SCTA Microtransit Feasibility Study

STEERING COMMITTEE MEETING 2 – MARCH 3, 2025

Agenda

- Introductions
- Background of Study and Overview of Microtransit
- Opportunity Zone Identification Summary
- Public Participation Plan Summary
- Microtransit Models Summary
- Open Discussion and Next Steps

Team Introductions

Kimley»Horn

Tyler Beduhn,
Project Manager

Vickie Karandrikas

Poonam Patel

STEERING COMMITTEE

SCTA Board Members

VisionCorps

REAL Life Community Services

ECHOS Lancaster

Lancaster Chamber of Commerce

Northern Lancaster Chamber of Commerce

Southern Lancaster Chamber of Commerce

Denver Borough

Quarryville Borough

Providence Township

Warwick Township

City of Lancaster

Lancaster County Commissioners

Lancaster County Workforce Development Board

Lancaster County Office of Aging

Lancaster County Planning Department

SCTA

Steering Committee Introductions

- **Name**
- **Organization**
- **Role**

Project Background

Transit Development Plan (TDP) adoption in 2024

- Preliminary areas with microtransit potential identified
- Recommended additional study to get to a pilot implementation

Red Rose Transit Authority (RRTA) fixed route changes

- Implemented in November 2024

This feasibility study will develop recommendations for microtransit implementation in Lancaster County

What is Microtransit?

ON-DEMAND

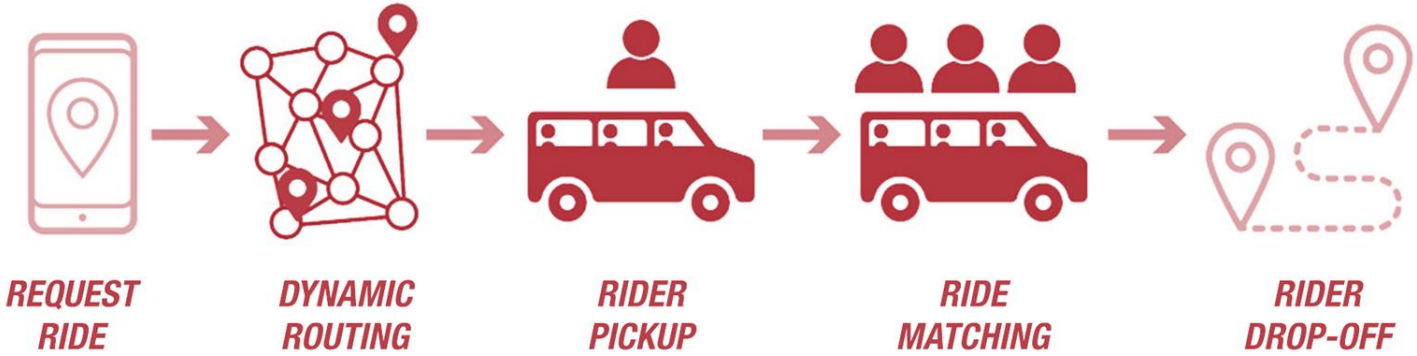
TECHNOLOGY-ENABLED

FLEXIBLE

ZONE OR DESIGNATED STOPS

SHARED VEHICLE

A Microtransit Trip



Understanding Microtransit

- A flexible tool, suitable for specific goals and mobility needs, but not a universal solution
- Clear goals, performance metrics, and service-level expectations should be set during planning
- Tailor service to meet the needs of the target market and community
- Zones typically cover 5-15 square miles, serving lower-density trip generators
- Productivity ceiling: 2-5 passengers per vehicle hour; costly to scale in high demand areas
- Ideal for areas where traditional fixed-route service isn't feasible due to low-density
- Operable under various models: in-house, private providers, or hybrid approaches
- Marketing, public education, adaptability, and continuous performance monitoring are crucial for success

