

February 7, 2023

Woodburn Transit Development Plan

TDP Steering Committee

Draft Service and Capital Improvements



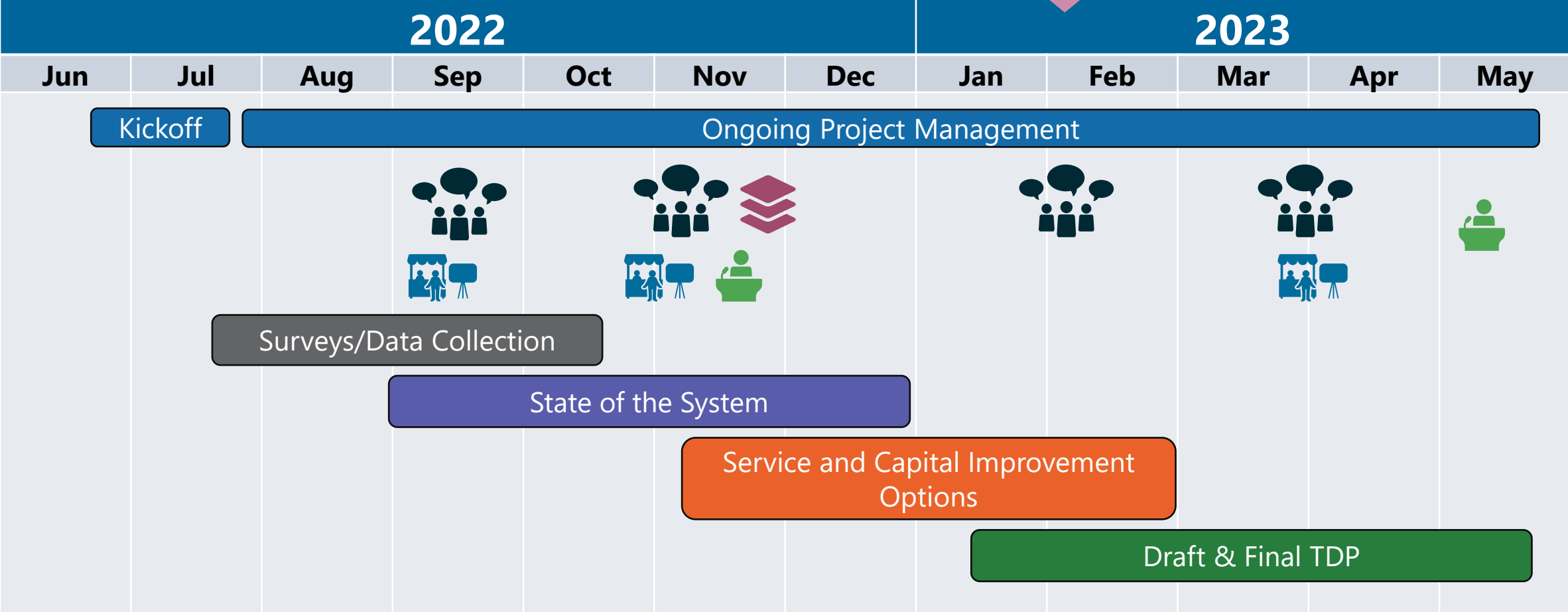
Agenda

- 1 Peer Review Summary
- 2 Transit Improvement Opportunities
- 3 Transit Service Types
- 4 Service Scenarios
- 5 Non-Service Improvements
- 6 Next Steps



Project Schedule

We are here



TDP Steering Committee



Community Meeting/Pop-Up



Planning Game Workshop



City Council Briefing

Peer Review Summary

Peer Review – Selection Process

- Total city population
- Population density
- 2010-2022 population growth
- Demographic composition
 - Hispanic/Latino population
 - Limited English proficiency



Peer Review – Service Overview

Yamhill County

- 11 fixed routes, including local and regional routes
- Complementary paratransit
- Free fares

Josephine County

- 4 local fixed routes in Grants Pass
- 3 regional routes
- Complementary paratransit
- Not fare free



Sandy

- Local fixed route
- Regional route to Gresham
- Local dial-a-ride
- Shopper shuttle
- Free local fares
- Fare charged on regional route

Canby

- Local loop route
- Regional route between Oregon City and Woodburn
- General public dial-a-ride
- Shopper shuttle
- Free local fares
- Fare charged on regional route

Lebanon

- Local flexible fixed route
- Regional route to Brownsville
- General public dial-a-ride
- Free fares

Peer Review – Transit Service Overview

Peer Community	Transit Service Overview	Fare Structure Overview
Woodburn Transit System (WTS)	<p>Two fixed routes and dial-a-ride service for seniors and people with disabilities. The Dial-A-Ride serves the entire city limits and serves as the complementary paratransit service. Service offered seven days a week. Also manages a volunteer medical transportation service serving Salem or the Portland area.</p>	<p>Fare free on all services (suspended fares during the pandemic). Prior to the suspension of fares, fixed route fares were \$1.25 for a single ride, \$3.00 for a day pass, \$5.00 for a four-ride pass, and \$18.75 for a 20-ride pass. The volunteer medical transportation service is free to passengers, but donations are accepted.</p>
Canby Area Transit (CATS)	<p>A regional route Canby-Oregon City-Woodburn (99x) and a local loop within the city. The regional route operates Monday-Saturday and the local loop operates only on weekdays. CATS also provides a complementary paratransit service to the fixed route service and a general-public dial-a-ride for anyone traveling within the urban growth boundary. A shopper shuttle is also provided for registered users of the paratransit service.</p>	<p>Fare free on local fixed route and shopper shuttle. \$1.00 per one-way trip on the regional route (99x) as well as the dial-a-ride. A 24-ride punch pass and a monthly pass are also available, each for \$20.00.</p>
Josephine Community Transit (JCT)	<p>Four local fixed routes and three commuter routes to Medford, Cave Junction, and Wolf Creek. A local complementary paratransit service (dial-a-ride) within $\frac{3}{4}$ of a mile of the local fixed route network. All transit services are offered Monday-Friday only.</p>	<p>Fares on the local fixed routes are \$1.00 for a single ride, \$3.00 for a day pass, and \$38.00 for a monthly pass. The commuter routes are \$2.00 for a single ride, \$6.00 for a day pass, and \$50.00 for a monthly pass. There are also several reduced fare options. Dial-a-ride fares are \$2.00 each way.</p>
Lebanon Inter-Neighborhood Express (LINX)	<p>Local loop flexible fixed route (Monday through Saturday) and a regional connector route to Brownsville on Tuesday and Friday. LINX also provides a dial-a-ride for seniors, people with disabilities, and the general public.</p>	<p>Fare free on all services</p>
Yamhill County Transit (YCT)	<p>11 fixed routes, including local service in McMinnville and Newberg and regional services to Grand Ronde, West Salem, Hillsboro, and Tigard. Complementary paratransit is also provided for riders who are unable to use the local and commuter fixed route services. All services operate Monday-Friday except the routes to Grand Ronde and Tigard that also offer reduced service on Saturday, and also provided limited local service in McMinnville and Newberg.</p>	<p>Fare free on all services (suspended fares during the pandemic). Previously, fares on the local and regional services were \$1.25 for a one-way trip, \$2.50 for a day pass, \$18.00 for a 10-day pass book, and \$35.00 for a monthly pass. Dial-a-ride fares were \$1.75 for a single ride and \$40.00 for a monthly pass.</p>
Sandy Area Metro (SAM)	<p>A local fixed route as well as regional service to Gresham and Estacada. Also operates a dial-a-ride service (called Sandy Transit Area Rides – or STAR) that provides both complementary paratransit service as well as general-public, curb-to-curb service. A shopper shuttle is also provided locally. The route between Sandy and Gresham operates seven days a week; route to Estacada operates Monday through Saturday and the shopper shuttle only operates on weekdays.</p>	<p>All fixed route services within the Sandy city limits are fareless. Fares for service outside of the city limits to reach regional destinations are \$1.00 for a single trip. The dial-a-ride is also \$1.00 for a single trip. Multi-trip and monthly passes are available (\$20.00 and \$30.00, respectively) and a combined SAM/Mt. Hood Express day pass is \$5.00.</p>

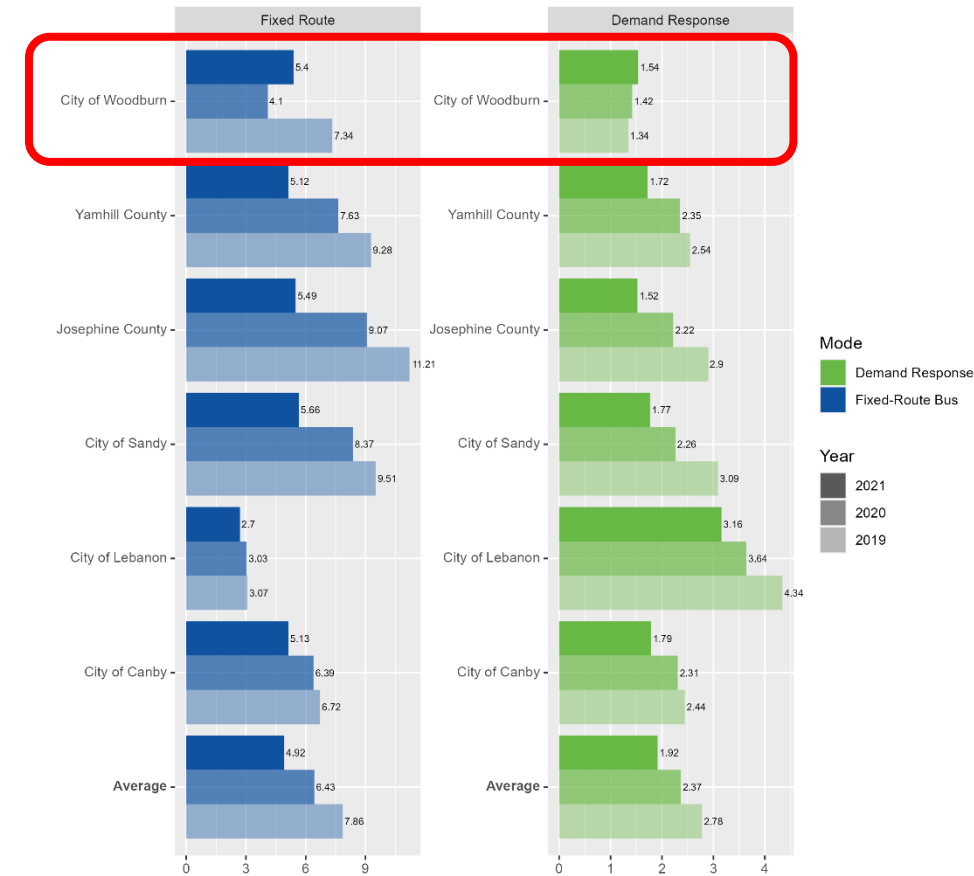
Peer Review – Demographic/Service Overview

Agency	Primary City	Service Area Population *	Population Density (per sq. mile)	Total Annual Passenger Trips **	Total Annual Vehicle Revenue Hours **	Total Annual Operating Cost **	Max. Vehicles in Operation **
Woodburn Transit System (WTS)	Woodburn	26,013	4,440	29,100	9,500	\$694,000	3
Canby Area Transit (CATS)	Canby	18,171	3,877	60,100	14,600	\$1,843,800	8
Josephine Community Transit ***	Grants Pass	48,000	600	125,200	28,000	\$2,926,000	15
Lebanon Inter-Neighborhood Express (LINX)	Lebanon	18,447	2,633	19,700	6,500	\$555,500	6
Yamhill County Transit (YCT) ***	McMinnville	107,722	150	142,000	36,200	\$2,926,800	26
Sandy Area Metro (SAM)	Sandy	12,612	3,533	76,600	17,100	\$1,796,700	7

* 2020 US Census; ** 2021, National Transit Database, fixed route and demand response combined; *** Josephine and Yamhill County population figures are for the entire county.

Peer Review – Key Findings

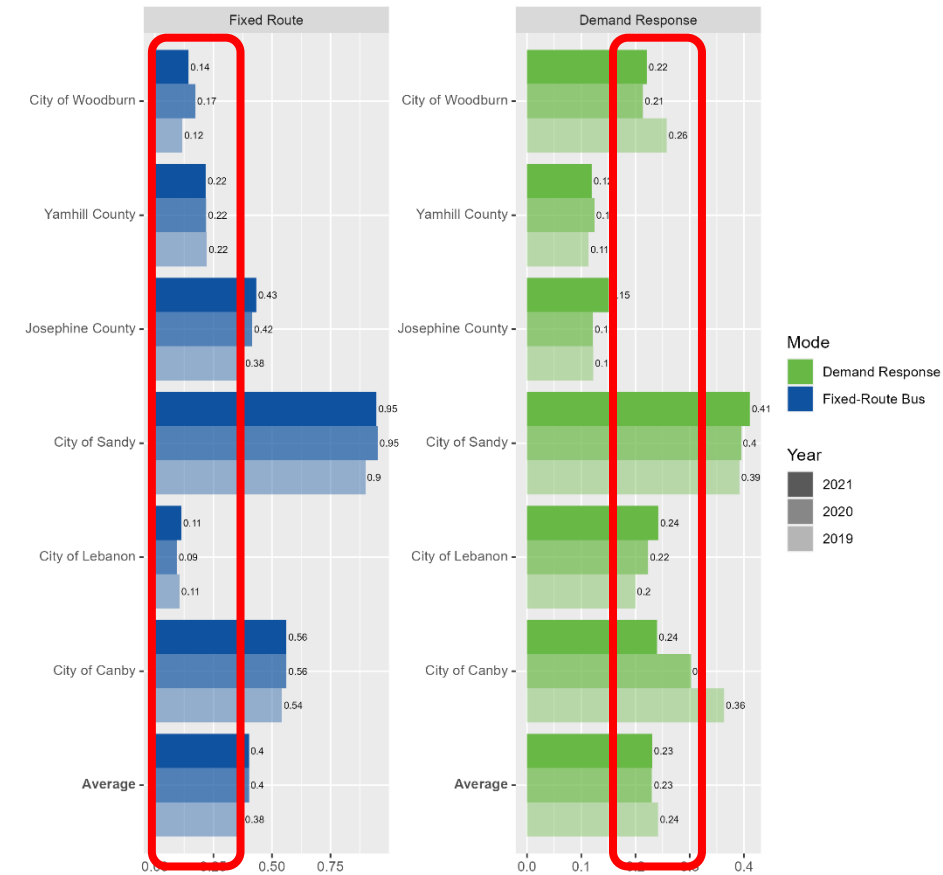
- Boardings per Revenue Hour measures how well the service is being used in relation to the amount of service available (**productivity**).
- Woodburn is the only peer for which boardings per revenue hour (productivity) **showed any annual increase** during the three-year period.



Boardings per Revenue Hour

Peer Review – Key Findings

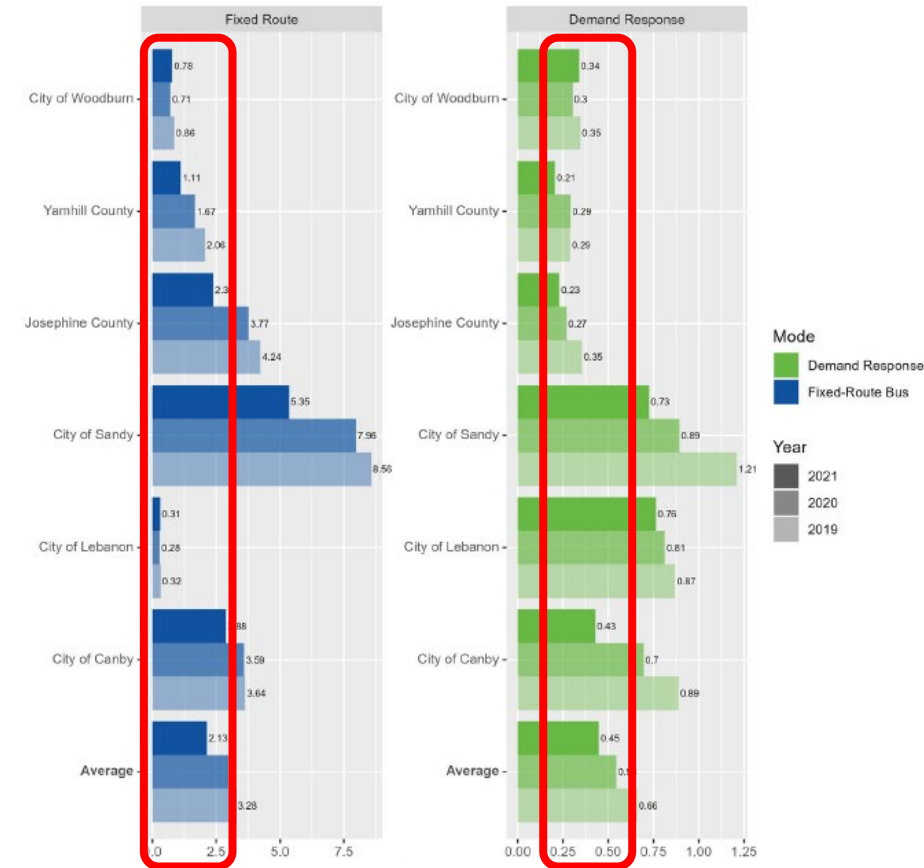
- Annual Revenue Hours per Capita is an indicator of the **investment in transit**.
- The investment in transit remained relatively steady over the past three years for **all peers** because many agencies were able to maintain service during the pandemic.



