



Laredo Microtransit Feasibility Study

Laredo Mass Transit Board

May 19, 2025



(Prime Consultant)



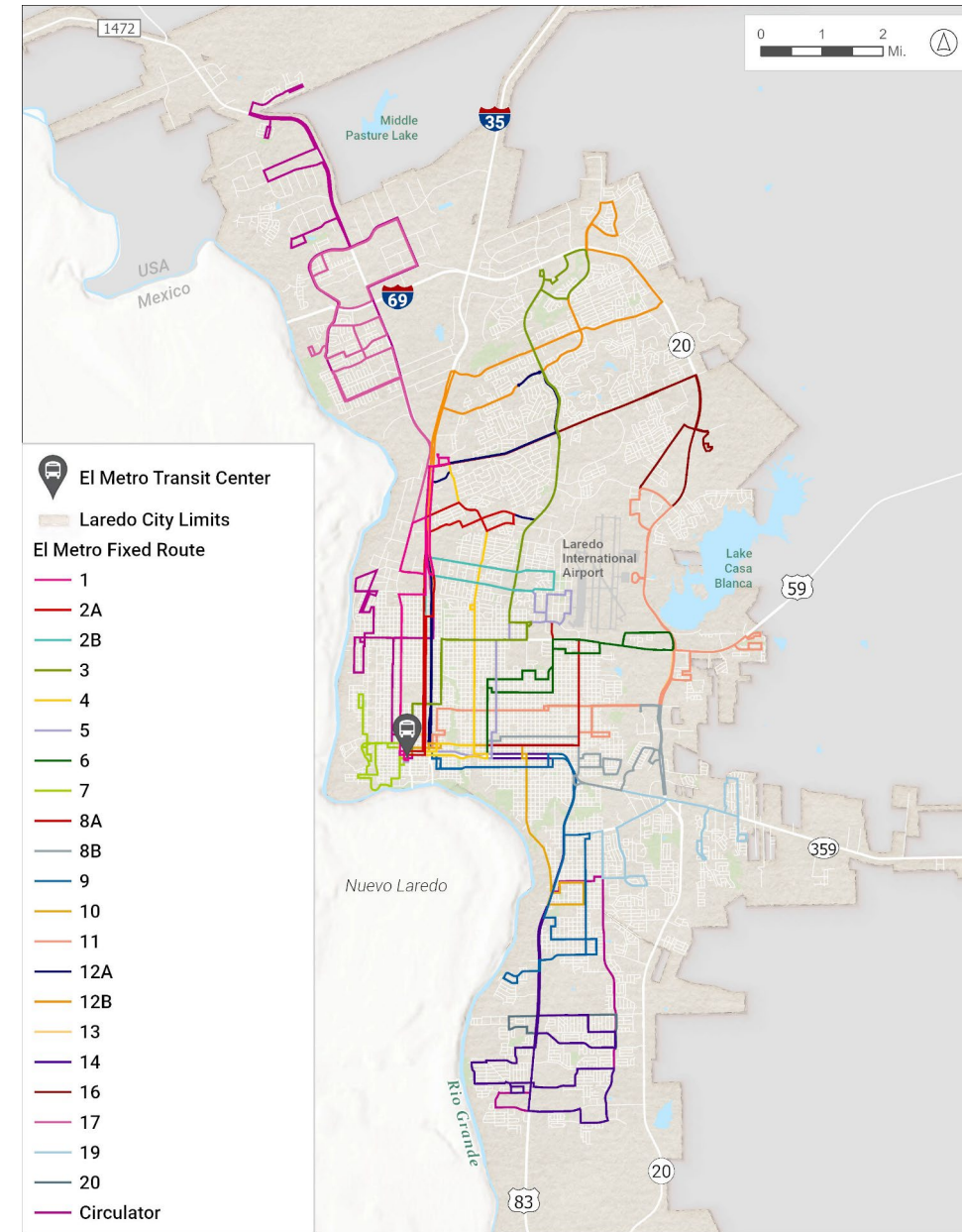
(Subconsultant)

Agenda

- Introduction to microtransit
- Peer agencies
- Proposed service in Laredo
- Recommendations
- Implementation Strategy

Transit in Laredo

- **El Metro:**
 - Fixed route service
 - Paratransit (El Lift)
- *Fixed route:*
 - 21 routes; 3 circulators
- *Paratransit (El Lift):*
 - Curb-to-curb shared-ride system for eligible people with disabilities
 - ¾-mile of fixed routes



What is microtransit?

- Technology-based, on-demand shared ride transportation service
- Works within defined, geofenced zones
- Call, website, and smartphone app-based interface to request trips is typical
- **Benefits:** improved coverage, higher quality service, similar performance to low-performing fixed routes



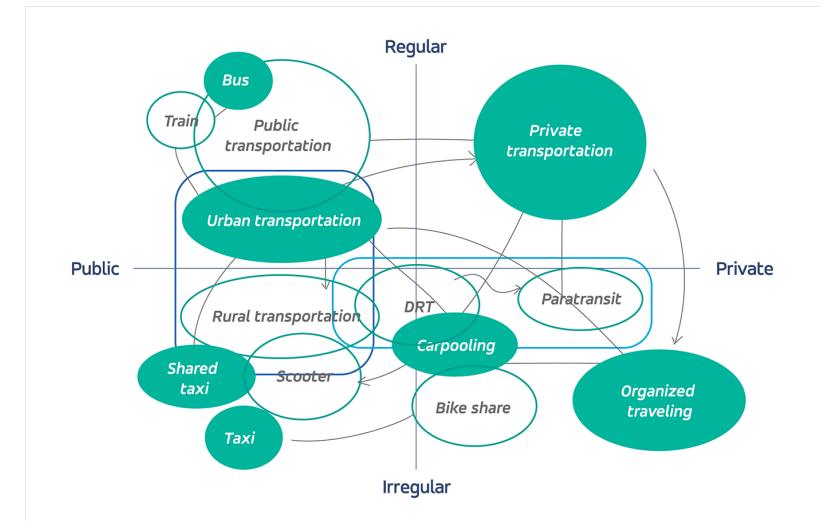
Austin Region, Texas
(Pickup)



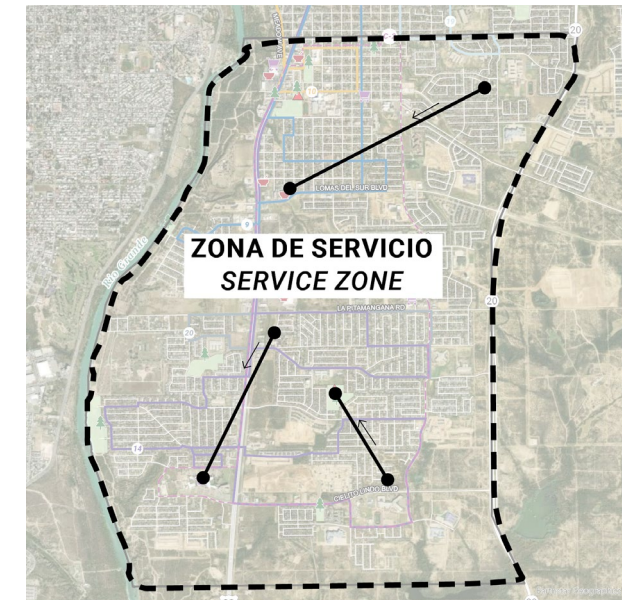
Calexico, California
(Calexico On Demand)



