October 18, 2022

Norman

Microtransit Pilot Study
Council Workshop

Agenda

- Introductions
- Service Overview and Existing Conditions
- Project Overview
- Microtransit Overview
- Case Studies
- Discussion
- Next Steps

Service Overview and Existing Conditions

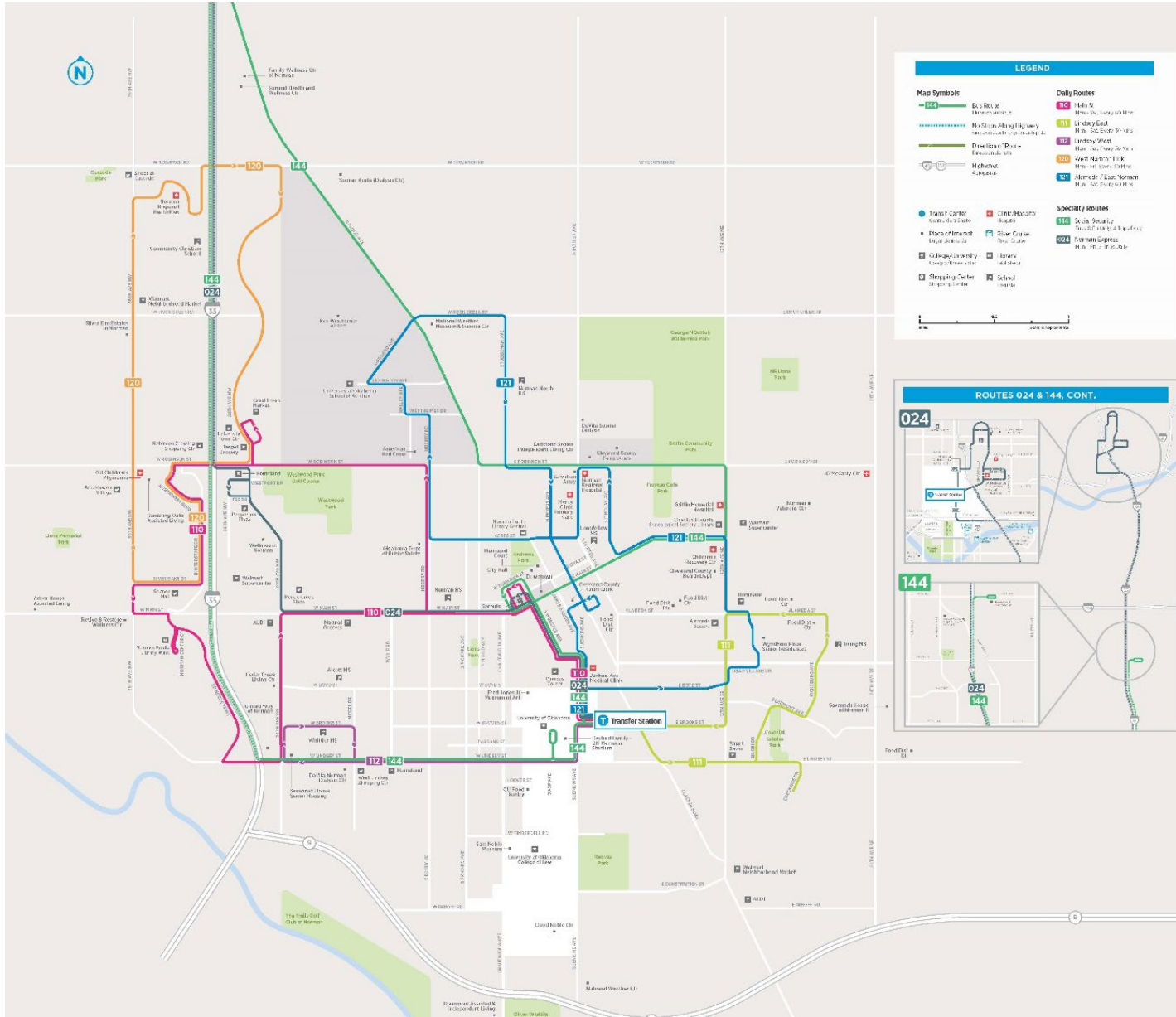
Service Overview: Fixed-Route

- Fare Free
- Operates on a Fixed Schedule
  - Monday-Friday 7am-10pm
  - Saturday 10am-7pm
- Serves Various Destinations in Norman (map on next slide)
- 13 buses in fixed-route fleet
  - 7 new on order (2 35’ electric and 5 35’ CNG)
- Fiscal Year 2022 Ridership:
  - 244,482 passengers carried – 28.9% increase
- Fiscal Year to Date 2023 Ridership (July – September 2022)
  - 63,094 passengers carried – 3.6% increase
  - Average Daily Weekday: 911 (13.32 RPSH)
  - Average Saturday: 375 (10.58 RPSH)

Service Overview: Fixed-Route Map

- **5 Local Routes**
  - 110 – Main St
  - 111 – Linsey East
  - 112 – Lindsey West
  - 120 – West Norman Link
  - 121 – Alameda/East Norman

- **2 Specialty Routes**
  - 024 – Norman/Sooner Express
    - Operated by EMBARK OKC.
  - 144 – Social Security
    - Operates on Tuesday and Friday afternoons during the Moore Social Security Office open hours.