Annual Revenue Hours per Capita

Peer Review – Key Findings

- Boardings per Capita is an indicator of **transit’s market share** in the region.
- Woodburn offers **less service (both in terms of revenue hours and operating dollars) per capita** than the peer cities.



Annual Boardings per Capita

Peer Review – Key Findings

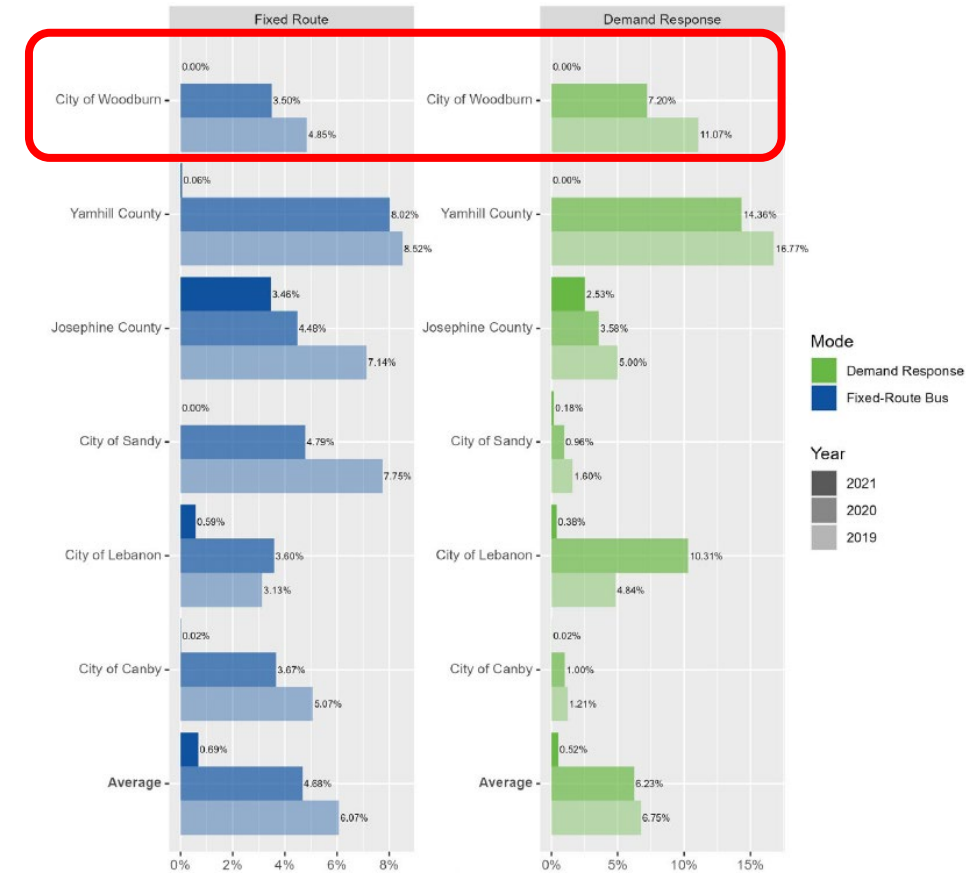
- Operating Cost per Revenue Hour** measures how **efficiently resources are provided** by the transit provider. It reflects a combination of some factors outside of agency control, such as prevailing wage rates, as well as considerations within a provider's influence, like staffing practices and assignments, and resources not used in revenue service (i.e., deadhead hours).
- The efficiency of providing transit service in Woodburn is **mixed between services, but on par with peer communities overall.**



Operating Cost per Revenue Hour

Peer Review – Key Findings

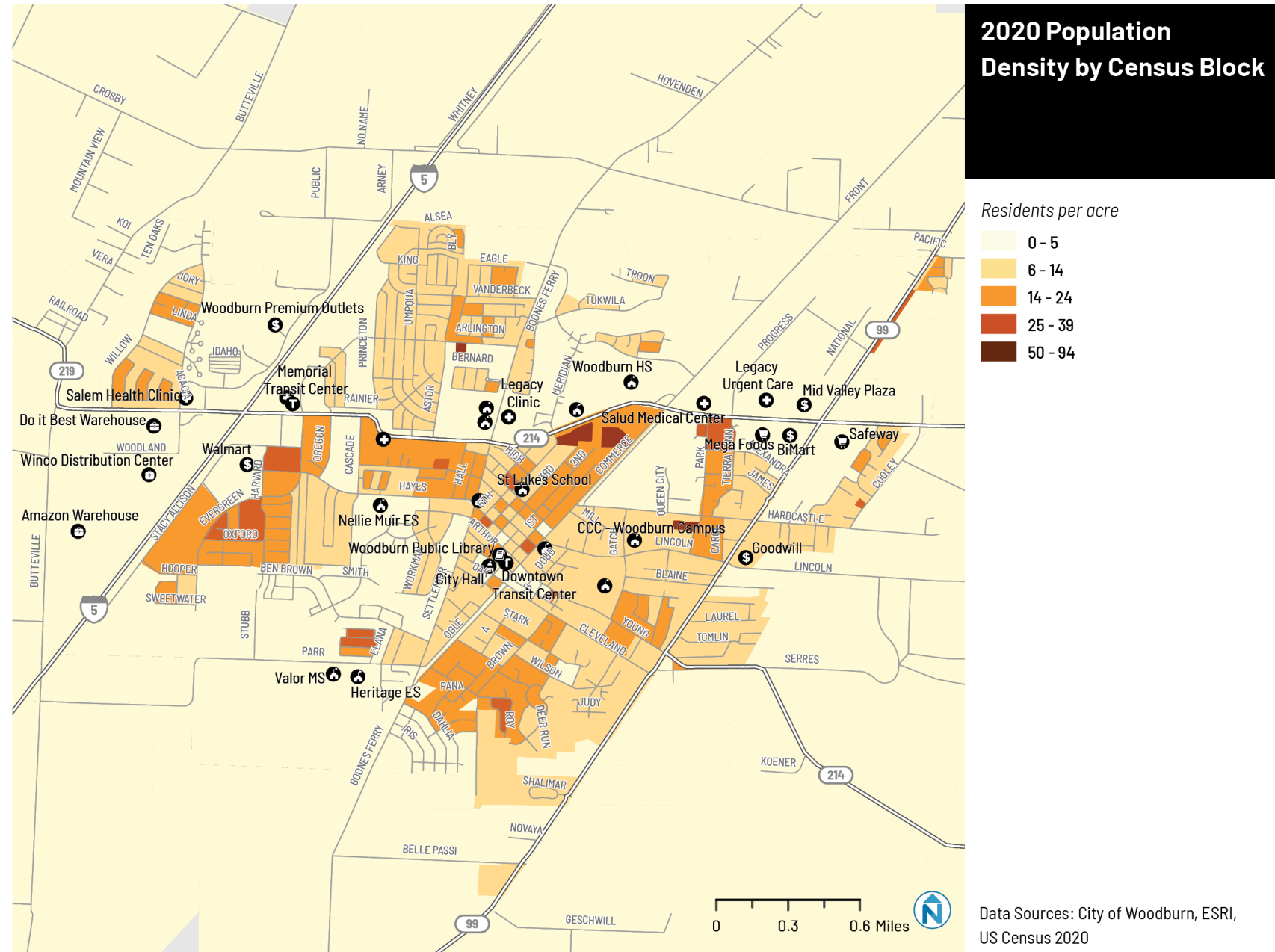
- Farebox Recovery is measured to understand how much of a provider’s operating costs are supplied by fare revenue -- and is **another way to measure cost effectiveness**.
- The farebox recovery ratio for all peer communities **dropped significantly** over the past three years as ridership declined.
- **Fares on some peer systems were suspended** during the pandemic (and are still suspended in Woodburn, Lebanon, and Yamhill County).



Farebox Recovery Ratio

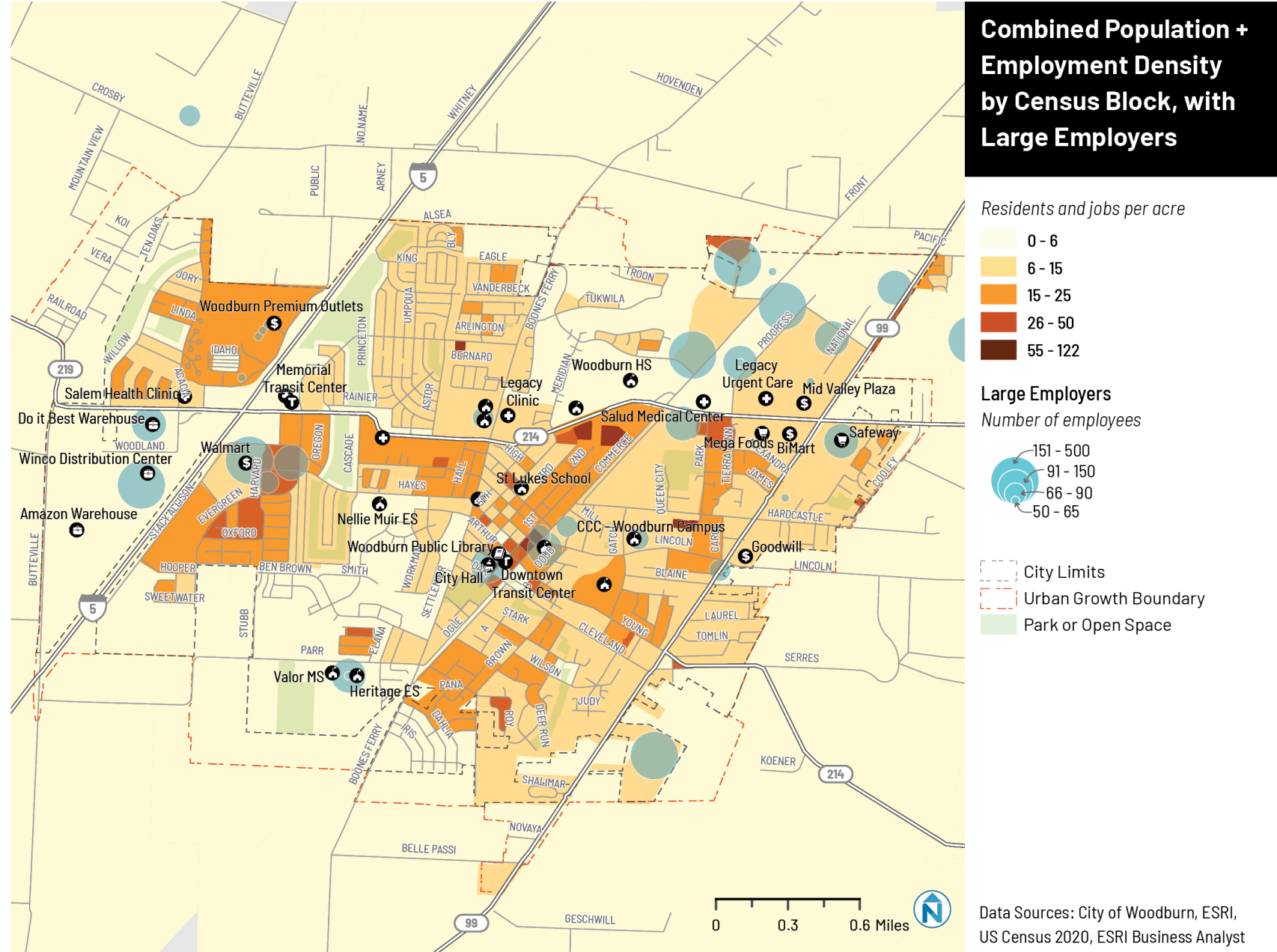
Market Analysis

- Population and Employment
- Transit Propensity
- Land Use
- Regional Travel Flows



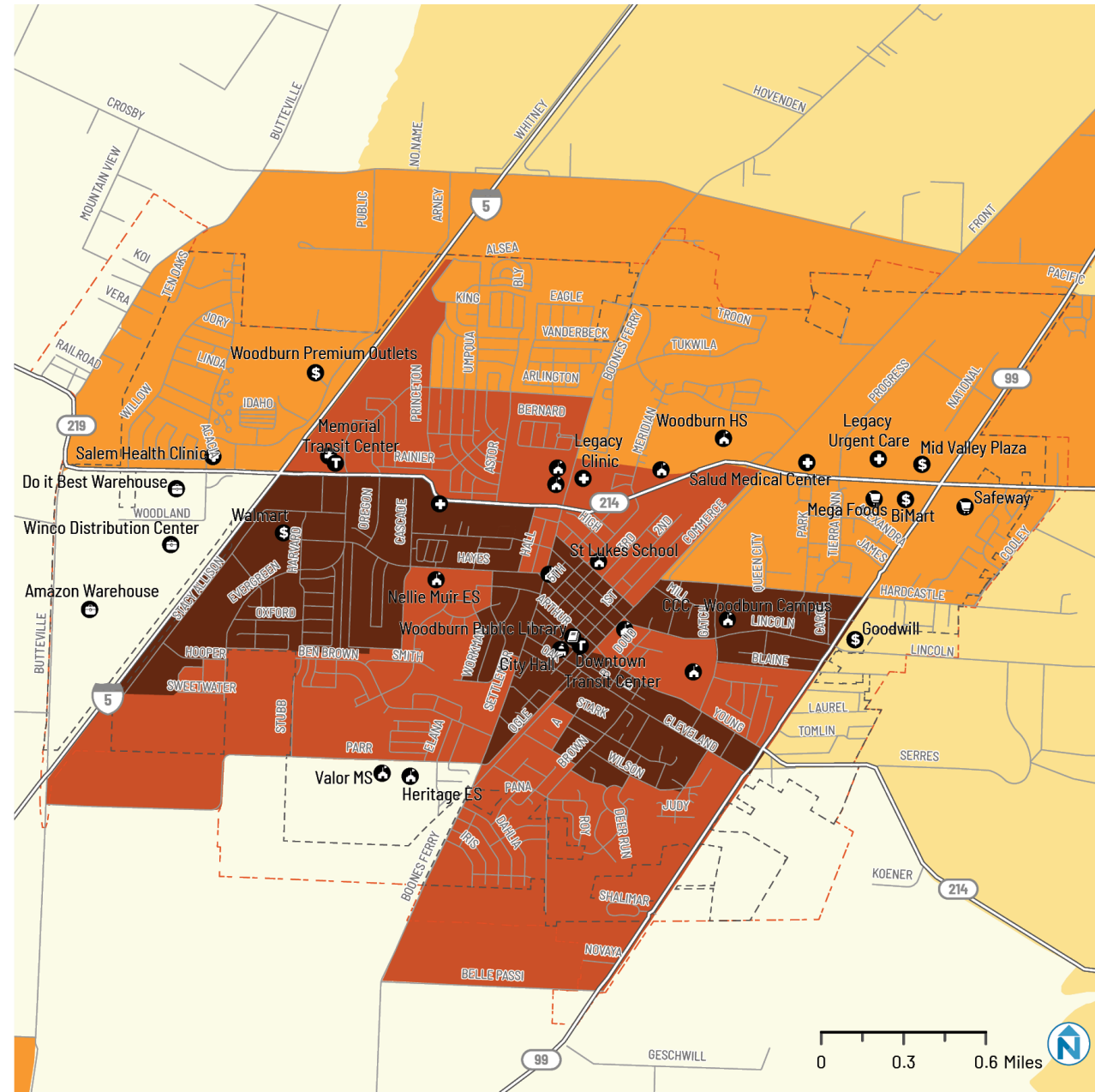
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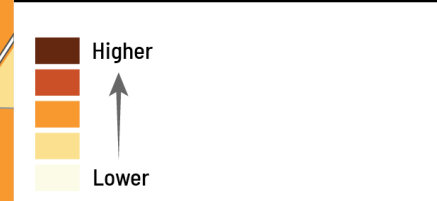


Market Analysis

- Population and Employment
- **Transit Propensity**
- Land Use
- Regional Travel Flows