Chula Vista, California (CV
Community Shuttle)



(Source: Via)



Peer agencies implementing microtransit

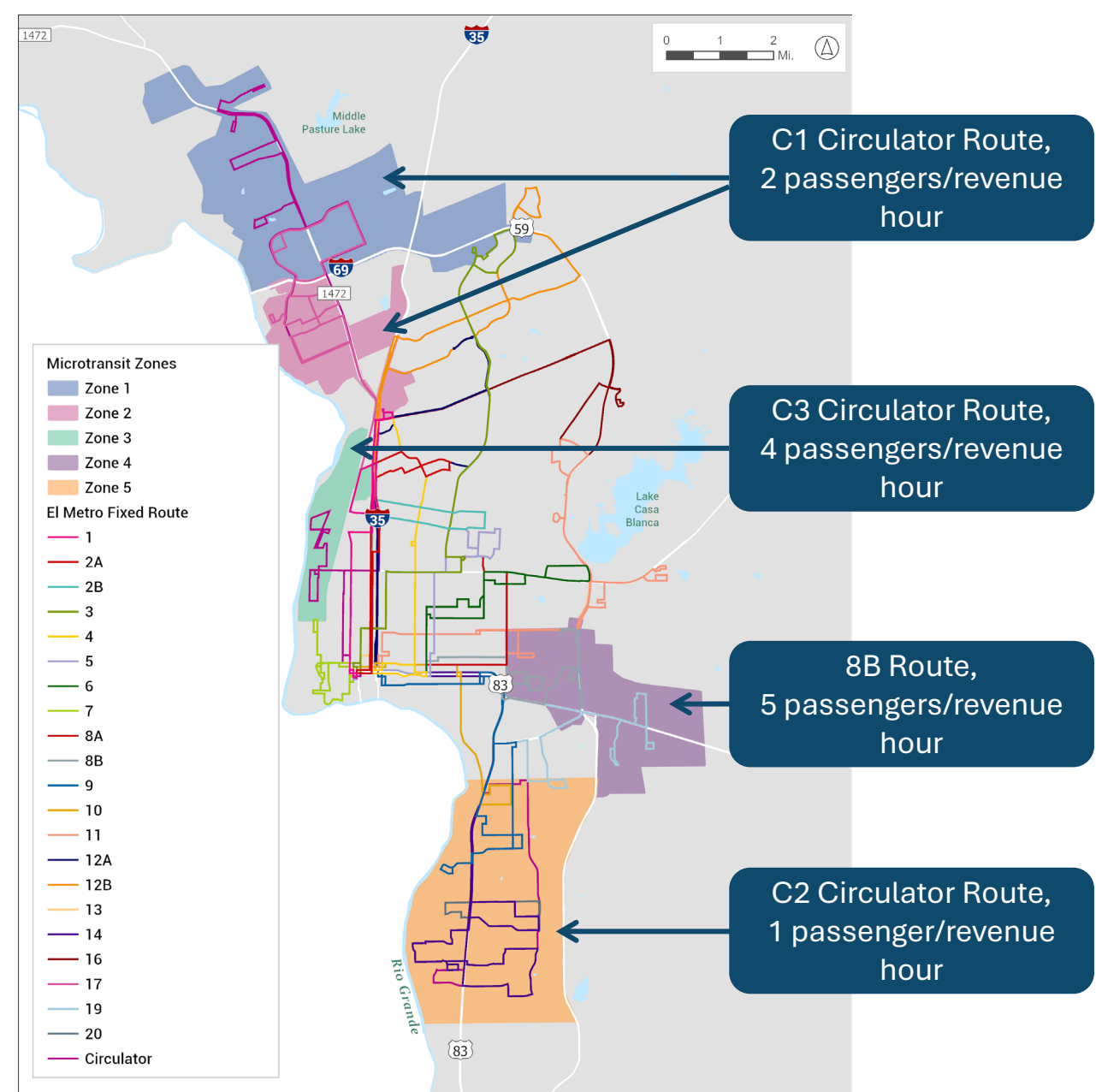
- Austin, TX
- Calexico, CA
- Chula Vista, CA
- Denton County, TX
- McAllen, TX
- San Antonio, TX
- Tulsa, OK



Service Area Location	Number of Zones	Fleet Size	Average Wait Time (Minutes)	Base Fare	Annual Operating Cost	Cost per Revenue Hour	Cost per Passenger	Passengers per Revenue Hour
Austin Region, TX	11	83	18	\$1.25	\$11.9 million	\$82.00	\$21.48	3.5
Calexico, CA	1	4	40	\$2.00	\$725,480	\$80.64	\$16.37	5.5
Chula Vista, CA	1	7	10	\$2.00	\$892,000	\$95.30	\$20.00	4.5
Denton County, TX	2	68	21	\$1.50	\$11.7 million	\$42.95	\$10.26	4.2
McAllen, TX	1	2	5	\$1.00	\$200,000	No Data	No Data	No Data
San Antonio Region, TX	5	58	15	\$1.30	No Data	No Data	\$13.15	No Data
Tulsa Region, OK	5 Day / 4 Night	61	35	\$2.00	\$3.1 million	\$30.00	\$30.00	2.6

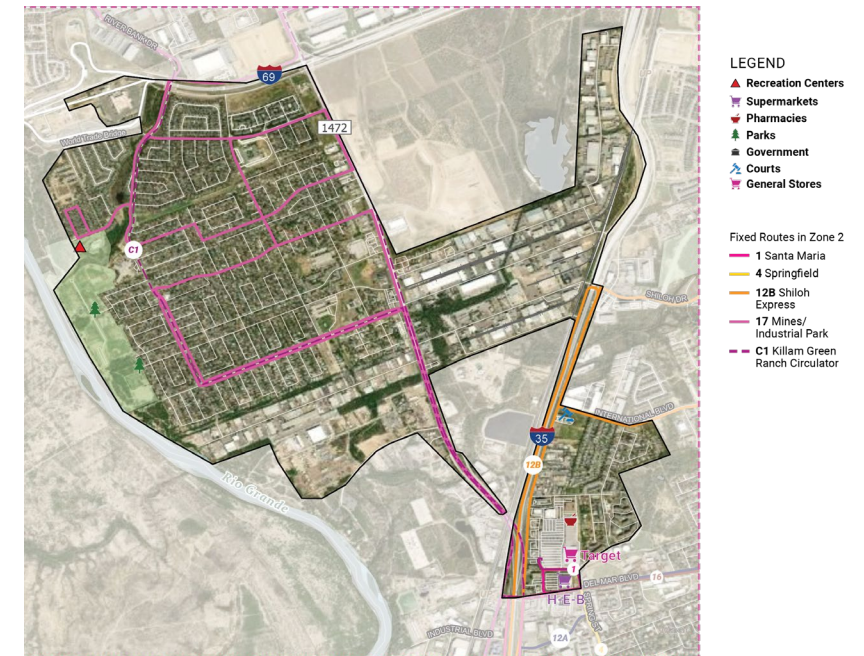
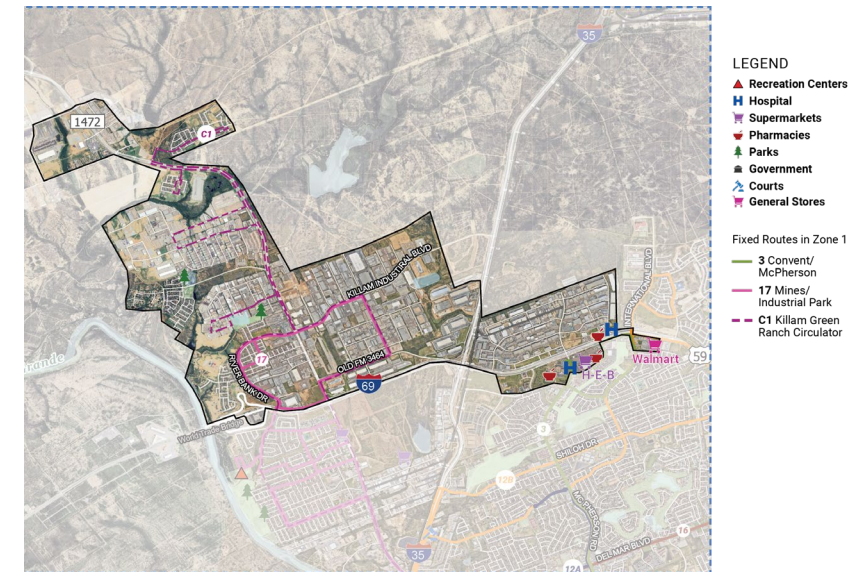
Zone Development