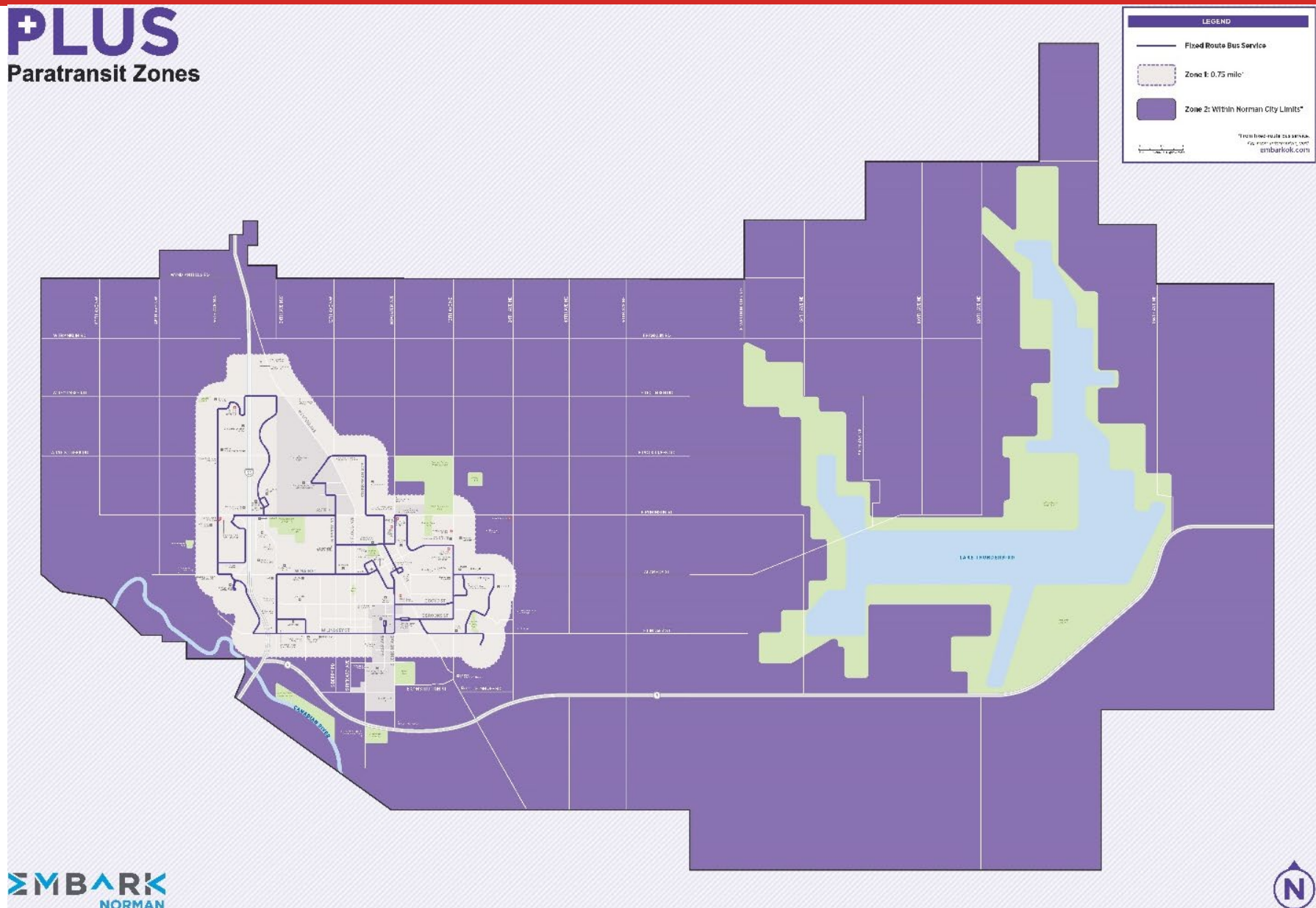
Service Overview: Plus Paratransit

- Fare free
- Hours of Operations:
  - Zone 1:
    - Monday-Friday 7am-10pm
    - Saturday 10am-7pm
  - Zone 2:
    - Monday-Friday 7am-7pm
- 15 buses in paratransit fleet
  - 5 new vehicles on order
- Fiscal Year 2022 Ridership
  - 21,625 passengers carried – 32% increase
- Fiscal Year to Date 2023 Ridership (July – September 2022)
  - 5,991 passengers carried – 20% increase
  - Average Daily Weekday: 89 (1.26 RPSH)
  - Average Daily Saturday (Zone 1 only): 12

- Required to provide for eligible individuals who are not functionally able to ride fixed-route bus service due to a disabling condition.
  - Must submit an application. Once approved, customers can schedule a trip 1-7 days in advance.
  - Current number of active customers: 563

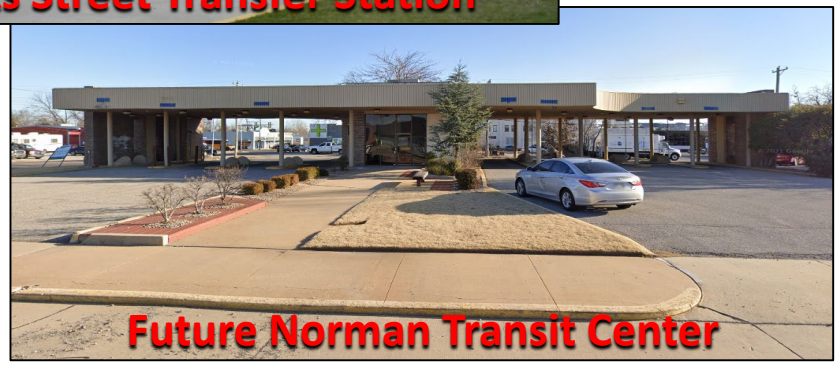
Service Overview: Plus Paratransit Map

- Zone 1: Paratransit service required to be provided ¾ mile around fixed routes.
- Zone 2: ¾ mile to City of Norman limits.
    - Service provided above what is required.