Transit Propensity Index by Block Group



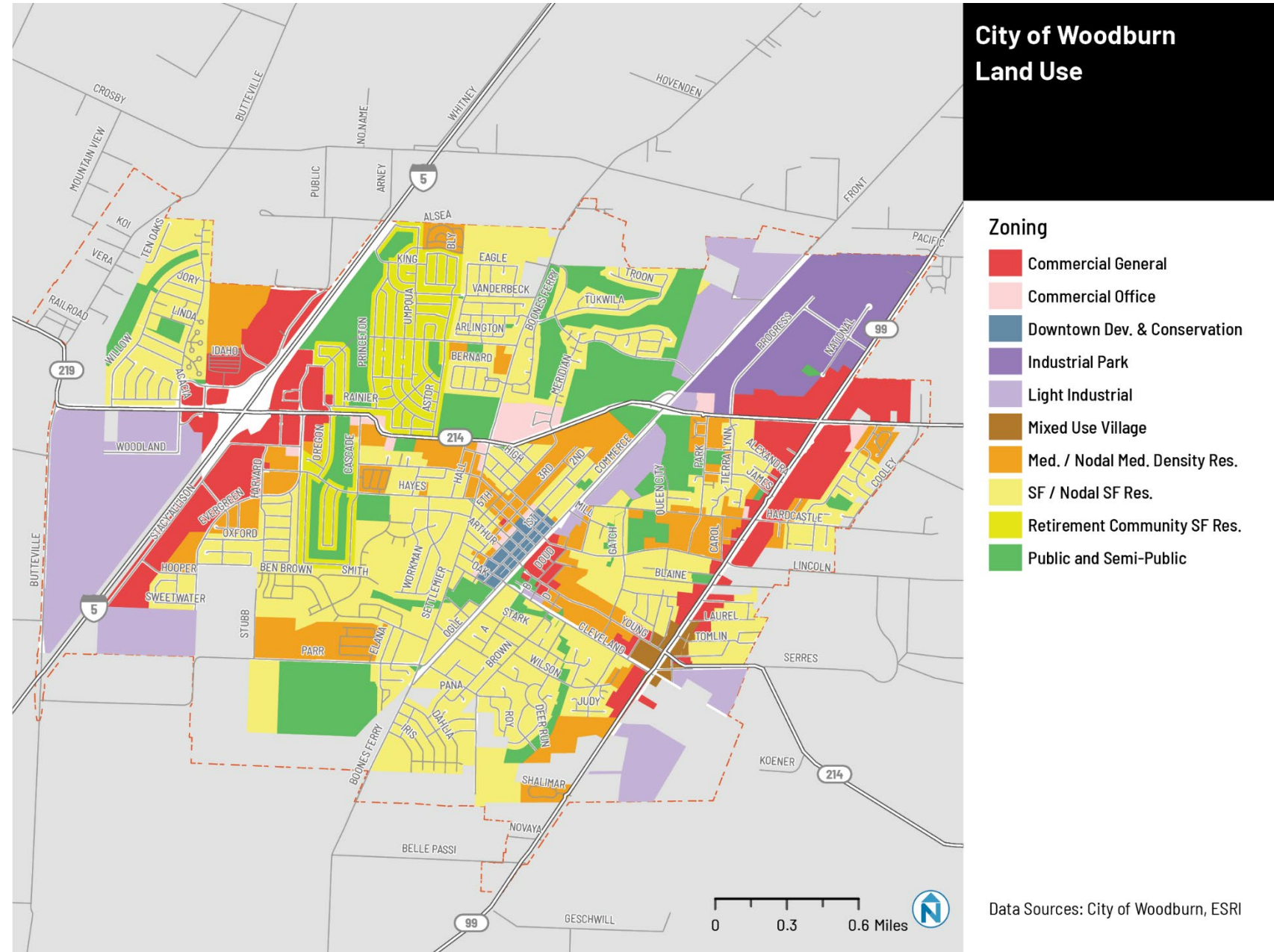
The Transit Propensity Index combines the densities of the following populations who are more likely to rely on public transportation:

- Young people under age 18
- Older adults age 65+
- People with disabilities
- Households with no access to a vehicle
- Low-income households (defined here as below 200% of federal poverty level)

Data Sources: City of Woodburn, ESRI, US Census 2020 5-Year ACS

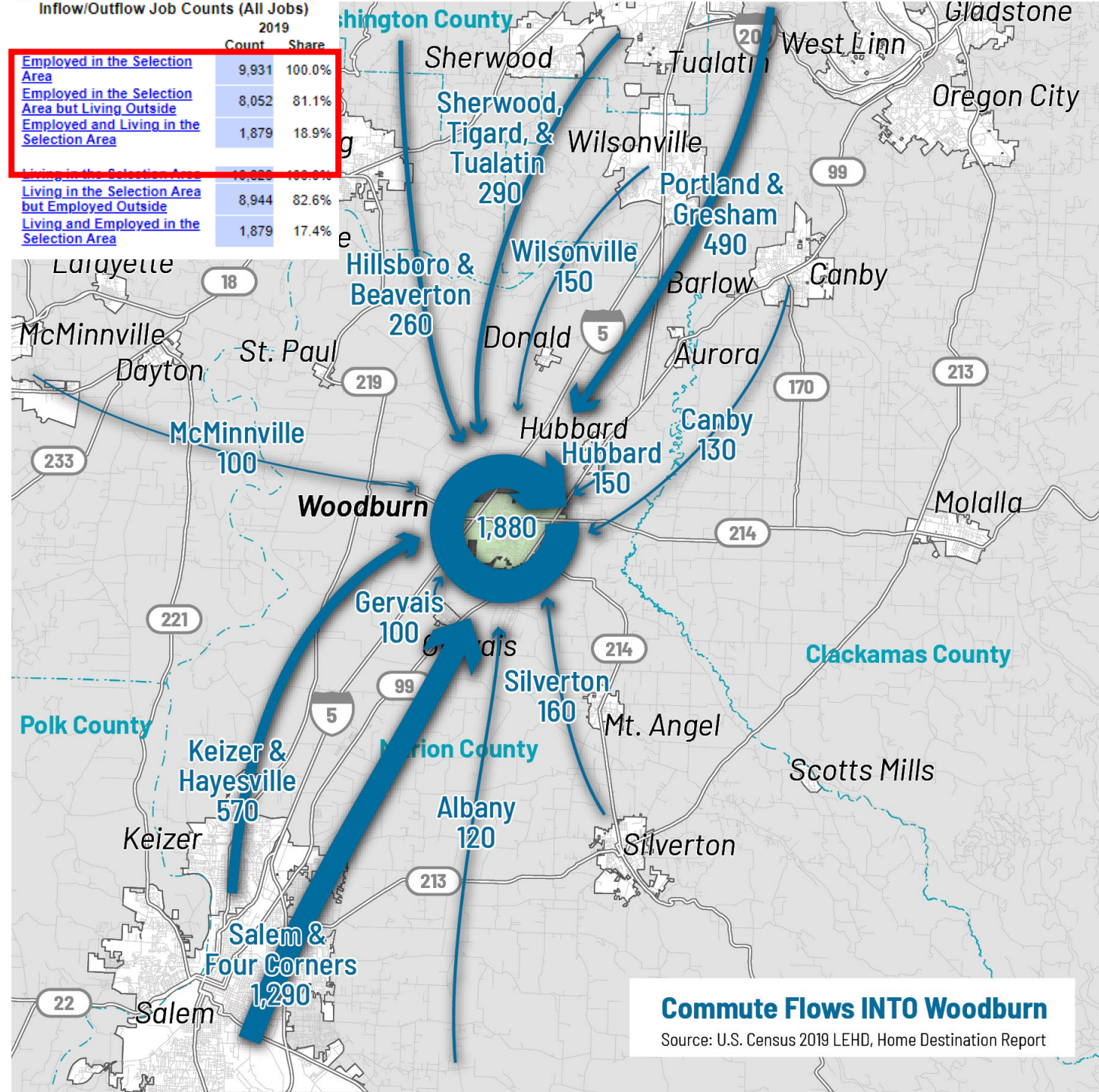
Market Analysis

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- Regional Travel Flows



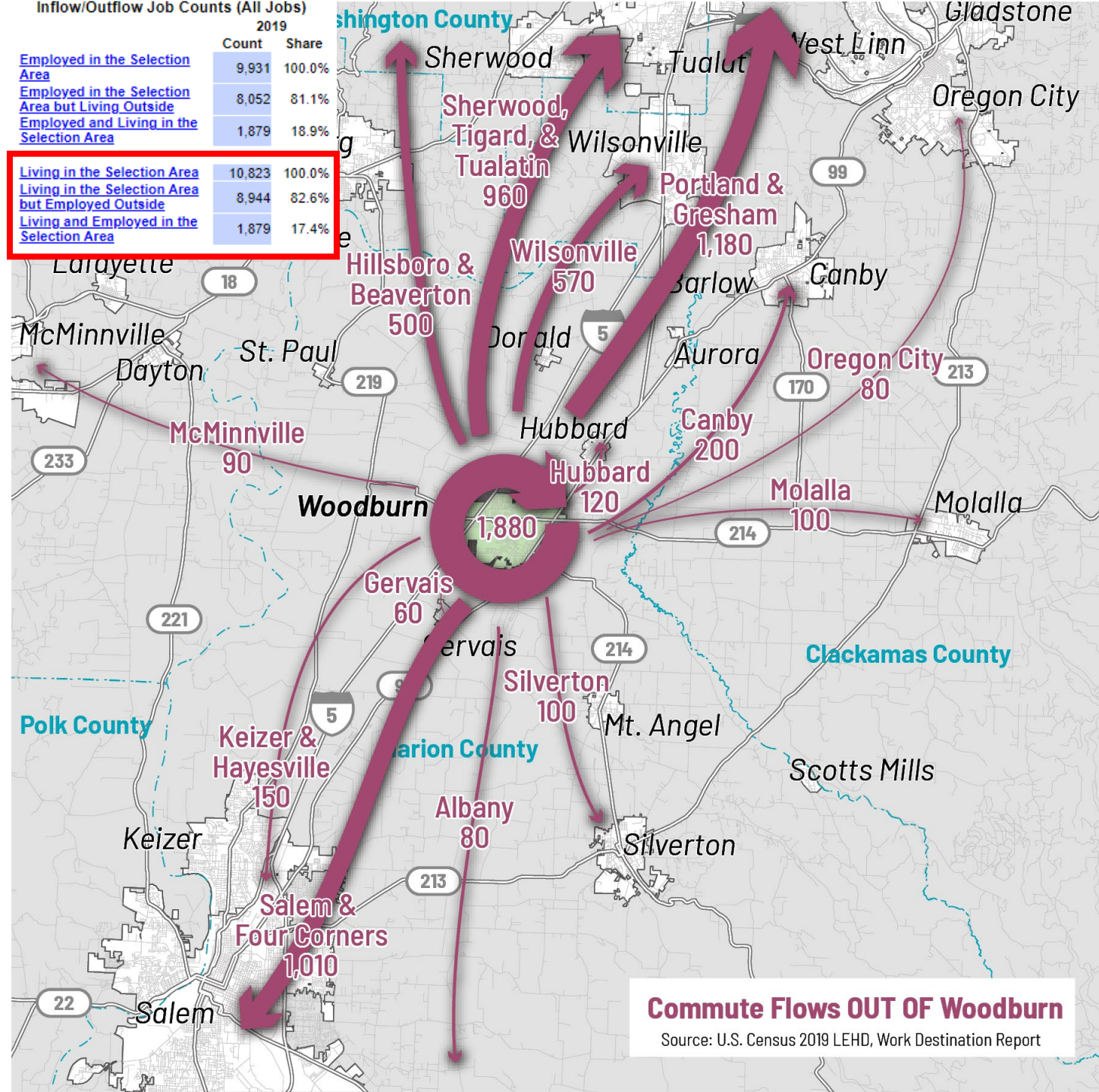
Market Analysis

- Population and Employment
- Transit Propensity
- Land Use
- **Regional Travel Flows**
 - o **Work Trips**
 - o All Trips



Market Analysis

- Population and Employment
- Transit Propensity
- Land Use
- **Regional Travel Flows**
 - o **Work Trips**
 - o All Trips



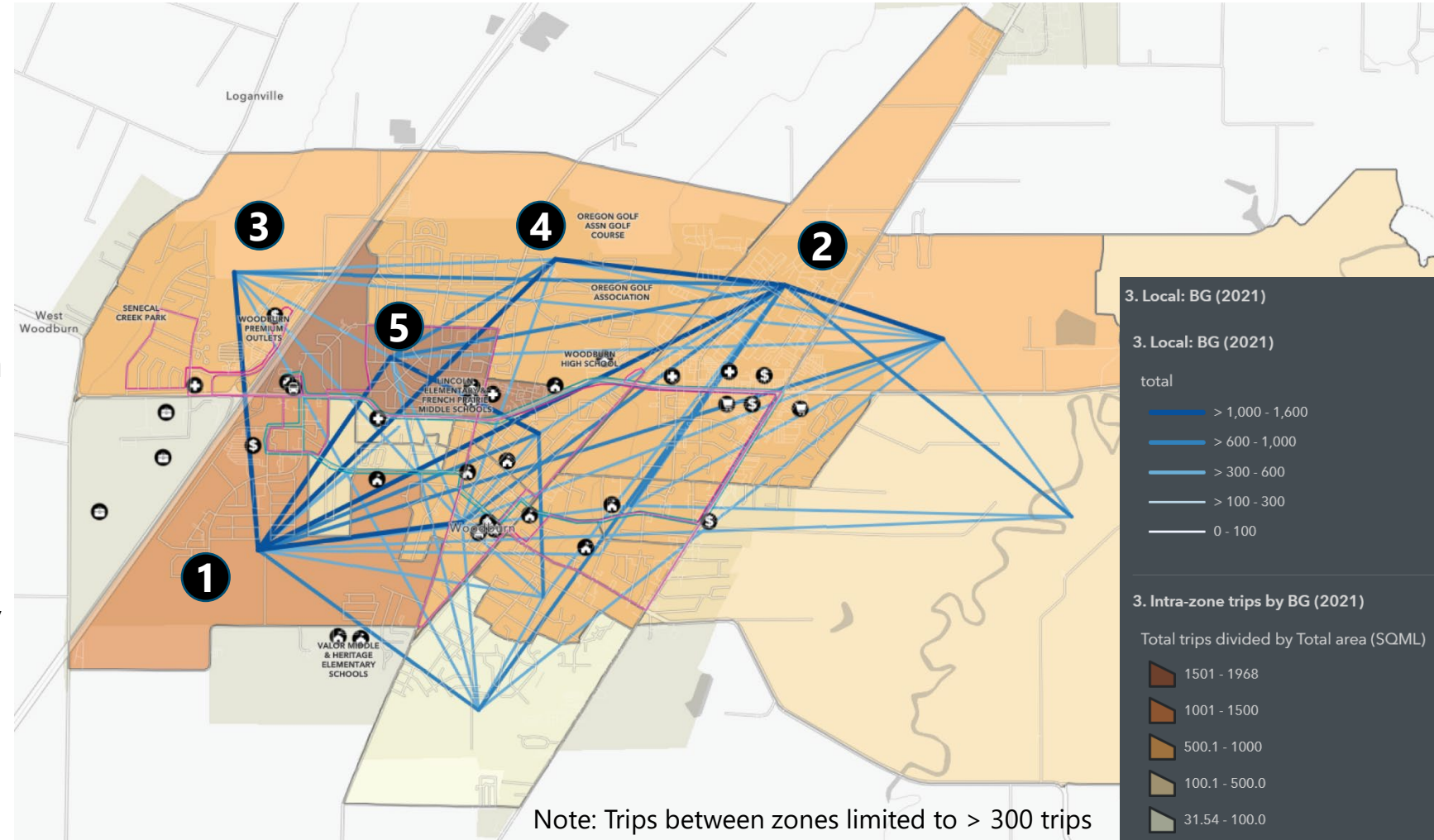
Travel Flows – All Trips

- As a supplement to the State of the System report, an analysis of travel flows was conducted to understand travel patterns for trips to, from, and within Woodburn. This analysis will be used to inform service planning and regional coordination recommendations for the TDP.
- Data is for all trips not just work trips, both 2019 and 2021
- Used to understand:
 - Local travel patterns
 - Regional travel patterns
 - Regional travel destinations within Woodburn and outside of Woodburn, e.g., Salem area



Local Travel Flows - 2021

- 1 Southwest zone with **Walmart** east of I-5 includes 6 of top 10 travel patterns
- 2 Northeast zone that includes **Mid-Valley Plaza and Salud** includes 4 of top 10
- 3 **Northwest** Woodburn with Outlet Mall east of I-5 to both the Walmart and Mid-Valley Plaza zones, within Top 10
- 4 **North** zone with High School
- 5 **Central** zone with elementary and middle schools; generally shorter patterns



Regional Travel Flows - 2019

1 Salem/Keizer area is the largest single pattern (~35%) – *Cherriots 10X/20X/80X*

▪ **Portland Metro Area** is comparable to Salem/Keizer; includes:

2 Portland

3 Wilsonville – *Cherriots 80X*

4 Washington County: Tualatin, Tigard, Beaverton

Other major patterns:

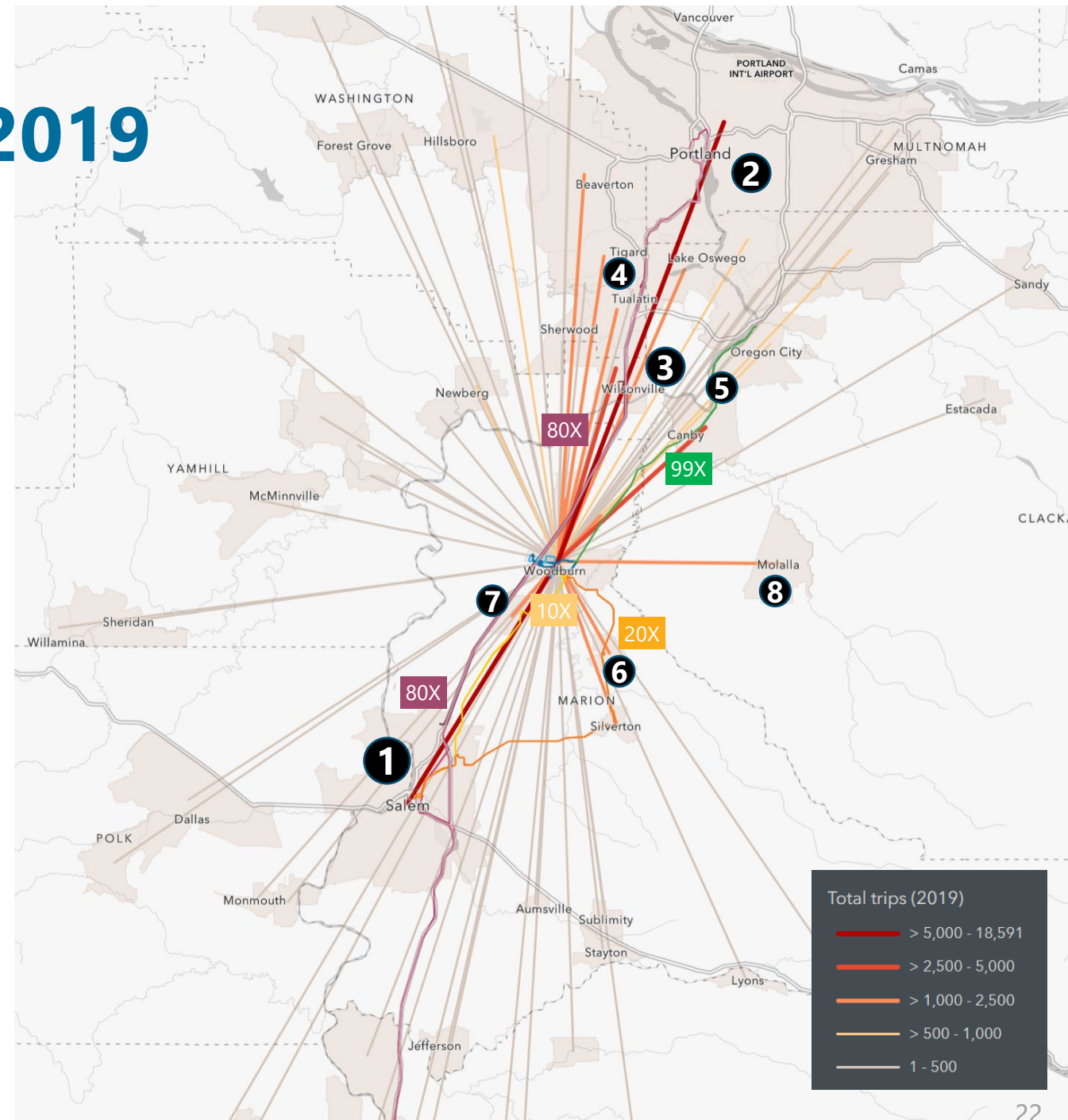
5 North OR-99E: Canby, Hubbard, Oregon City

6 Southeast OR-214: Mt Angel, Silverton (20X)

7 Gervais (10X)

8 Molalla

2021 flows are similar



Transit Improvement Opportunities and Service Types

Transit Improvement Opportunities



Some **duplication** and **confusion** of fixed route services

- Fixed route versus Express route



Connections to regional services are important, but difficult to coordinate given existing schedules



Frequency of service is a deterrent to some riders, and important for regional connections

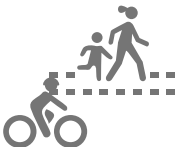


Service to **new residential/employment** areas



Marketing and information

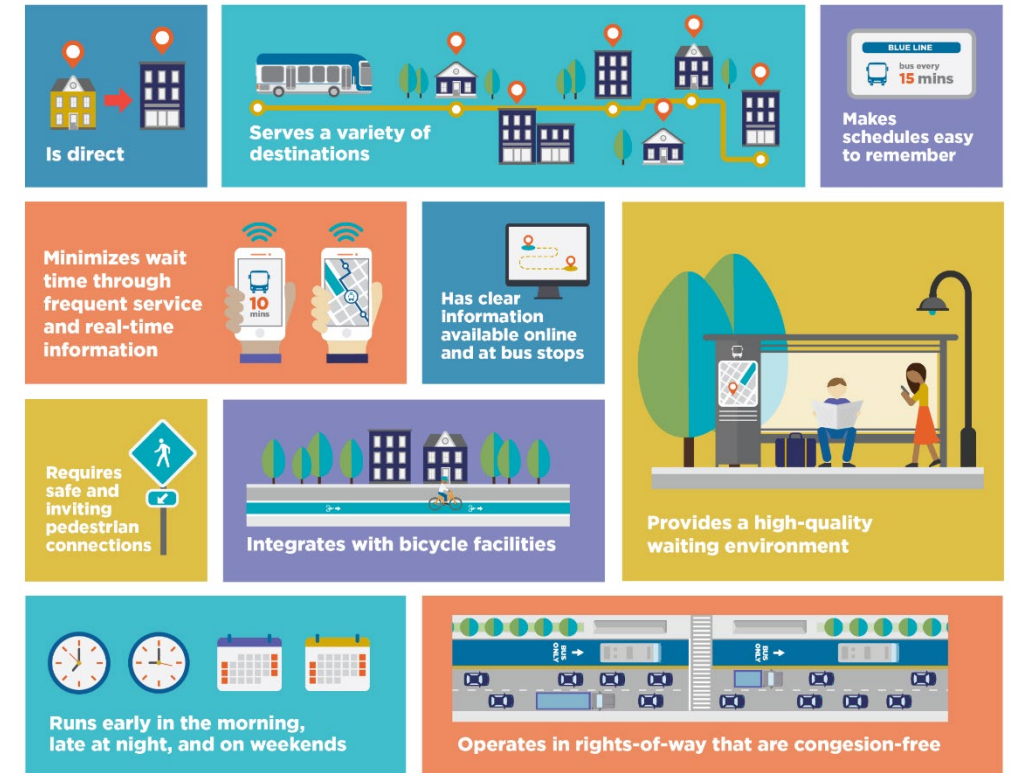
- Some barriers for Spanish speakers



Crossings and **barriers** for pedestrians/bicycles are difficult in places

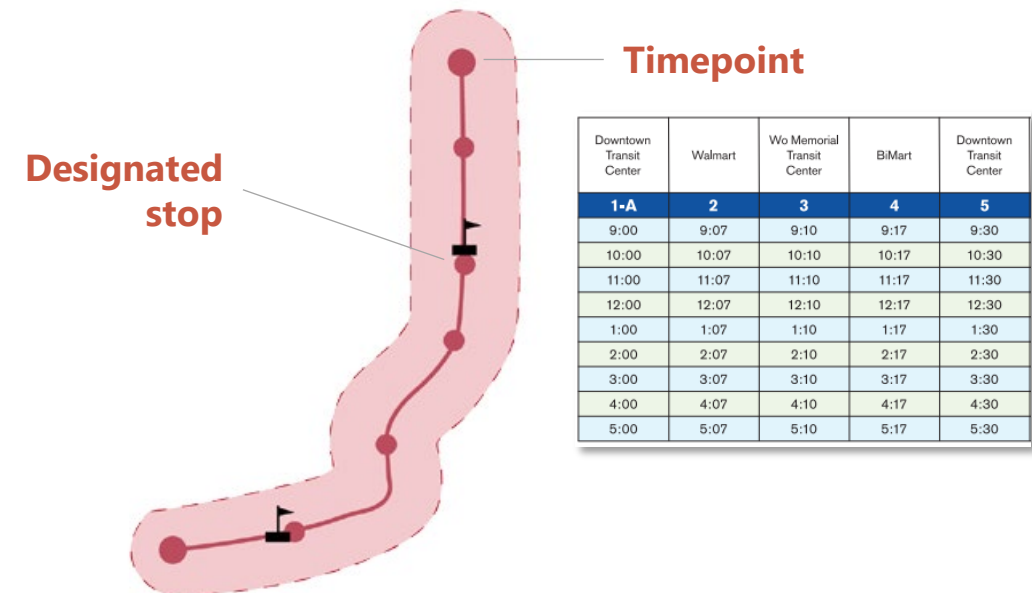
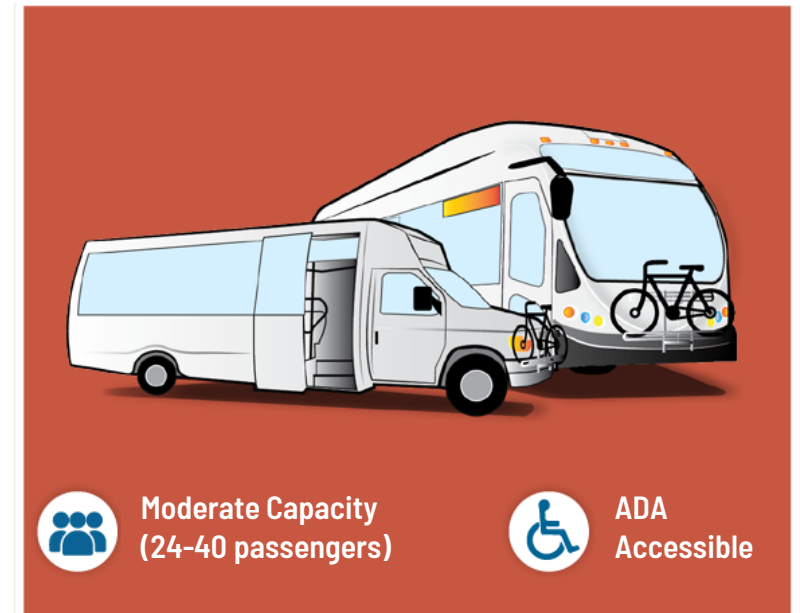
What makes transit successful?

- Schedules should operate with **simple, repeating patterns** (e.g., every hour or half hour)
- Routes should be **direct** and **easy to understand**
- Routes should serve a **variety of destinations**, both along the route as well as at the end of the route (i.e., strong destinations)
- Amenities should be **comfortable** and **safe** for customers
- Information should be **clear** and **identifiable**
- **Access** to transit should be **safe for pedestrians and cyclists**
- Service should be **easy to pay for** and **affordable**



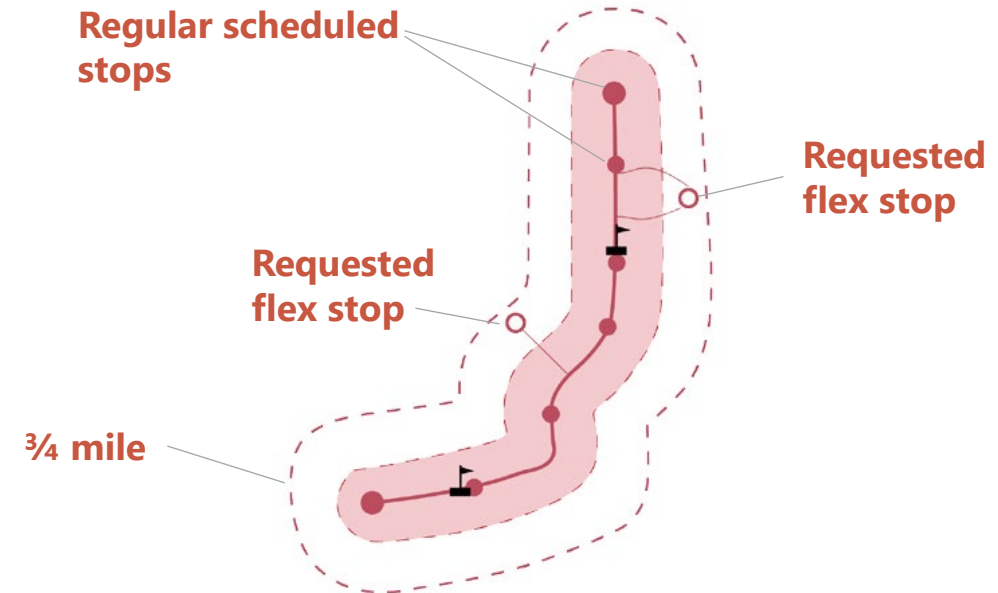
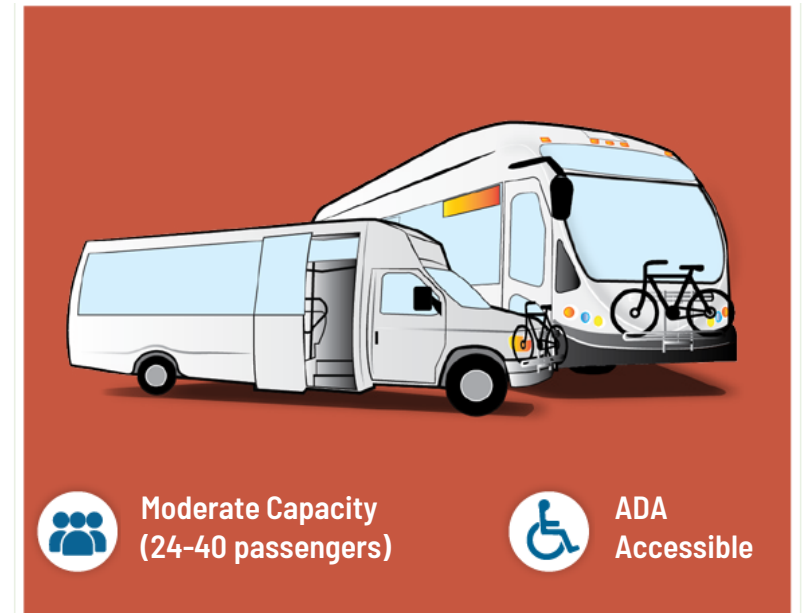
Fixed Route

- Most common type of transit service among peer agencies
- Operates on a fixed route and schedule
- Designed to directly serve major activity centers and travel corridors
- Typically runs at regular “headways” - 15 to 60 minutes - and makes frequent stops (~1/4 mile)
- Requires complementary ADA paratransit within 3/4-mile of route
- Works best for:
 - Moving lots of people cost-effectively
 - Accessing major destinations quickly and reliably



Flexible Fixed Route

- Similar to fixed route:
 - Directly serves major destinations and travel corridors
 - Operates on a regular schedule and route, with frequent stops
- Schedule allows deviations for pickup or drop-off within a specified distance of the set route (e.g., 1/4-mile)
 - Pickup deviation between 2-24 hours in advance
 - No advanced notice for drop-off deviation
- Combines some benefits of both fixed-route and dial-a-ride service
 - Can fulfill requirement for complementary ADA paratransit
- Works best for:
 - Accessing a variety of local destinations
 - Serving a mix of moderate- to low-density areas
 - Maintaining flexibility for riders with limited walking capability



Flexible Fixed Route: Examples

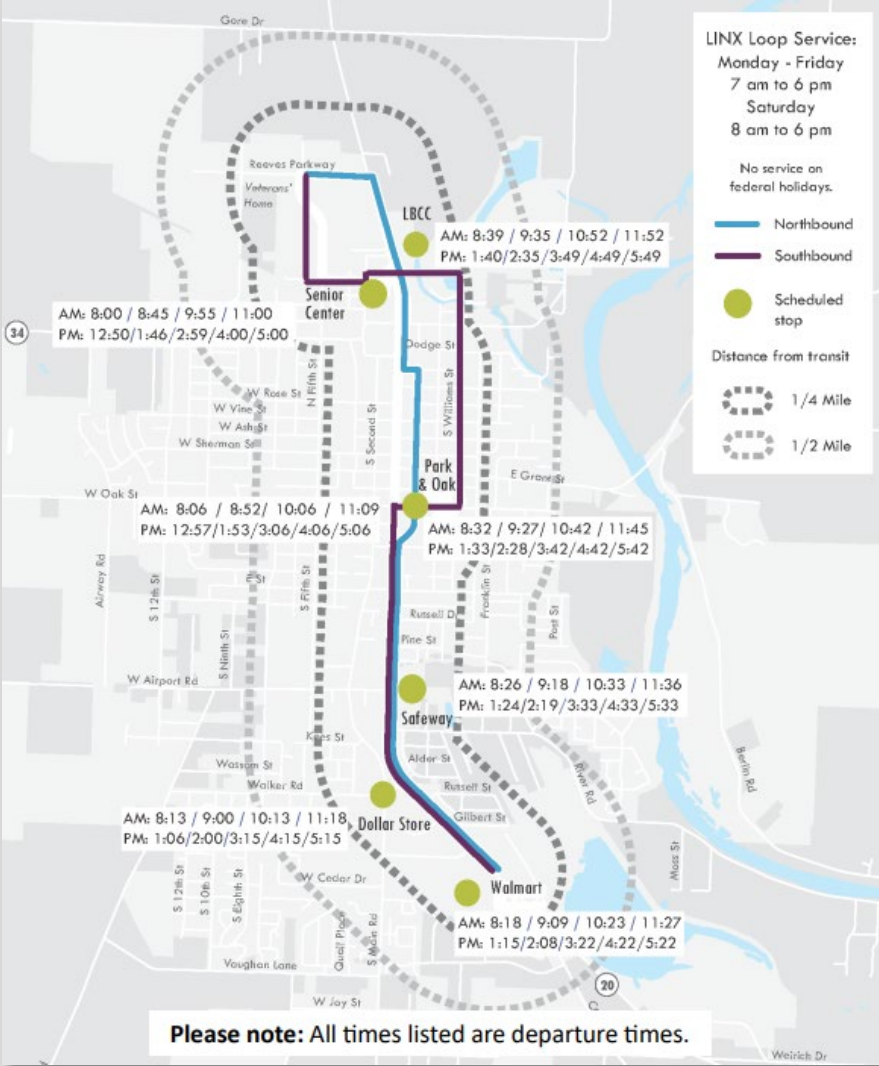
- LINX Loop (Lebanon)**

- Local deviated fixed route operating weekdays and Saturday. As its schedule permits, deviations allowed up to ¾ of a mile from its route, expanding the service area to cover a majority of the city.



