CHERRIOTS

Comprehensive
Operational Analysis (COA)

Existing Conditions Report

Salem Area Mass Transit District

July 2025

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Introduction

Overview

In early 2025, the Salem Area Mass Transit District (SAMTD) started work on a Comprehensive Operational Analysis (COA) to develop a new operational plan to serve as a roadmap for the agency over the coming years. The purpose of the COA is to evaluate existing Cherriots fixed-route bus service and identify opportunities for improvement. This document, the Existing Conditions Report, provides the foundation for the COA by evaluating the performance of Cherriots Local and Regional services as well as conducting a market analysis to identify transit demand throughout the Cherriots service area. The evaluation presented in this document supports the development of service enhancement options and will provide SAMTD with crucial context for making informed decisions about current and future service. The document is divided as follows:

Chapter 1: Introduction, outlines key takeaways from the System Overview and Transit Demand Analysis chapters.

Chapter 2: Plans and Projects Review, grounds the COA in the work undertaken by previous planning efforts and ensures coordination with other concurrent projects being conducted by SAMTD or in the Salem-Keizer area.

Chapter 3: System Overview, identifies when, where, and how well the system currently performs. It examines how ridership has changed since the onset of COVID-19, and examines route-level on-time performance.

Chapter 4: Transit Demand Analysis, explores the factors that have an impact on transit demand and identifies where transit demand is located within the Cherriots service area. This section includes maps of various demographic groups in the local and regional service areas.

Chapter 5: Route Profiles, provides a snapshot of each route in the Cherriots local and regional fixed-route network. For each route, the following data is compiled: ridership, productivity, schedule adherence, span and frequency of service, top boarding locations, operations performance measures, and a map of the route with weekday, Saturday and Sunday stop-level ridership. The route profiles allow for easy comparison of operational characteristics and performance between routes.

Chapter 6: Transit Opportunities, identifies high-level considerations for service improvements to the Cherriots system.

Why is Transit, and Cherriots, Important?

Cities and regions support public transportation services for a variety of reasons. Providing travel choices beyond the private automobile creates a diversified, accessible, and equitable transportation network. A successful transit system creates opportunities to support a variety of community interests:

Affordability

Well-functioning transit services can reduce household expenses for individuals and families. Transportation is the second largest expense on average for a household, second only to housing. According to the Automobile Association of America (AAA), the average transportation costs of owning and operating a new car, including gas, insurance, and maintenance, are estimated at $12,300 a year. An annual Cherriots pass costs a fraction of this: $540.

Access, Participation, and Independence

Cherriots service is especially important for households that do not have access to a vehicle and individuals who have limited abilities. Cherriots service provides community members the ability to participate in daily activities and to travel throughout Salem, Keizer, and surrounding towns with access to places of work, recreation, education, and health care.

Economic Development

Transit has a demonstrated ability to attract economic investment along corridors as well as in specific commercial areas. Transit is also critical for low-income households by providing access to jobs and economic opportunity.

Safety

Transit service is among the safest ways to travel. Research from the American Public Transportation Association shows that commuters reduce their crash risk by 90% by taking transit instead of driving. Transit also makes communities safer by taking cars off the road: transit-oriented communities have one-fifth the per-capita crash rate of automobile-oriented communities.

Environment

By reducing the number of vehicles on the road, bus riders reduce air pollution and greenhouse gas emissions. Transit is also a more efficient use of road space and encourages higher density land use, which decreases the need to expand roadway capacity and valuable land to accommodate growing populations.

Key Takeaways

Service Analysis: Local Routes

Based on the evaluation of Cherriots Local fixed-route services, key issues and findings include:

Frequency translates to higher ridership. Not surprisingly, all five of the routes that serve more than 1,000 riders per day (Routes 2, 5, 11, 19, and 21) are Corridor routes that operate the most frequently (every 15 minutes on weekdays).

The highest ridership routes also tend to be the most productive. Routes 19 and 21 are Cherriots' most productive routes, followed by Routes 2 and 11. Routes 3, 5, and 13 also have high productivity.

Many routes do not meet productivity standards. Less than half of the Corridor routes meet Cherriots' productivity goal of 20 rides per hour, and less than half of the Coverage routes meet Cherriots' productivity goal of 10 rides/hour.

Many routes do not meet Cherriots standards for on-time performance. On weekdays, only three routes meet Cherriots' standard of 85% of buses departing no more than five minutes late. Despite the goal that no buses should depart early, roughly 10–12% of all buses do. While this could be an issue with how data is reported, this should be addressed if many trips are arriving early. Similarly, buses should not depart a timepoint late (more than 5 minutes) more than 15% of the time, but Routes 6, 9 and 11 are close to exceeding this benchmark, which indicates time may need to be added to these schedules or alignment changes may need to be made.

Maintaining ridership has become more resource intensive. Local route ridership has recovered to pre-pandemic levels, but productivity has not, and revenue hours have increased. Cherriots operated 14,594 monthly revenue hours on average in 2019 and operated 17,801 monthly revenue hours on average in 2024. While this investment in service has maintained pre-pandemic ridership numbers, it translates to less productive service.

Key Takeaways

Service Analysis: Regional Routes

Based on the evaluation of Cherriots' Regional fixed-route services, key issues and findings include:

Ridership is correlated with service frequency. The highest ridership route (Route 40X) has ten trips a day, and the lowest ridership route (Route 80X) has four trips a day. While demand is the primary predictor of transit ridership, ridership also responds to service that is frequent, regular and operates throughout the day and week, all of which offer more choices for when people travel.

Productivity is low on Regional routes. Only one route, Route 40X, comes close to meeting productivity standards for Regional routes (10 rides/revenue hour). While productivity decreased for both Local and Regional routes during the COVID-19 pandemic, productivity on Regional routes has been hit particularly hard.