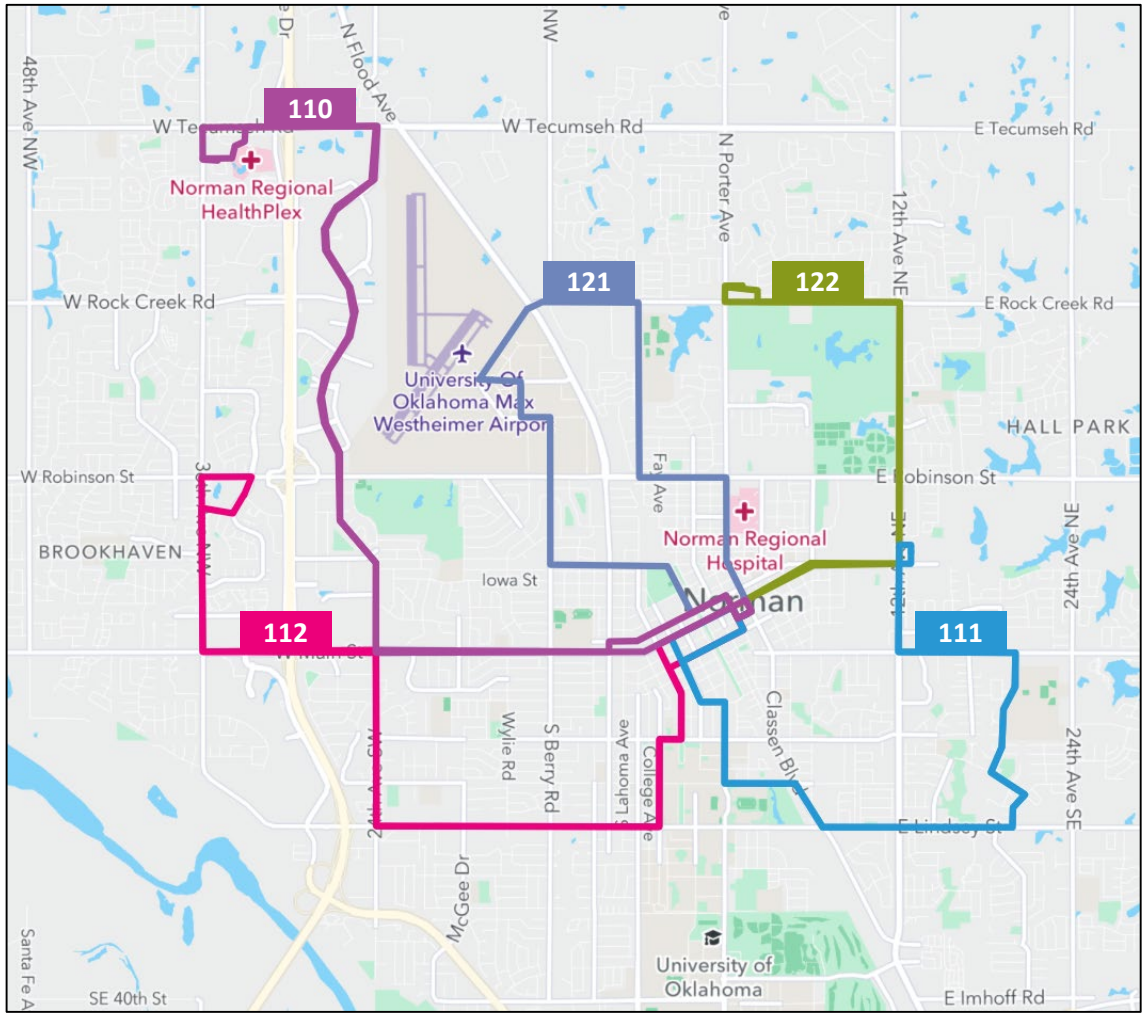


Service Overview: Transit Facilities

- Transit and Public Safety Maintenance Facility
  - The 18,634 sq. ft. facility consists of office spaces and service bays to maintain large public transit and public safety vehicles.
  - Construction Cost - **$7,584,743.41**
    - FTA CARES Act Grant - **$5,057,371**
    - Capital Fund - **$1,657,372.41**
    - PSST - **$870,000**
- Downtown Transit Center
  - Currently utilizing CART's Brooks Street Transfer Station.
  - Supportive existing infrastructure (sidewalks, bike lanes/paths, access to street grid for routes).
  - Improve access to major destinations.
  - Continue momentum of creating a more vibrant downtown.
  - Budget (Capital Fund) - **$1,234,900**
    - Land Acquisition - **$442,500**
    - Design/Construction/Remodeling - **$792,700**



Service Overview: Go Norman Transit Plan



- Nearly year long planning process approved by Council on June 22, 2021
- Proposed route change in 2023 (routes 110, 111, 112, 121, and 122)
- Recommendations for future improvements such as adding routes, increasing frequency, and adding service periods

Project Overview

Project Overview

Develop a Microtransit pilot that aligns with the Go Norman Transit Plan

Project Overview – Process

Discovery Phase

- What are the needs that a Microtransit system can address?
- Existing Conditions

Alternatives Analysis

- Alternatives Development and Testing
- Alternative(s) Recommendation and Adoption