- Prioritized lower-performing fixed routes
- Zones designed to **complement** fixed route system
 - Need to consider ALL routes within each zone
- Zones each have key destinations (i.e., grocery, general store)



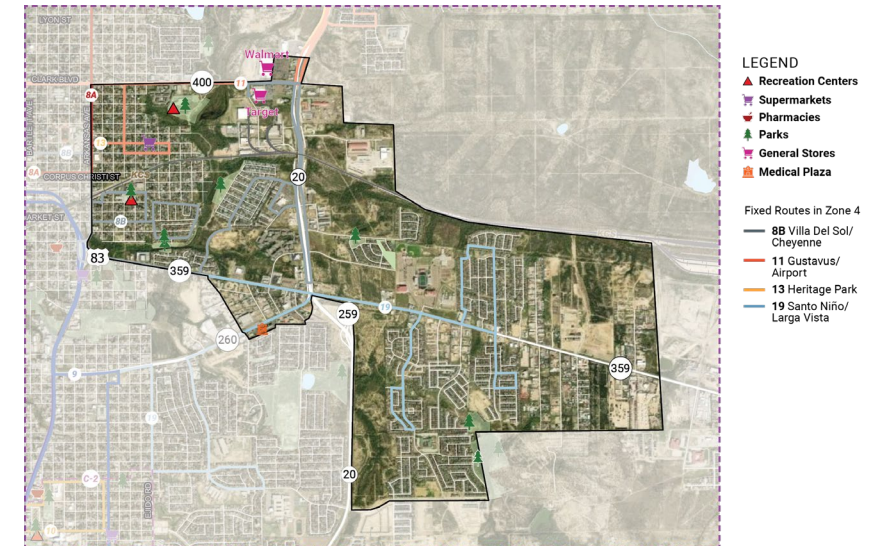
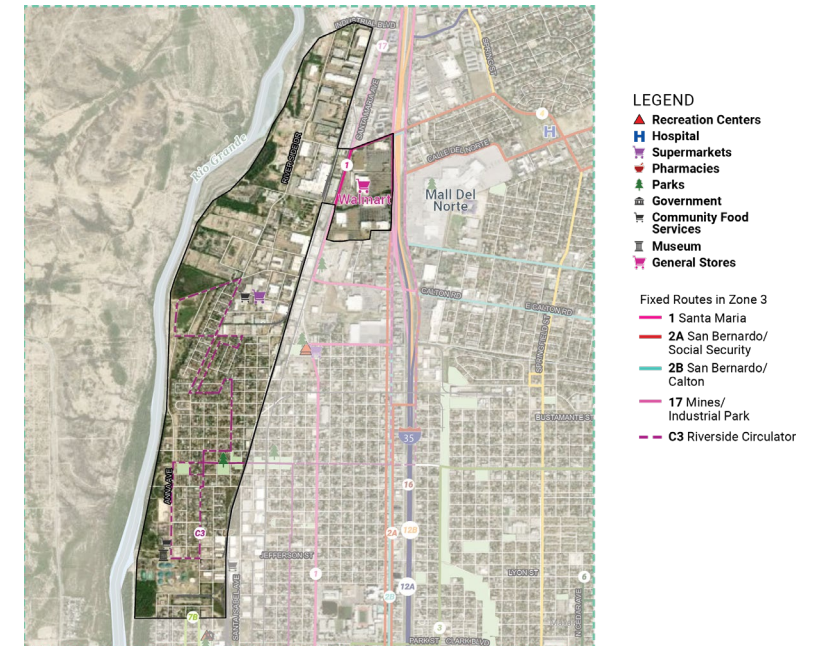
Zone Profiles: 1 and 2

- 9 & 3 square miles
- Serve industrial parks in northwest Laredo, commercial establishments and residential areas
- Could allow for elimination of the C1 (Killiam Green Ranch) Circulator
- Zones could serve tractor-trailer drivers