On average, on-time performance is lower for Regional routes than for Local routes. On weekdays, Regional routes are on time 77% of the time. Early departures are particularly high for Regional routes, with early departures occurring 16% of the time on weekdays (which could be an issue with how data is reported).

Key Takeaways

Transit Demand Analysis: Local Routes

The analysis of underlying local transit demand based on population density, socioeconomic characteristics, and employment density shows transit demand to be the strongest in the following areas:

Downtown Salem has high transit demand driven by population density, job density, the proximity of several key destinations (e.g., the Oregon State Capitol, Willamette University, Salem Hospital, Oregon State Penitentiary, and the Oregon State Hospital). Downtown Salem is served by a high density of transit routes arranged in a radial pattern, with multiple lines feeding into the Downtown Transit Center.

East Salem, particularly along Lancaster Drive, has relatively high population and job density. This density – combined with concentrations of populations with demographic characteristics that are correlated with higher transit usage – means that east Salem has a high overall demand for transit. East Salem is also home to Chemeketa Community College, a major destination and transfer point in the system. This demand for transit is generally matched by the concentration of frequent-service routes in east Salem.

The **industrial and commercial areas of south Salem** along Fairview Industrial Drive, Commercial Street, and 12th and 13th Streets also have pockets of transit demand due to the concentration of jobs, especially low-wage jobs. Compared to the other areas with high transit demand, transit service is lower in this area, with most service provided at hourly or half-hourly frequency and with limited evening and weekend service.

The analysis also reveals areas with lower demand for transit:

Most of **West Salem** and the residential areas in **south Salem** (off the main corridors) are less supportive of traditional fixed-route transit services, largely due to lower population and employment density, but also the lower propensity for populations to use transit and residential streets that are not suitable for larger transit vehicles. While other types of transportation services could be successful here, they would still not be expected to generate significant ridership due to low population and jobs density.

Key Takeaways

Transit Demand Analysis: Regional Routes

Overall, Salem-Keizer is the center of transit demand in the region, especially due to its concentration of jobs. The towns surrounding Salem-Keizer vary in their land use and demographic makeup – some have population densities and populations with demographic characteristics that are supportive of transit, while most have generally low demand for transit, largely due to rural land use patterns. A few of the towns in the region stand out as more supportive of fixed-route transit compared to the others:

Woodburn has relatively high transit demand due to its population density – which is higher than Salem's – and the high transit propensity of the residents who live there. Woodburn is served by the highest number of Cherriots Regional routes (the 10X, 20X, and 80X). Similarly, the communities of **Dallas, Monmouth, and Independence** have relatively high transit propensity and are served by the highest ridership and productivity route in the Cherriots Regional network (40X).

Wilsonville in the southern part of the Portland metro area has noticeable pockets of high transit demand. The transit demand is reflected in the level of transit service found within Wilsonville: It is served by two Cherriots routes (1X and 80X), the South Metro Area Regional Transit (SMART) system, and TriMet's Westside Express Service (WES) commuter rail.

The comparison of ridership levels and the number of population and jobs found in the towns served by each route paint a somewhat unclear picture of the relationship between the two. Higher numbers of jobs and residents are generally associated with higher ridership, but in the Cherriots Regional system, this relationship is not as apparent. This is likely due to a variety of factors including infrequent Regional service (few trips a day) and low demand for travel to Salem-Keizer (i.e., more localized travel).

2 Plans and Projects Review

Concurrent Plans and Projects

Shared Micromobility Feasibility Study

In January 2025, Cherriots embarked on a Shared Micromobility Feasibility Study and Implementation Plan for the Salem-Keizer region. The goal of the study is to assess the potential for introducing sustainable, efficient transportation options. This study aims to address growing transportation needs, reduce congestion, and provide equitable mobility solutions for the community. A bikeshare program has been highlighted as one potential solution that can help improve access to transit by addressing first-and-last-mile barriers, making it easier for riders to connect with bus routes, worksites, and community resources.

As of June 2025, the evaluation of existing conditions and a comprehensive market analysis are complete. The project team has also identified community needs, established project goals, and developed a shared vision for micromobility in the region.

Stakeholder interviews, focus groups, and outreach activities have concluded. To minimize engagement fatigue, the project team coordinated with the COA project team on outreach activities. These efforts included community events, peer agency reviews, a visioning session with Cherriots leadership, and an external focus group with key community partners. A community survey was conducted and has since closed, with 339 responses collected to help assess interest in shared micromobility options.

Climate Action Plan

Since October 2024, Cherriots has been preparing its 2025 Climate Action Plan (CAP), which will lay out the agency's strategy to decarbonize operations and to bolster operational and infrastructural resilience to the impacts of climate change. As of June 2025, Cherriots is in phase 2 of the project, which entails developing strategies to mitigate and adapt Cherriots environmental impact. These strategies are driven by findings from the existing conditions assessment completed in phase 1 of the project and by extensive stakeholder engagement. The selected strategies will form the backbone of the draft Climate Action Plan, which is expected to be available for public review in July 2025. The Final Climate Action Plan will be completed by October 2025. More information is available on the project website.[1]

1. https://www.cherriots.org/climate-action-plan/

Salem Transportation System Plan (TSP)

The City of Salem is currently updating its Transportation System Plan, which is called Salem in Motion: Connecting People and Places. A Regional Scenario Plan is currently under development. Once approved, it will be used to update projects and policies in the TSP.

More information about this project is available at the project website.[2] The COA project team will consult City of Salem staff throughout the COA to ensure the plans are consistent with the TSP update.