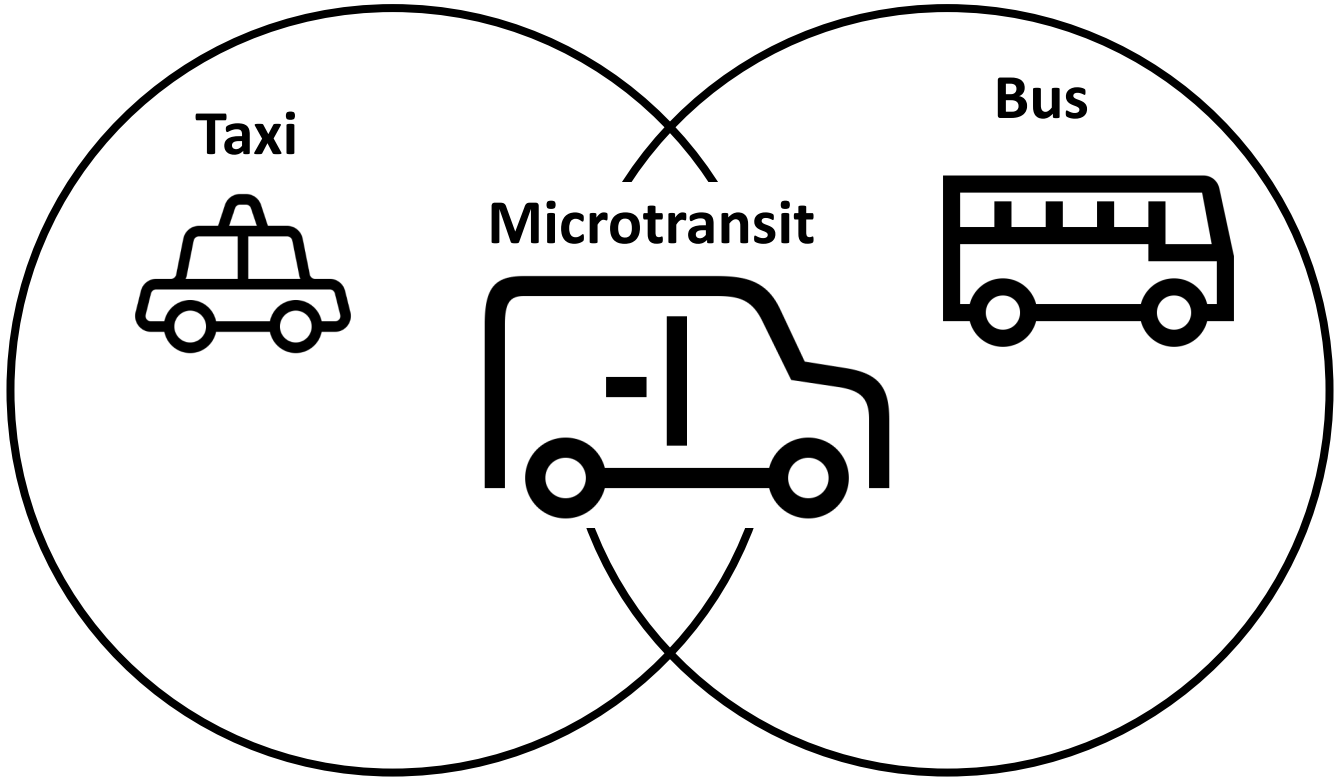
Implementation

- Pilot Program

Microtransit Overview

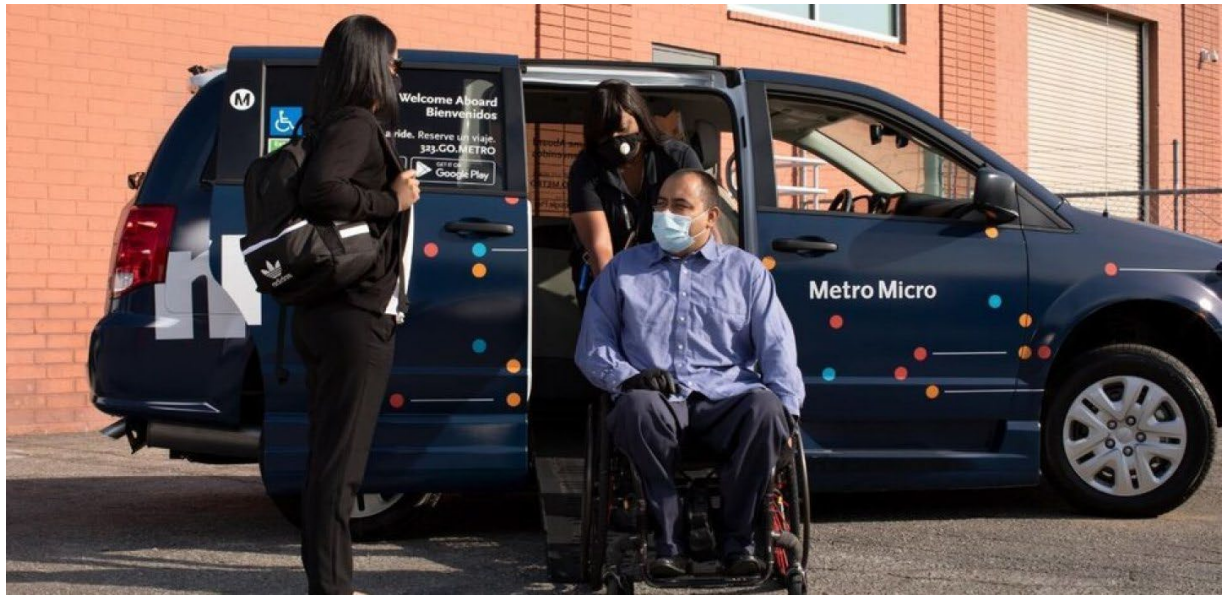
Microtransit Overview

A publicly regulated, software-enabled transit service that uses multi-passenger vehicles (cars, vans, or shuttles) to provide on-demand or semi-fixed-schedule/route services



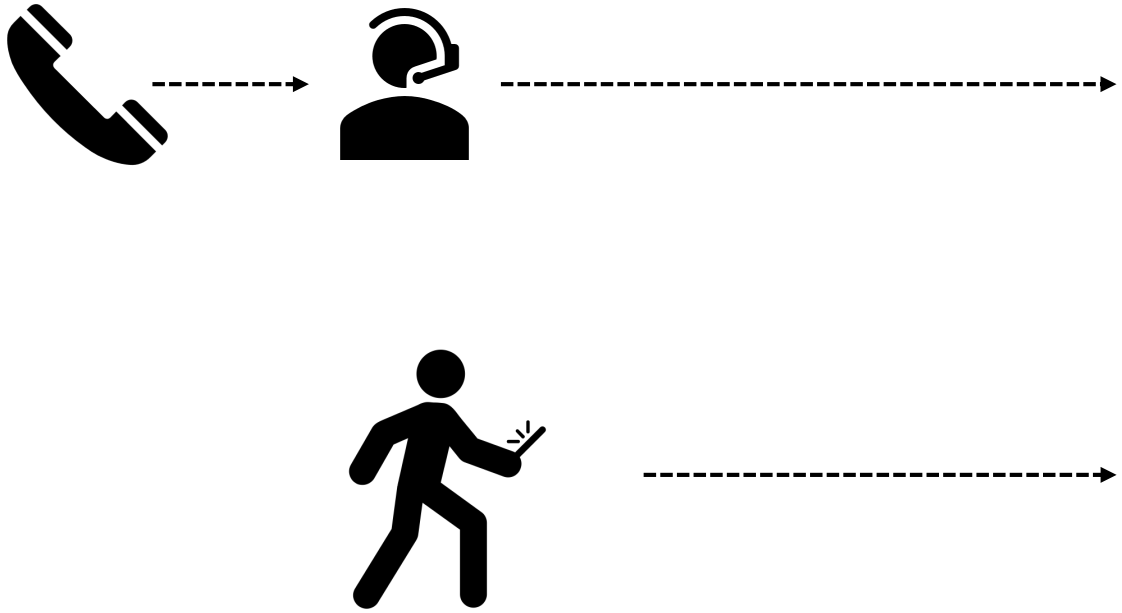
Graphic credits: Monster Icon, Noun Project; Wolf Bose, Noun Project

