

Berkshire Regional Planning Commission Microtransit Feasibility Study

TAC Briefing

May 20, 2025

Prepared by:



Agenda

- Project overview
- Introduction to microtransit
- Needs Assessment summary and findings
- Discussion, questions, next steps

Project Overview

Background

- Berkshire County faces the challenges of providing a comprehensive and effective transit service for all its residents and visitors.
- Public transportation is concentrated in the county's more developed areas, resulting in challenges with accessibility and personal vehicle dependency.

Microtransit Feasibility Study for Berkshire County

- **Study Goal:** Develop recommendations for the implementation of a pilot microtransit service.
- **Long-Term Goal:** Provide a sustainable, permanent microtransit service.



Introduction to Microtransit

What is Microtransit?

- Technology-driven demand-response service with predictable fares
- More coverage than fixed-route service; more responsive than traditional dial-a-ride services
- Effective approach for low-density and/or auto-oriented environments
- Similar interface for those who have used Uber/Lyft app



Microtransit Use Cases

Coverage Expansion

- Can supplement fixed-route or deviated flex bus service.
- Allows rural agencies to provide service across a larger service area.



Dial-a-Ride Replacement

- Gives customers more flexibility to book via app or immediate service.
- Potential to reduce the burden on call center staff.
- Can reduce demand on separate ADA paratransit service.

Fixed-Route or Deviated Fixed-Route Replacement

- Allows rural transit agencies to provide service across larger service area, sometimes more efficiently or cost-effectively.
- Can provide a more flexible service for customers.



First-Mile/Last-Mile Service

- Provides connection to fixed-route service.
- Allows customers to access transit services that are beyond walking distance.

Needs Assessment Summary and Findings

Needs Assessment Overview

- Summary of relevant existing conditions in Berkshire County, including:
 - Existing transit options and transit productivity
 - Key destinations
 - Demographic and socio-economic trends
 - Travel flows
- Analysis of microtransit suitability based on these conditions.
 - This is not necessarily where we will propose operating zones!
 - Recommendations will be further informed by stakeholder and public input, as well as operational feasibility.

Transit Potential & Transit Need

Methodology

- **Transit Potential:** Total number of jobs and population per acre.
- **Transit Need:** Demographic factors commonly correlated with transit use.

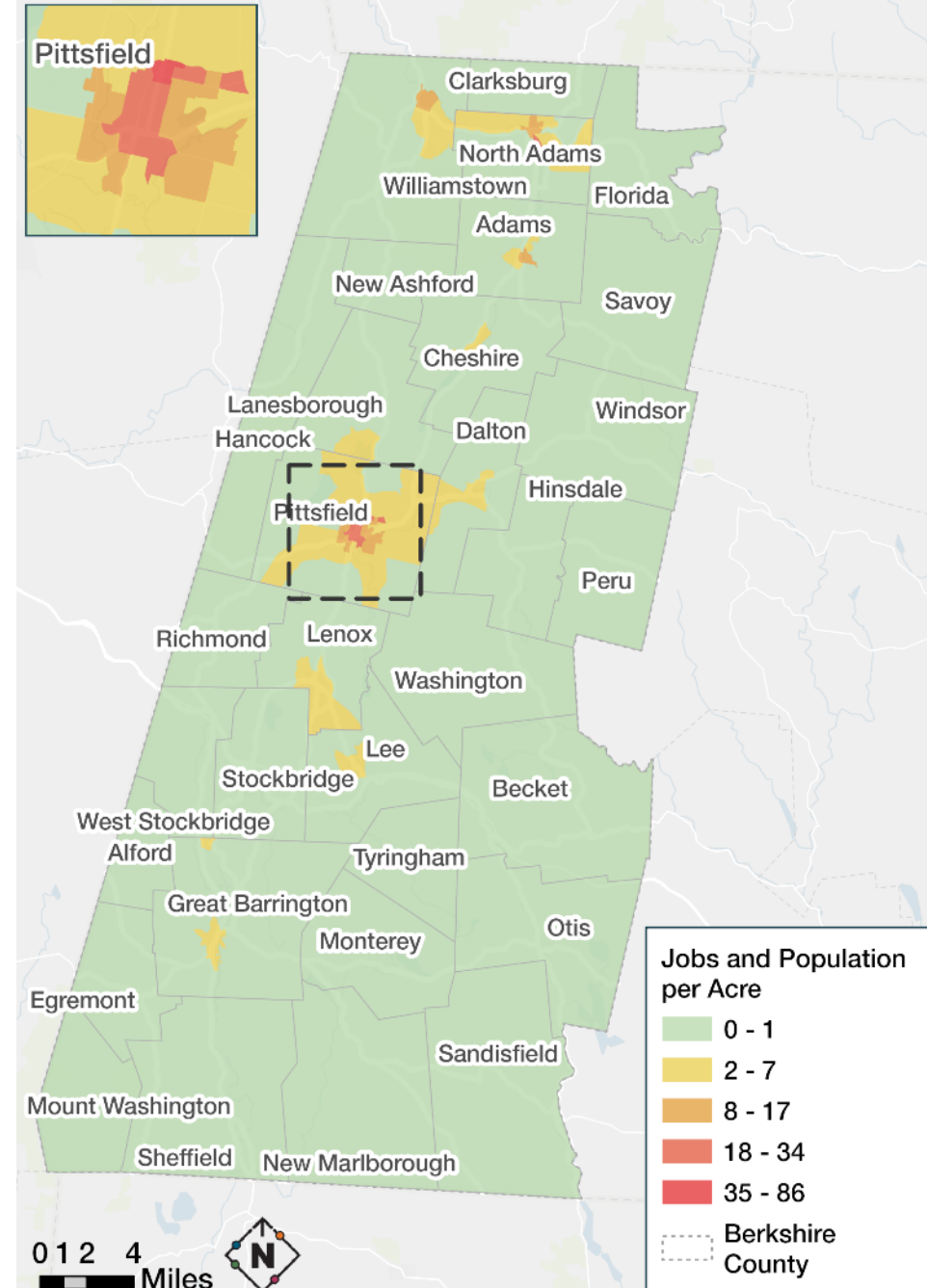
INDEX	ANALYSIS FACTOR	DATASET
Transit-Oriented Population Propensity	Population	Total Population
		Non-White or Hispanic Population
	Age	Seniors (Age 65+)
		Young Adult (Age 18-25)
	Income	Population with Household Income below 150% Poverty Line
	Vehicle Ownership	Zero-Car Households
		One-Car Households
	Disability Status	Population with a Disability