2. https://www.cityofsalem.net/government/shaping-salem-s-future/salem-in-motion

South Salem Transit Center and Mobility Hub

The need for a transit center in south Salem and in Keizer was first identified in 2004. The 2022 Screen and Site Recommendation Report analyzed potential locations for a south Salem Transit Center and Mobility Hub (SSTCMH) and recommended three sites for further study. The analysis conducted for this report recognizes that travel patterns and Cherriots' operating environment have shifted away from increased high-capacity transit and toward a greater mix of mobility types, which has changed the criteria for site suitability. Today, the prototypical design for the SSTCMH includes bus shelters, bicycle storage and repair amenities, space for micromobility facilities, customer restrooms, space for transit passenger pickup and drop-off (including paratransit and microtransit), open space, electric bus charging facilities, and operator facilities. Analysis of all potential sites for the South Salem Transit Center yielded three sites along Commercial Street Southeast for further evaluation.

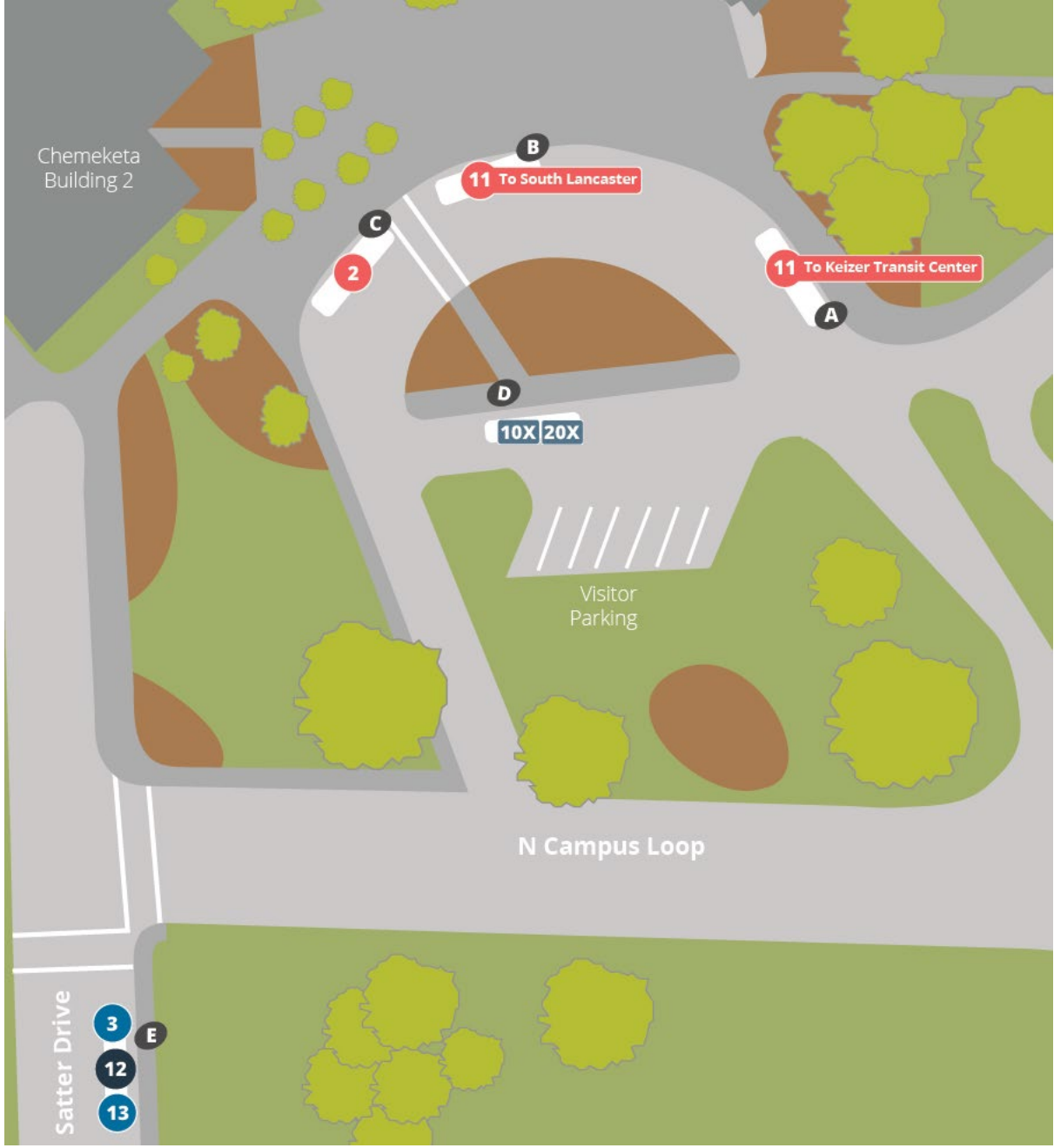
South Salem Transit Center and Mobility Hub

PIVOT Architecture, the firm that designed the Keizer Transit Center, was contracted for the SSTC in late 2022. Pivot initially produced schematic designs for the three potential sites, and ultimately the Board of Directors selected the site at the northeast corner of SE Commercial Street and Wiltsey Road to move forward into design. In January of 2024, PIVOT presented renderings of the site design to the board, with an estimated cost of $21.8 million.

SAMTD is applying for federal funding for the SSTC as part of the 2025 funding package.

East Salem Transit Center

A new transit center in east Salem near Chemeketa Community College (CCC) is identified as a capital project for 2024 to 2029. This college campus has the second highest stop ridership in the Cherriots system, second only to the Downtown Transit Center. Service and operations changes in 2015 increased the number of routes accessing CCC and created assigned bays for the buses. However, concerns remained that there are no shelters available for waiting passengers, there is no room for additional routes, there is poor lighting for some of the bus bays, and the distance between bays makes transfers challenging. A new transit center in this area would replace the bus stops at Building 2 and on Satter Drive NE (shown to the right) and could include bike share and TNC partnerships in addition to improved bus facilities. The next steps for the project are site selection, Title VI analysis, and schematic design, followed by a NEPA environmental analysis.