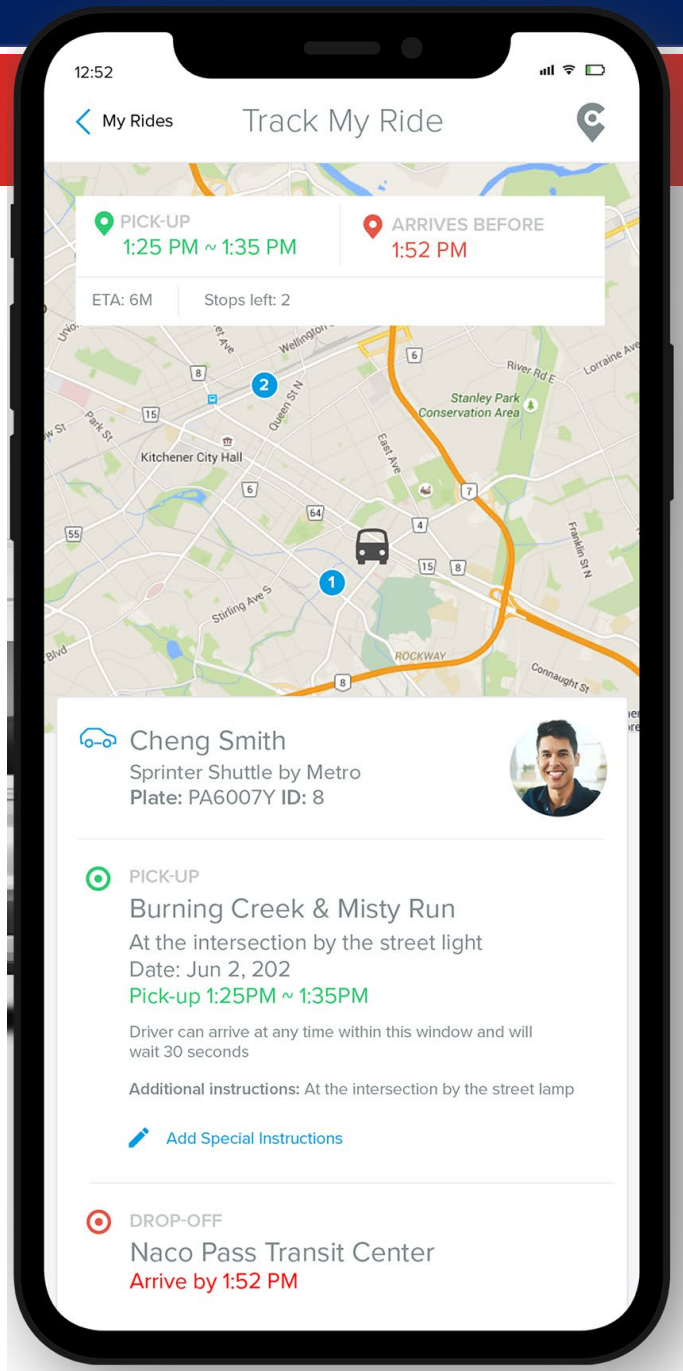
Customer experience: vehicles



Customer experience

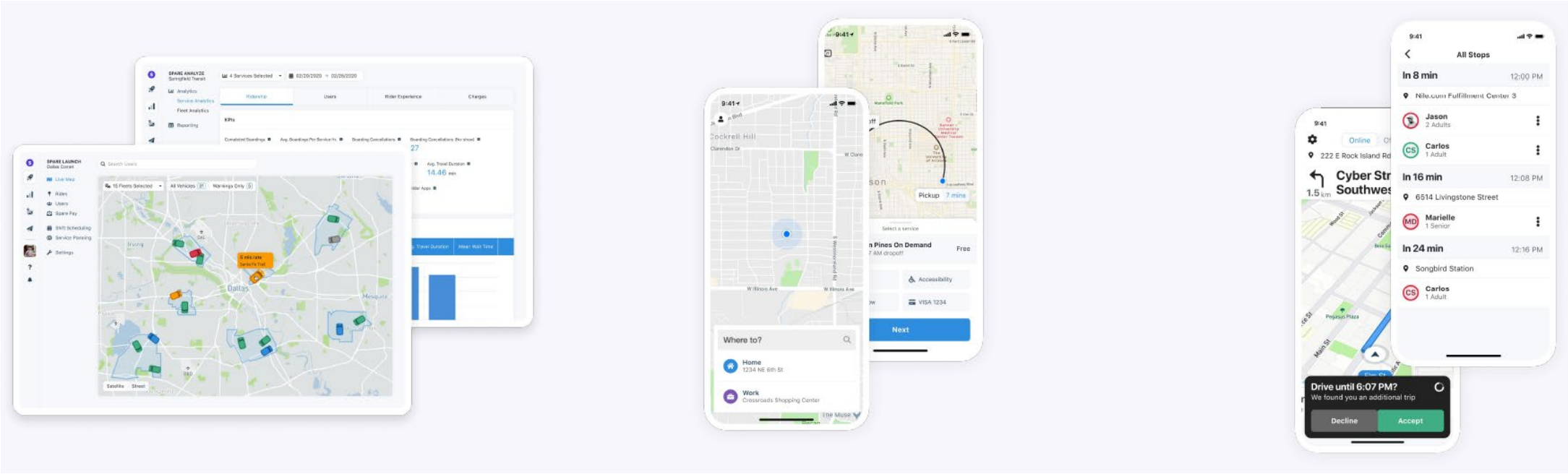
Requesting a ride





Vendor Software and Technology

- Vendors provide **3 key components**: passenger app, driver app, and back office and administrative functions (e.g., routing, dispatching, reporting)

