



# CITY OF NORMAN, OK CITY COUNCIL STUDY SESSION

Municipal Building, Executive Conference Room, 201 West Gray, Norman,  
OK 73069

Tuesday, October 18, 2022 at 5:30 PM

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## AMENDED AGENDA

*It is the policy of the City of Norman that no person or groups of persons shall on the grounds of race, color, religion, ancestry, national origin, age, place of birth, sex, sexual orientation, gender identity or expression, familial status, marital status, including marriage to a person of the same sex, disability, retaliation, or genetic information, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination in employment activities or in all programs, services, or activities administered by the City, its recipients, sub-recipients, and contractors. In the event of any comments, complaints, modifications, accommodations, alternative formats, and auxiliary aids and services regarding accessibility or inclusion, please contact the ADA Technician at 405-366-5424, Relay Service: 711. To better serve you, five (5) business days' advance notice is preferred.*

### CALL TO ORDER

### AGENDA ITEMS

1. DISCUSSION REGARDING A MICROTRANSIT PILOT PROGRAM.
2. DISCUSSION REGARDING CITY COUNCIL MEETING PROCESSES AND DECORUM.

### ADJOURNMENT

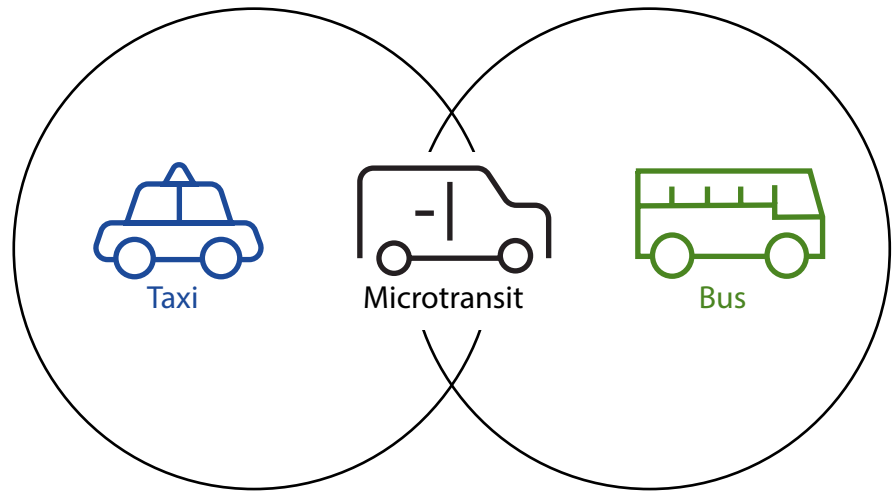
# Microtransit Pilot Study Norman, OK

City Council Workshop  
October 18, 2022

## What is Microtransit?

Microtransit is 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 service.

Microtransit can be considered the middle ground between traditional, fixed-route bus service and individual, curb-to-curb service offered by taxi cabs. Passengers request rides on their smartphones or by calling the transit agency, and scheduling and dispatching software then optimizes a microtransit vehicle's route in real time to serve the most people as efficiently as possible. Microtransit in lower density cities typically serves 2-4 passengers per hour.



## Norman Microtransit Pilot Study

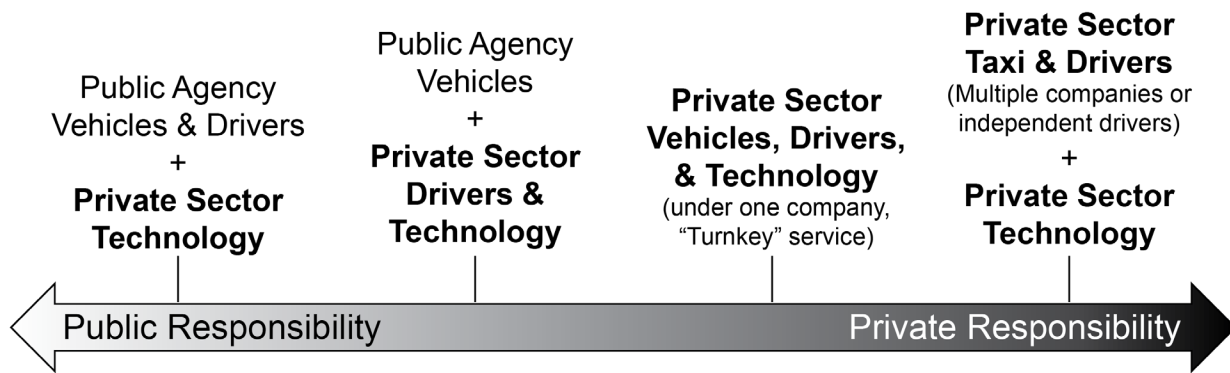
The City of Norman and HNTB will be evaluating the feasibility of alternative mobility services to supplement or replace existing service. The purpose of this exercise is to understand the goals of the City and explore alternative solutions within the microtransit industry that would meet those goals. Results of the analysis will guide the implementation of a pilot program.



# Market Size & Operating Models

Microtransit can better serve low demand areas or small, distinct markets with costs similar to traditional fixed-route bus service. In places of low density or low ride demand, it can improve service effectiveness through shorter or more reliable wait times and by requiring less advance request by the customer. Pick up and drop off spots can also minimize walking or transfers. The market size for microtransit rider demand should target 2-5 passengers per hour to successfully maintain service standards, such as guaranteed wait times. Exceeding 2-5 passengers per hour would require a greater number of vehicles and drivers that can become cost prohibitive for the agency.

Transit agencies can implement microtransit quicker with software options on the market that deal specifically with microtransit service. Contracts with service providers typically include the technology to make on-demand service possible and then may layer on other costs based on the agency's preference. Companies offer "turnkey" products to operate microtransit services without long lead times for adopting the service or the need for extensive software expertise on the part of the transit agency.