Transit Potential

- Areas with highest Transit Potential:
 - Pittsfield
 - North Adams
 - Williamstown
- Areas with Medium-Low Transit Potential:
 - West of Downtown Pittsfield on Rte. 20.
 - East of Downtown Pittsfield on Rte. 9.
 - Lenox
 - Lee
 - Great Barrington

Sources: 2023 American Community Survey (ACS) 5-year Estimate, 2022 Longitudinal Employer-Household Dynamics (LEHD).

Transit Potential

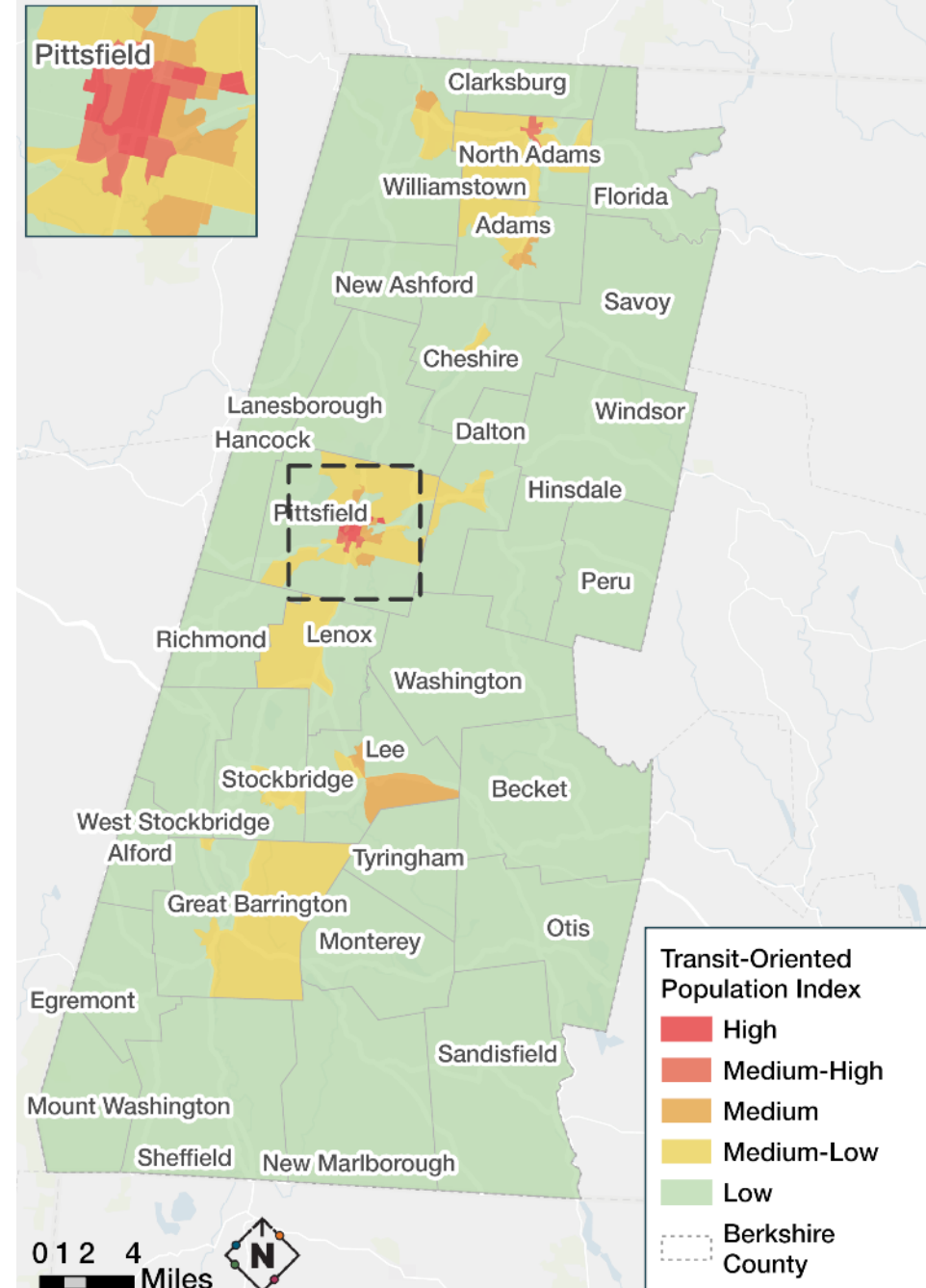


Transit Need

- Areas with Highest Transit Need:
 - ▣ Pittsfield
 - ▣ North Adams
 - ▣ Williamstown
 - ▣ Adams
 - ▣ Lee
- Areas with Medium-Low Transit Need:
 - ▣ Pittsfield (outside Downtown)
 - ▣ North Adams (outside Downtown)
 - ▣ Adams
 - ▣ Lenox
 - ▣ Great Barrington

Sources: 2023 American Community Survey (ACS) 5-year Estimate, 2022 Longitudinal Employer-Household Dynamics (LEHD).

Transit-Oriented Population Index



Demographic Suitability

Microtransit is most suitable in places with **medium to low** Transit Potential but **medium to high** Transit Need.