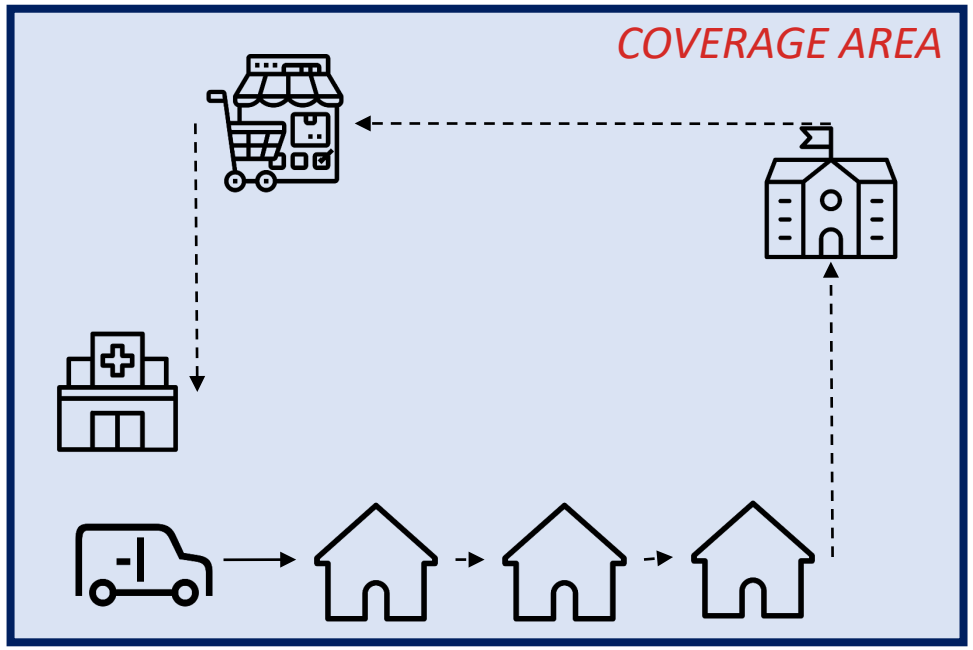


Back-office and Administration **Rider App** **Driver App**

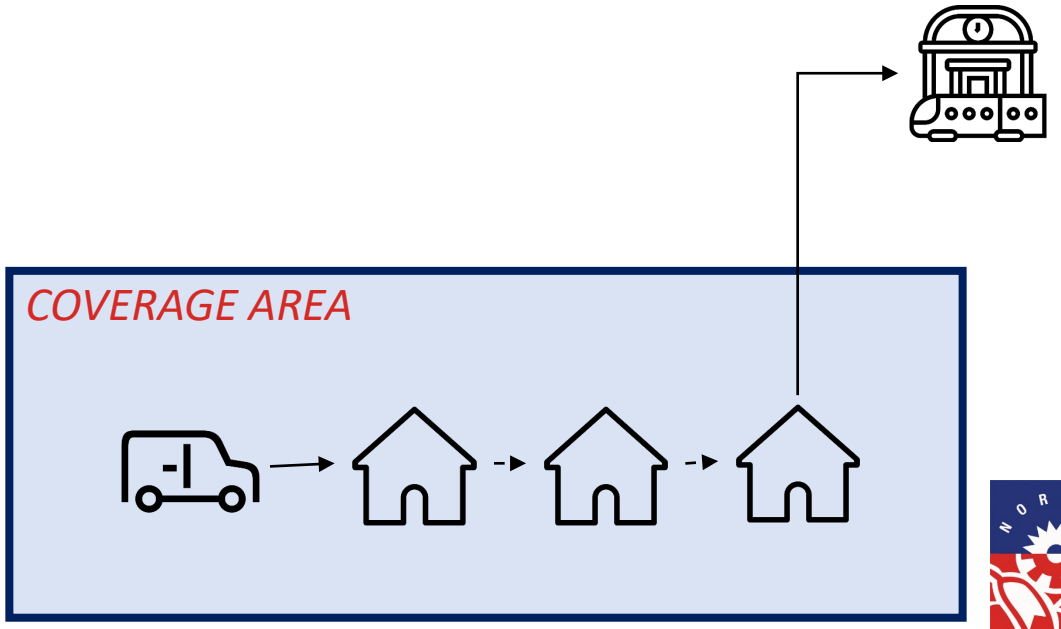
What is Microtransit?

On-demand in coverage area or “zone”:

- serve one or a few origins to one or a few destinations with dynamic routing determined by demand