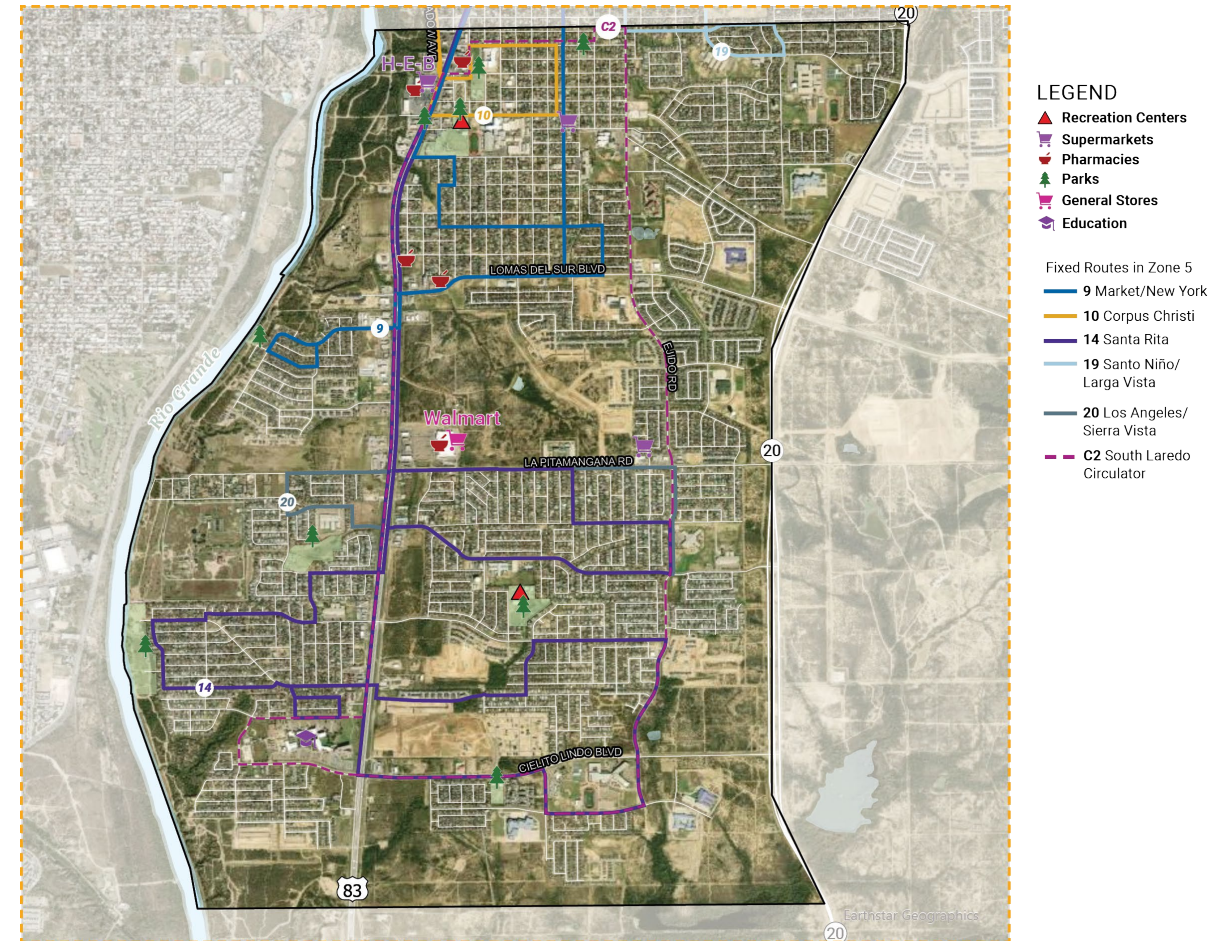
Zone Profiles: 3 and 4

- Zone 3: most compact (1.5 square miles)
 - Mix of residential and industrial
 - Would allow for elimination of the C3 (Riverside) Circulator
- Zone 4: 5 square miles
 - Primarily residential
 - Addresses the 8B route and could facilitate streamlining of others



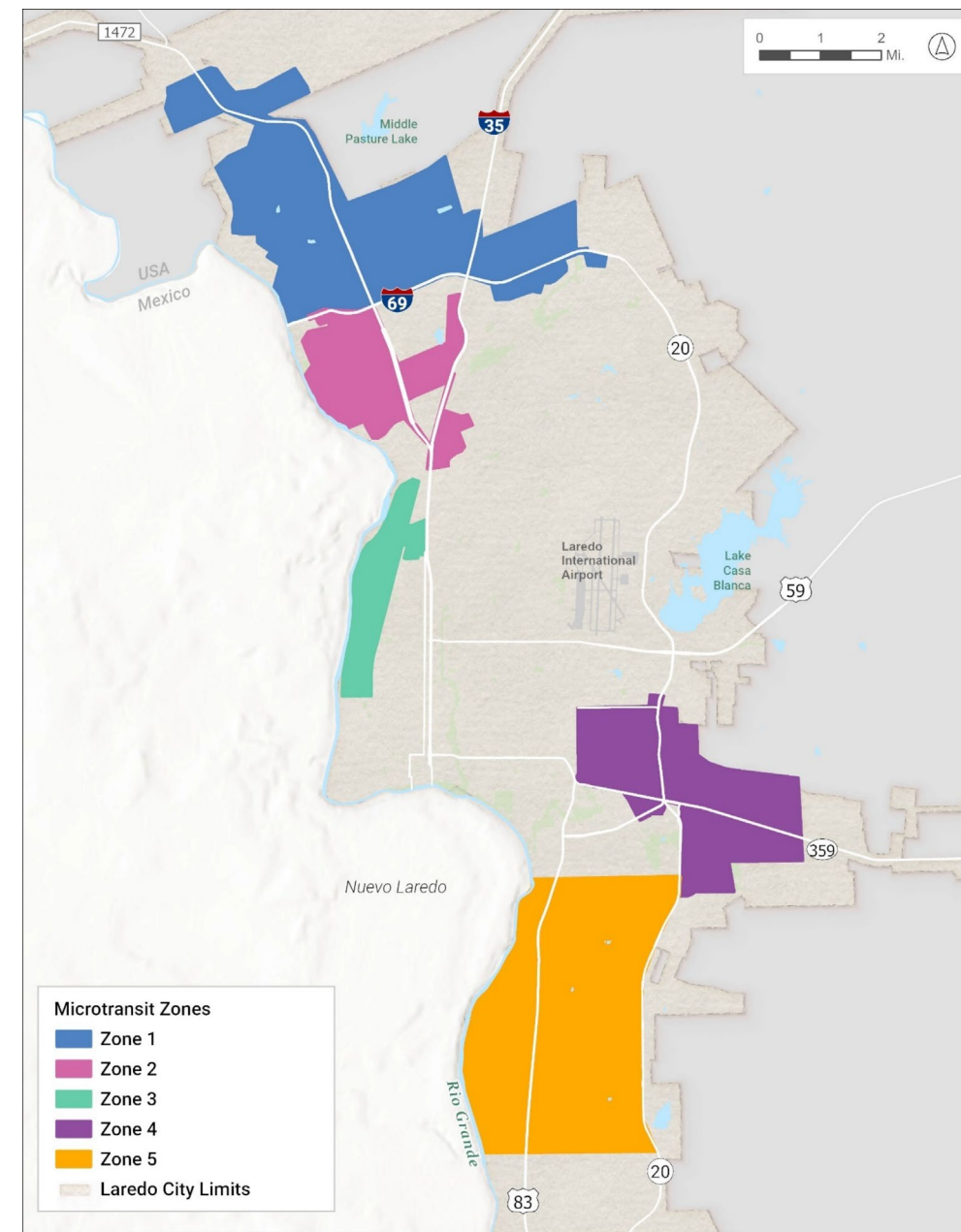
Zone 5 Profile

- 9.6 square miles
- Residential with activity hubs (schools, commercial)
- Addresses the C2 (South Laredo) circulator route
- Several fixed routes in this zone would potentially be impacted