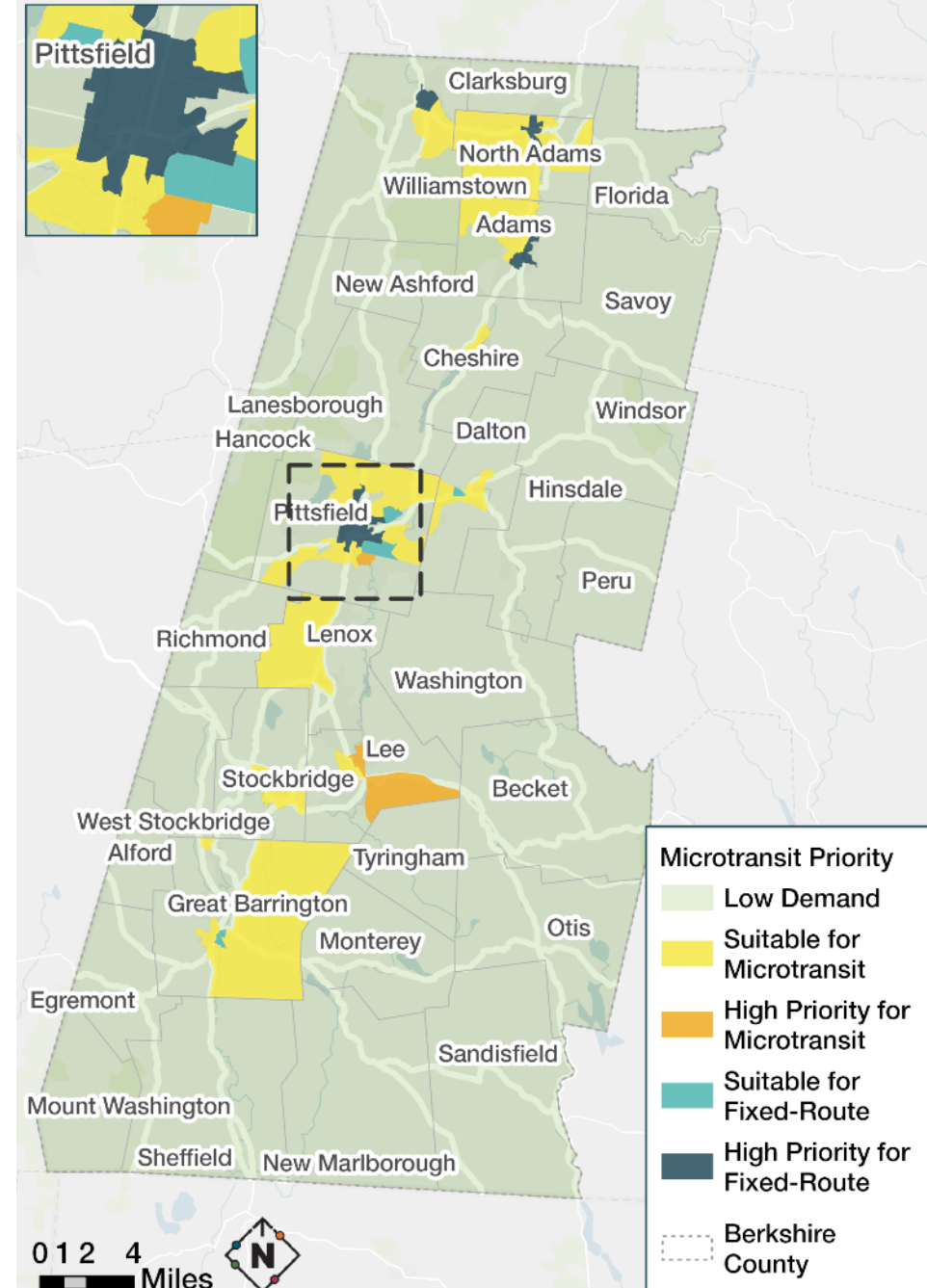
	TRANSIT-ORIENTED POPULATION PROPENSITY			
Transit Potential (Jobs + Population per Acre)		Low	Low-Medium	Medium to High
	Less than 5	Low Demand for Any Transit	Suitable for Microtransit	High Priority for Microtransit
	5 or more	Somewhat Suitable for Fixed-Route	Suitable for Fixed-Route	High Priority for Fixed-Route

Demographic Suitability

- Areas suitable for microtransit:
 - Williamstown
 - North Adams
 - Adams
 - Pittsfield (outside of Downtown)
 - Dalton
 - Lenox
 - Lee
 - Stockbridge
 - Great Barrington

Sources: 2023 American Community Survey (ACS) 5-year Estimate, 2022 Longitudinal Employer-Household Dynamics (LEHD).

Demographic Priority



Travel Demand

Methodology

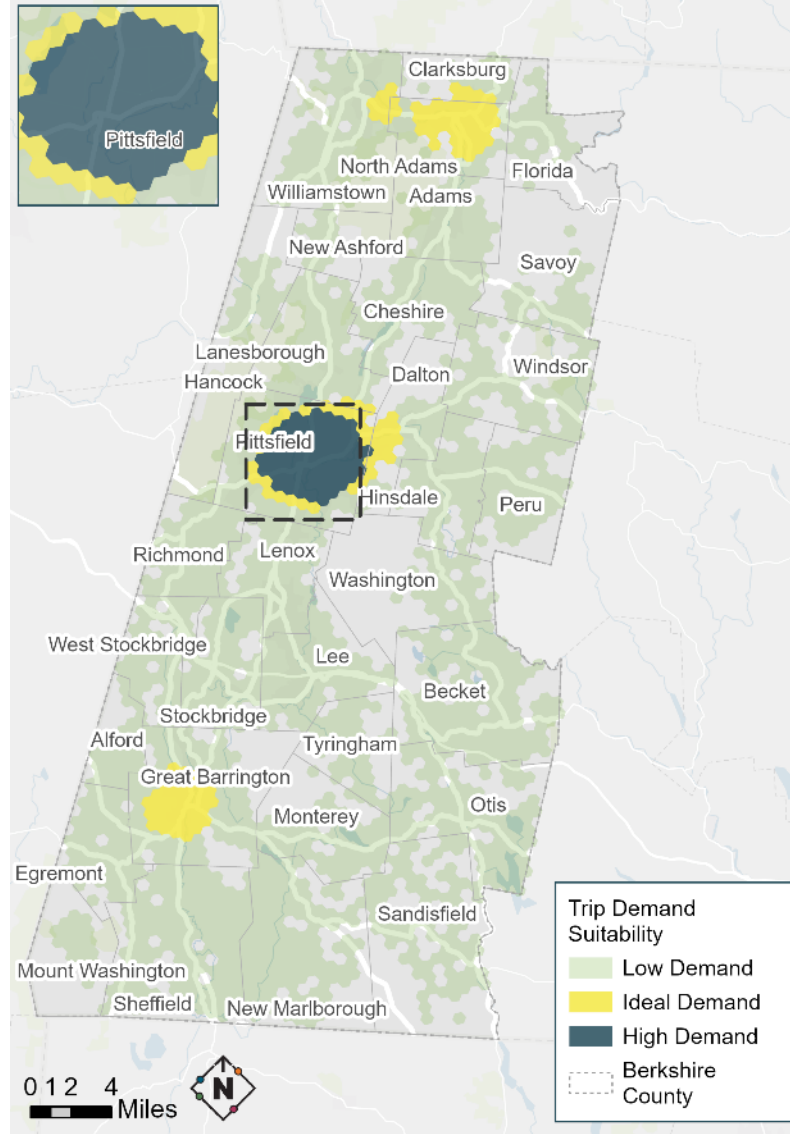
- Countywide trip analysis using Replica's activity-based travel demand model.
 - Time of day
 - Duration
 - Purpose
- Trip characteristics most suitable for microtransit:
 - Shorter than transit trips.
 - Do not form a recognizable corridor.
 - Spread throughout the day.
 - Between areas of lower density.
 - For a desirable purpose (e.g., shopping, medical appointment).