MicroCAT
Charlottesville, VA

PonyPlus
Monroe County, PA

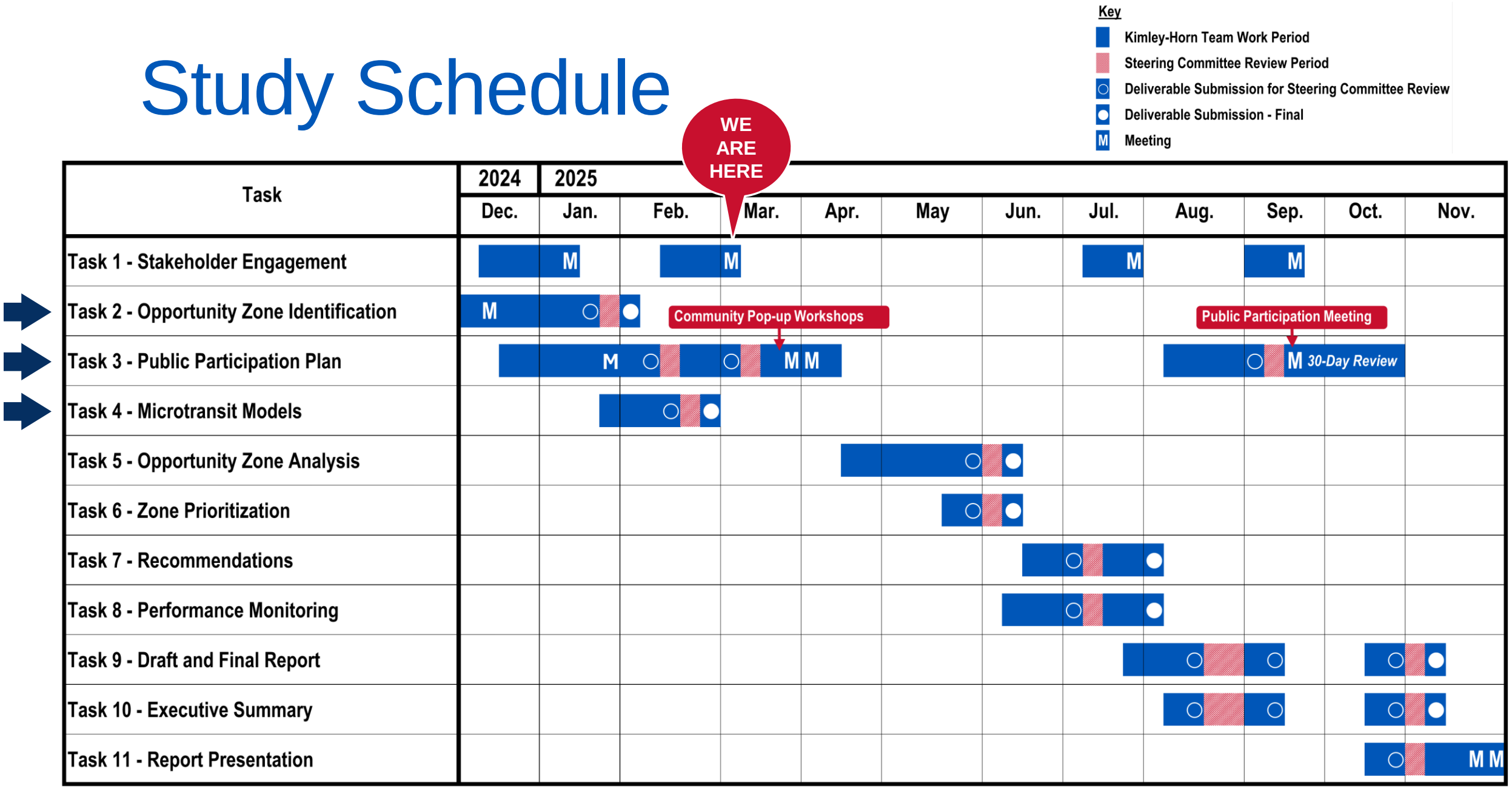
Steering Committee Involvement

Meetings

- Kick-off Meeting: January
- **Opportunity Zones and Models Meeting: March**
- **Recommendations Meeting: July**
- **Draft Study Meeting: September**

*One week review periods alongside SCTA for each task deliverable

Study Schedule



Opportunity Zone Identification

SUMMARY

SCTA Goals Relevant to Microtransit

GOAL
(from Transit Development Plan)

Effective

Offer a network that links people to the places they need and want to go

Efficient

Make riding transit reliable and efficient

Fiscally Sustainable

Operate a service that maximizes available funds and remains well-positioned financially into the future

Innovative

Explore new tools and operating models to maximize service quality and efficiency