- Tillamook County (TCTD)**

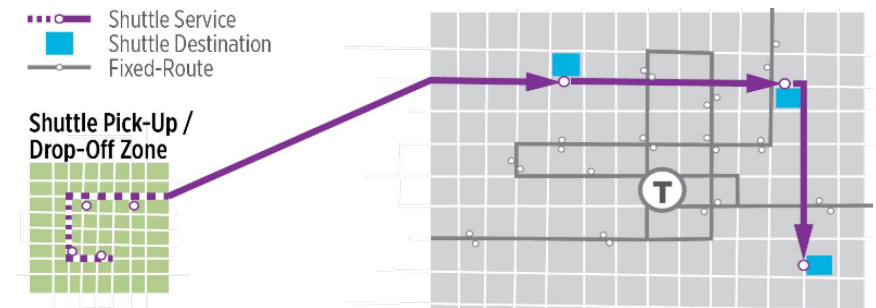
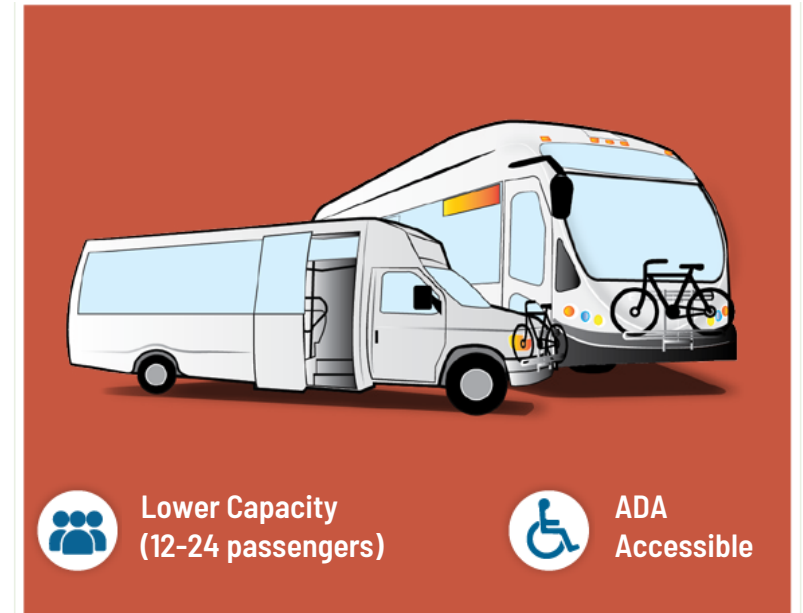
- Allows route deviation requests on the Wave routes up to ¾ of a mile. A deviation request must be made at least two hours in advance of the requested pickup. A deviation request to be dropped off can be made as early as when the rider boards the vehicle. No extra fare is charged for deviation requests.



Lebanon LINX Loop

Specialized Shuttles

- Shuttles are designed to serve specific types of trips and connect to specific destinations
- Can complement/connect to existing transit routes or operate independently
- Typically operates on limited daily, seasonal, or irregular schedules (to meet shift times)
- Examples include shopper shuttles, employer shuttles, medical shuttles, and recreation shuttles



Specialized Shuttles: Examples

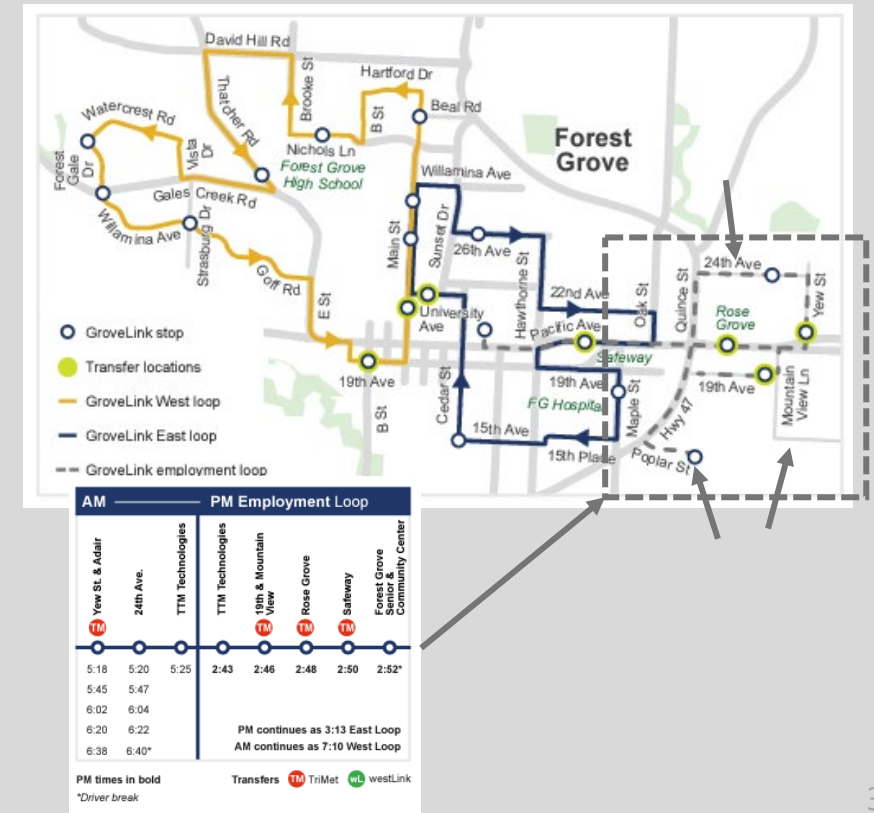
- **Shopper Shuttle**

- Sandy Area Metro (SAM) operates the **Trolley Shopper Shuttle** for ~4 hours each weekday, connecting residential neighborhoods to locations providing daily needs such as Fred Meyer and Safeway. It runs on a schedule but can serve other pickup locations by request.



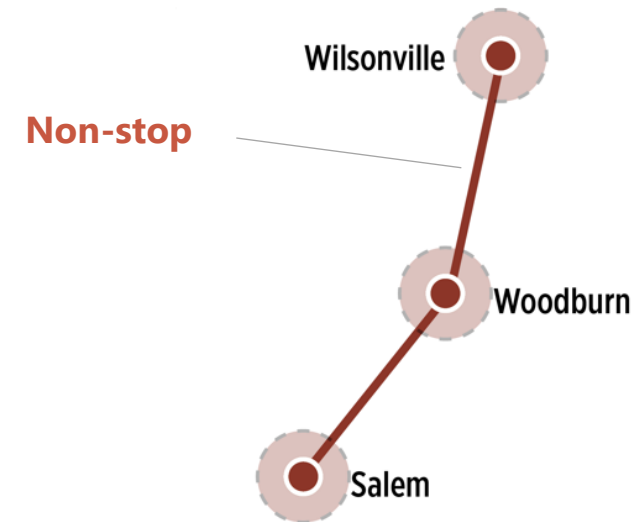
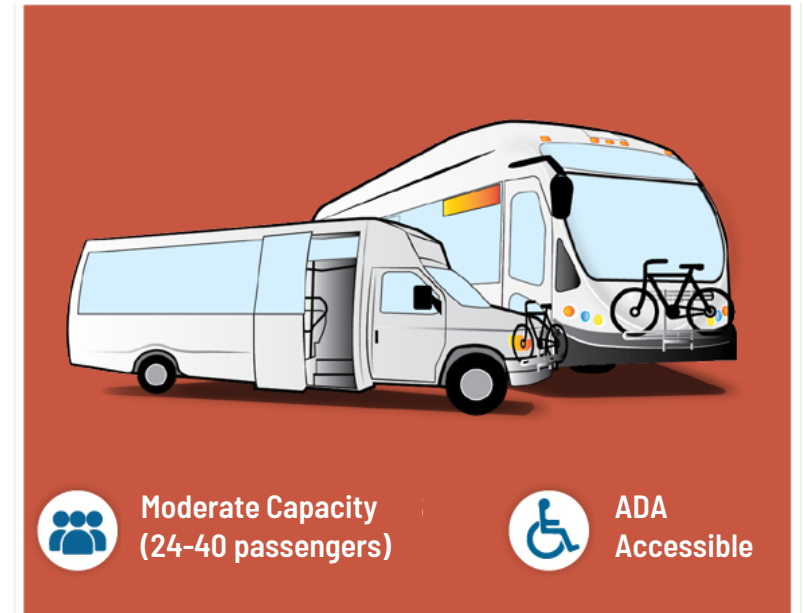
- **Employer Shuttle**

- **GroveLink** (Forest Grove, operated by RideConnection) provides an **employment loop** for specific employers and employment clusters at specific morning and afternoon shift times, in addition to flex route shuttles that circulate within the city. It connects with TriMet Line 57.



Intercity Services

- Regional fixed-route service that provides connections between towns and cities
- Limited local stops, but may have 1-3 scheduled stops in each city and may allow flag stops along the way
- Typically offers lower frequency than local fixed-route service (e.g., every 2 hours)

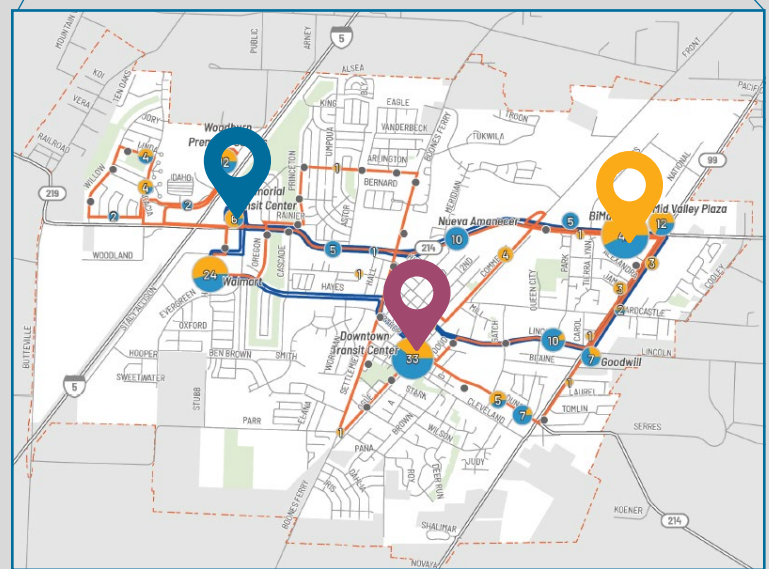
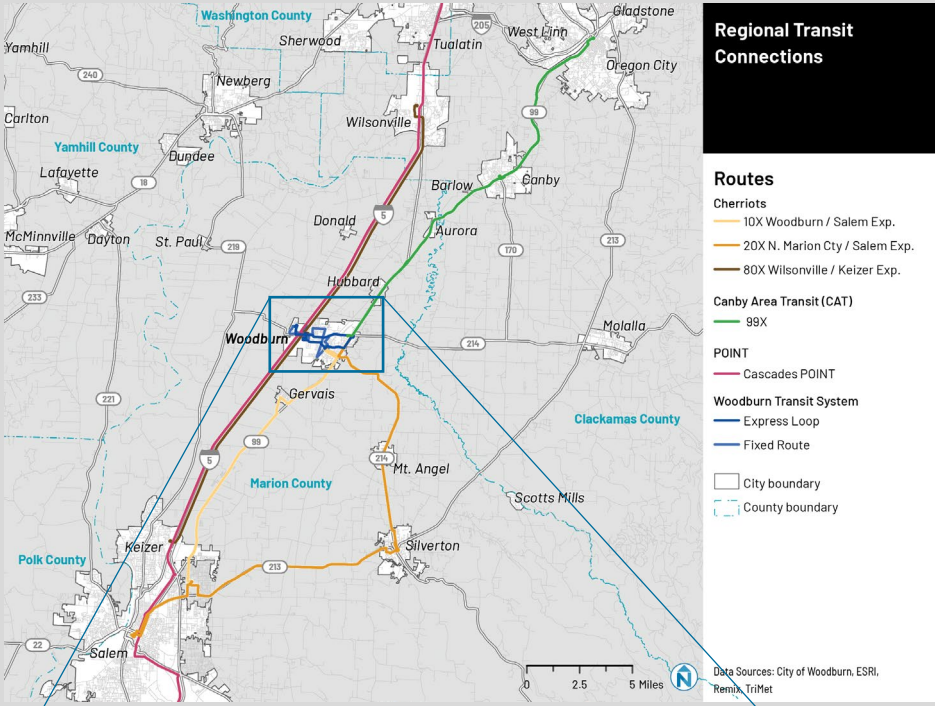
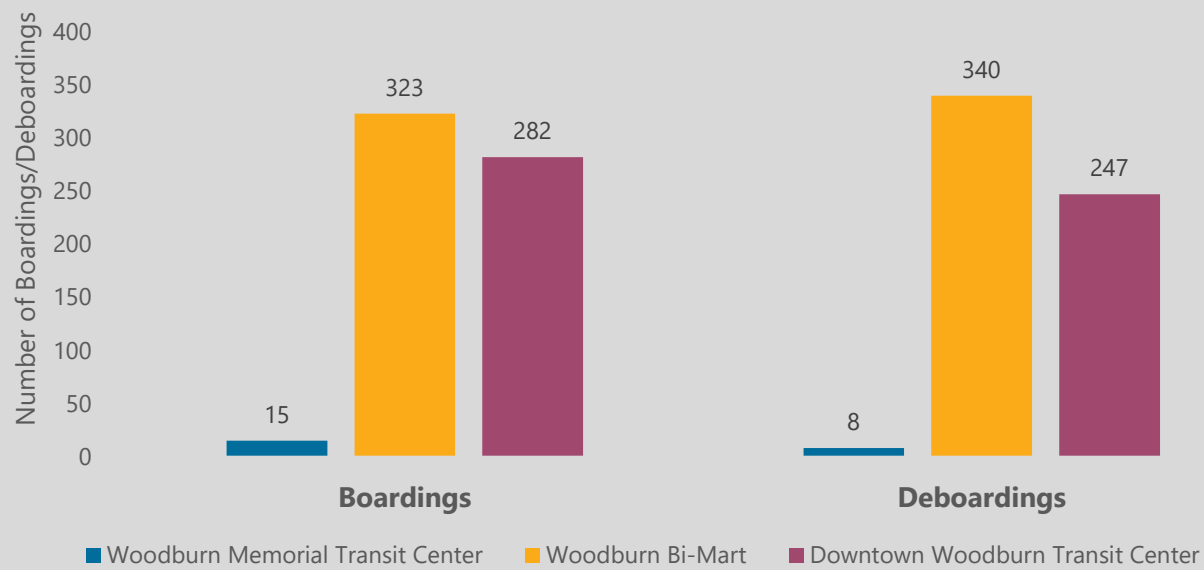


Intercity Services: Examples

- **Cherriots (Salem)**

- Regional routes include 10x (Woodburn-Salem), 20x (Woodburn-Salem), and 80x (Keizer-Woodburn-Wilsonville). Most frequent route (10x) provides 8 trips per day.

Cherriots Ridership in Woodburn (Oct. 2022)



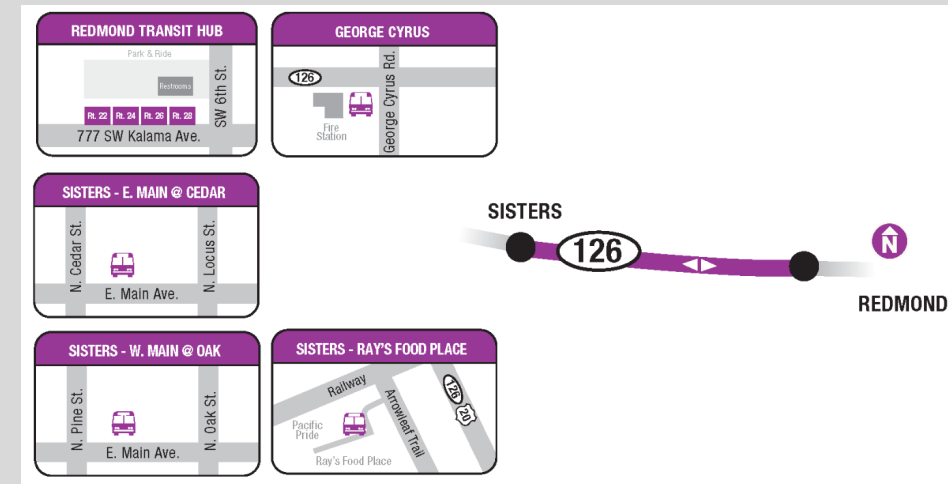
Intercity Services: Examples

- **Canby Area Transit**

- Route 99x runs hourly trips between Woodburn, Canby, and Oregon City.