Trip Demand Suitability

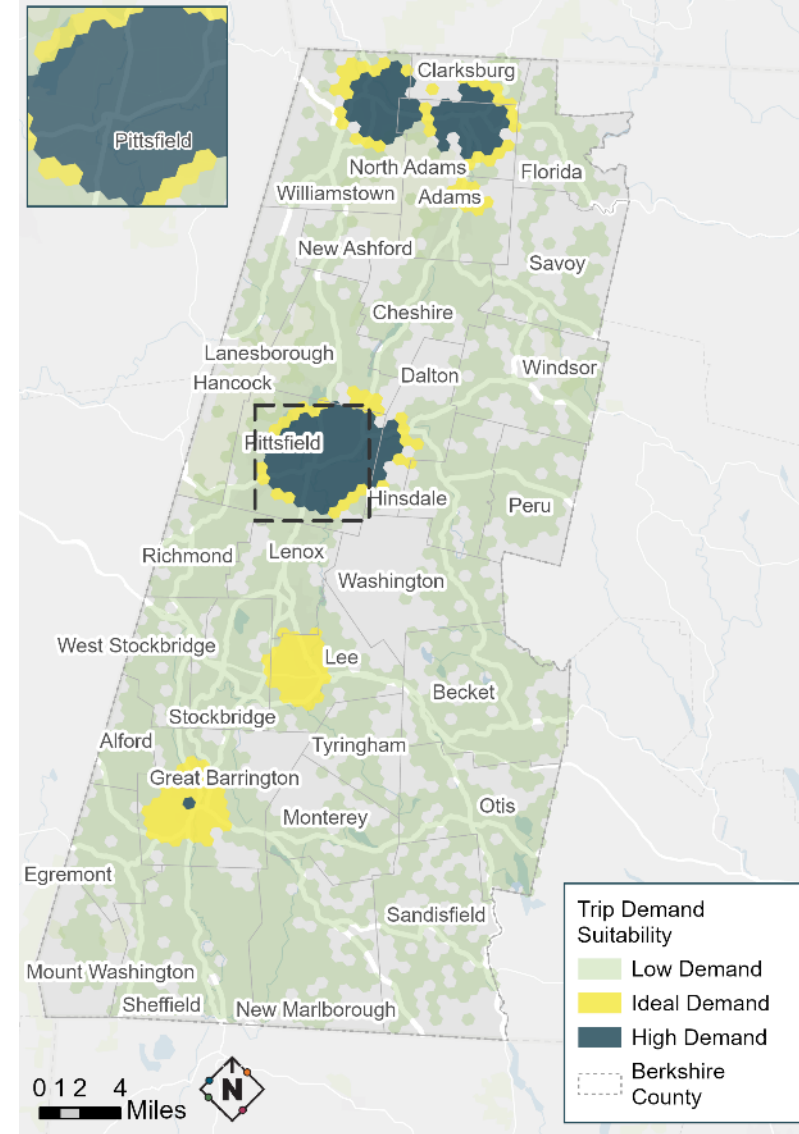
- AM Peak microtransit suitability (left):
 - ❑ Great Barrington
 - ❑ North Adams
 - ❑ Williamstown
 - ❑ Pittsfield (outside of Downtown)
- PM Peak and Weekend microtransit suitability:
 - ❑ Williamstown, North Adams, and Pittsfield (outside Downtown).
 - ❑ Lee
 - ❑ Great Barrington

Source: Replica (<https://www.replicahq.com/>)