## Paratransit

Microtransit software and its automated, on-demand features can be adapted to paratransit services. Even without creating a new Microtransit service offering, the agency may find benefit in contracting for vendor software that handles paratransit reservation and dispatching. In some applications, agencies have contracted for Microtransit software to offer both new, Microtransit service with the typical, zone based approach as well as to offer improved paratransit service reservations and dispatch.

## Project Schedule

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

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



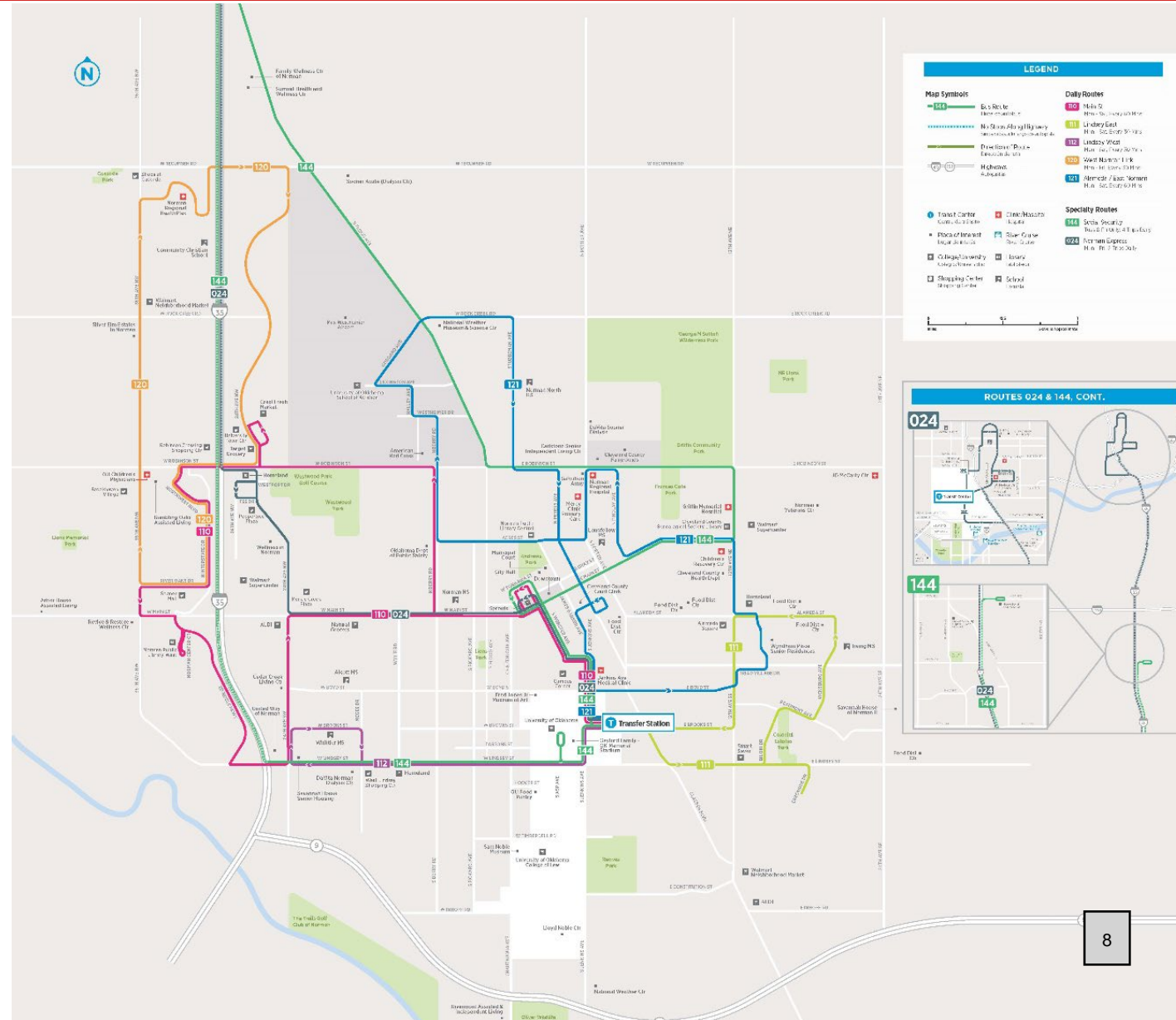
# Service Overview: Fixed-Route

- 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.