Identifying Zones

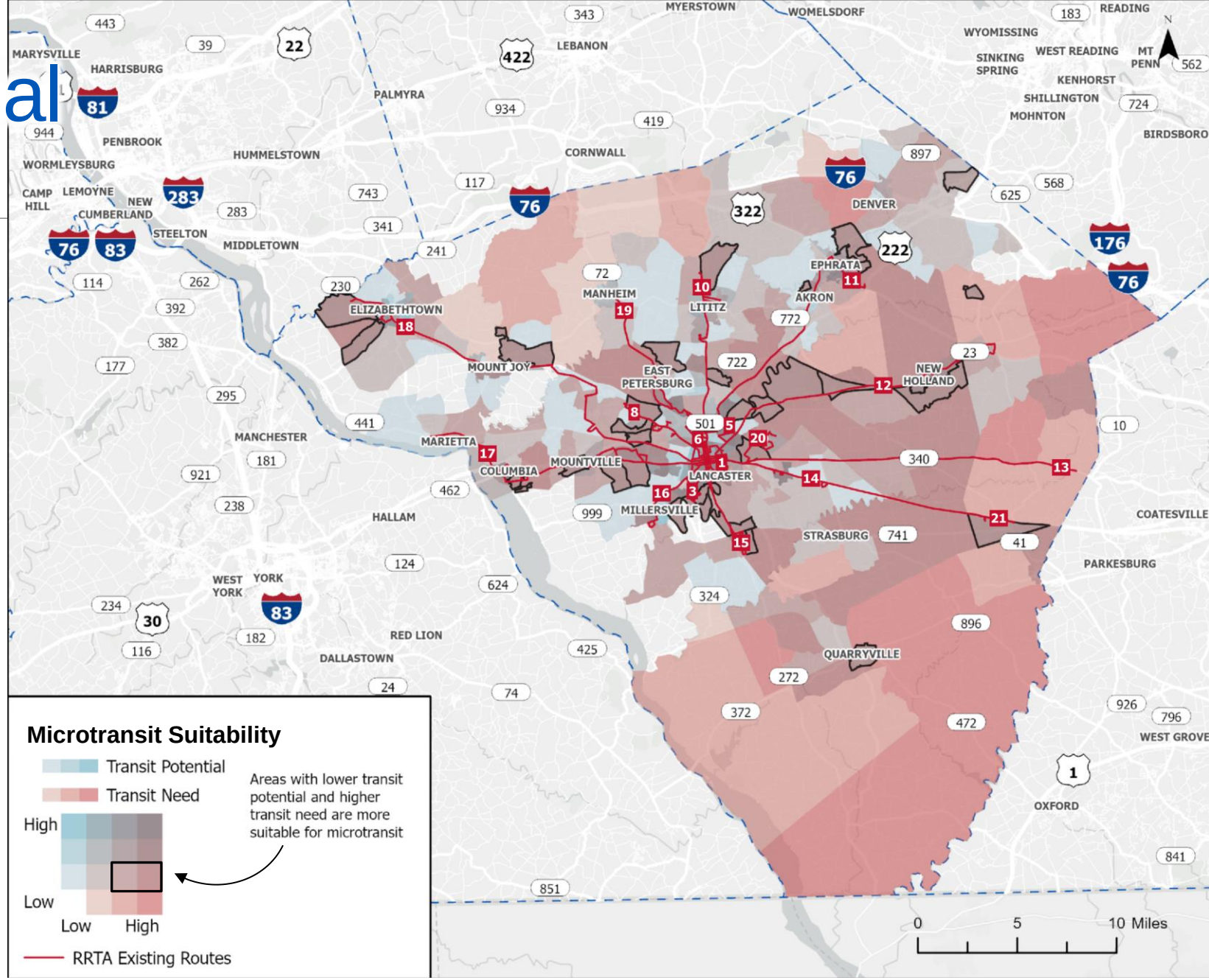
Opportunity zones are areas particularly well-suited for microtransit services and with the potential to address specific transportation needs

Transit Potential and Need

Microtransit suitability was defined by identifying areas with:

- Low-moderate transit potential
- Moderate-high to high transit need

These represent areas that do not have the density to support high-performing fixed route service, but have population that may depend on public transit



Fixed-Route Performance

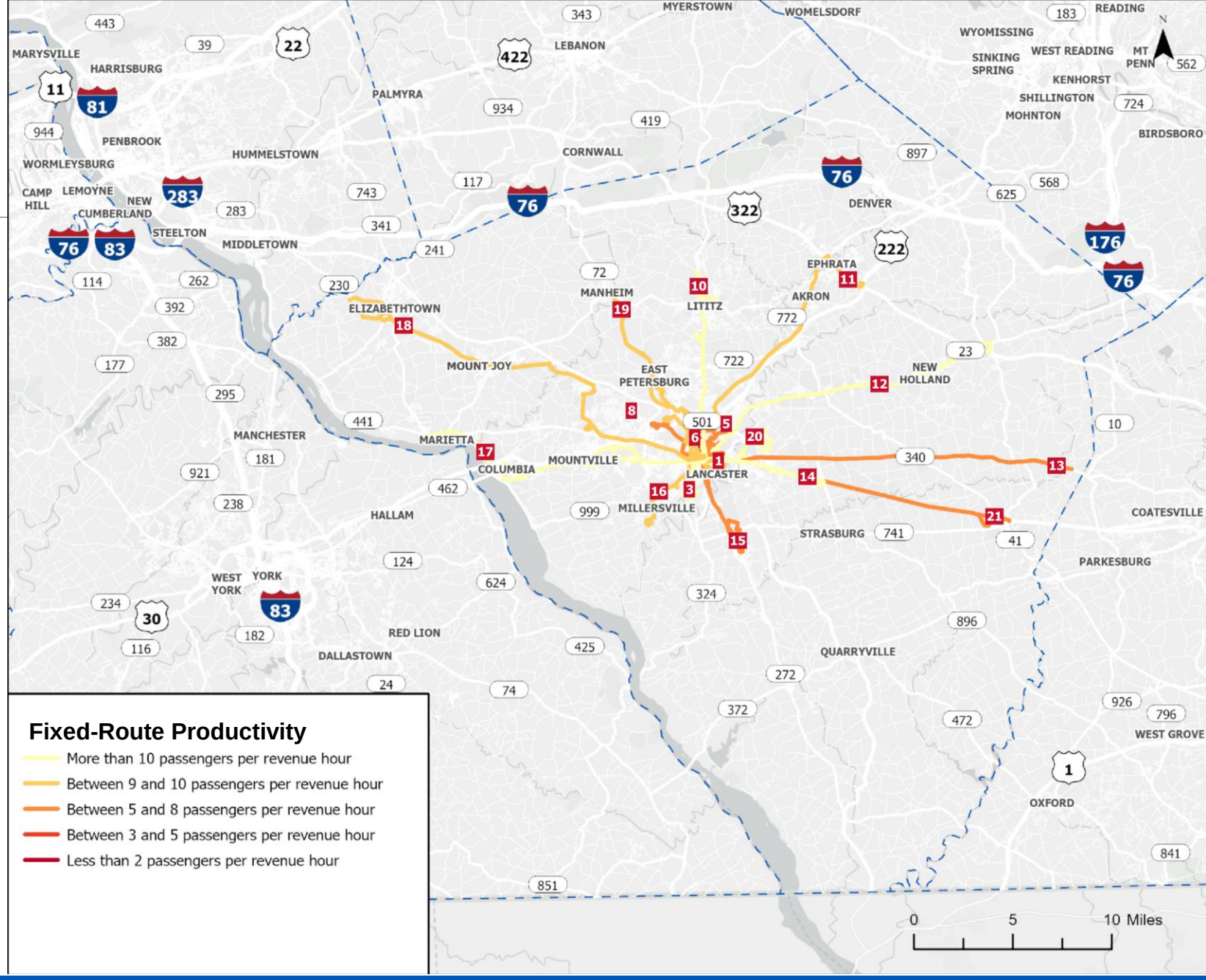
Data from June 2023 to July 2024 (*before* November 2024 service changes)