Trip Demand Suitability - AM Peak



Trip Demand Suitability - All Day Weekend

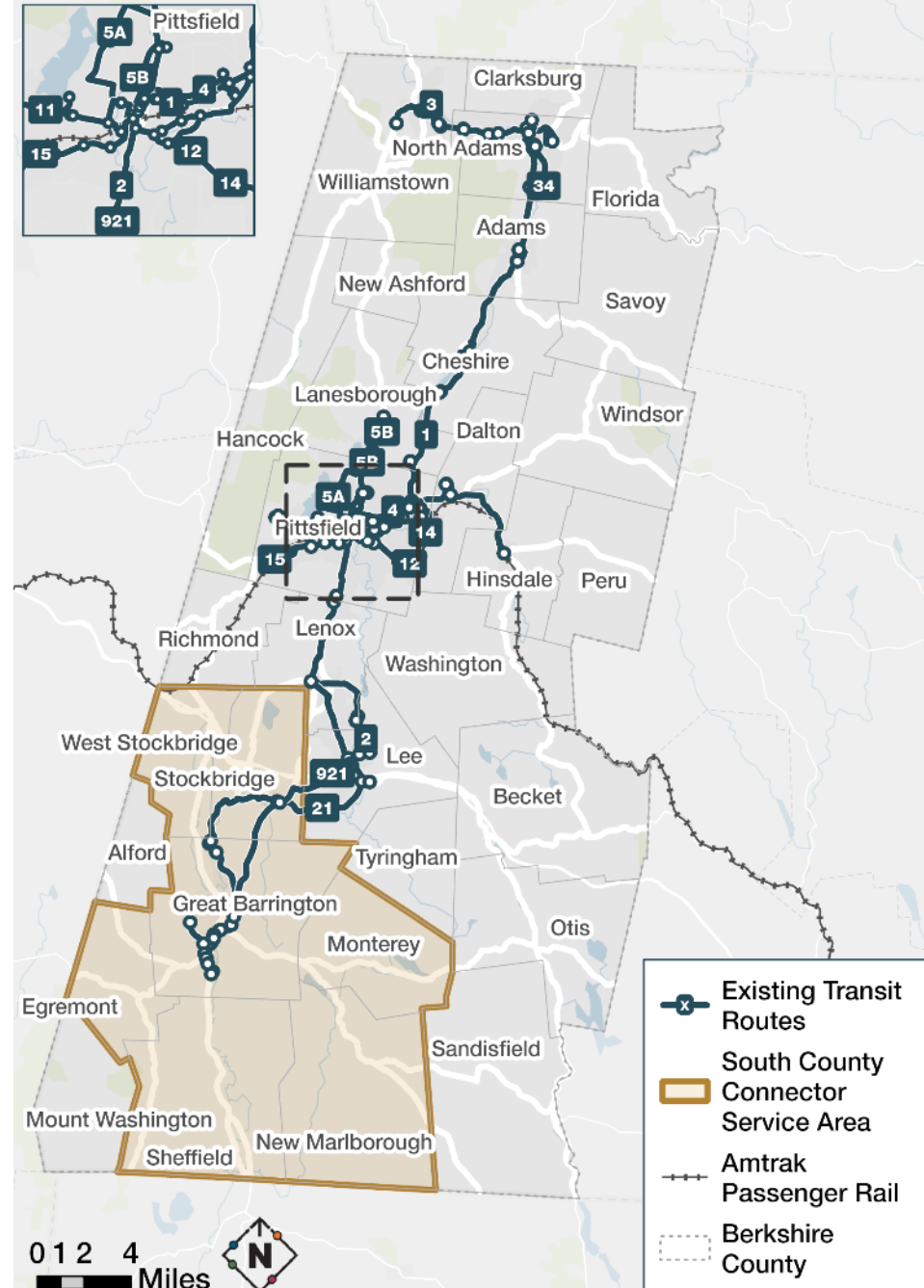


Existing Transit Productivity

Considerations for Microtransit

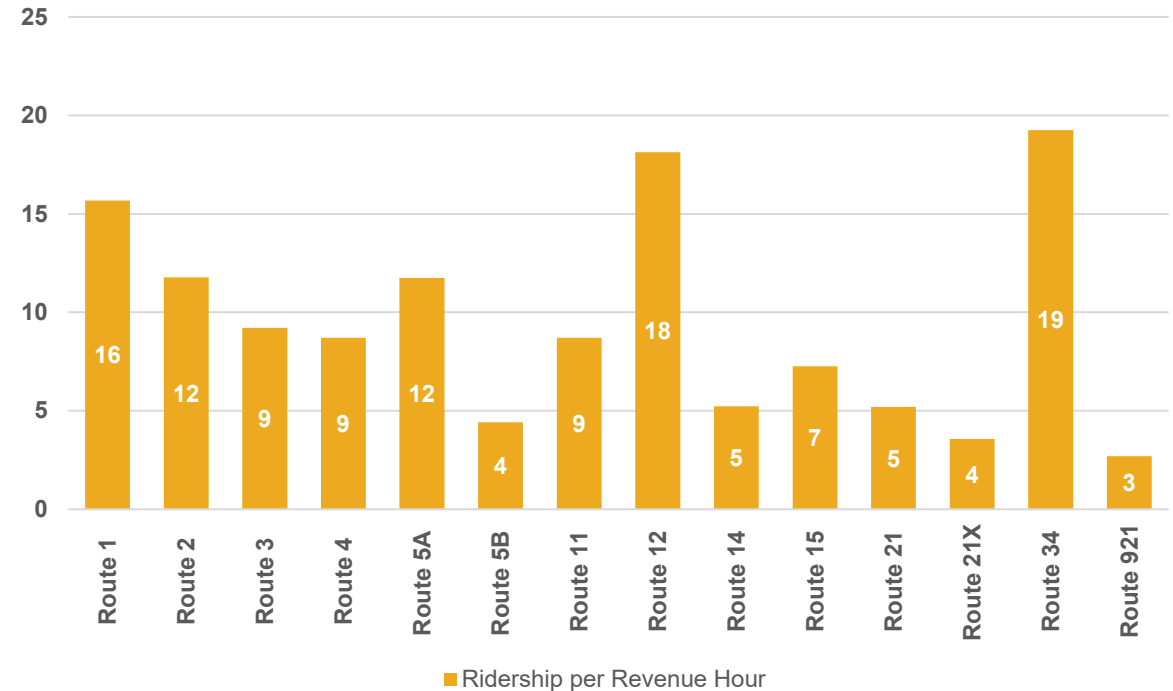
- Microtransit is an opportunity to enhance existing transit service.
 - ▣ Serve areas with unmet transit demand.
 - ▣ Avoid competing with productive transit routes.