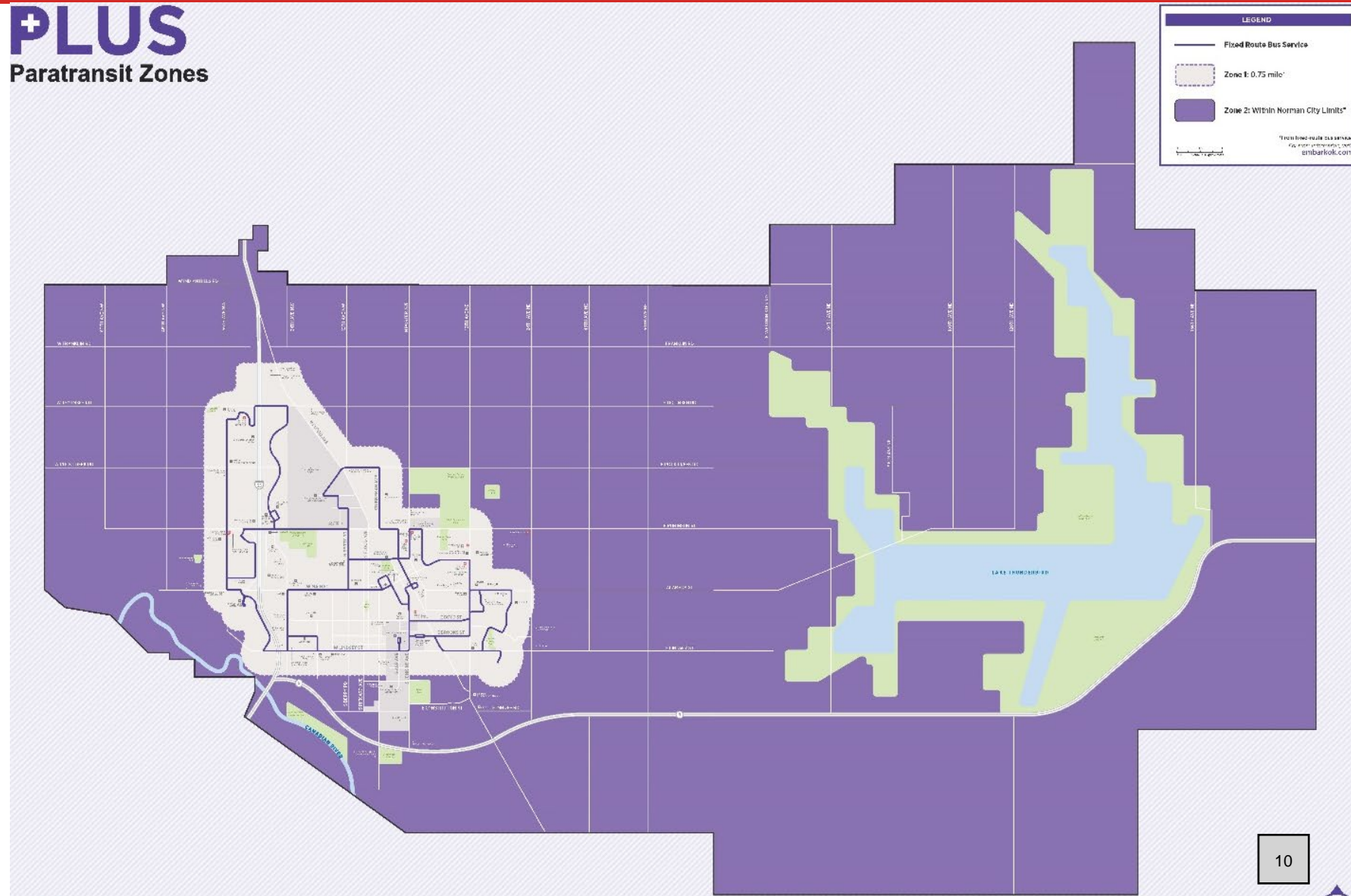
# Service Overview: Plus Paratransit

- 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

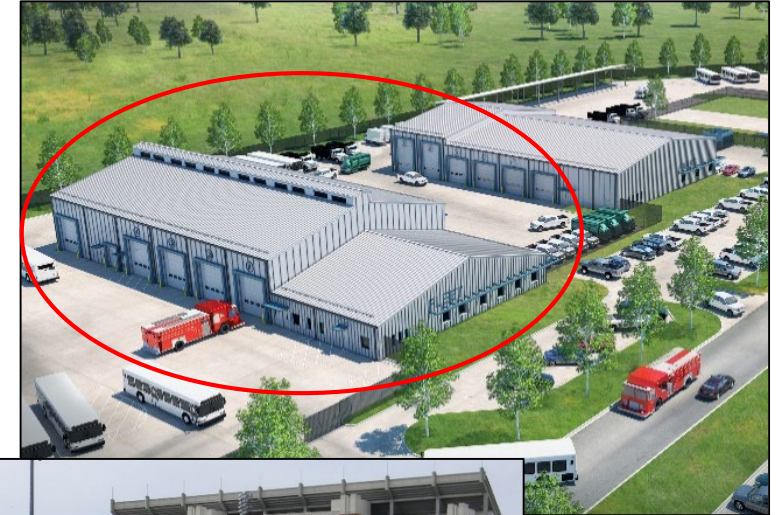
- Zone 1: Paratransit service required to be provided ¾ mile around fixed routes.
- Zone 2: ¾ mile to City of Norman limits.
  - Service provided above what is required.



# Service Overview: Transit Facilities

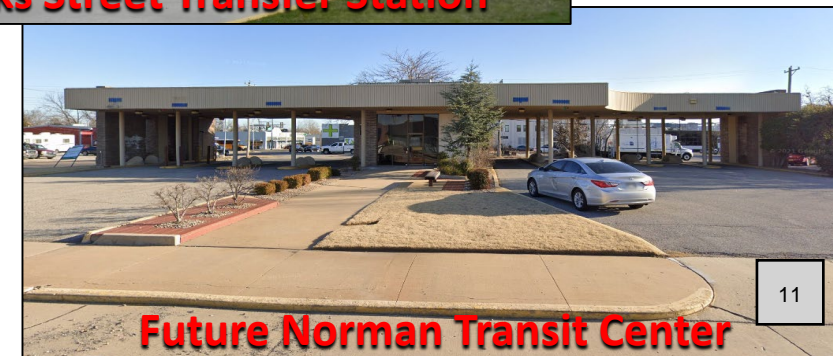
- **Transit and Public Safety Maintenance Facility**