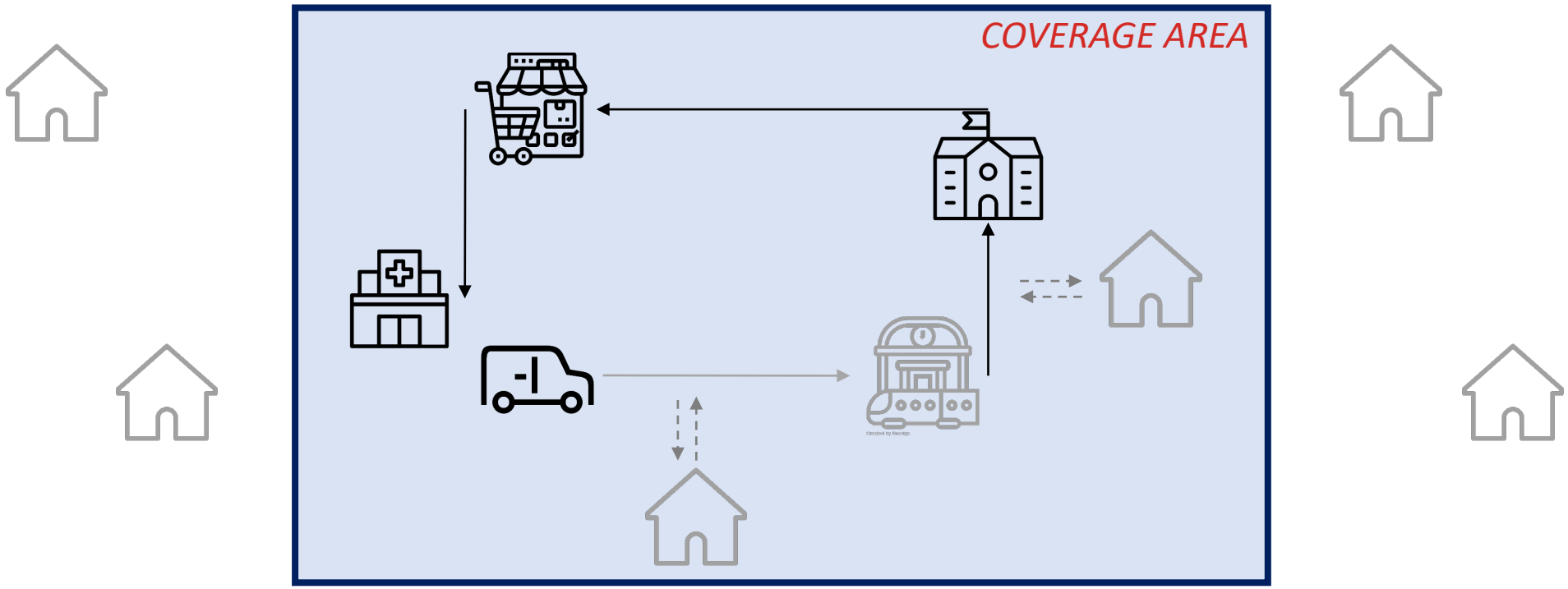
- serve a few origins to a hub or transfer point with routing determined by demand



What is Microtransit?

Fixed-route plus on-demand coverage area or “zone”:

- vehicles travel along a fixed route where there is high demand
- floating stops for fluctuating demand
- demand response for low demand

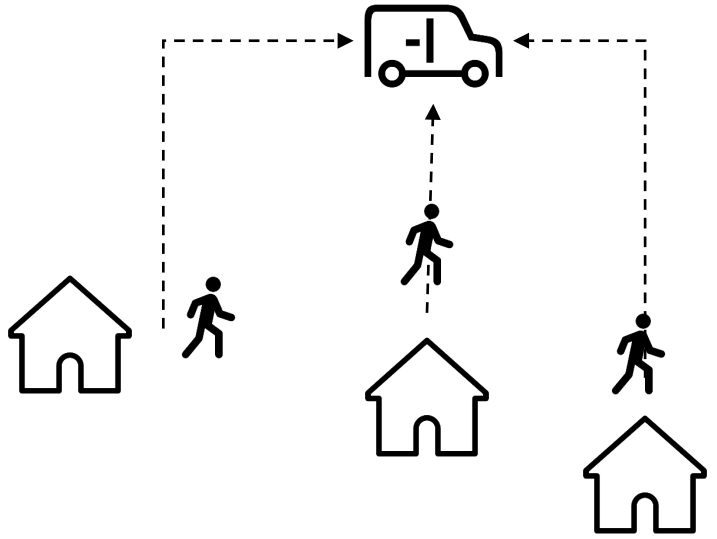


What is Microtransit?

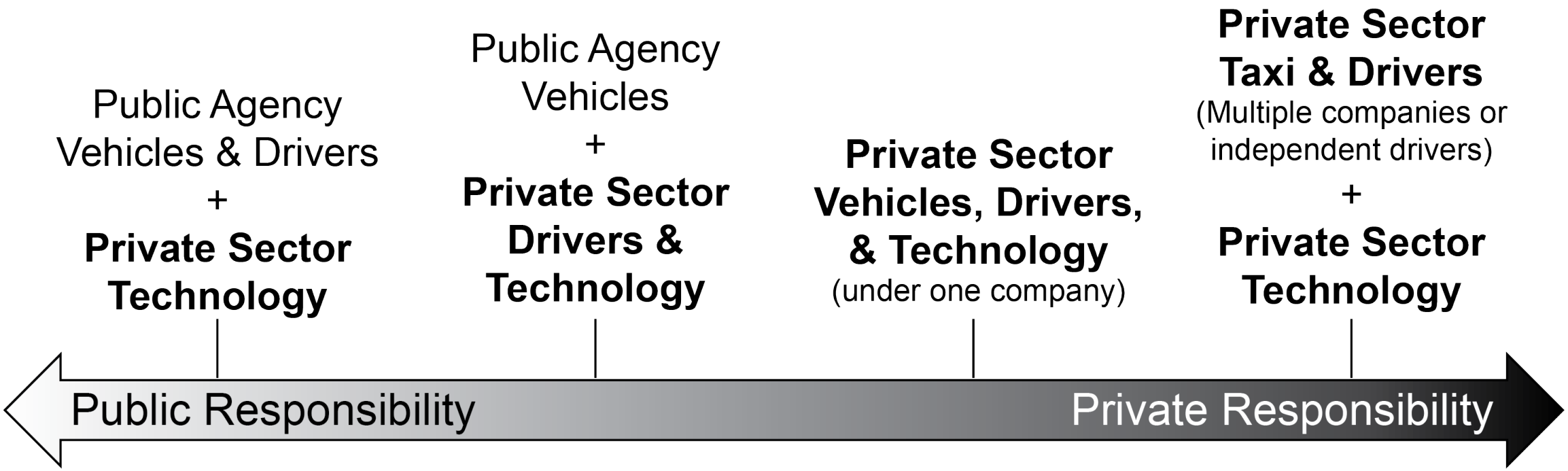
"Curb to curb" or
"Door to door"

vs.