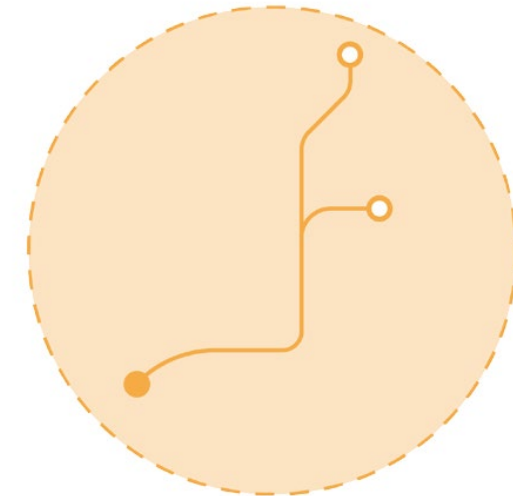
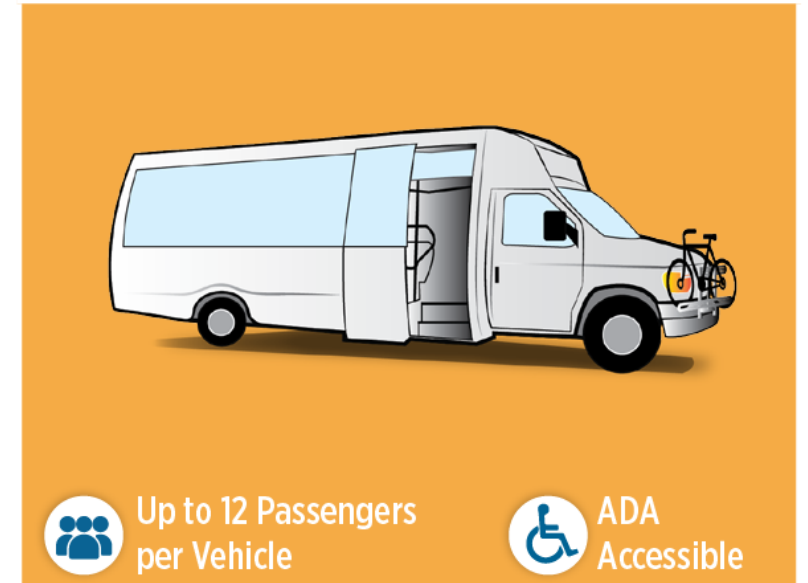
- **Cascades East Transit**

- Provides up to 90-minute frequency between cities in Central Oregon: Bend, Sisters, Redmond, Madras, La Pine, Prineville, Warm Springs.



General Public Dial-A-Ride

- Provides demand-response service within a set area, such as a city boundary
- Trips are typically curb-to-curb
- Trips are often grouped together
- Riders may be required to book trips well in advance (e.g., within 24 hours), or some systems can use on-demand scheduling



General Public Dial-A-Ride: Examples

- **LINX Dial-A-Ride**

- Curb-to-curb on weekdays and within city limits. Rides requested the same day are accommodated as permitted by the service schedule that day.



- **Cascades East Transit (CET)**

- Provides curb-to-curb, shared-ride dial-a-ride transit service for the general public in the cities of Prineville, La Pine, Redmond, Madras, and Sisters. All CET dial-a-ride and fixed route services are fareless.



- **Tillamook County (TCTD)**

- Shared-ride, door-to-door dial-a-ride service that operates on weekdays. One-way regular fares are \$4 for the first five miles and \$0.50 for each additional mile. Reduced fares are also available.



Microtransit

- Microtransit is like Dial-A-Ride service but offers same-day, on-demand trips like Transportation Network Companies (TNCs) such as Uber and Lyft. Riders typically request service using a smartphone app.
- Microtransit can provide **curb-to-curb** or **point-to-point** trips within a specified service area. Rides are usually shared with others travelling in the same general direction.

Microtransit works best for:

- Serving low-density areas
- Completing the “first or last mile” of transit trips
- Riders who prefer not to walk due to uncomfortable weather
- Providing options for passengers who have limited mobility

How Microtransit Works

Request
by app/phone/web



Dynamic
routing



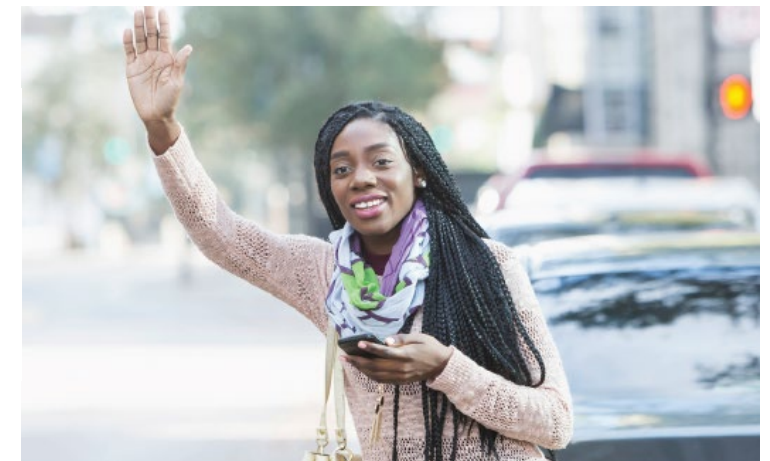
Rider
pickup



Efficient
sharing



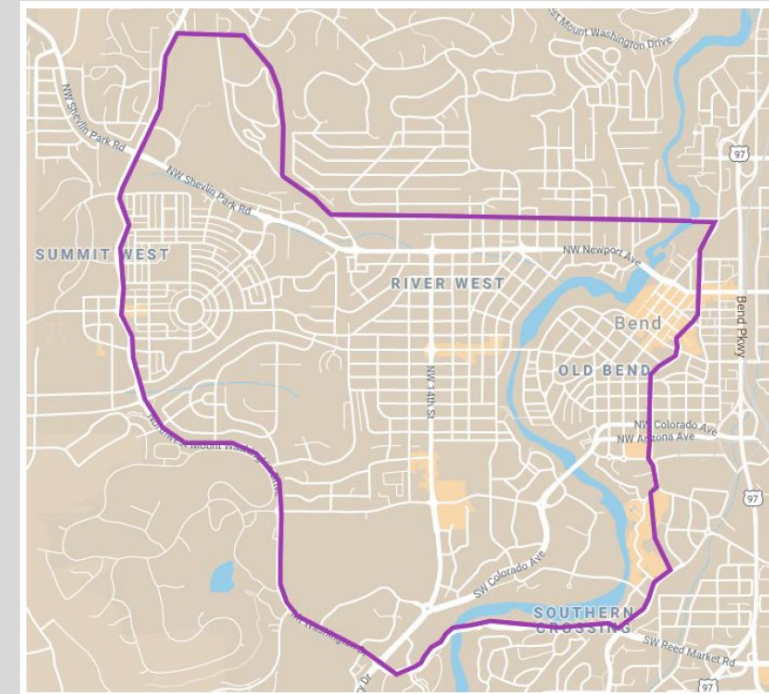
Rider
drop-offs



Microtransit: Examples

- **Cascades East Transit (Bend)**

- In 2019 CET partnered with Oregon State University Cascades to pilot a fare-free point-to-point microtransit service serving downtown, the transit center, the Old Mill District, and areas around OSU Cascades campus.



- **Yolo County Transit District (CA)**

- YCTD runs a microtransit service called YOUR Ride that connects small towns to and around the agricultural hub of Vacaville. Rides are available within the towns of Winters, Woodland, and Knights landing, or between these towns and larger cities.



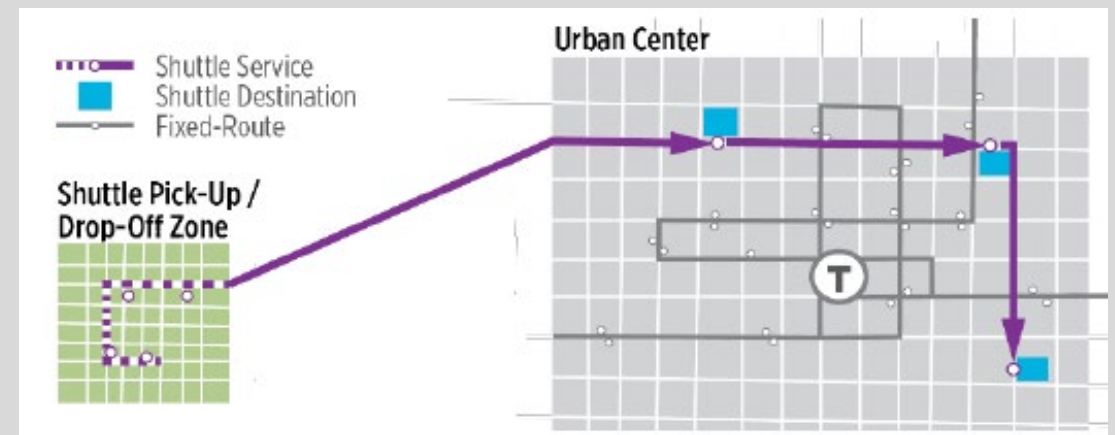
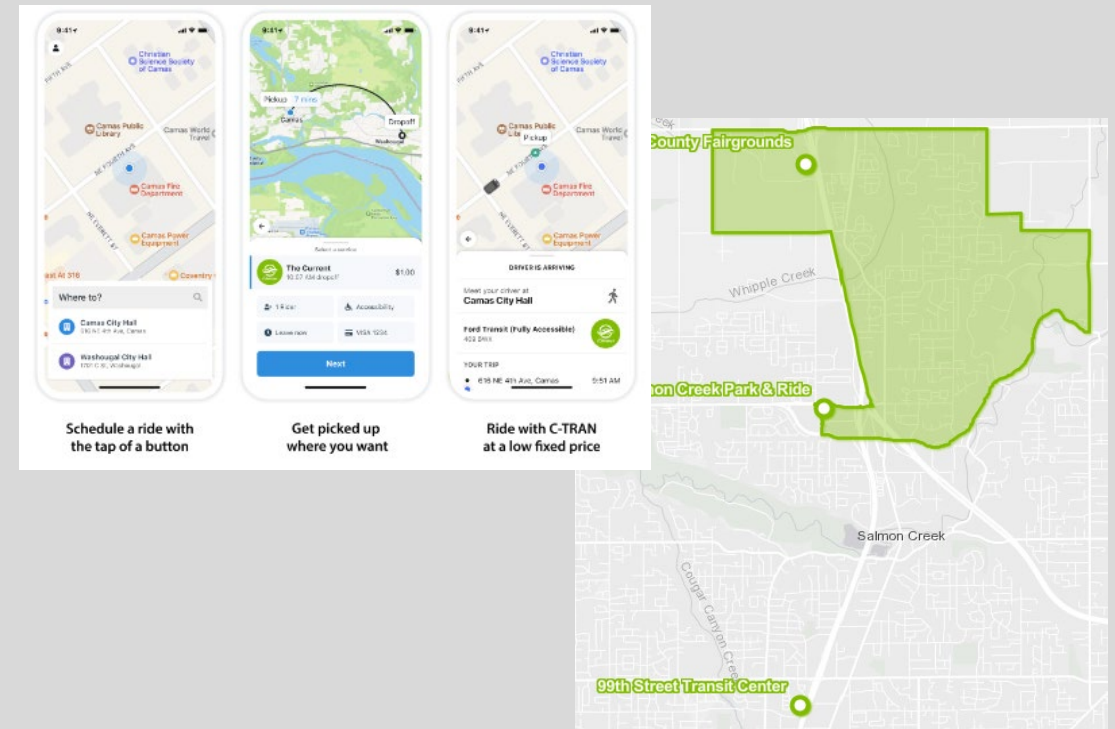
Microtransit: Examples

- **The Current (Clark County, WA)**

- C-TRAN offers a new, on-demand rideshare microtransit, providing point-to-point service in multiple areas at the same cost as a standard bus fare and integrating with other C-TRAN and TriMet services via mobile apps.


- **UTA On-Demand (Salt Lake, Tooele, and Davis Counties)**

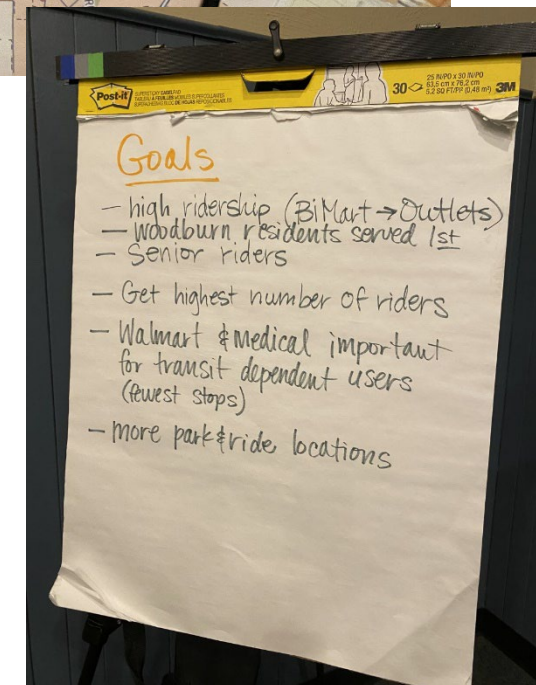
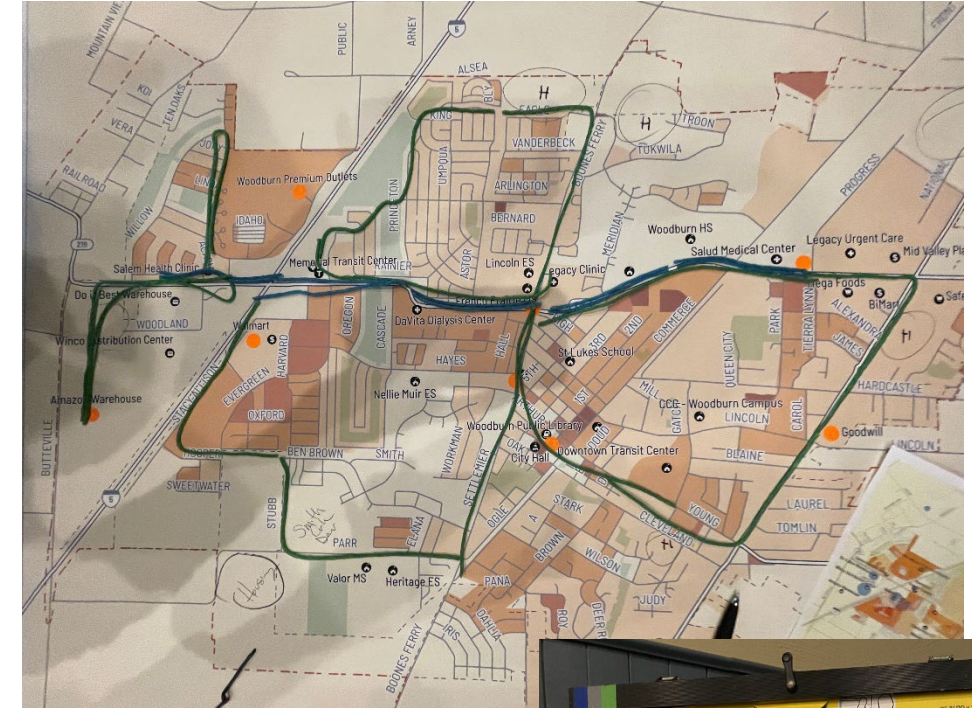
- UTA provides an on-demand microtransit service that connects riders with light rail, streetcar, and bus services in multiple areas at a fare of \$2.50, using a mobile app for fare payment and to match riders based on dropoff and pickup locations.