- 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

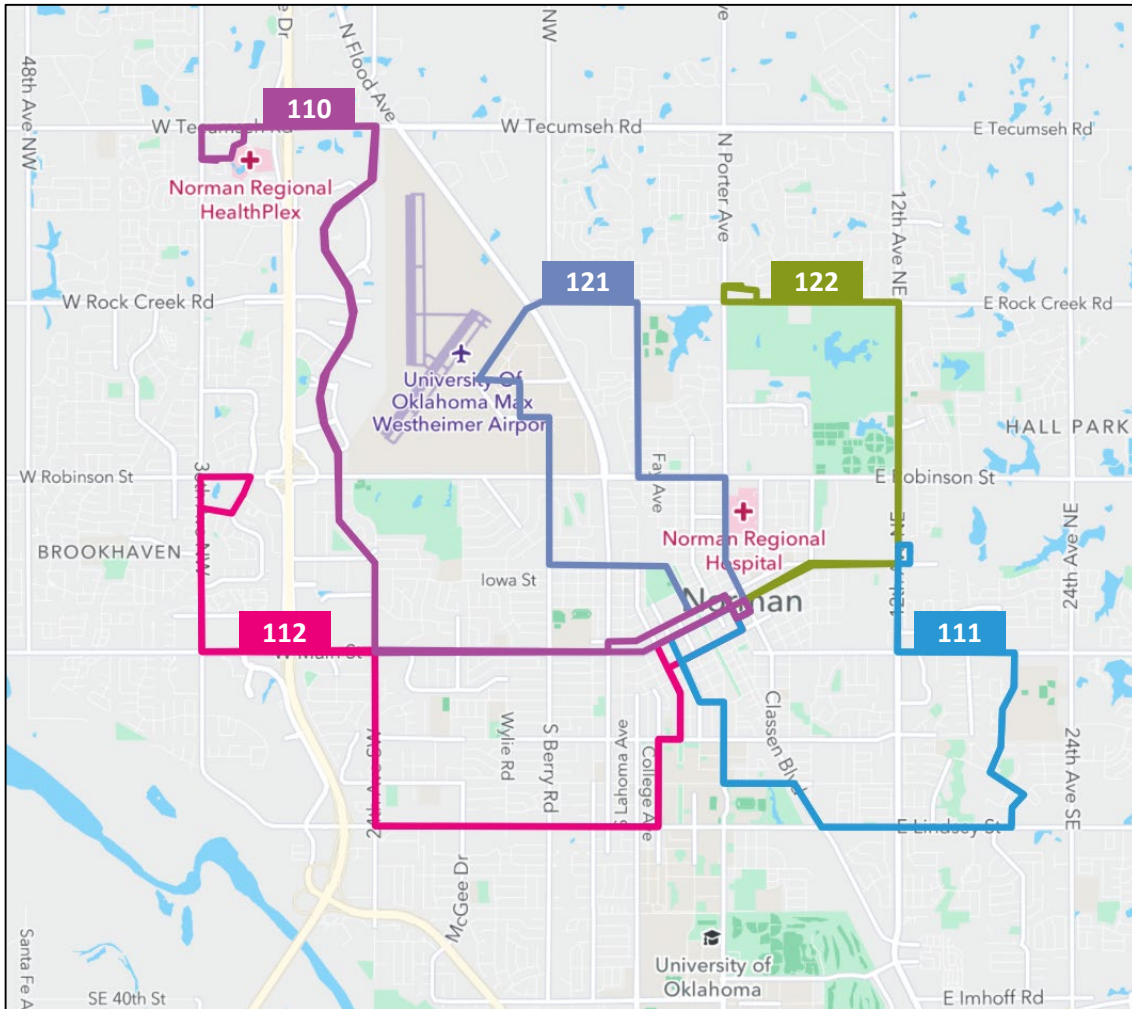


- **Downtown Transit Center**

- 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

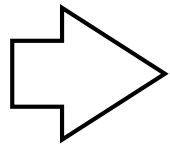


- Nearly year long planning process approved by Council on June 22, 2021
- Proposed route change in 2023 (routes 110, 111, 112, 121, and 122)
- Recommendations for future improvements such as adding routes, increasing frequency, and adding service periods