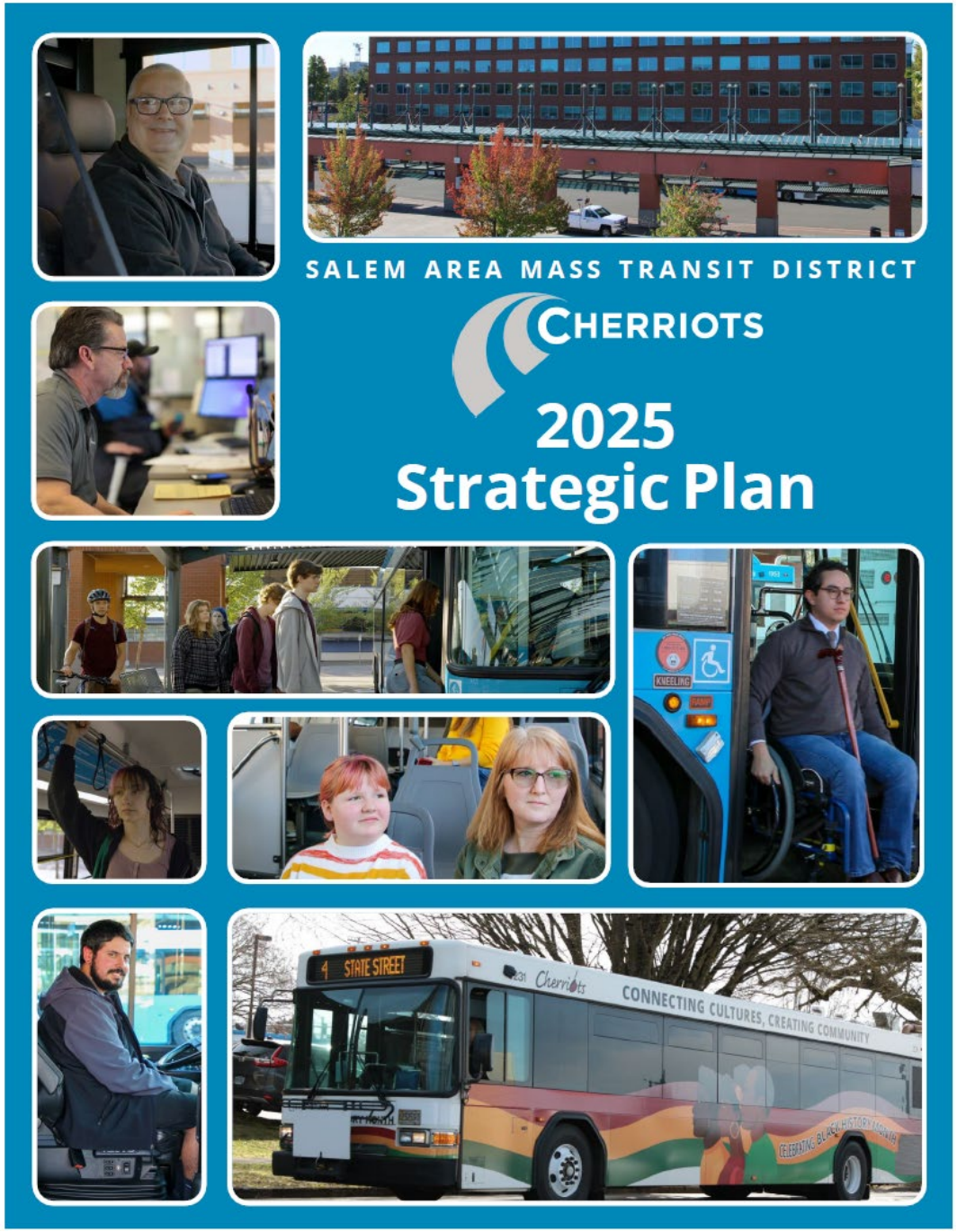


Recently Completed Plans and Projects

Cherriots 2025 Strategic Plan

SAMTD's 2025 Strategic Plan[3] aims to guide its transit system toward enhanced service, accessibility, and sustainability. The plan identifies measurable success outcomes that indicate success for Cherriots' customers, workforce, and the Salem-Keizer community under the District's four core areas of service and operations: Community Value, Customer Satisfaction, Culture of Ownership, and Financial Sustainability. The plan further outlines actionable organization tactics and goals for 2025 under these core areas.

Cherriots identified conducting a COA as one of the key tactics to enhance customer satisfaction. Its goals include determining Cherriots' service efficiency, effectiveness, and customer experience improvements, as well as developing service enhancement recommendations. Other key tactics include establishing zero emissions infrastructure roadmaps; implementing Cherriots Intelligent Transportation System (CITS) for improved data monitoring; and improving safety and security for customers, employees, and the community.



3. https://www.cherriots.org/media/doc/FY2025_Strategic_Plan_External.pdf

2024 Needs Assessment

The 2024 Needs Assessment identified areas of unmet transit needs through analysis of the existing system and a rider survey filled out by 890 transit riders. Based on this assessment, the three top priorities for SAMTD include:

1. **Increasing weekend coverage.** The focus should be on transit desert areas, such as south Salem and West Salem, as well as areas in the Regional network with the greatest demand. Coverage could be provided through the fixed route services, as well as microtransit and micromobility.
2. **Improving route frequency.** The focus should be on improving frequencies on weekend days to better match service frequency on weekdays. These improvements could include both higher and lower frequency routes, as well as first/last mile strategies like bike or scooter share programs.
3. **Expanding the span of service.** This includes expanding service hours all days of the week, with a focus on the Core Network corridors and/or on-demand or ride hailing services.

