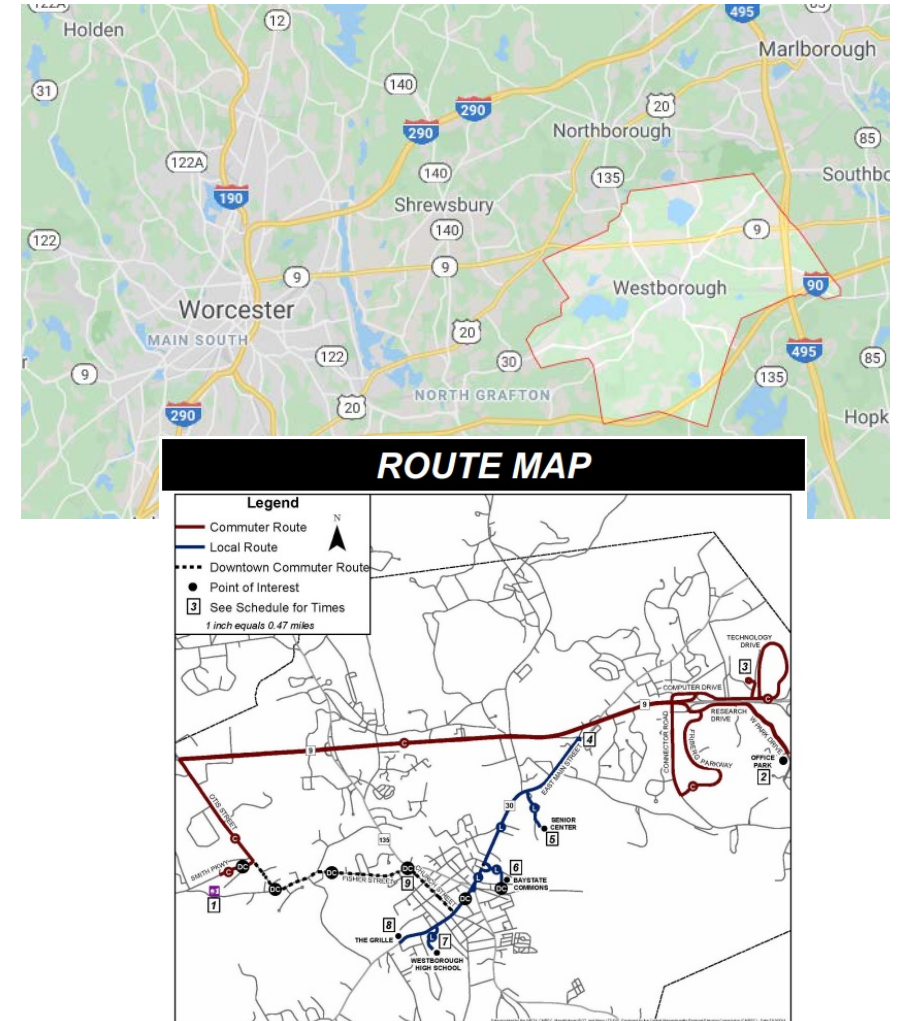
- Findings / Lessons Learned

- Ridership is growing
 - 224 in Dec., 334 in Jan., 392 in Feb.
 - Utilization has grown from 1.33 to 2.31 people per van per hour
 - Cost per rider has fallen from \$26.91 to \$15.54
 - May soon beat deviated fixed-route cost of \$13/hour
- Diverse trip types
 - 1 in 5 trips is for shopping (i.e. economic benefit)
 - Commuting trips include first/last mile connections with fixed-routes
- Routing algorithm improves with utilization
 - May allow for reduction of peak vehicles



- Background / Purpose

- Westborough is a suburban community 33 miles west of Boston, 11 miles east of Worcester, MA
 - Served by MBTA commuter rail and WRTA bus service
- WRTA is seeking to replace an ineffective community shuttle
- WRTA has been awarded a \$460,000 MassDOT grant to fund a microtransit pilot project
 - Proposals evaluated on several metrics:
 - Potential to increase ridership
 - Demonstrating innovation
 - Serve a priority population
 - Financially sustainable
 - Provide cost savings or operational efficiencies
- WRTA has selected Via to provide turn-key service



STOA Funding Eligibility

- General Rule

- Section 975.2(e) of the Statewide Mass Transportation Operating Assistance Program Rules and Regulations states:
 - *Eligible bus services shall be limited to those provided in motor vehicles having a manufacturer's rated carrying capacity of fifteen or more passengers, excluding the driver.*

- Exceptions (last updated August 1999)

- *Exceptions will be granted for use of motor vehicles having a capacity of 8 to 14 passengers when it is determined by the Commissioner that the use of motor vehicles having a capacity of 15 or more passengers is not the most effective and efficient means of providing basic mobility to:*
 - (1) transit disabled individuals in urbanized areas; and,
 - (2) persons, who by reason of physical, economic or other circumstances, do not have access to private personal transportation or are unable to use private personal transportation, either permanently or temporarily.





THANK YOU



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