# Project Overview



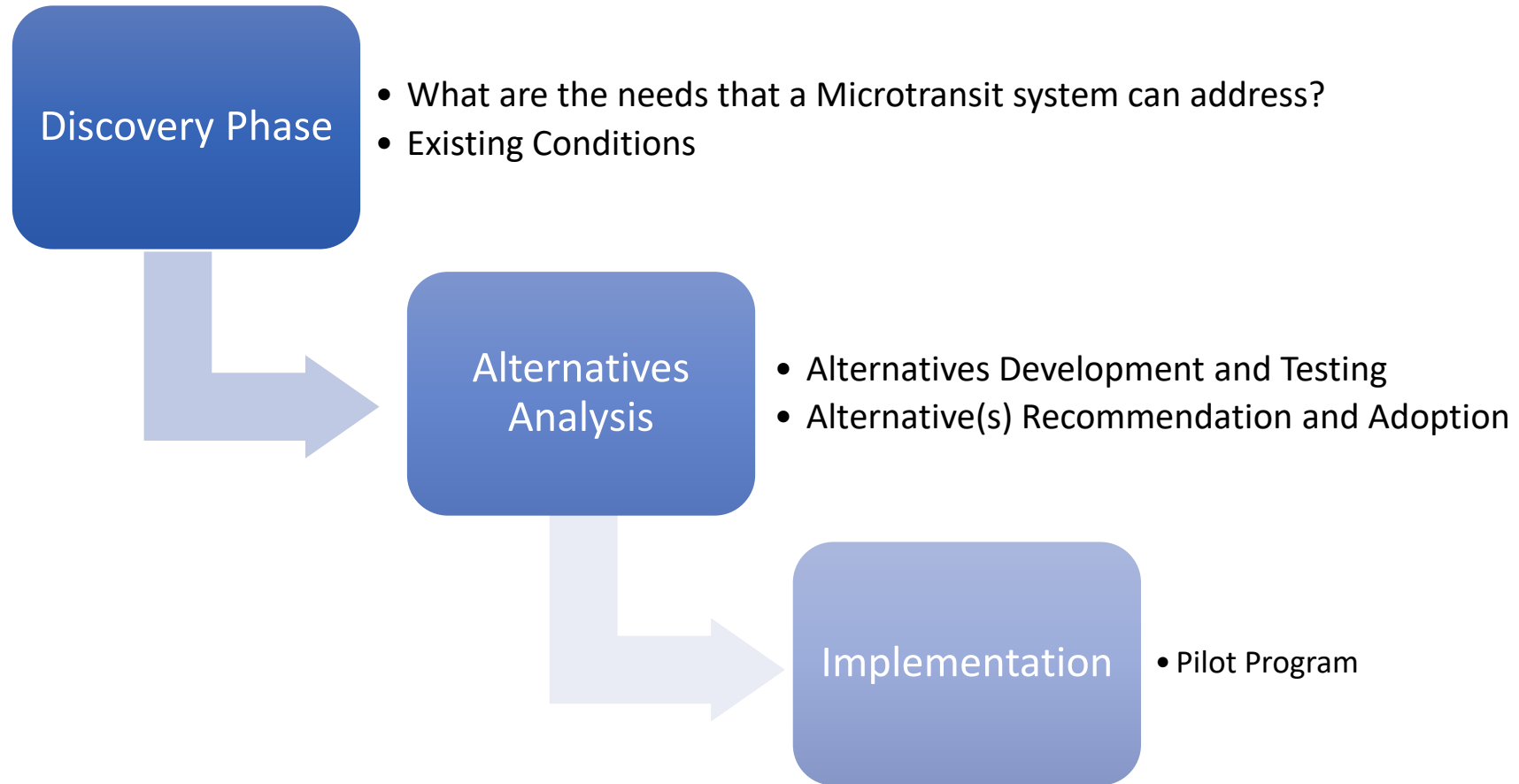
# Project Overview



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



# Project Overview – Process



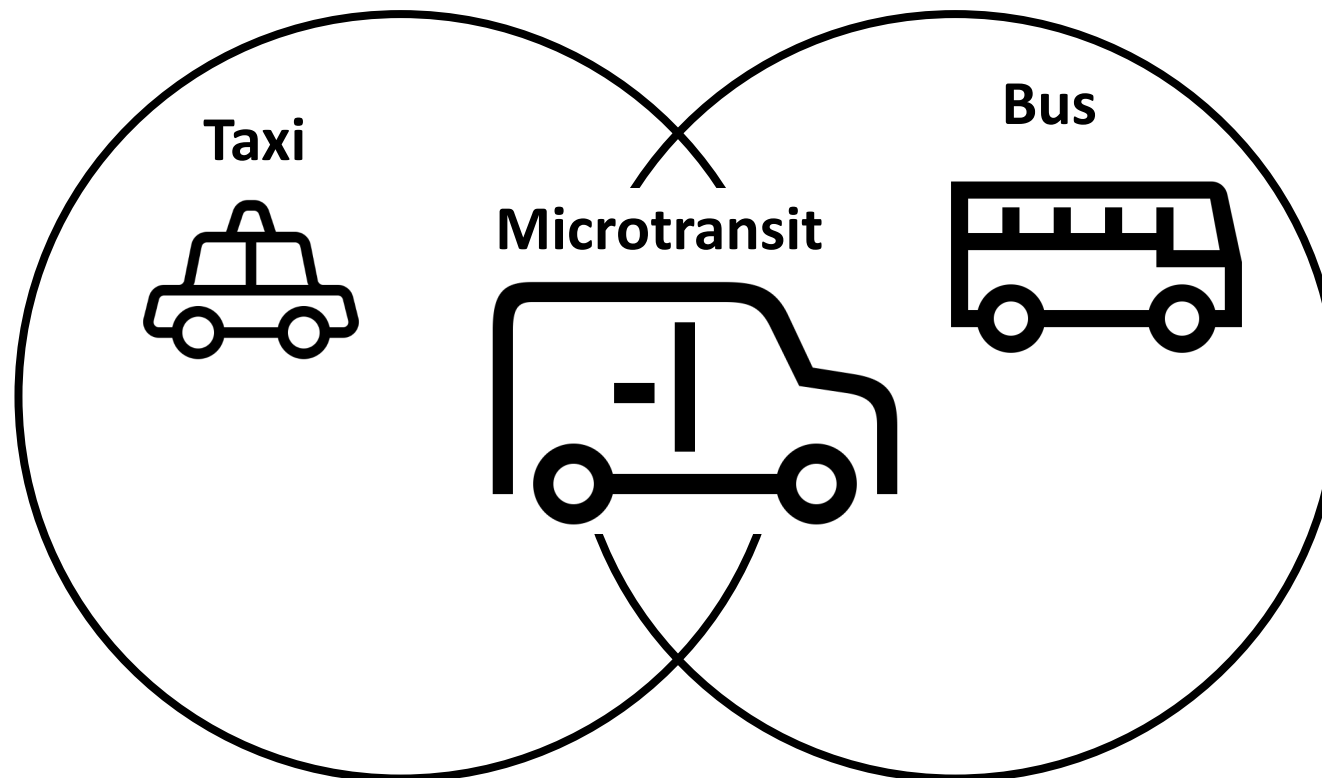