Community Values and Customer Satisfaction Surveys (2024)

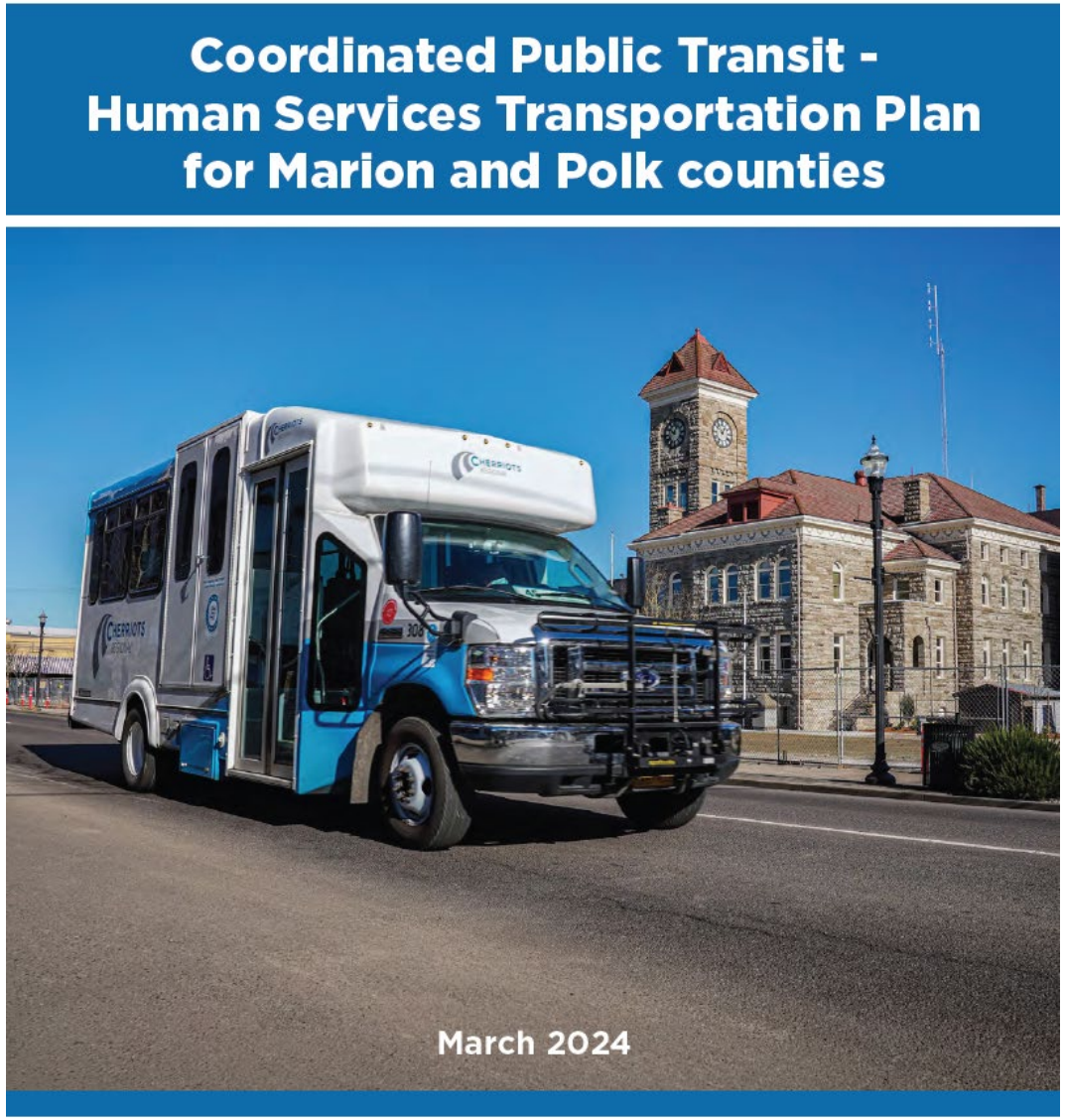
In 2024, Cherriots conducted two surveys. The Community Values Survey (CVS) was distributed to a random sample of Salem-Keizer community members and was filled out mostly by non-transit-riders. The Customer Satisfaction Survey (CSS) was an intercept survey that was taken only by transit riders. Important comparisons can be made between the two groups of respondents:

- CSS respondents are more racially, ethnically, and linguistically diverse than CVS respondents, and they live on lower incomes.
- CSS respondents are more likely to highly recommend Cherriots to a friend, family, or colleague (net promoter score of 56 compared to -1).
- CSS respondents identify more opportunity areas than CVS respondents. CSS respondents identify on-time performance, bus cleanliness, safety and security at bus stops, schedule convenience, and frequency as opportunity areas, whereas CVS respondents only identify reduction in traffic congestion as an opportunity area.
- CVS respondents identified more frequent service, more routes, and shelters at transit stops as the top three amenities or features that would add value to the Cherriots system. On-time performance, bus cleanliness, and bus safety are regarded as the most important factors by CSS respondents.
- Convenience is important to both riders and non-riders. Out of CVS respondents who don't take the bus, half say that the trip takes too long or there aren't stops located close to their homes. Out of the CSS respondents who could use an alternative mode of transportation and choose to take the bus, 41% do so because it is convenient.
- CSS and CVS respondents agree that Cherriots is a valuable part of the community, and satisfaction with Cherriots service has increased over time.

Coordinated Public Transit–Human Services Transportation Plan Update (2024)

The 2024 Coordinated Plan Update[4] is a critical component of Cherriots strategic planning, specifically addressing transportation needs for seniors and individuals with disabilities. It directly informs service adjustments and resource allocation within the COA framework by identifying service gaps and prioritizing enhancement strategies. This plan ensures alignment with federal funding requirements in the Section 5310 program and facilitates integrated service delivery between Cherriots and human service agencies.

The plan outlines the service area, demographic profile of riders, overview of transit providers in Marion and Polk Counties, public outreach conducted for the plan, and goals and objectives for the plan. The plan then identifies six categories of unmet transportation needs and corresponding strategies.