Microtransit can typically achieve a productivity of 2 to 5 passengers per revenue hour (PPRH)

Routes with a productivity above this likely cannot achieve the same performance with microtransit

Least productive routes:

- Route 6 (Trolley): 1.9 PPRH
- Route 21 (Gap): 7.1 PPRH
- Route 5 (Grandview / Rossmere): 7.3 PPRH
- Route 13: (White Horse) 7.3 PPRH



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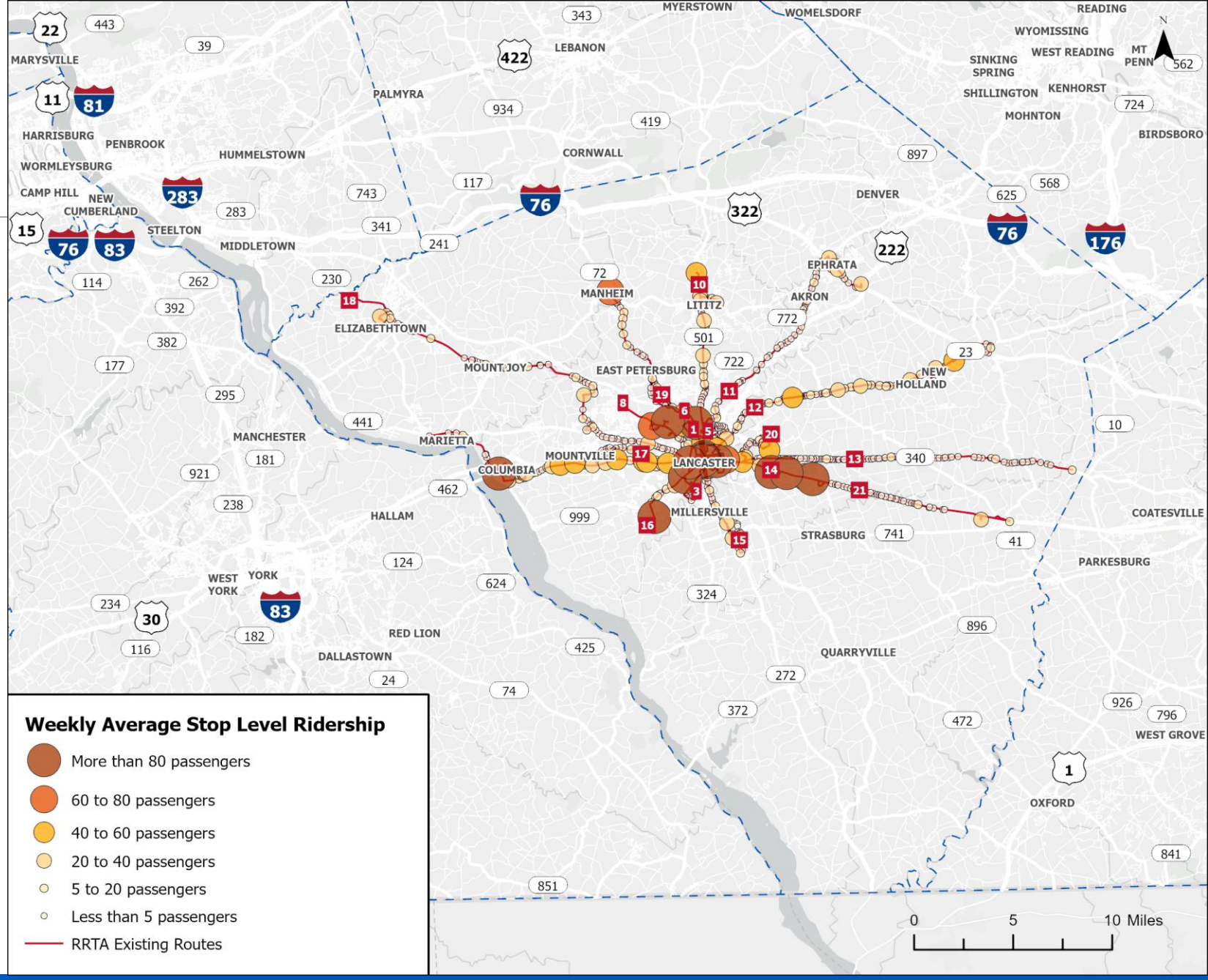
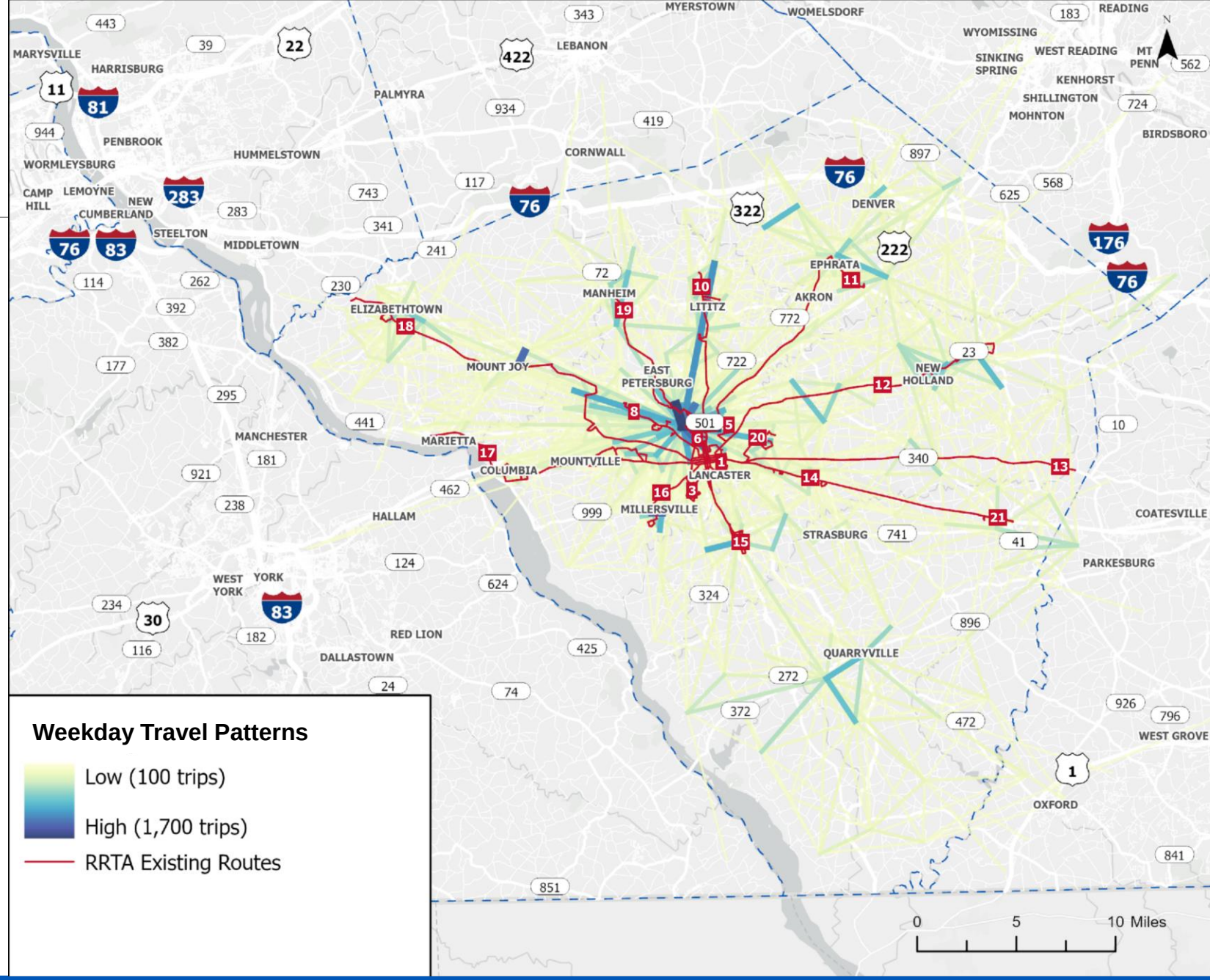


Travel Patterns

Travel patterns for the Lancaster County were identified using Replica data which utilizes a mix of Census data and location-based services data (LBS) to estimate typical travel in a region

Established trip patterns without existing coverage:

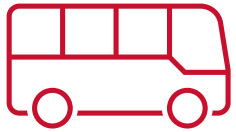
- Within Ephrata and along US 322
- Mount Joy to Rapho Township
- Crosstown connections to shopping areas along Manheim Pike, Fruitville Pike, and Harrisburg Pike
- New Holland to Blue Ball
- Gap to White Horse, Black Horse, and Parkesburg
- Within Millersville
- Quarryville and surrounding communities



Opportunity Zone Overview

- The analysis was guided by the study's goals and objectives and Steering Committee input on areas and populations with greater needs
- Microtransit opportunity zones were identified by:

Transit Potential and Need



Existing Service Performance

Travel Patterns

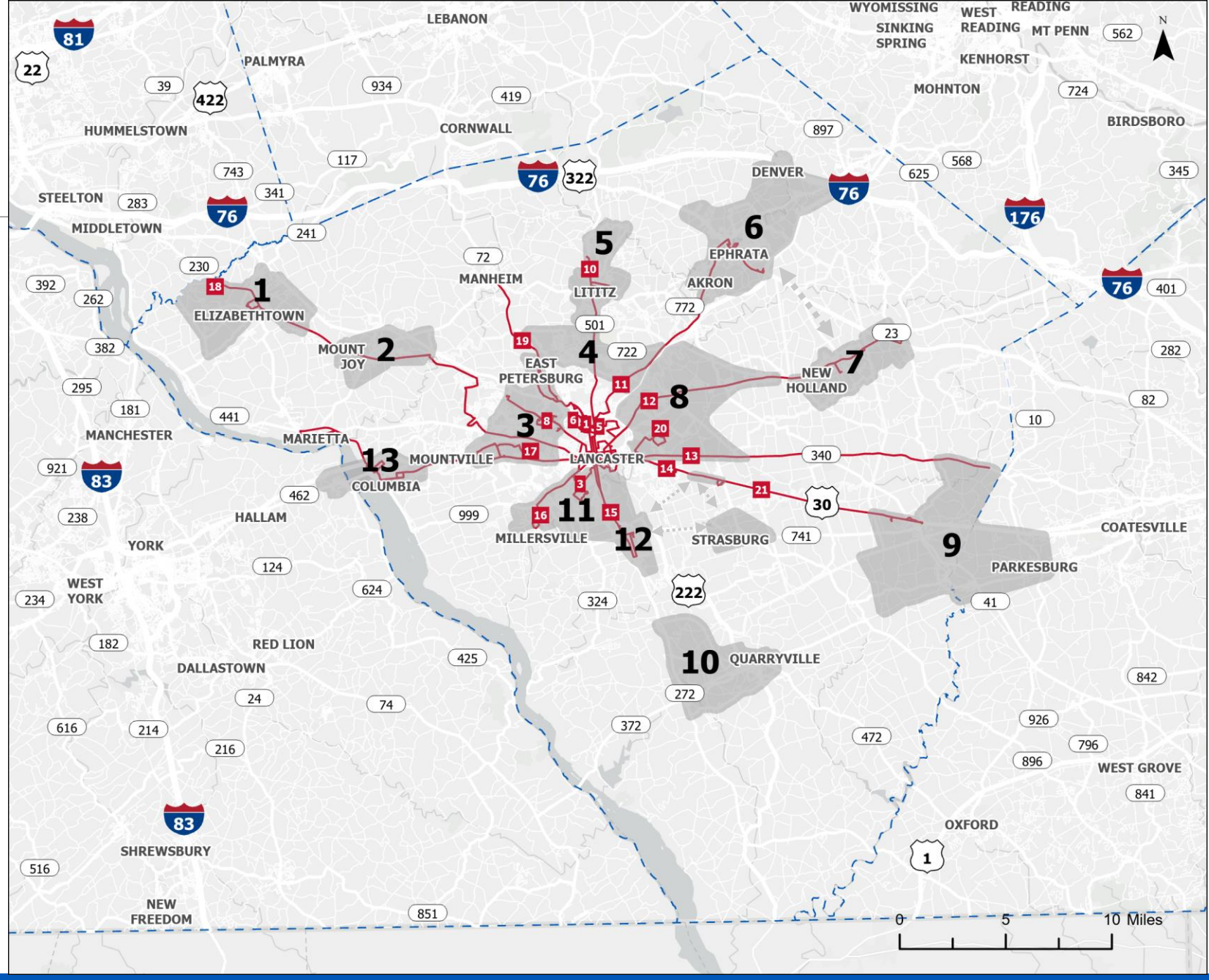
What's Next?

- The current zones are ***preliminary*** and highlight potential areas for microtransit. They will continue to be refined and analyzed throughout the study.
- The Public Participation Plan will engage the community, focusing on these areas to gather feedback.
- Community input will help define zone boundaries and guide further analysis of these areas.

Opportunity Zones

1. Elizabethtown
2. Mount Joy
3. East Petersburg–East Hempfield
4. Neffsville
5. Lititz
6. Ephrata–Denver
7. New Holland[1]
8. Leola–Eden
9. Gap–Christiana[2]
10. Quarryville
11. Millersville
12. Willow Street–Strasburg–Outlets
13. Columbia–Wrightsville[3]

[1] Potential connection between zones could be considered
[2] Would require coordination with Chester County and TMACC
[3] Would require coordination with rabbittransit



Public Participation Plan

SUMMARY

Goals and Objectives

Outreach will…

- **Explain** microtransit, addressing concerns and highlighting benefits.
- **Build** trust through clear, transparent communication.
- **Encourage** public and Steering Committee participation.
- **Provide** project updates on a public platform.

Engagement will…

- **Use** accessible, informative, and impact-driven tactics, including verbal and written opportunities.
- **Offer** digital and in-person participation options.
- **Prioritize** engagement with key groups, including seniors, Mennonites/Amish, non-transit users, and marginalized communities.
- **Ensure** thorough documentation with qualitative and quantitative data.