Existing Transit Service



Fixed Route Ridership Productivity

- Routes with high ridership per hour demonstrate effective service that is meeting demand, while routes with low ridership per hour may be more effectively served by (or complemented by) other forms of transit service.
- Fixed routes with high ridership per hour:
 - ❑ 1 - Pittsfield—North Adams
 - ❑ 2 - Pittsfield—Lee
 - ❑ 5A - Pittsfield—Lanesborough
 - ❑ 12 - Pittsfield Southeast Loop
 - ❑ 34 - North Adams Loop
- Fixed routes with low ridership per hour:
 - ❑ 5B - Pittsfield—Lanesborough
 - ❑ 14 - Pittsfield Southeast Loop
 - ❑ 21X - Great Barrington—Lenox—Pittsfield*
 - ❑ 921 - Express Pittsfield—Great Barrington*



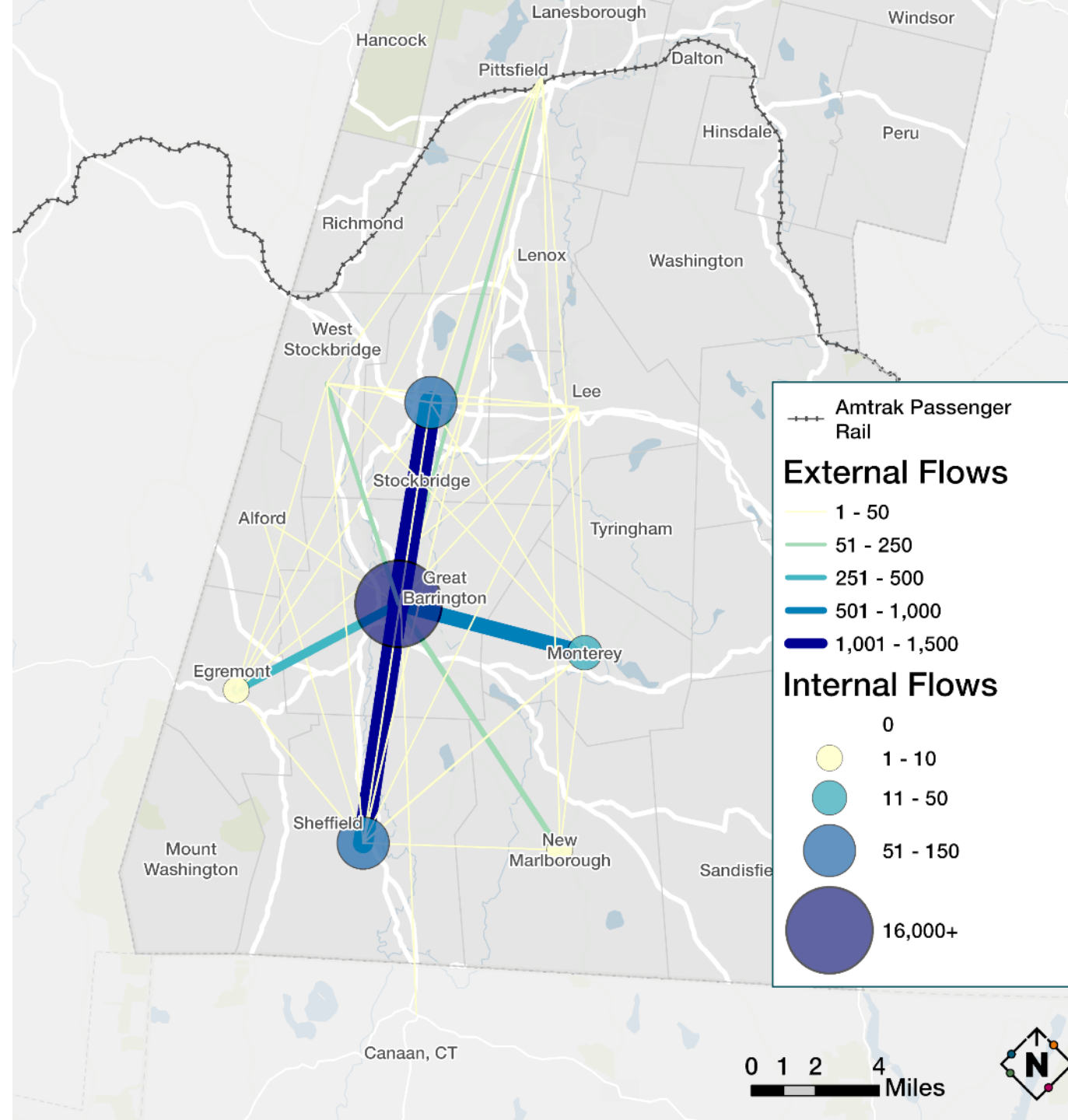
Source: Berkshire Regional Transit Authority (FY2024)

* Route 21X was replaced by Route 921 in the middle of FY24. Route 921 ridership has grown significantly since initial implementation.

South County Connector Ridership

- Nearly 17,000 South County Connector trips—over 78 percent of its annual total—were taken within Great Barrington
 - ▣ Trips between Great Barrington and Stockbridge/Sheffield represented twelve percent of annual trips in 2024.
- Intercity trips were much more common than intra-city trips, representing almost 21 percent of all trips in 2024.
 - ▣ Intra-city trips represented less than one percent of total trips

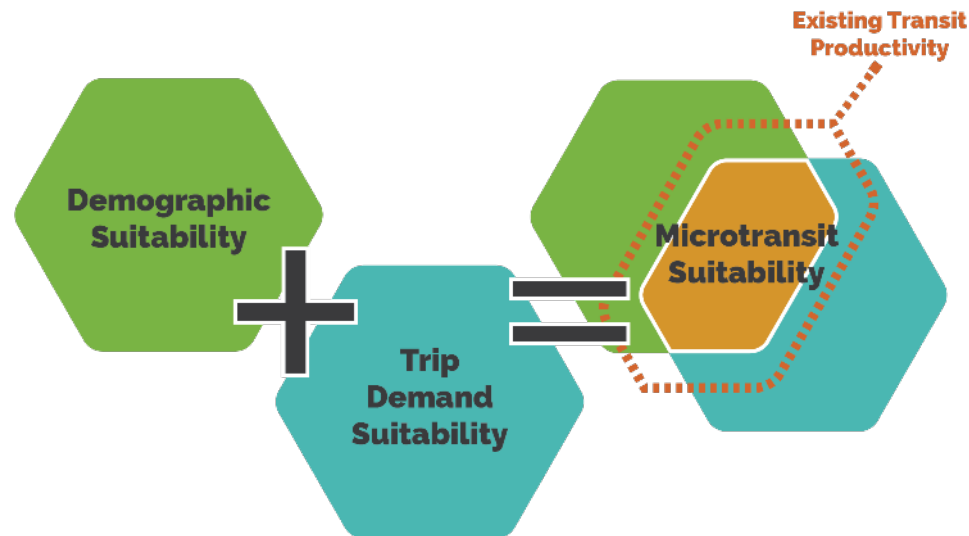
Source: South County Connector (CY2024)