4. https://www.cherriots.org/media/doc/Cherriots_Coordinated_Plan_2024.pdf

Coordinated Plan Update (2024)

Key strategies relevant to the COA under the six identified focus areas are listed below:

1. Transportation services.

- Sustain current service levels, considering equity and service performance.
- Identify areas with the greatest need for additional or enhanced transit services and apply new funding towards these identified needs.
- Extend morning and evening hours on fixed routes during the weekdays and increase weekend and holiday service.
- Improve frequencies where service is too infrequent.
- Expand service coverage to more basic needs destinations.

2. Infrastructure.

- Prioritize bus stop locations that need improvement.
- Create a safer transit environment by following design principles that promote visibility and comfort on new or upgraded transit facilities.

3. Coordination and organization.

- Coordinate with medical facilities, seniors and/or people with disabilities, and their representatives to optimize trip scheduling.
- Coordinate with public and private sector organizations to identify opportunities for joint scheduling or sharing of vehicles.

4. Marketing, customer service, and outreach needs.

- Explore a fare assistance program for people whose primary barrier to using public transit is financially based.

5. Technology needs.

- Develop and test new technologies to improve service efficiencies.
- Explore implementation of new technologies at bus stops such as speaking/digital schedules and electronic signs to enhance accessibility.

6. Capital and funding needs.

- Review bus inventory against route/rider needs. Seek grants that would enable "right sizing" of vehicles, that balances ridership and capacity with maneuverability and fuel efficiency.
- Advocate for adequate capital replacements.

2023 Title VI Program

The 2023 Title VI Program[5] documents SAMTD's compliance with Title VI of the Civil Rights Act of 1964 in accordance with FTA grant recipient requirements. Any service changes recommended by the COA must meet the standards and requirements set by this document. The document outlines:

- **General FTA requirements**, including Title VI Notice to the Public, Public Participation Plan, Language Assistance Plan, committee membership and recruitment, facilities siting and construction, and major service and fare change equity analyses.
- **Title VI policies,** including policies on major service changes, fare changes, analyses of disparate impact and disproportionate burden of service/fare changes, and public hearings.
- **Systemwide service standards and policies** regarding service availability, service frequency, on-time performance, vehicle loads, amenity placement, and vehicle alignment.
- **Demographic analysis:** SAMTD uses demographic data, including data on minority, low-income, and limited English proficiency populations, to ensure equitable distribution of services. This data informs the planning process and allows Cherriots to monitor service performance and mitigate disparities. Analysis of Cherriots service confirmed that there are no disparities in performance standards that would indicate lesser service provision to minority riders or populations.

5. https://www.cherriots.org/media/doc/SAMTD_Title_VI_Program_2023_Update_FINAL_sm_12-19-24.pdf

Long-Range Transit Plan (2022)

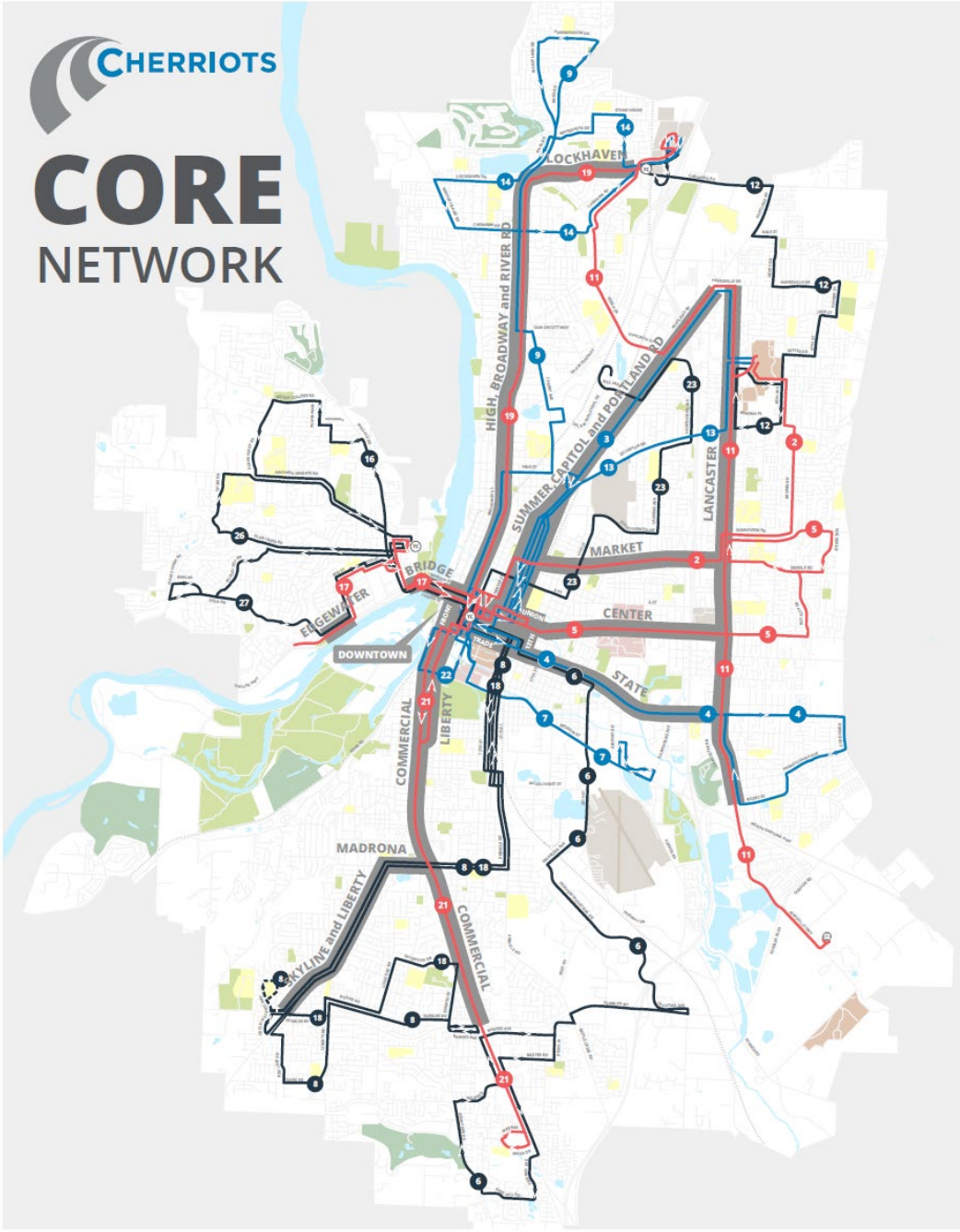
The Cherriots Long-Range Transit Plan[6] (LRTP) outlines a strategic vision for the region's public transit over the next 20 years. The plan guides future investments and service improvements, ensuring Cherriots meets evolving community needs. Based on the existing conditions of services provided by Cherriots, the LRTP identified categories of services and investment types that will help Cherriots meet the District's vision, mission, and values.