# Microtransit Overview





# 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

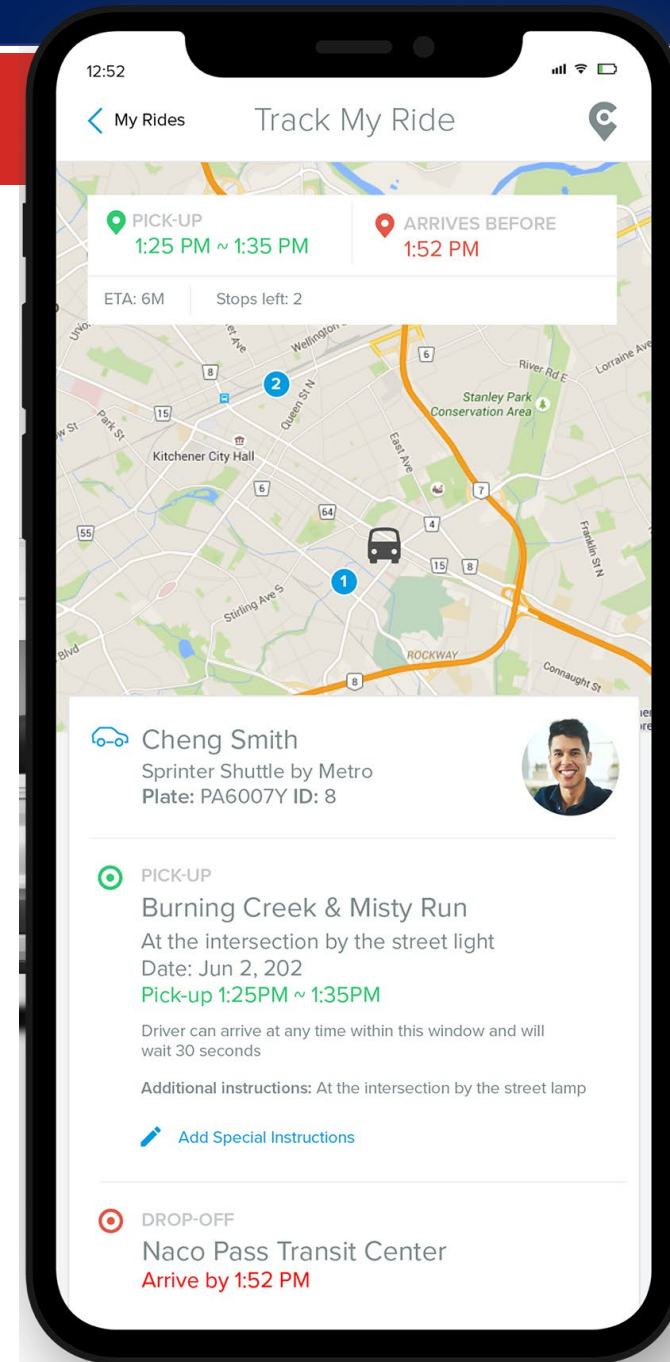
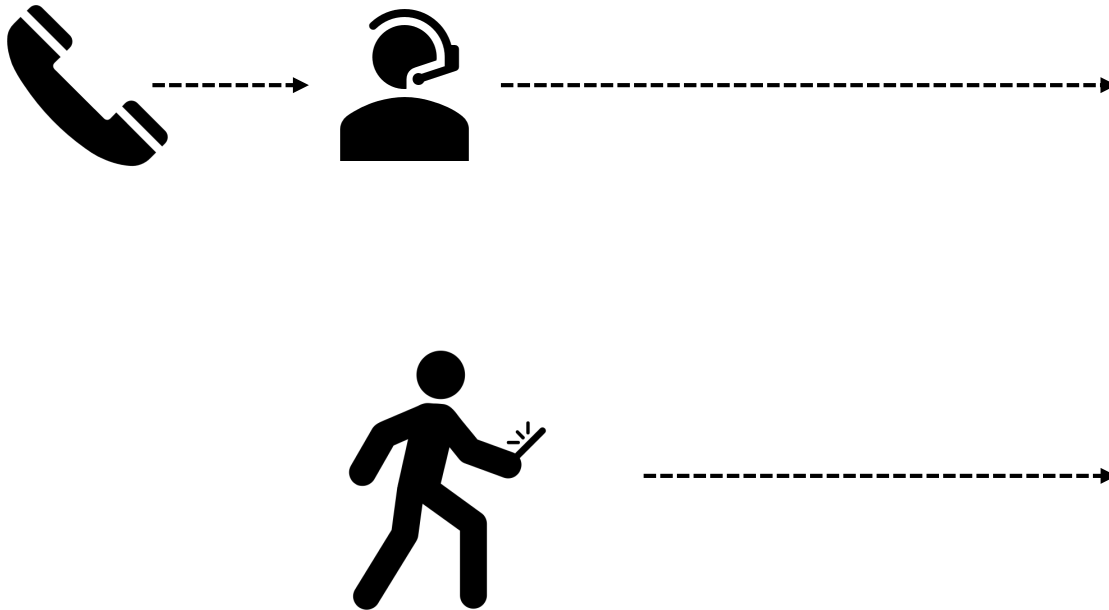