Summary

Methodology

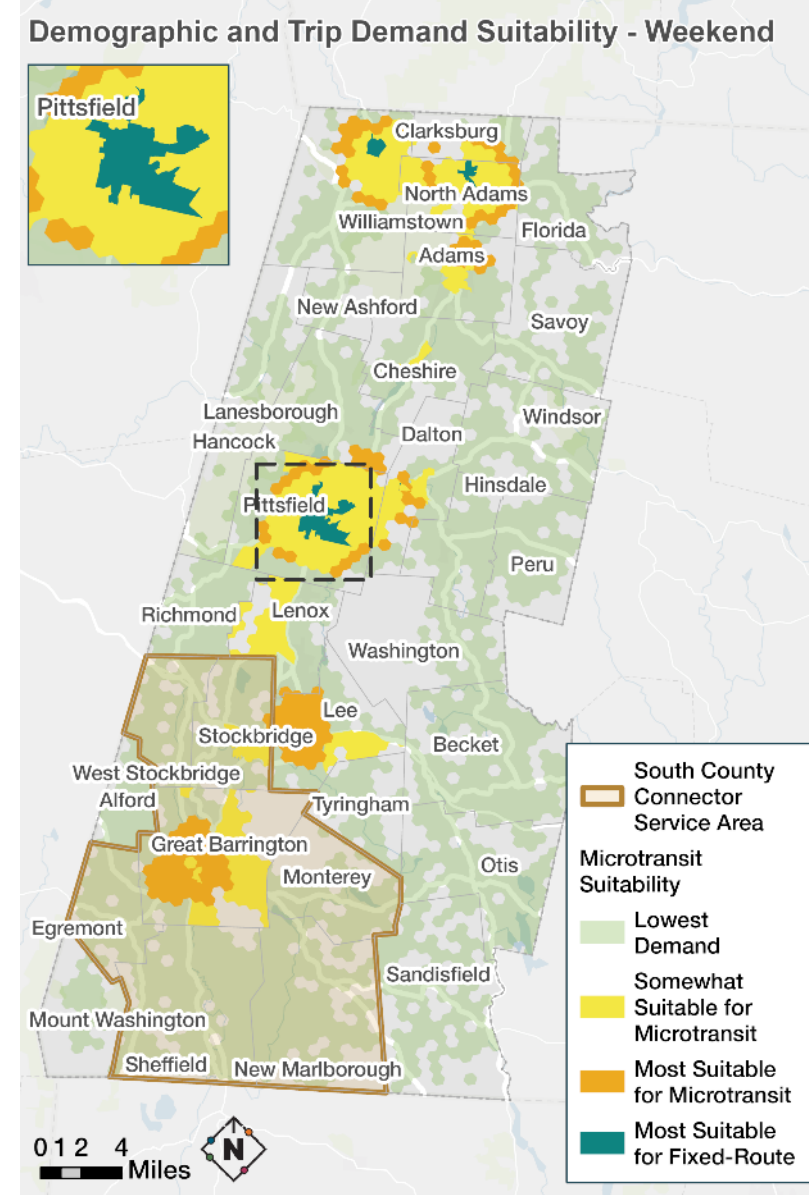
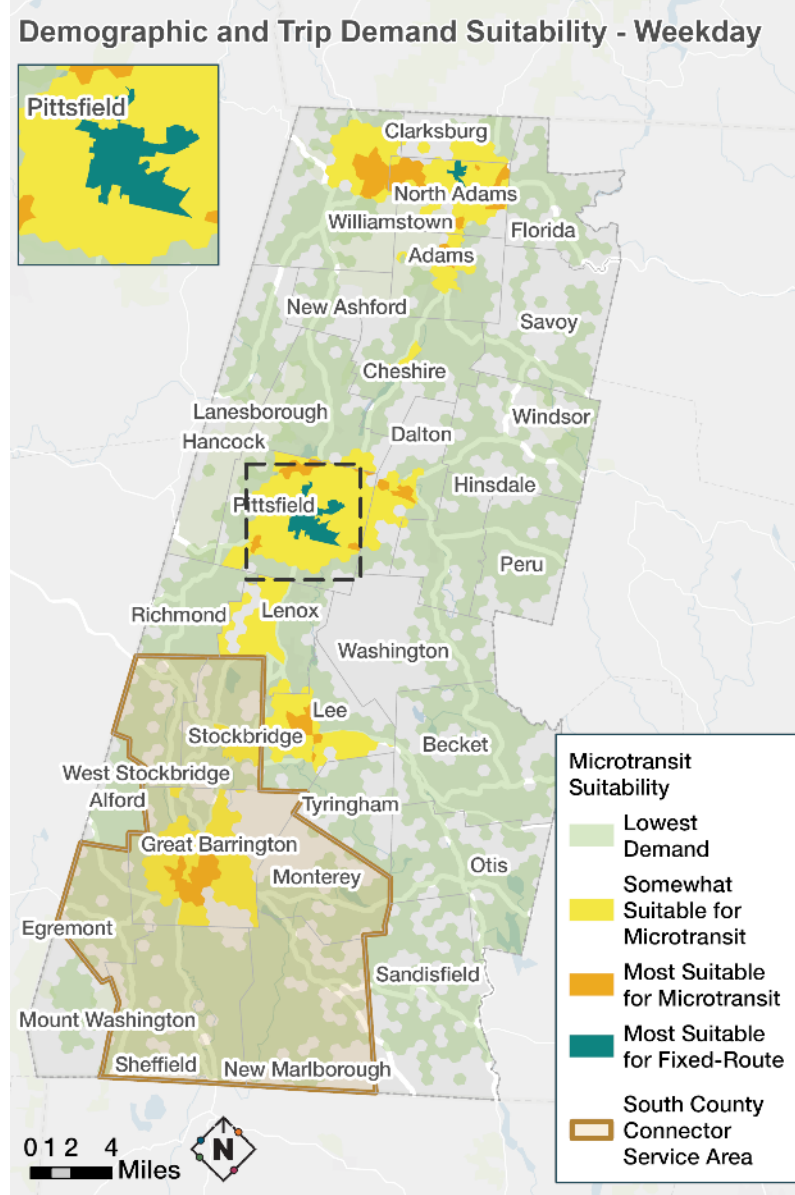
Overlaps between Demographic Suitability and Trip Demand Suitability indicate where microtransit can be most successful.