Analysis Assumptions

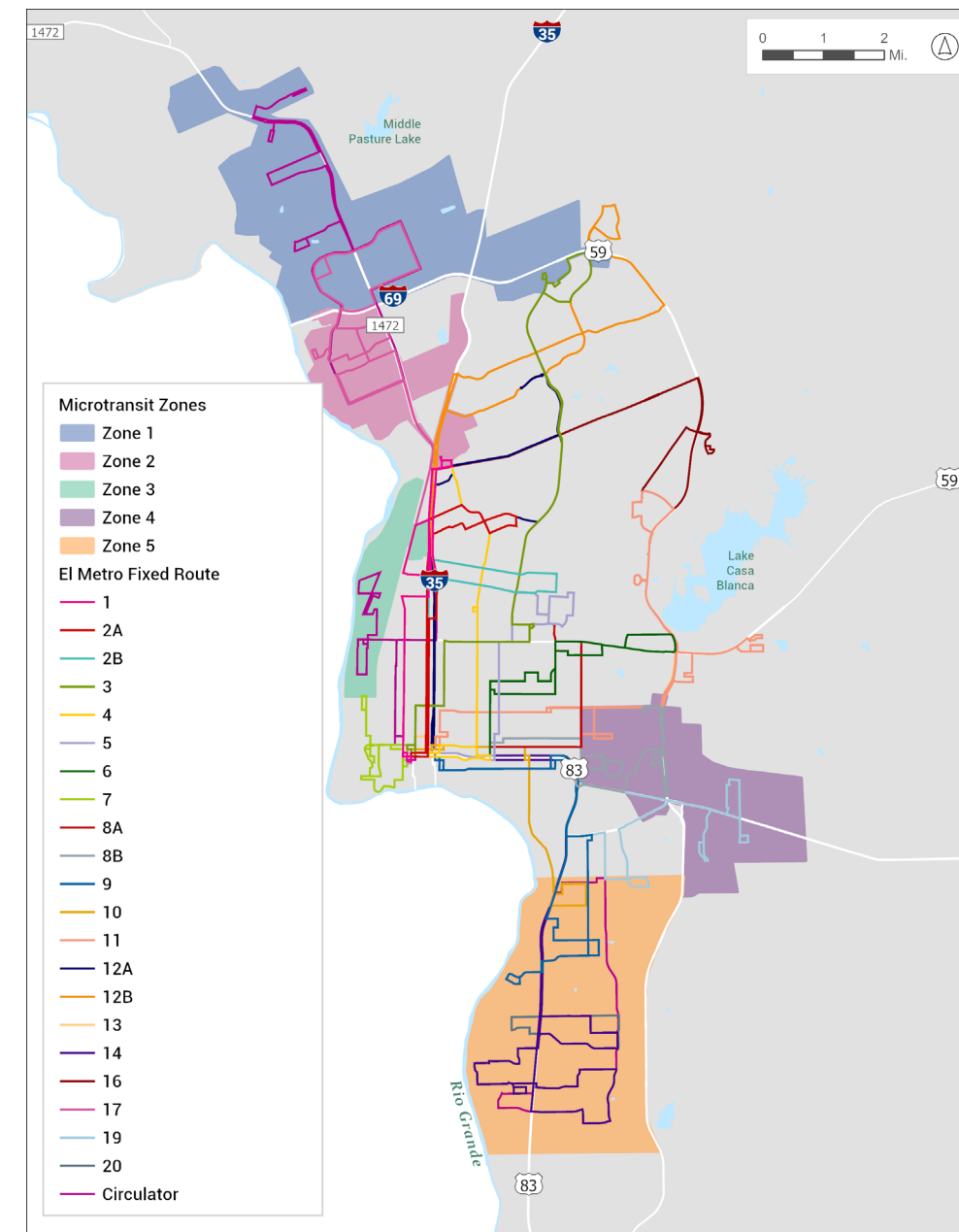
- Location-based cell phone data for trips
- Modeled initial three years of operation
 - Assume ramp up for modal shift
- 10-, 20-, and 30-minute wait times
 - Impacts total cost and rides per hour
- Conservative cost per hour - \$109.19
 - El Metro's 2023 bus operating expense per vehicle revenue hour
- Service hours similar to fixed routes



Projections (riders & cost)

- By zone, range over years one to three
 - Wait times ranging from 10 to 30 minutes

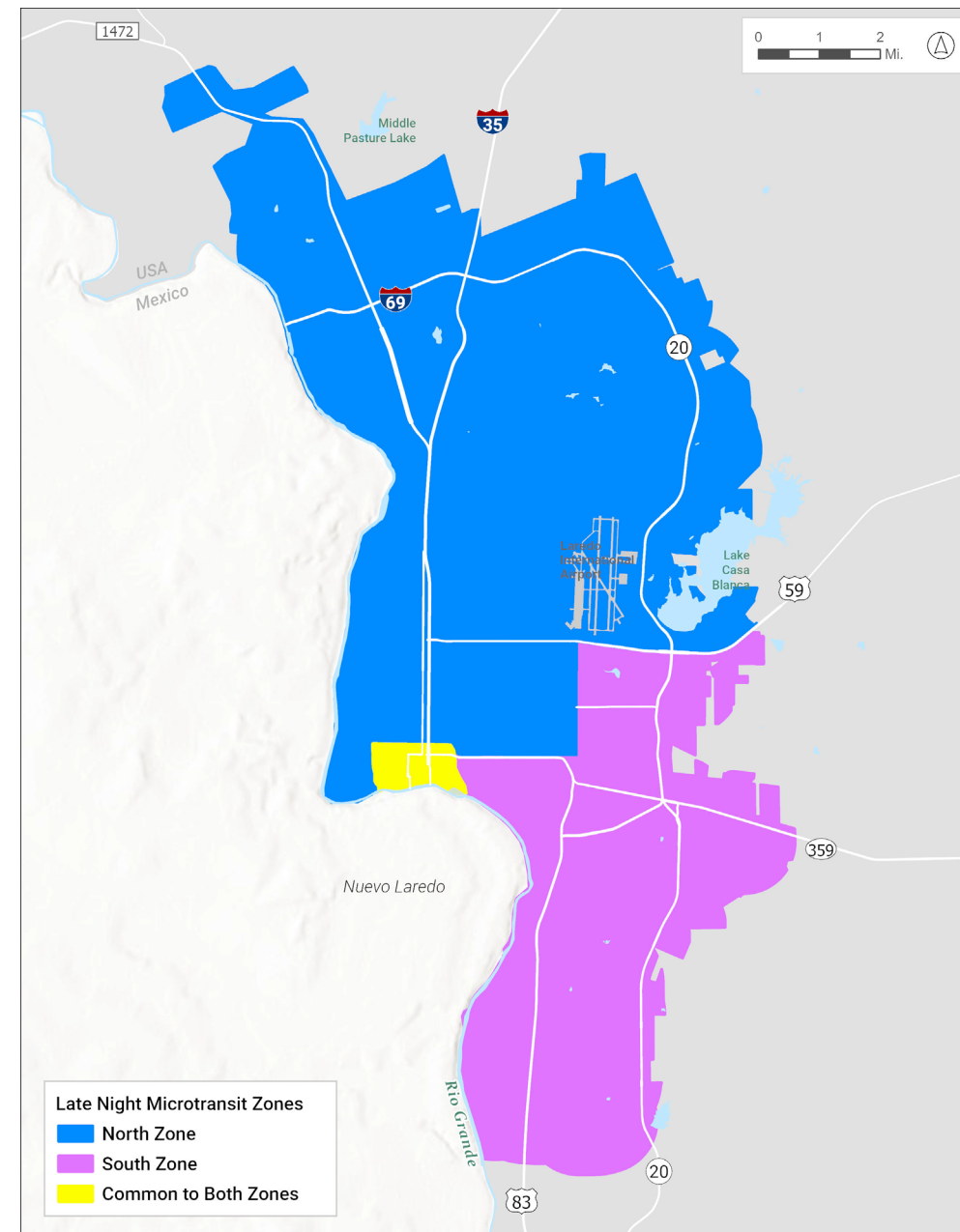
Zone	Annual Ridership	Annual Cost
1: North	40,000 to 60,000	\$1.6M to \$3.07M
2: North	23,000 to 35,000	\$930,000 to \$1.46M
3: West	8,000 to 12,000	\$530,000
4: East	33,000 to 49,000	\$1.07M to \$2.00M
5: South	117,000 to 176,000	\$3.46M to \$7.46M



Late Night Service

- Possibility for evening service from end of fixed routes to ~11pm)
- City split into two zones with a common zone for transfer trips downtown
- Year one result with 30-minute wait time

Zone	Area (Sq. Miles)	Annual Ridership	Annual Cost
North Laredo	47.4	41,500	\$1.68M
South Laredo	22.7	17,300	\$653,000