6. https://www.cherriots.org/media/doc/LRTP_2022-12-15.pdf

LRTP (2022)

The six focus areas identified in the LRTP are:

- **Prioritize core service expansion:** Fulfill existing service goals by expanding weekday and weekend service levels across the core network, shown on the map to the right, and regional routes.
- **Increase frequency and reliability:** Improve local and regional routes by adding service frequency and enhancing reliability to better connect riders to key destinations.
- **Develop as a mobility integrator:** Leverage expertise to offer flexible routes, micro-transit, and partnerships for emerging mobility options, adapting to evolving community needs.
- **Enhance transit infrastructure:** Create safe, accessible, and multi-modal mobility hubs by improving bus stops and transit centers.
- **Strengthen jurisdictional partnerships:** Collaborate with cities and counties for strategic service expansion and land use integration.
- **Lead in environmental sustainability:** Advance clean transportation and pursue further opportunities to reduce environmental impact.



Service Guidelines for Bus Service (2020)

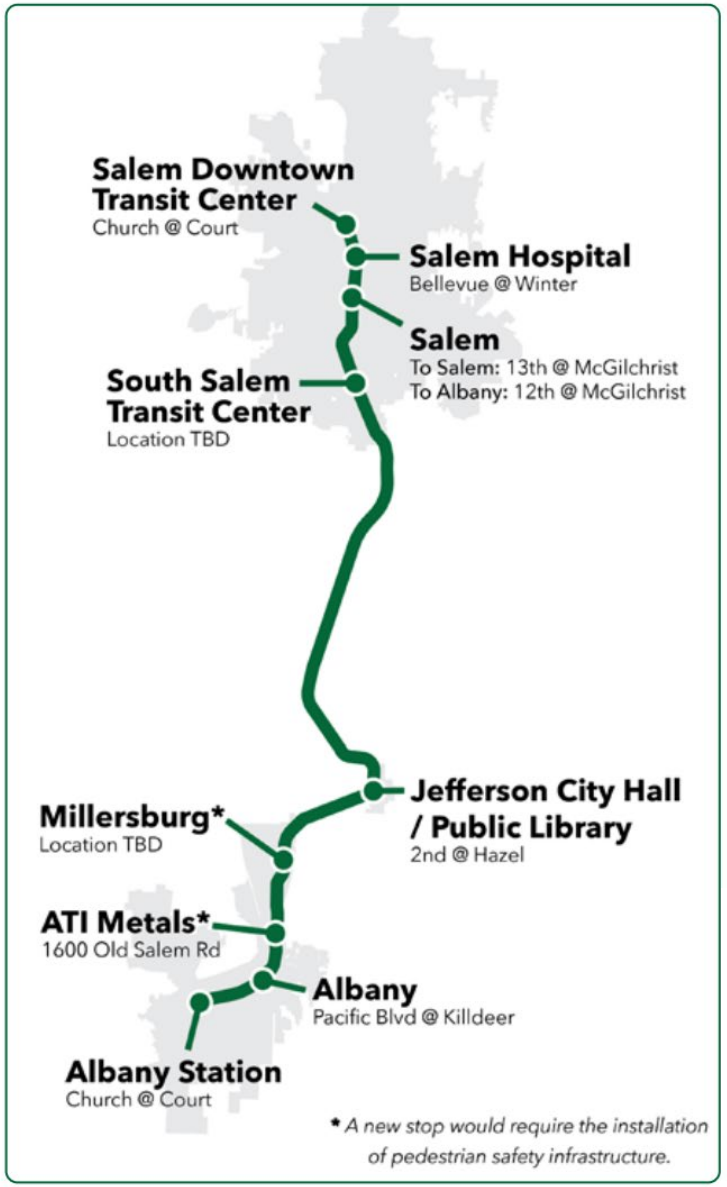
The service guidelines[7] establish the framework for designing, evaluating, and modifying the local and regional fixed transit services offered by Cherriots. The guidelines help Cherriots staff conduct the Statewide Transportation Improvement Fund service planning process by detailing guidelines on 1) performance goals, measures, monitoring, and evaluation, 2) needs assessment methods, 3) service change plan development approaches, 4) service design standards, 5) public engagement strategies, and 6) the implementation process. The document details the definitions of key terms and SAMTD Board Policy 109.

7. https://www.cherriots.org/media/doc/Service_Guidelines_2020-09-01.pdf

Salem–Albany Corridor Feasibility Study (2021)

The Salem-Albany Corridor Feasibility Study[8] examined the potential for enhanced transit connectivity along the I-5 corridor, which is vital for regional mobility. This study informs long-term planning by exploring options to improve travel times and accessibility between Salem and Albany, addressing growing transportation demands. Corridor recommendations were made based on the analysis of multiple service design alternatives and iterations of public inputs.