Connecting with the Community

SCTA Microtransit Feasibility Study

Public Engagement Process

0	1	2	3
Pre-Launch	**Identification of Opportunity Zones**	**Analysis and Prioritization**	**Determinations**
Identify goals and objectives, develop relationships with key community stakeholders, draft Public Engagement Plan.	Gather community feedback on the identified areas for microtransit implementation.	Further develop micotransit opportunity zones based on community input and Steering Committee guidance.	Final moment for input from the public before publication and closing the loop with participants.
Phase Zero	**Phase One**	**Phase Two**	**Phase Three**
• Stakeholder Engagement - committee formation • Existing Conditions Analysis	• Online Engagement tool (Survey) • Interactive Pop-ups • Outreach & Education Campaign	• Steering Committee Engagement	• Steering Committee Engagement • Public Meeting • Closing the loop
Jan-Feb	**Mar- Apr**	**May- Aug**	**Sept - Nov**

Phase 1 - Public Survey and Pop-Ups

Public Survey

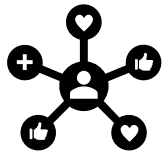
- **Gather** community insights, designed to be clear, concise, and accessible online, with paper options available through partners.
- **Promoted** independently and adapted as an intercept survey for pop-ups, with translations as needed.
- **Cover** current travel and transit use, challenges, desired microtransit features and connections, open comments, and demographics.

Pop-Up Events

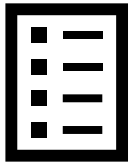
- **Maximize exposure**: Look at population data and density to narrow down locations by target audience and set up at transit hubs during peak travel hours
- **Meet people where they are**: Co-locate at organized festivals and local events
- **Leverage existing networks:** Partner with local community centers, employment hubs, or schools to capture target audiences

Phase 1 - Outreach Campaign

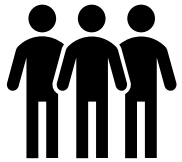
Digital – share through websites, newsletter, etc.



Social media – internal and partner channels



Posters – post on buses and a variety of locations



Partnerships – communities, employers, chambers

Communication Toolkit

- Fact sheet
- Web banner
- Newsletter content
- Social media
- Survey

Steering Committee Responsibilities

- Outreach Toolkit Distribution
- Outreach Toolkit Tracking/Communications Reporting
- Public Survey Distribution
- Support Pop-Up Implementation

Microtransit Models

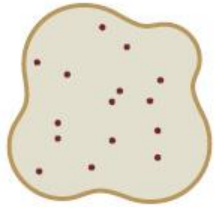
SUMMARY

Definitions

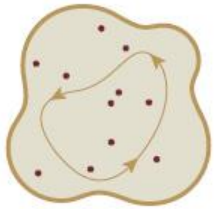
Microtransit Service Model	Microtransit Operating Model
A microtransit **service model** is the overall approach and design of how microtransit is provided to users	A microtransit **operating model** refers to the logistics and mechanisms used to deliver the service

Microtransit Service Models

Microtransit service models used by other transit agencies that can also be considered for Lancaster County are:

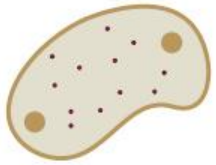


On-Demand Zone-Based

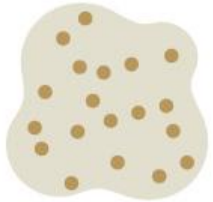


Flexible Route

On-Demand Zone-Based with External Nodes

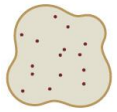
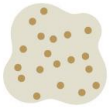
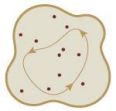


Zone Route



Point Deviation

Microtransit Service Models Summary

	 On-Demand Zone-Based	 On-Demand Zone-Based with External Nodes	 Point Deviation	 Flexible Route	 Zone Route
Travel Pattern*	Dispersed within a defined zone	Dispersed within a defined zone, and toward a nearby destination	A common set of origins/destinations within a defined zone	Along or near a route	Corridor based, with a common origin or destination
Stop Types	User-defined, designated, or virtual	User-defined, designated, or virtual	Designated or virtual	Designated	Designated, user-defined
Scheduled Timepoints	None	None	None	Many based on fixed-route schedule	One or two at the ends of corridor
Typical Vehicles	Body on chassis (BOC**) vehicle, van, minivan, sedan	BOC vehicle, van, minivan, sedan	BOC vehicle, van, minivan, sedan	Bus, BOC vehicle	Bus, BOC vehicle
Wait Time (Relative)	Low to moderate	Low to moderate	Low to moderate	Moderate to high	Moderate to high
Trip Request	On-demand or in advance	On-demand or in advance	On-demand or in advance	In advance	On-demand or in advance

* Connections between the microtransit service and fixed-route bus service can be planned and designed to also facilitate travel outside of the service zone
** BOC vehicle is a body on chassis transit vehicle or often referred to as a shuttle bus

Microtransit Service Models Evaluation

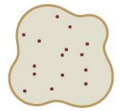
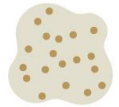
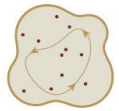
Criteria