Public Engagement

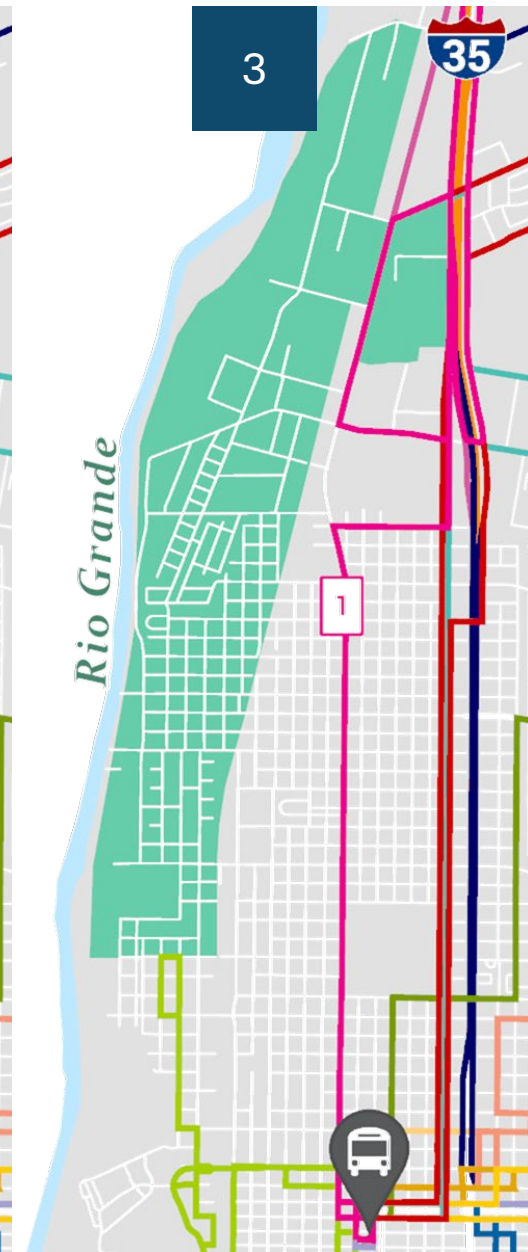
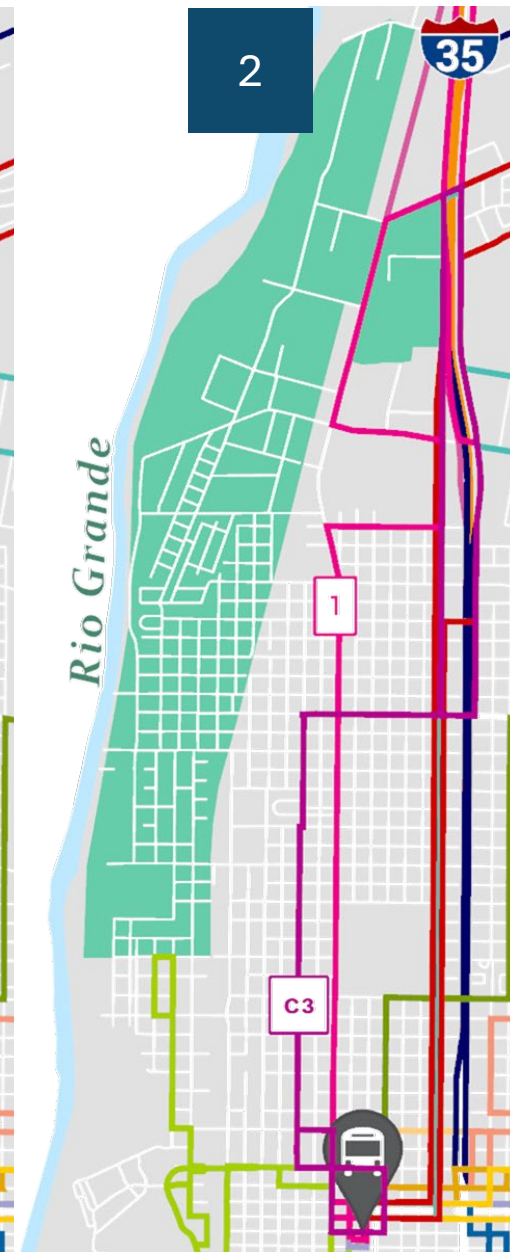
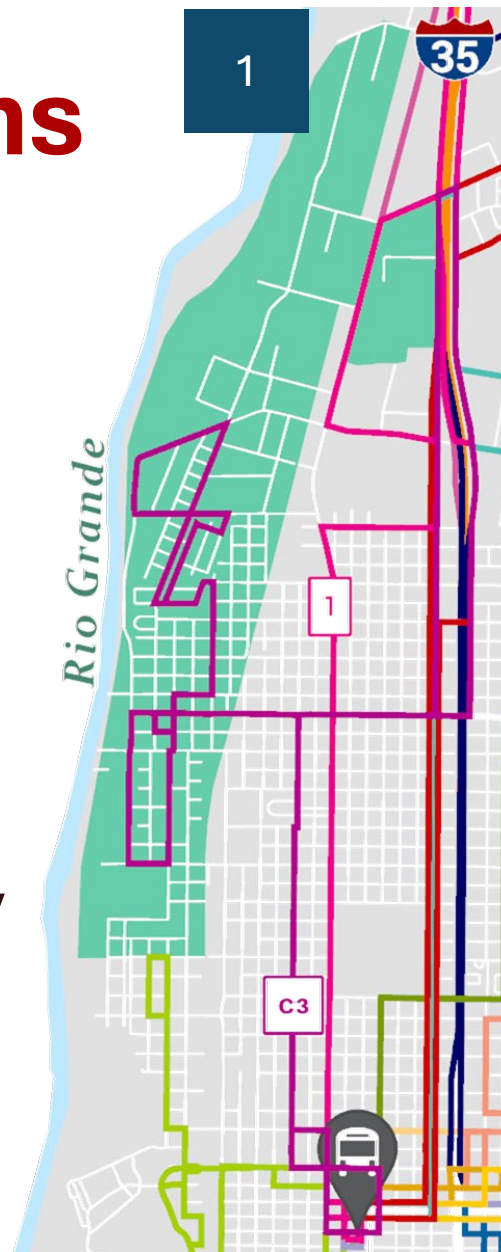
- Interviews with tractor-trailer stakeholders and outreach to non-profit partners
- Survey: Fall 2024
 - 14 questions
 - 130 responses
- Public Meeting: February 2025
- High level of interest in microtransit



Recommendations

- El Metro has spare vehicles to support a microtransit pilot program in-house
- Three options for zones:
 - (1) leave route(s) as-is
 - (2) truncate route(s) in zone
 - (3) eliminate route(s) entirely

Note: Replacing fixed route service with microtransit will only offset ~15 to 55 percent of operating costs at the \$109.19 cost per hour assumption (i.e., not a one-to-one tradeoff)