Transit Service Scenarios

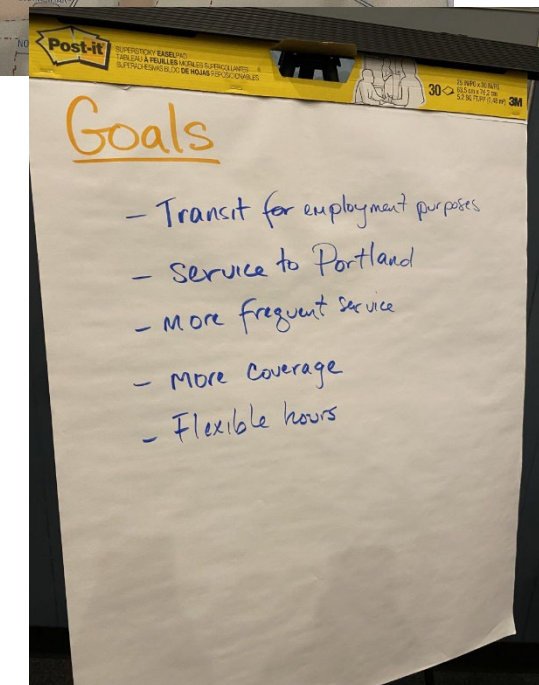
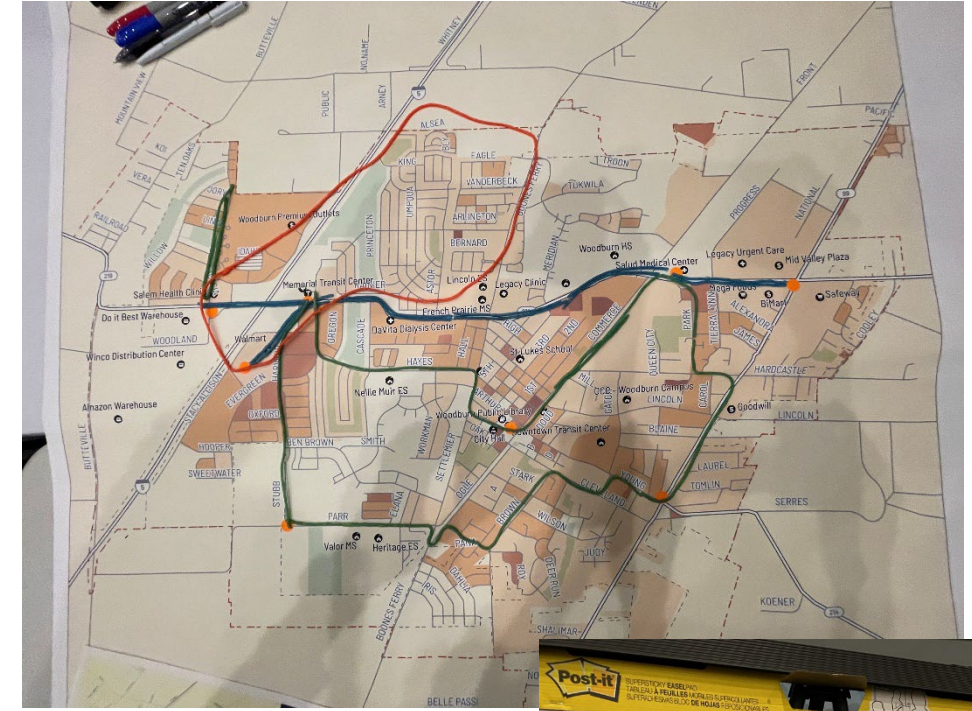
Transit Service Scenarios

- State of the System Transit Opportunities
- Peer Review key findings and examples
- **Planning Game Workshop** 
- Comments and suggestions from community input (on-board survey and community survey)




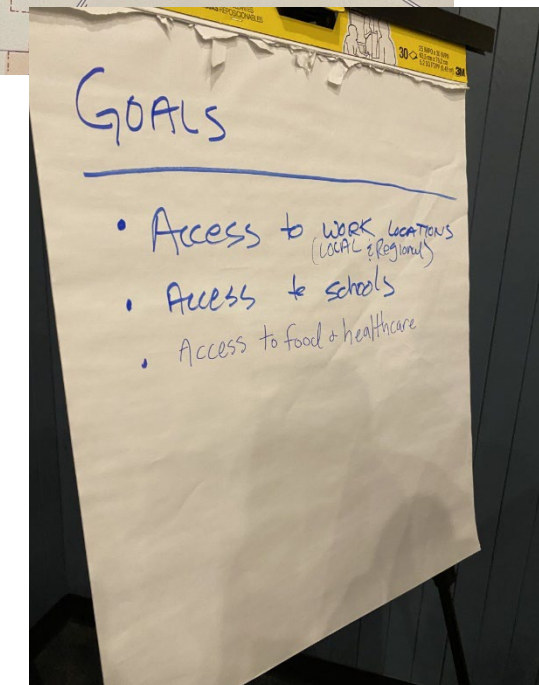
Transit Service Scenarios

- State of the System Transit Opportunities
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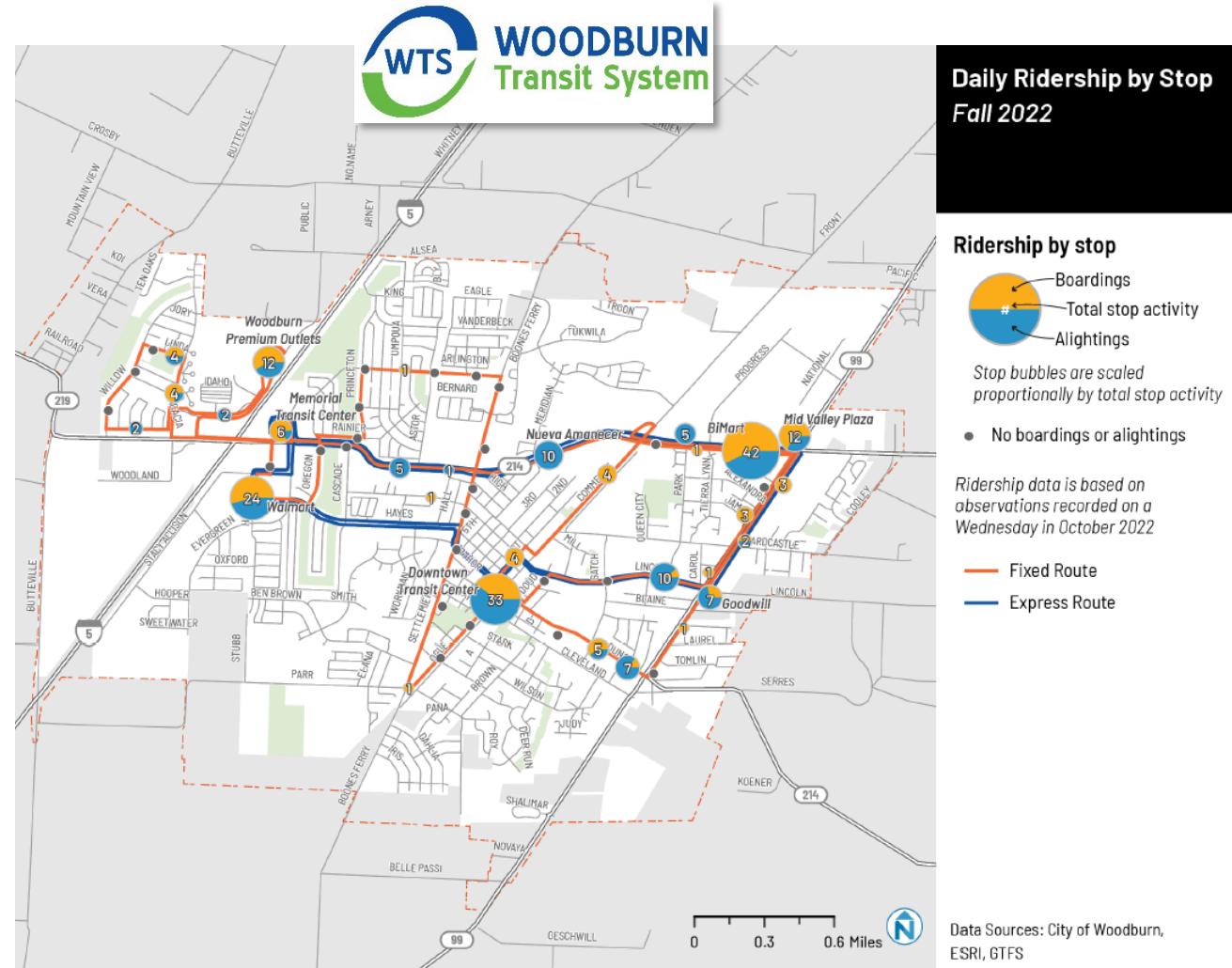
Transit Service Scenarios

- State of the System Transit Opportunities
- Peer Review key findings and examples
- **Planning Game Workshop** 
- Comments and suggestions from community input (on-board survey and community survey)



Transit Service Scenarios: Existing Network

- Fixed Route and Express Route
 - Fixed Route is hourly, Express Route runs every 30 minutes in opposite directions
- Dial-A-Ride
 - For people who can't use the fixed route network
- Medical transportation to Portland and Salem
 - Volunteer drivers
- Regional Connections
 - POINT
 - Cherriots
 - Canby Area Transit (CAT)
 - Route 10X, 20X and 80X (new)
 - Groome Transportation
 - Greyhound and Fronteras del Norte



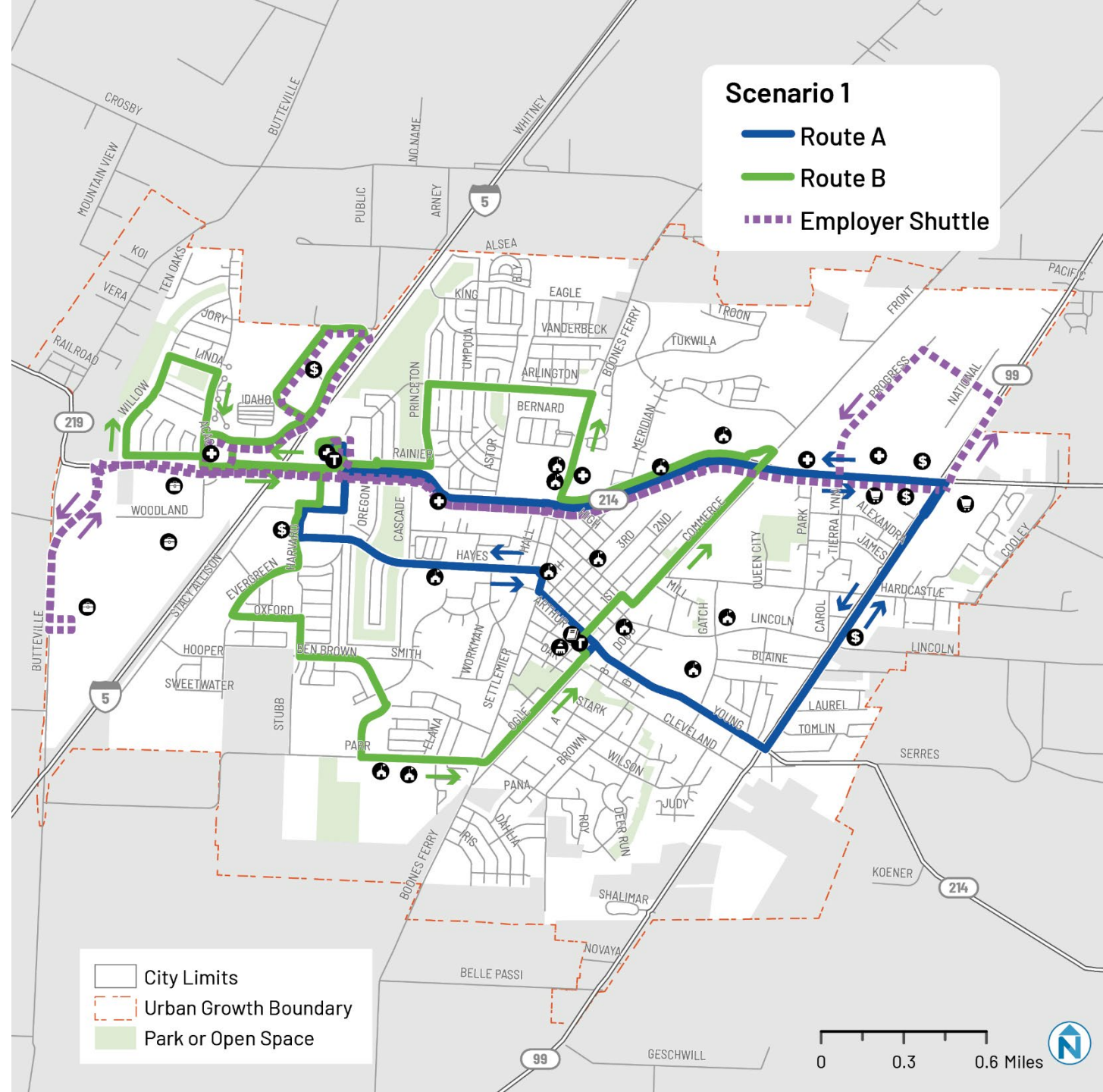
Transit Service Scenarios: Overview

- **Scenario 1:** Maintain Fixed Route Services but with Modifications (Maintain Coverage)
- **Scenario 2:** Maintain Fixed Route Services but with Modifications (Focus on Ridership)
- **Scenario 3:** Maintain Some Fixed Route Service, but Introduces Flex Route
- **Scenario 4:** Maintain Some Fixed Route Service, but Introduces Microtransit

Transit Service Options: Scenario 1

Maintain Fixed Route Services (Maintain Coverage)

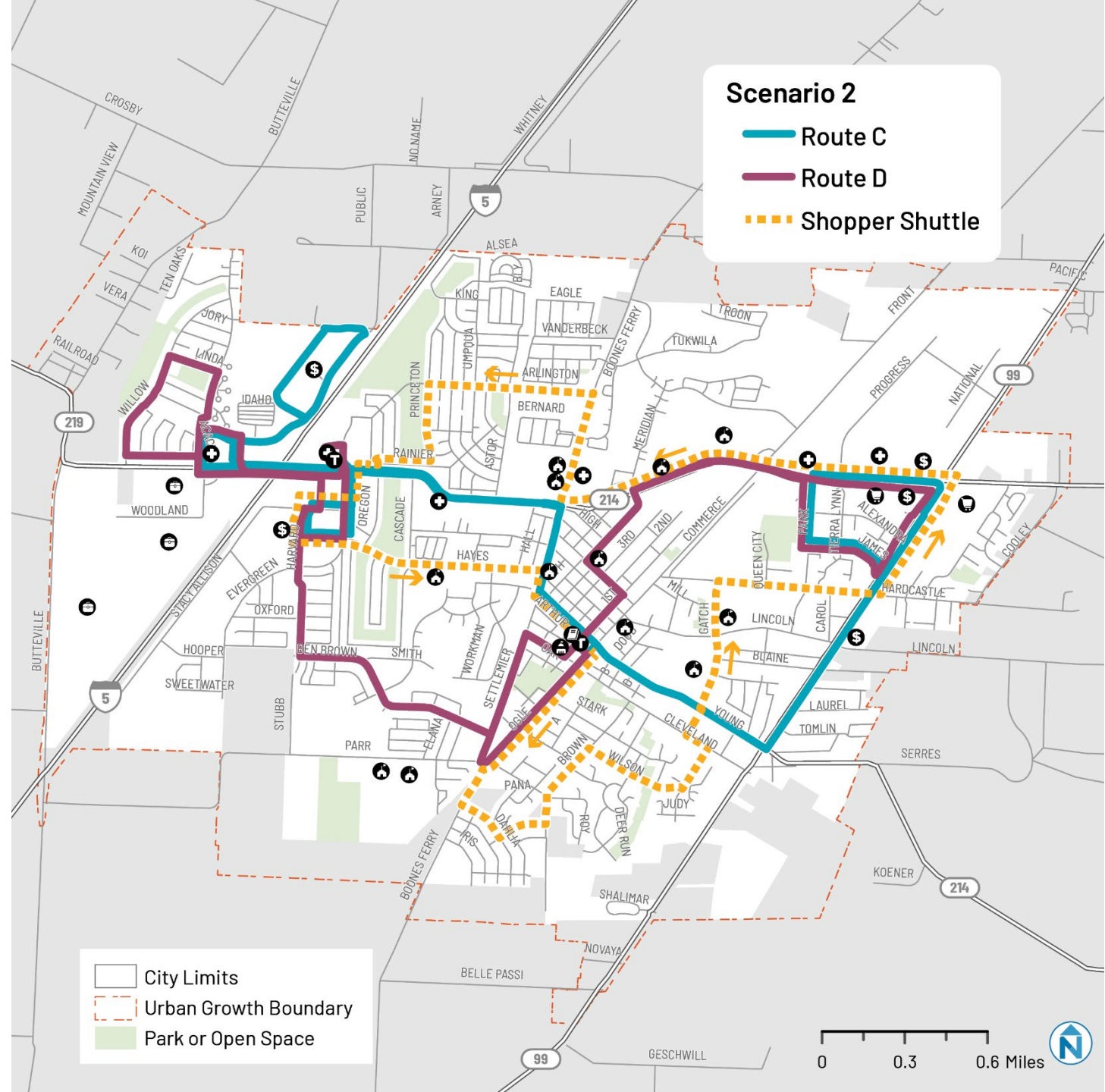
- **Route A (existing Express Route)**
 - Bidirectional, 30 minutes in opposite directions
- **Route B (modified Fixed Route)**
 - One-way, hourly; Expands to growing areas on south end of town
- Maintains (and expands) coverage, but focuses on areas with highest ridership
- Timed connection in downtown (Route A and B)
- **Employer Shuttle** (4 hours, weekdays only)
- Requires 3 buses



Transit Service Options: Scenario 2

Maintain Fixed Route Services (Focus on Ridership)