Adaptability

Interoperability

Technology Availability

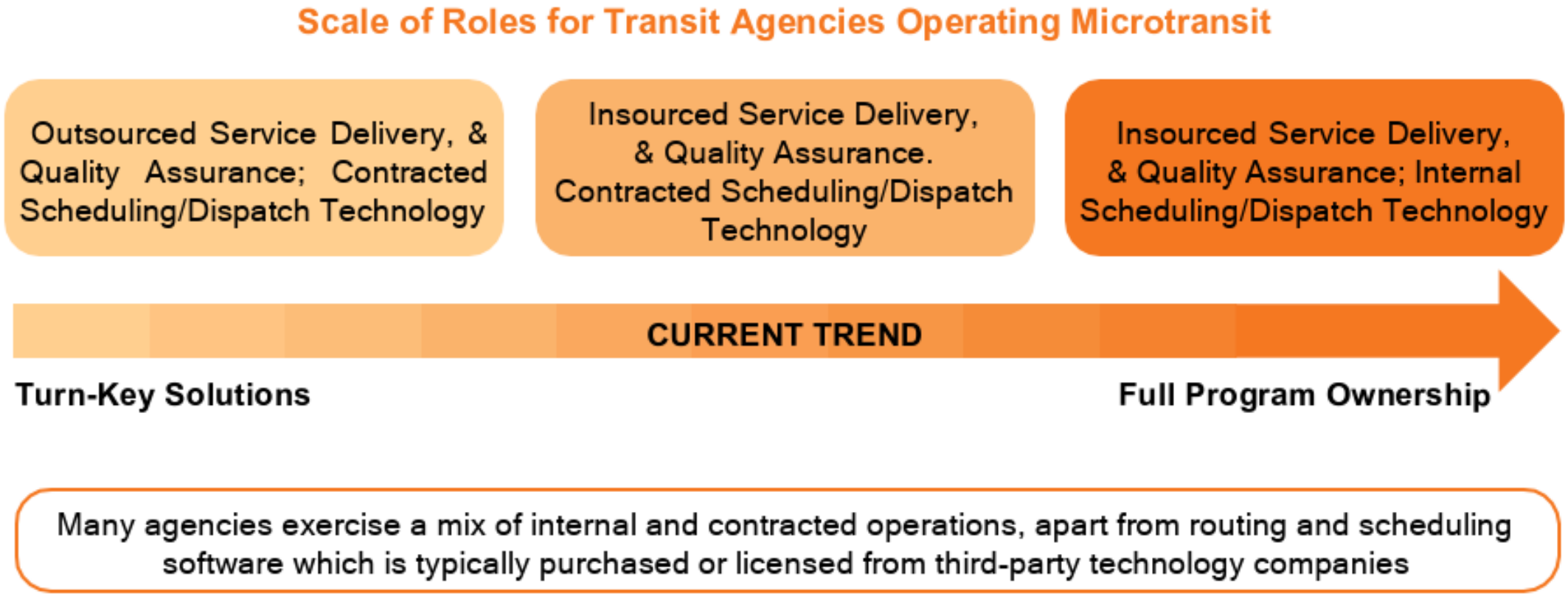
Customer Experience

	Service Model	Total Score
	On-Demand Zone-Based	High (12)
	On-Demand – External Nodes	High (12)
	Point Deviation	Moderate (10)
	Flexible Route	Moderate (8)
	Zone Route	Low-Moderate (6)

*The total score is the sum of all four criteria, where Low = 1, Moderate = 2, High = 3.

Microtransit Operating Model Spectrum

A microtransit **operating model** refers to the logistics and mechanisms used to deliver the service. This can also be thought of as a *delivery model.*



Microtransit Operating Models

Operating models consist of a technology component and an operations component (service provided, vehicles, and operators). Multiple potential operating models exist for microtransit:

1

Software as a Service (SaaS)

One contract for technology but in-house operations

2

Turnkey

One contract for technology and operations

A - Turnkey (microtransit only)
B - Turnkey (microtransit and shared-ride services)

3

Hybrid

Separate contracts for technology and operations

A – Hybrid (microtransit only)
B – Hybrid (microtransit and shared-ride services)

SCTA Existing Service Delivery

Red Rose Transit Fixed-Route Service

- In-house bus operators (drivers)
- In-house customer service
- SCTA-owned vehicles
- SCTA-owned facility
- Contracted technology

Most like a **Software as a Service** operating model given the in-house operations

Red Rose Access Shared-Ride Service

- Contracted bus operators (Easton Coach Company, the current contract ends June 2026)
- In-house customer service
- SCTA-owned vehicles
- Contractor-leased facility
- Contracted technology through PennDOT

Most like a **Hybrid** operating model given the mix of contracted and in-house responsibilities

Microtransit Operating Models Evaluation

Criteria

Ease of Implementation

Infrastructure Needs

Costs

Customer Experience

Interoperability

Reporting

Adaptability

Operating Model	Total Score
SaaS	High (18)
Turnkey A (microtransit only)	Moderate (15)
Turnkey B (microtransit + shared-ride)	High (17)
Hybrid A (microtransit only)	Moderate (13)
Hybrid B (microtransit + shared-ride)	Moderate (13)

The total score is the sum of all seven criteria, where Low = 1, Moderate = 2, High = 3.

Open Discussion

Next Steps

- Prepare for Phase 1 of Public Participation Plan
- Outreach campaign, public survey, four pop-ups
- After public input, begin opportunity zone analysis and prioritization

- **Steering Committee Reviews**
  - Task 5 and 6 deliverable (zone analysis and prioritization)—week of June 2
- **Steering Committee Meeting #3—**TBD July