Recommendations

Phase 1. Initial Pilot of Daytime Microtransit Zones

Zone 1 North Laredo
Zone 3 West Laredo

Phase 2. Additional Daytime Zones and Late Evening Pilot

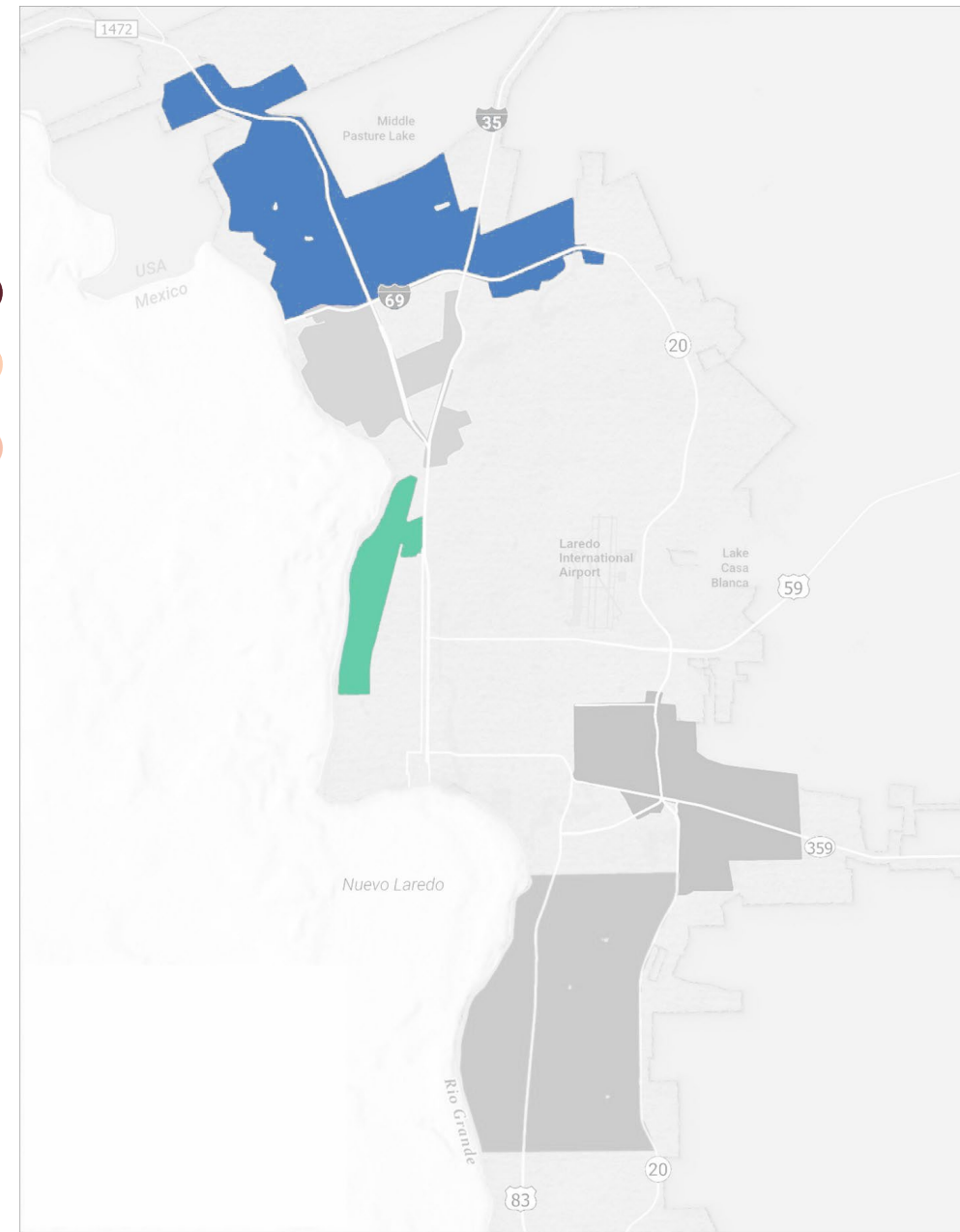
Refinement (Zones 1 & 3)
Zone 2 North Laredo (South)
Zone 4 East Laredo

Further Study

Zone 5 South Laredo
Fixed Route Network Redesign

Phase 1. Pilot two zones (~2 vehicles each)

- Zone 1:
 - Land use variety
 - Commercial areas for tractor-trailer test case
- Zone 3:
 - Compact area will allow for test case elimination of C3 circulator route



Recommendations

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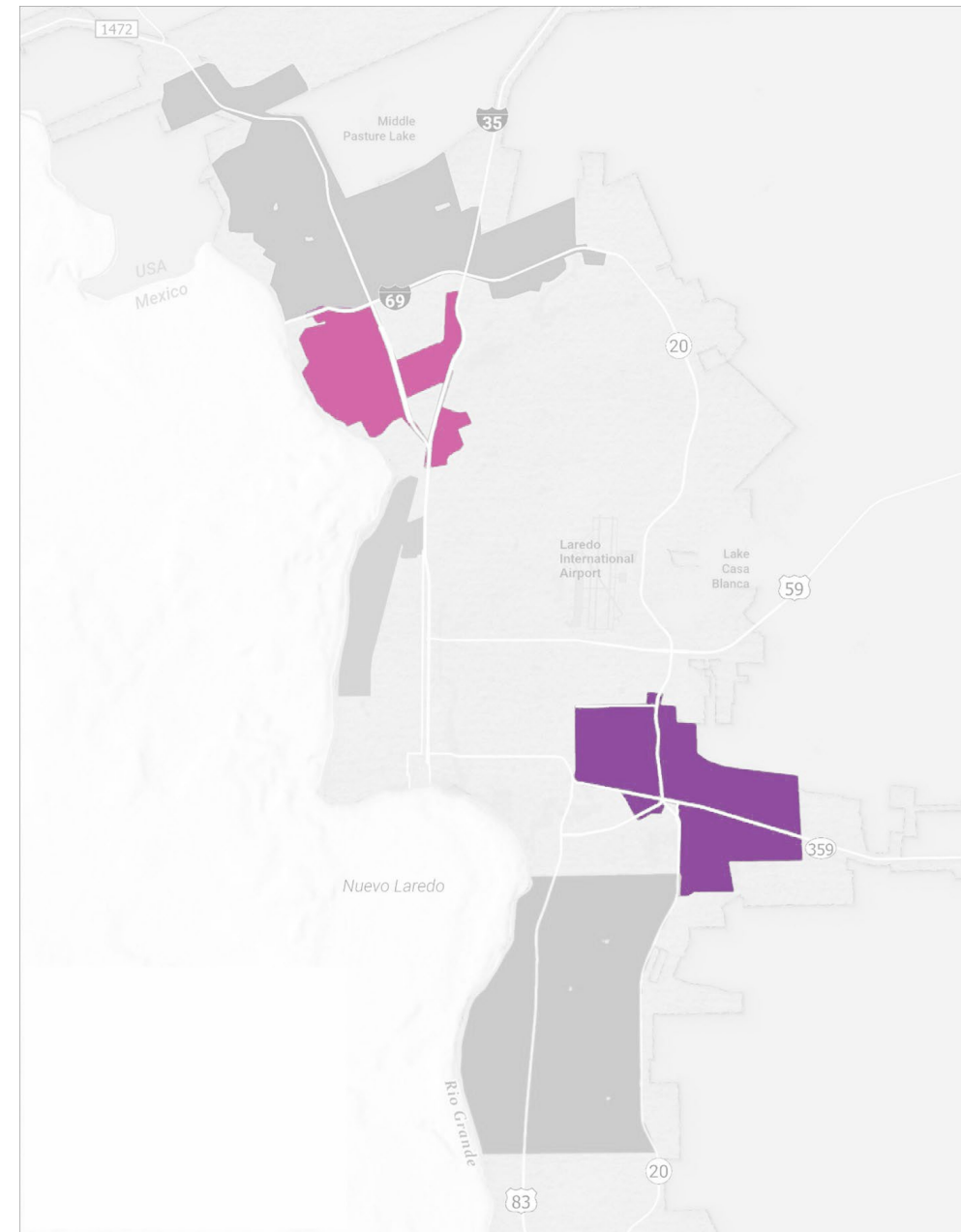
Zone 5 South Laredo
Fixed Route Network Redesign