# Customer experience: vehicles



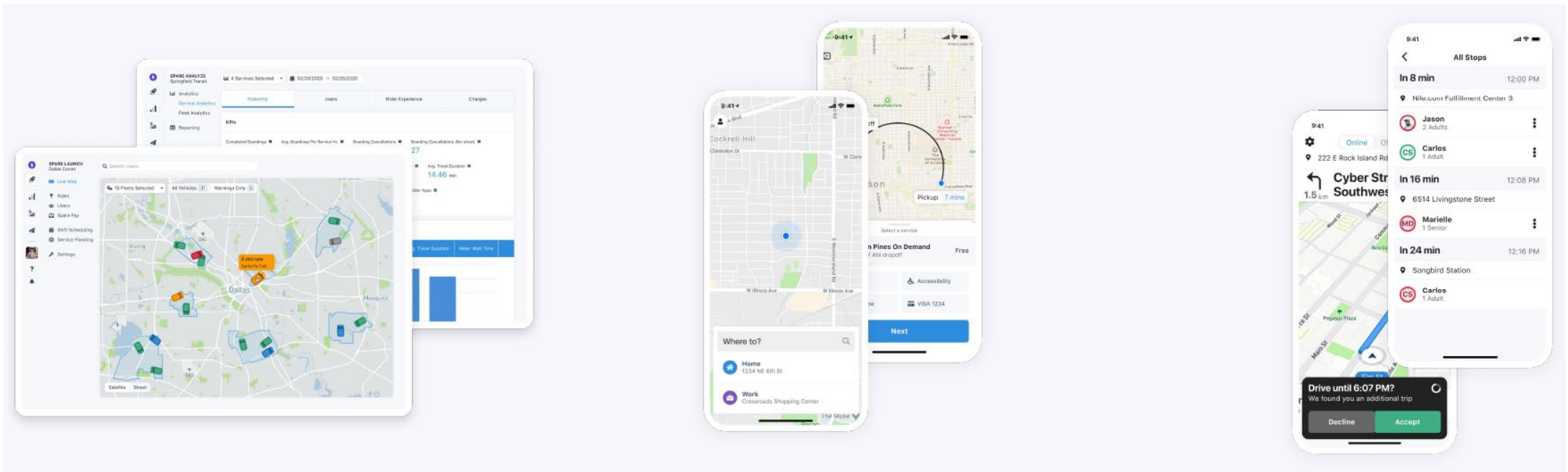
# Customer experience

## 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

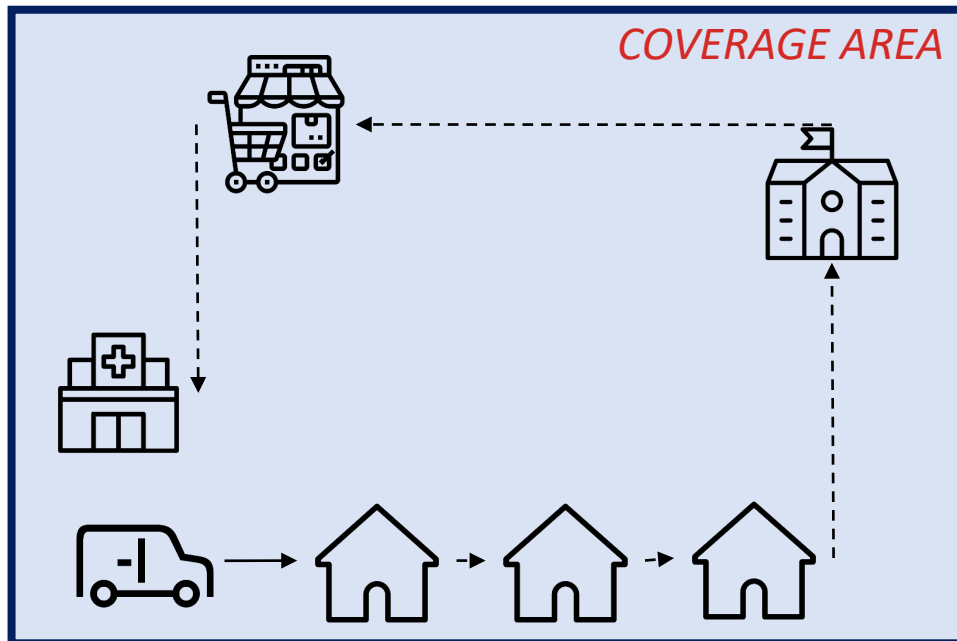
Rider App

Driver App

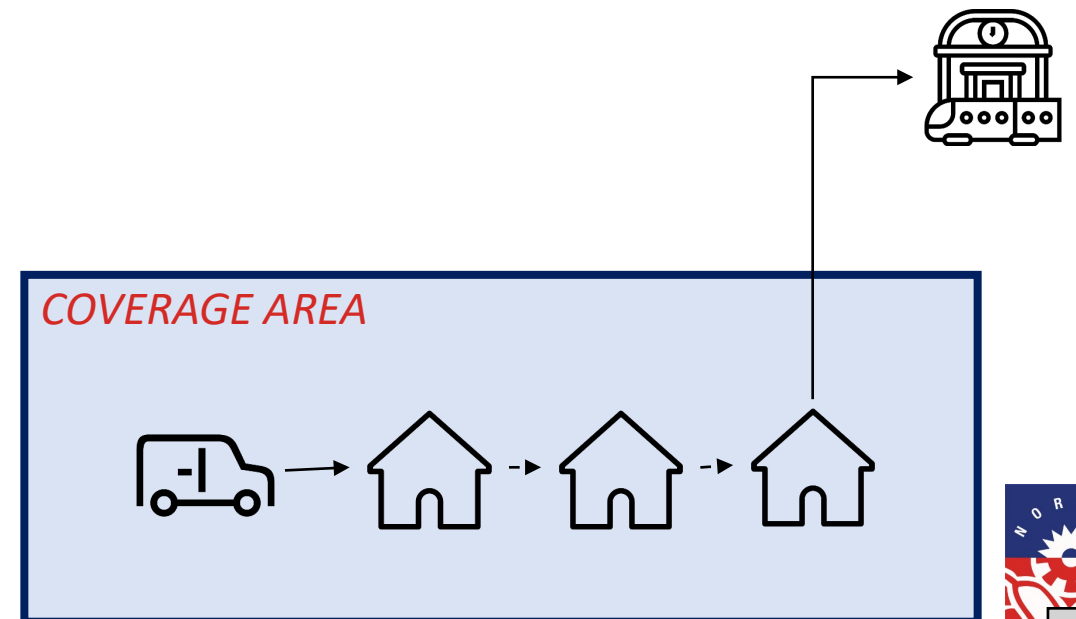
# What is Microtransit?