Pick up location/drop off



Service Delivery: Operating Models



Microtransit Pilot Performance

Transit Agency	Contract or In house	Cost per Vehicle Service Hour	Passengers per Vehicle Service Hour	Cost per Passenger Trip
AC Transit	In house	$214.00 (fully allocated)	3	$71.00
Cherriots	In house	$65.00	3.5	$18.57
DART (Dallas)	Contracted. DART provides vehicles and facilities but not fuel.	$46.00	2.5 for original DRT service and 3.5 for new GoLink service.	$18.40 $13.14
Greater Dayton RTA	In house and contracted	RTA pays Lyft and taxis and uses in-house paratransit.	Not applicable	$13.00
Denver RTD	Contracted	$83.00	3.8	$21.84
HART	Contracted	HART pays contractor by trip and not by hour.	3.5	$10.00
Houston METRO	In house	$75.00	2.4	$31.25
Kitsap Transit	In house	$130.72	3.66	$35.68
LYNX	Contracted	$41.17	3.3	$12.60
MST	Contracted	$54.18	4.03	$13.44
NVTA	Contracted	$44.48	2.6	$17.00
NCTD	Contracted	$97.00	2.7	$36.00
TDU	Contracted and in house	$34.69	4.7	$7.34

Note. The numbers are self-reported figures from agencies that responded.

Source: *TCRP 2019: Microtransit or General Public Demand-Response Transit Services: State of the Practice*

Costs Compared to Fixed Route

Measure	Fixed Route Bus	Microtransit	Paratransit
Cost per Passenger	⇩	⇧	⇧
Cost per Hour	⇧	⇩	⇩

Expectation for Microtransit

Microtransit can better serve low demand areas or small, distinct markets. The total cost may be similar to the cost of providing service.

Expectations for Microtransit

- The productivity problem – how many people can be served efficiently?
  - Demand-based service is less efficient and more expensive per passenger
  - High subsidies could lead to inequitable allocation of services
- Opportunity cost
  - Serves fewer people
  - The funding could benefit more people through the improvement of fixed-route service, improving station and amenities, or improving pedestrian access
- Microtransit can serve other roles
  - Microtransit can replace low-productivity of fixed-route services (where passengers per hour are 5 or fewer)
  - Microtransit is beneficial in certain situations such as in areas where fixed-route is difficult/not viable, or to improve the reliability and coverage of paratransit

Case Studies

Case Study: Arlington, TX

- Full replacement of public transit service for 99 square miles
- Incremental build-out of coverage area
- Fares of $3 - $5
- Pickups within two blocks
- 12-minute average wait time (Sept 2019)

Case Study: Lincoln, NE

- Curb-to-curb, pooled (shared ride) service anywhere within Lincoln city limits
- Overlapping Microtransit and Paratransit service/fleet
  - All vehicles are accessible
- Provided in addition to a fixed route service
- $5 per trip
- Weekdays 7am-2pm & 4pm-7pm, Saturdays 7am-7pm, no Sunday service
- Trips booked through smartphone app only
- No guaranteed wait time and same-day only reservations

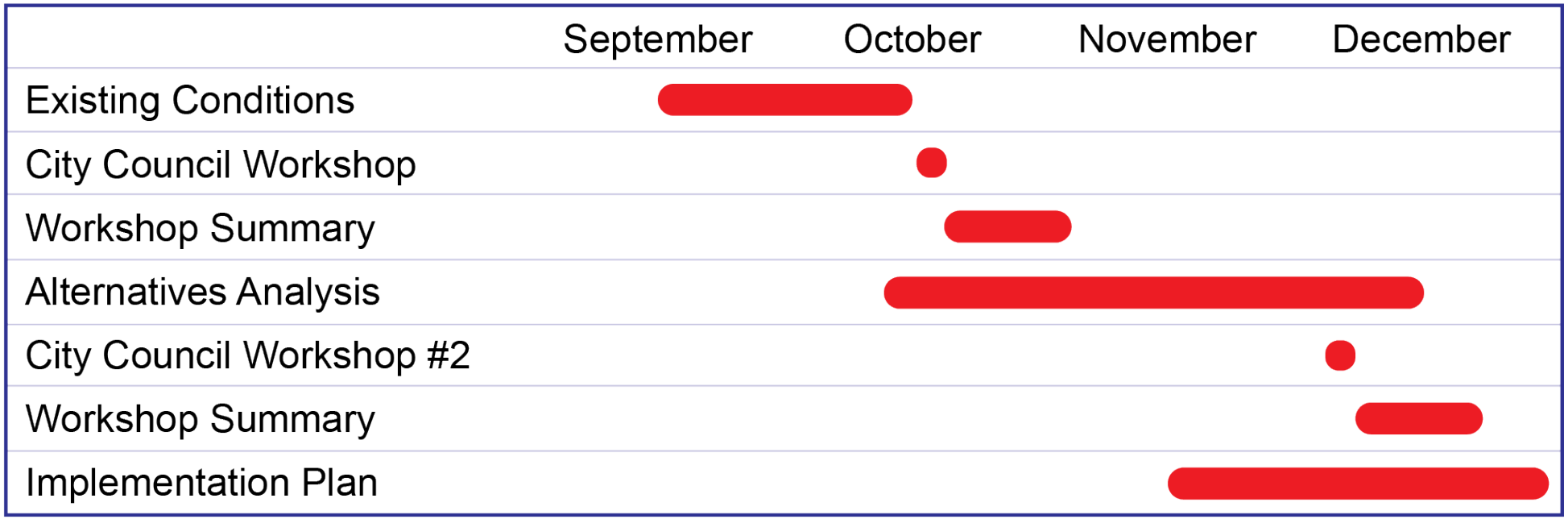
Case Study: Pinellas County, FL

- On-demand, curb-to-curb service for rides between home and work for late night workers
- Need based (no access to car, within 150% of federal poverty line)
- 9pm – 6am all days of the week
- Customers pay $20/month for up to 25 rides
- Average wait time from ride request to pick up of 5-7 minutes

Discussion/Exercise

Next Steps

Next Steps


September
October
November
December
Existing Conditions
City Council Workshop
Workshop Summary
Alternatives Analysis
City Council Workshop #2
Workshop Summary
Implementation Plan