Phase 2. Refine & Add Zones

- Refined Phase 1 zones (as-needed)
- Add Zones 2 and 4

Further Study:

- Systemwide data collection to evaluate fixed route network's future
 - Want to avoid undue impacts to existing riders with broader implementation of microtransit, including refined analysis of Zone 5



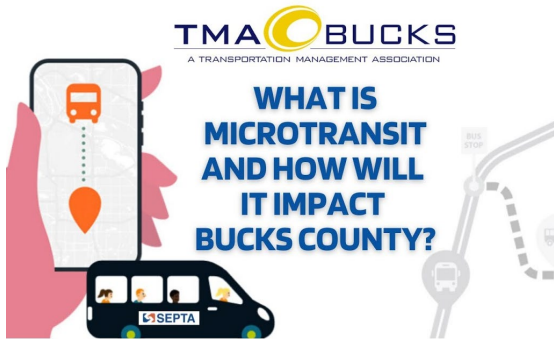
Implementation



- Technology
 - Software
 - Fare payment & transfers
 - Onboard operator equipment
- Operations and Maintenance
- El Lift Paratransit
 - Recommend continue offering paratransit as-is

Implementation: Marketing

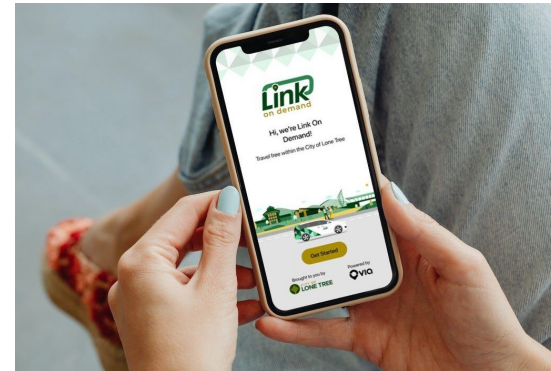
- Critical for service model to succeed
- Travel-training & ambassador training
- Partnership with activity centers, non-profits
- Information available in multiple formats and locations



Bucks County – SEPTA & TMA
Bucks Microtransit Presentation



LA County – Metro Ambassadors



City of Lone Tree – Link on demand
App



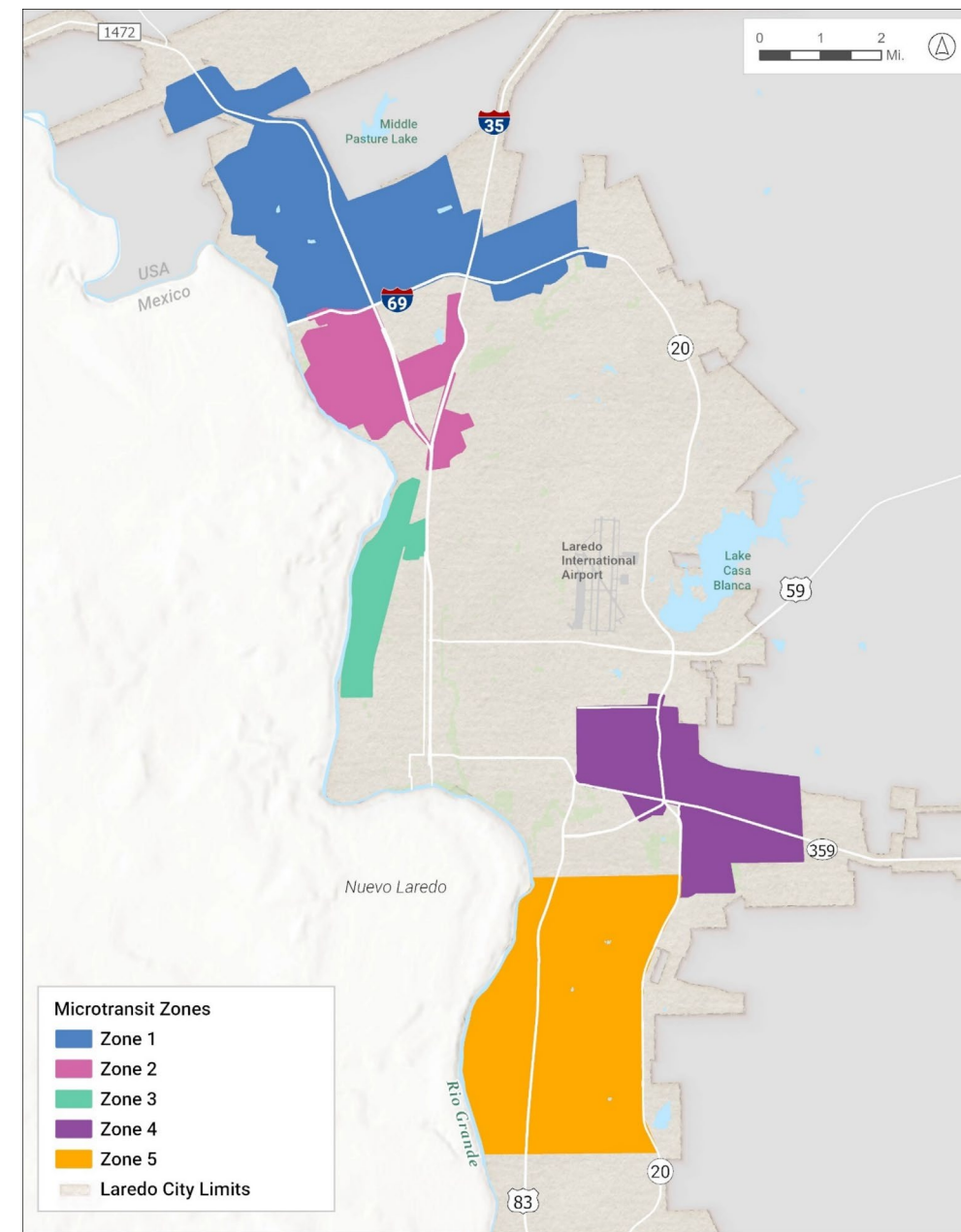
City of Manassas Park –
OmniRide Connect Rider's Guide

Implementation: Funding & Review

- FTA considers microtransit as a demand-responsive service
 - Utilize existing funding sources
 - Late night service is an opportunity for contract with service provider or brokering a portion of trips to manage demand load
 - Could use additional FTA Section 5307 funds for capital cost of contracting (i.e., lower local match funding requirements depending on contract type)
- Performance Indicators
 - Unlinked passenger trips, operating expenses, complaints, incidents, average wait time, on-time performance
- Control levers
 - Adjust zones, adjust fares, adjust wait time, marketing to organizational partners, vehicle leasing, brokering portion of trips to another operator

Conclusion

- El Metro riders interested in microtransit
- Microtransit is a viable new mode
 - Could complement the existing El Metro fixed route and paratransit services
 - Could create an improved rider experience and coverage in certain parts of Laredo



Thank you!



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LAREDO & WEBB COUNTY
AREA METROPOLITAN PLANNING ORGANIZATION