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



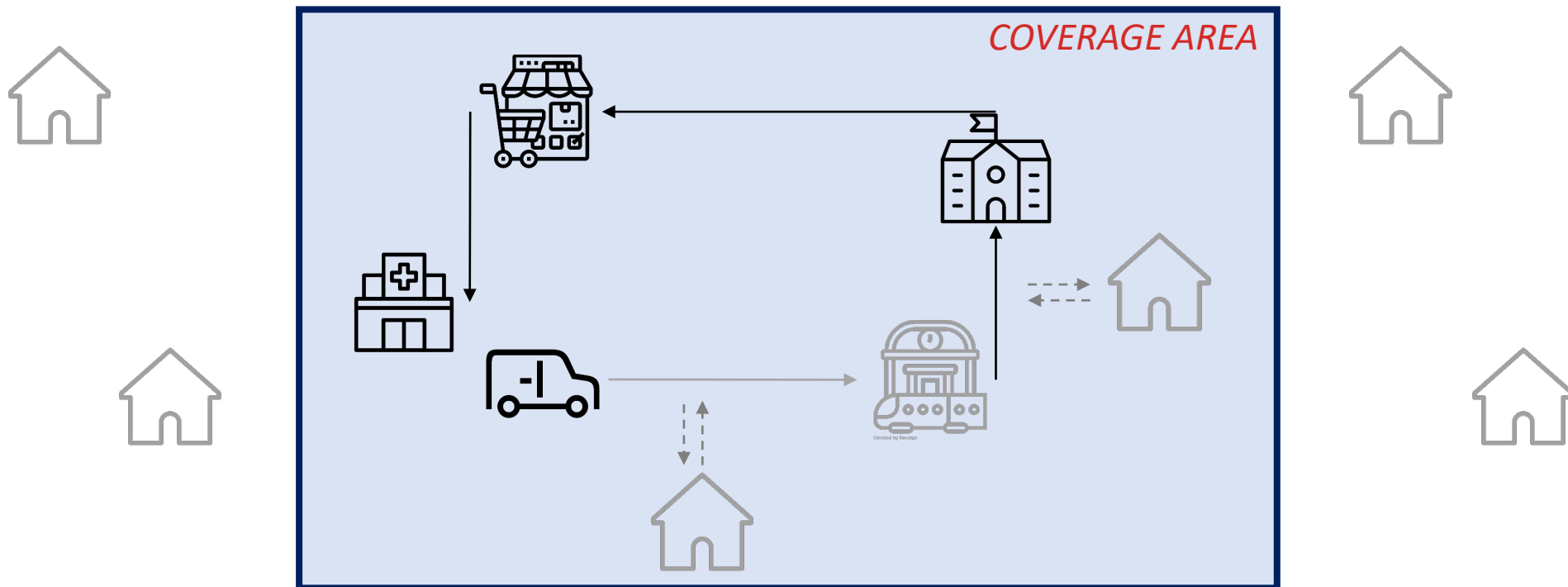
- serve a few origins to a hub or transfer point with routing determined by demand



# 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



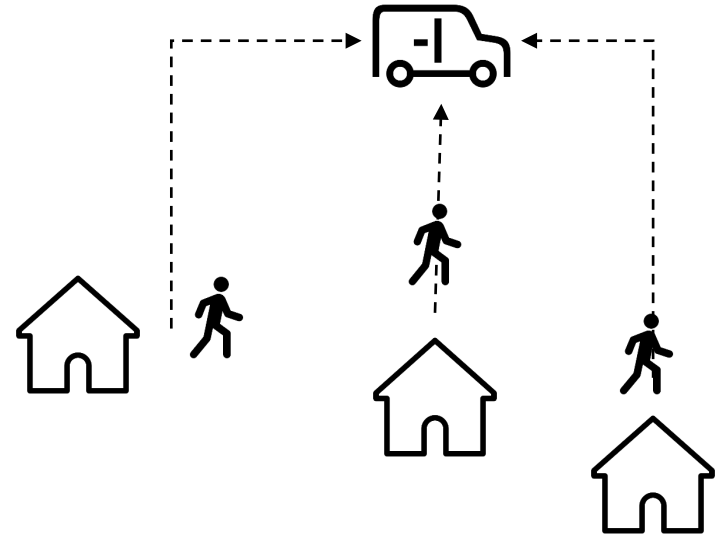
# What is Microtransit?

“Curb to curb” or  
“Door to door”

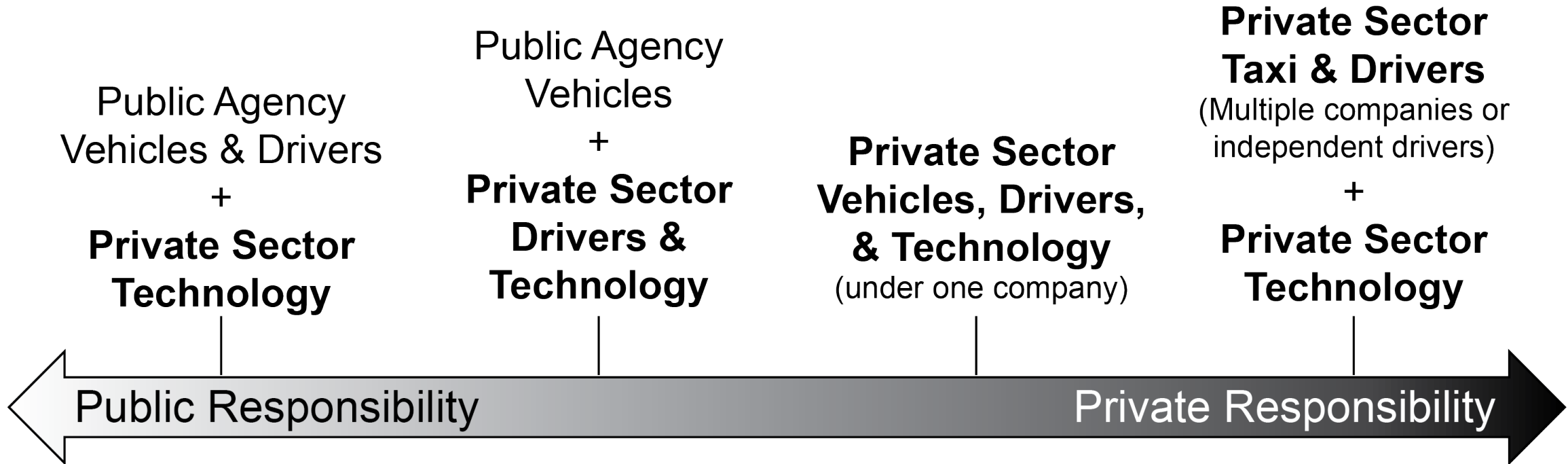


vs.

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

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

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



# 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				●
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Implementation Plan			██	