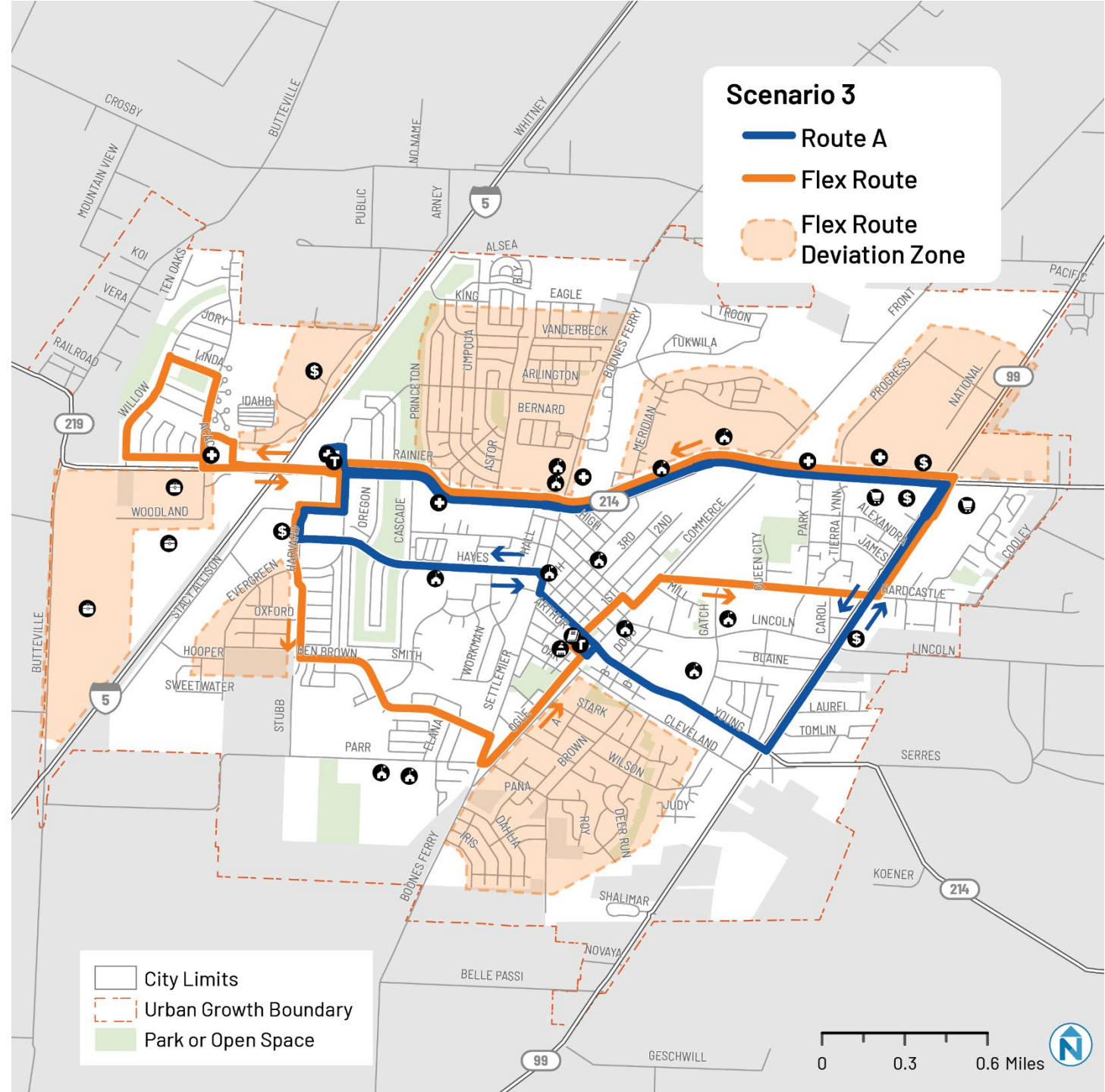
- **Route C**
 - Bidirectional, hourly
 - Serves all major destinations
- **Route D**
 - Bidirectional, hourly
 - Serves *most* major destinations
- Timed transfers between routes downtown
- Focuses on highest ridership areas
- **Shopper Shuttle**
 - One or two days/week
- Requires 2-3 buses



Transit Service Options: Scenario 3

Maintain Some Fixed Route (Introduce Flex Route)

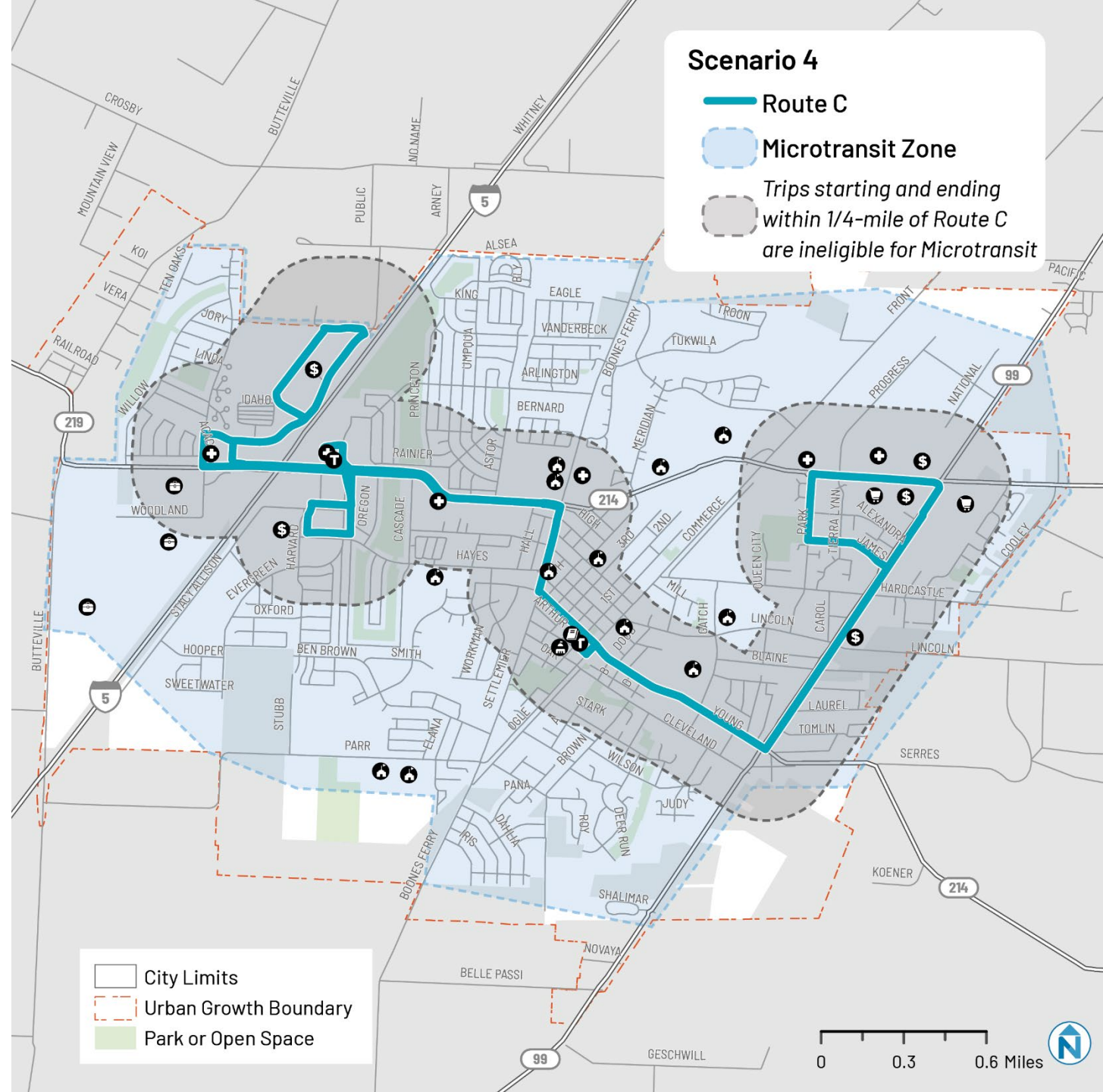
- **Route A (same as Scenario 1)**
 - Bidirectional, hourly
 - Serves all major destinations
- **Flex Route**
 - Bidirectional, hourly
 - Flex Route w/ Flex Zones
- Timed transfers between routes downtown
- Requires 2 buses



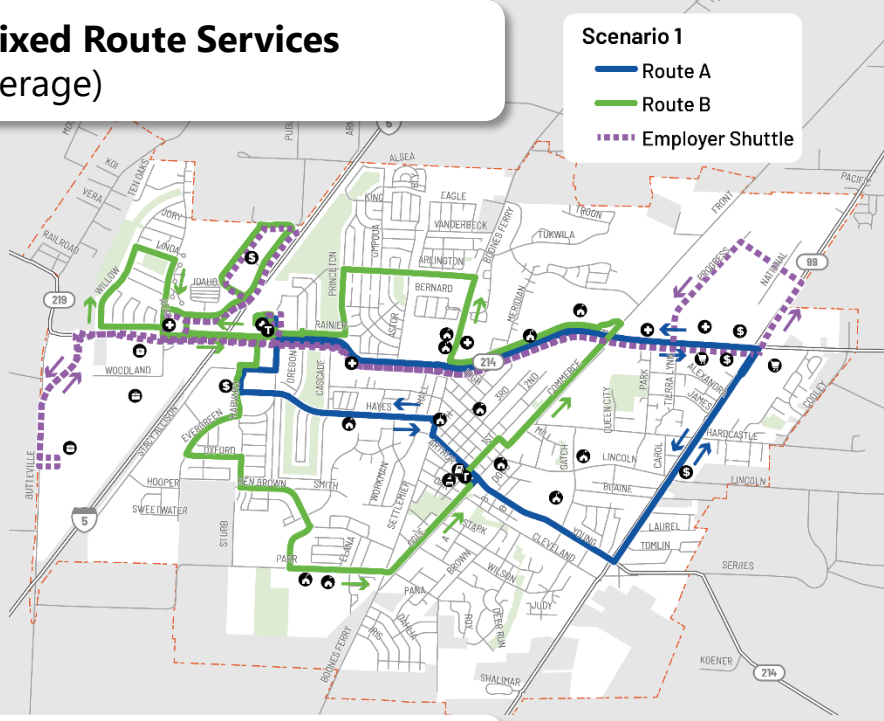
Transit Service Options: Scenario 4

Maintain Some Fixed Route (Introduce Microtransit)

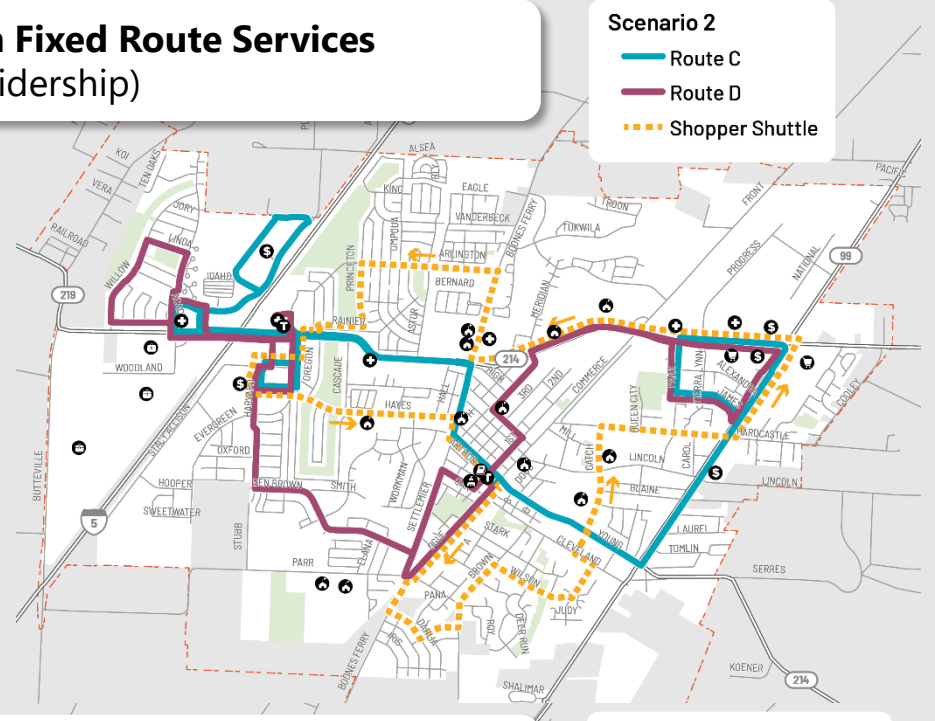
- **Route C (same as Scenario 2)**
 - Bidirectional, hourly
 - Serves all major destinations
- **Citywide Microtransit**
 - Trips with an origin and destination within ¼-mile of Route C would be ineligible for Microtransit
 - Could consider updating eligibility requirements on Dial-A-Ride
 - Could consider charging a fare for this service
- Requires 2-3 buses



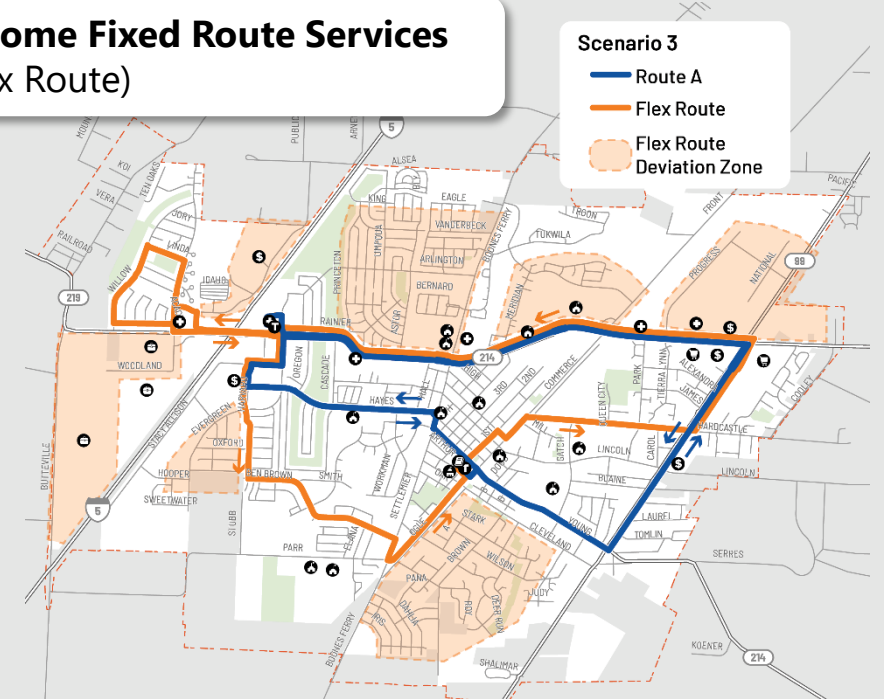
1. Maintain Fixed Route Services (Maintain Coverage)



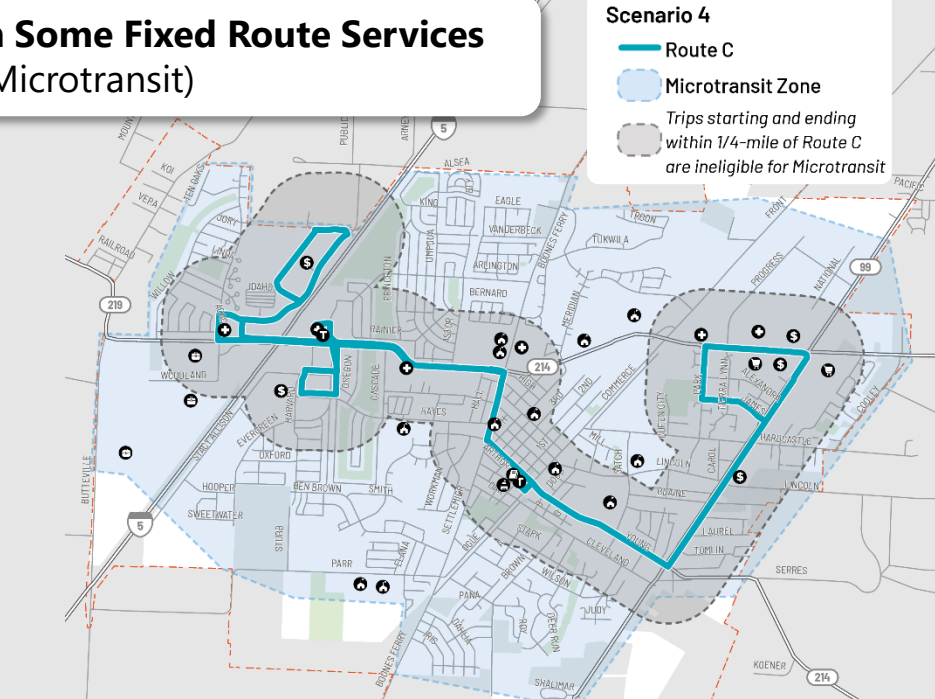
2. Maintain Fixed Route Services (Focus on Ridership)




























3. Maintain Some Fixed Route Services (Introduce Flex Route)



4. Maintain Some Fixed Route Services (Introduce Microtransit)



Service Scenario Comparison Matrix

	Residents	Jobs	Low-income residents ¹	People of color	Travel times
Existing Routes					
Scenario 1					
Scenario 2					
Scenario 3					
Scenario 4 ²					

1 - Earning less than 200% of federal poverty level.

2 - Results are shown for proposed Route C only. Microtransit would also provide service throughout the city in Scenario 4.

Next Steps: Non-Service Transit Improvements

- Vehicles
 - Transitioning to low- or zero-emission vehicles
 - Sandy received an FTA grant for 3 new electric buses
- Bus stop amenities
 - Shelters, benches, signage, lighting, maintenance
- Technology
 - Mobile real-time information
 - Trip planning
- Branding and Information
- Bicycle and pedestrian access

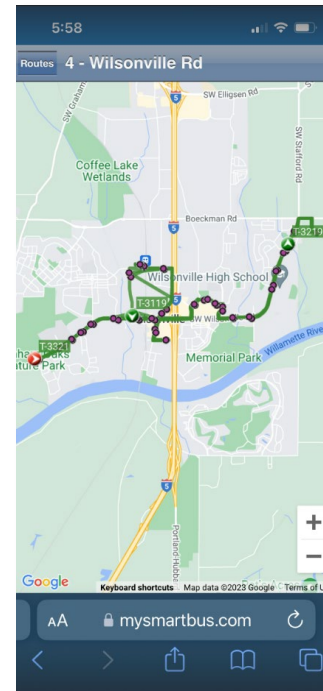


Image: Federal Transit Administration (<https://www.transit.dot.gov/lowno>)



Next Steps

- Draft Service and Capital Improvements Memo
 - *Late February*
- Rider focus group in Spanish
 - February
- Next TDP Steering Committee Meeting
 - *In-person late March/early April*
- Draft TDP
 - *Mid April*
- City Council Briefing
 - *Late April*
- Final TDP
 - *Mid May*



Thank you!



Paul Lutey, Principal

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