	Transit Potential & Transit Need are low for transit service	Transit Potential & Transit Need are ideal for microtransit	Transit Potential & Transit Need are ideal for fixed-route transit
Trip Demand is low for transit service	Lowest Demand		Somewhat Suitable for Microtransit
Trip Demand is ideal for microtransit	Somewhat Suitable for Microtransit	Most Suitable for Microtransit	
Trip Demand is ideal for fixed-route transit			Most Suitable for Fixed-Route

Combined Suitability

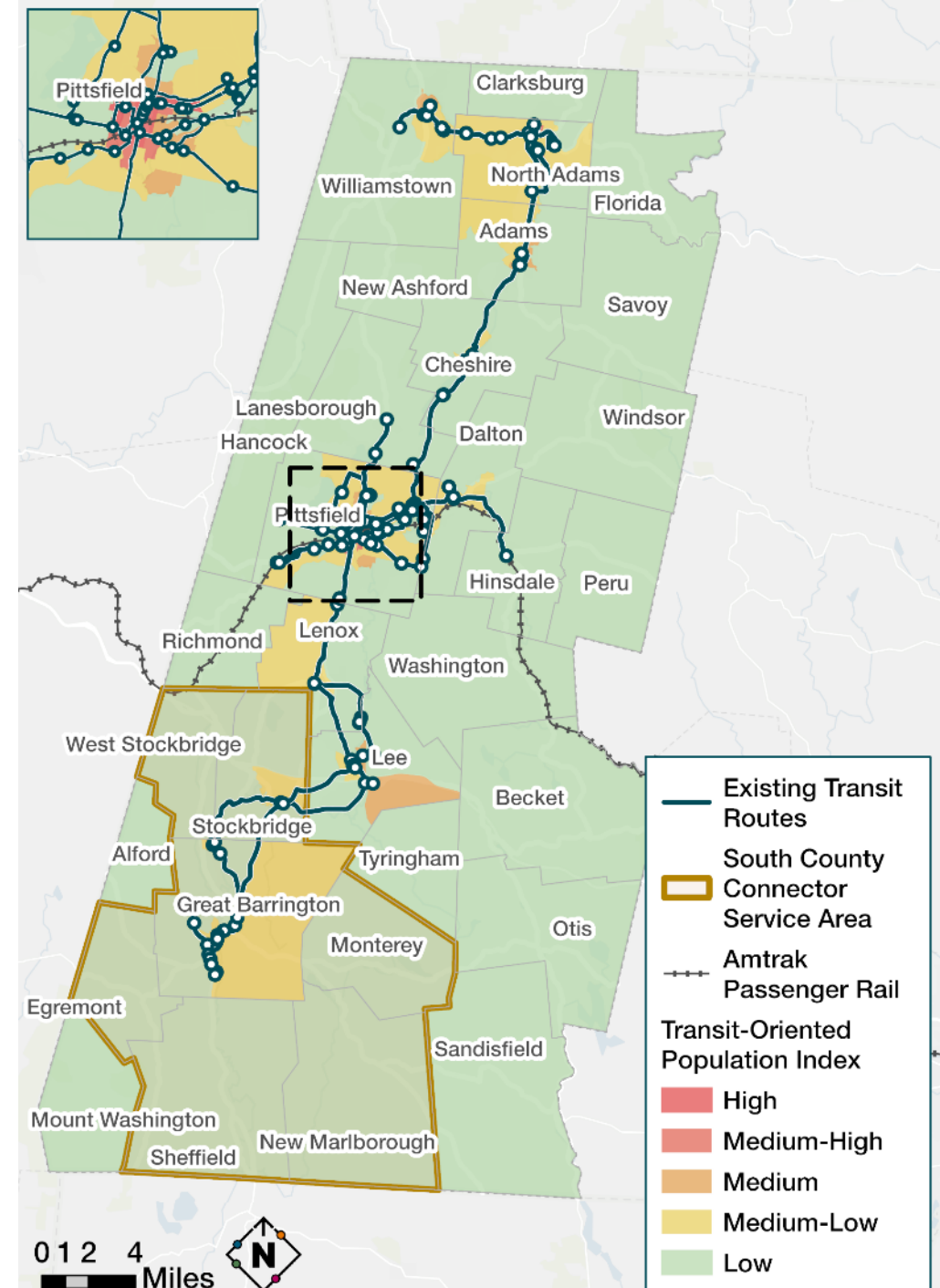
- Areas most suitable for microtransit:
 - Pittsfield
 - North Adams
 - Williamstown
 - Great Barrington
 - Lenox
 - Lee



Sources: 2023 American Community Survey (ACS) 5-year Estimate, 2022 Longitudinal Employer-Household Dynamics (LEHD), Replica (<https://www.replicahq.com/>)

Transit Gaps

- Many residents still lack convenient access to bus stops.
 - Lenox has only three major bus stops despite a relatively high number of transit-dependent residents.
 - In Adams and North Adams, residents who live farther from main corridors face limited or no access to reliable public transit.
 - Pittsfield has suburban pockets with medium to high transit reliance where residents lack convenient access to bus stops.
- The broad coverage that microtransit affords can fill these gaps.



Discussion & Questions

Next Steps



Thank you!

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