The study recommended an intercity route that links Salem, Jefferson, Millersburg, and Albany. The route would provide weekday and Saturday service with five or six round trips per day, with an option for express rush hour service that provides a more direct point-to-point trip between Salem and Albany. Suggested stop locations, trip schedules, and cost estimates are included in the recommendation.



The Recommended Route was based off of the Intercity Alternative. It would provide service six days per week and connect all four cities along the corridor.

8. https://www.cherriots.org/media/doc/Final_Recommendation_Report_web_quality070821.pdf

3 System Overview

Cherriots System Overview

Cherriots operates two fixed-route service types: **Local** and **Regional**. Local routes operate within the Salem-Keizer urban growth boundary, while Regional routes mostly connect the Salem-Keizer area to communities in Marion and Polk Counties as well as the Portland metro area in Wilsonville.

To understand the strengths and weaknesses of each service type, this chapter evaluates the following characteristics at the system level:

- Overview and service categories
- Service span and frequency
- Service levels by bus stop
- Ridership
- Productivity (riders per revenue hour)
- On-time performance
- Peak vehicle needs

Because the two service types have different goals within the Cherriots fixed-route system, as well as different geographic extents, this chapter uses the **Local** and **Regional** headers on each page to distinguish between the two service types.

Local

Cherriots Local bus near the capitol in springtime. Source: Cherriots.

Regional

Cherriots Regional bus in Independence, OR. Source: Cherriots

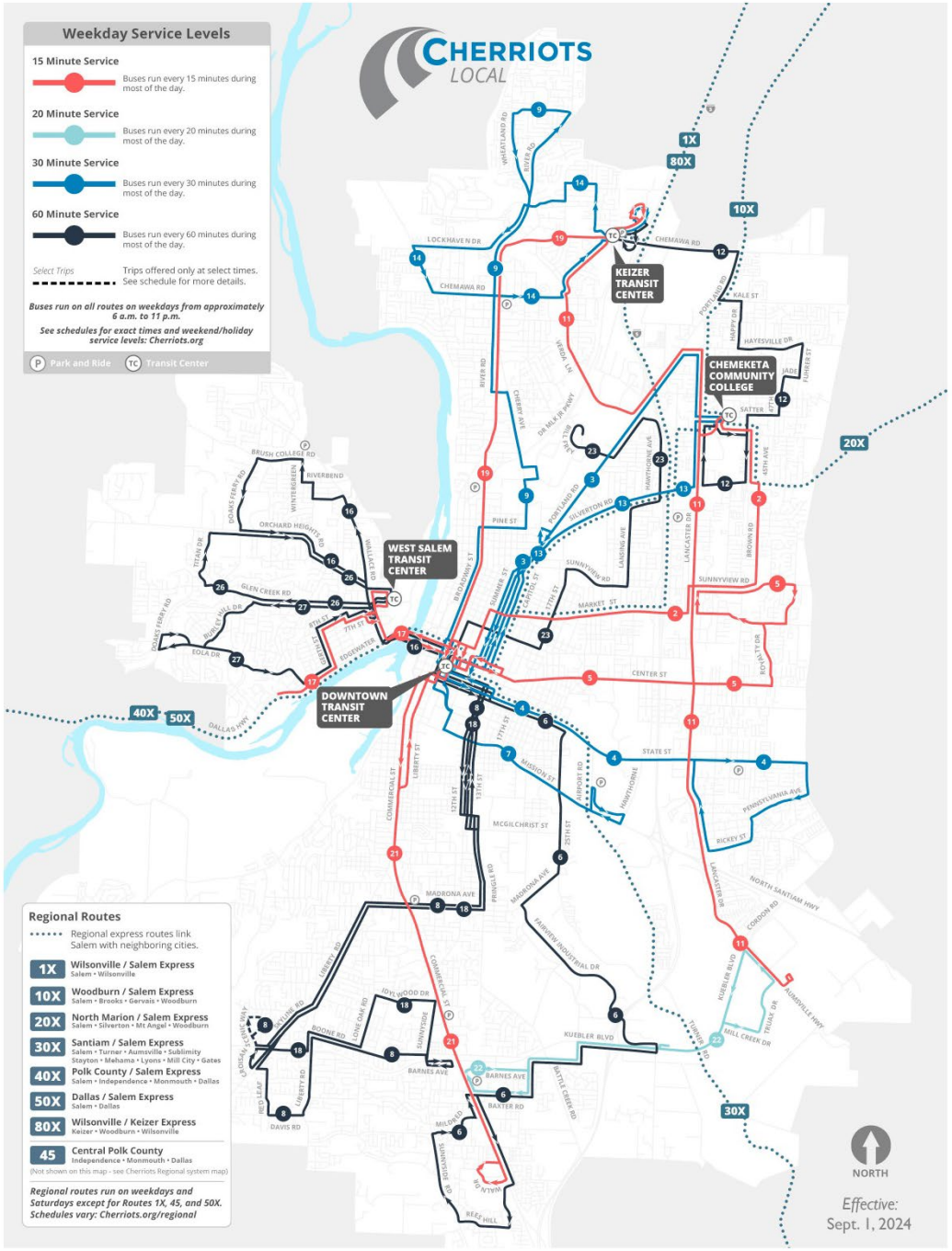
Cherriots Local

Cherriots operates 21 Local routes. The Local routes are further divided into three main categories:

- **Frequent service** routes run every 15 minutes for most of the day on weekdays. All Frequent routes operate on weekends as well as weekdays, though less frequently. There are six Local Frequent routes – Routes 2, 5, 11, 17, 19, and 21.
- **Standard service** routes run every 30 minutes for most of the day on weekdays, and either every 30 minutes or hourly on weekends. There are six Local Standard routes – Routes 3, 4, 7, 9, 13, and 14.
- **Basic service** routes are coverage routes that run every hour. Most service is concentrated on the weekdays, with limited weekend service. There are eight Local Basic routes – Routes 6, 8, 12, 16, 18, 23, 26, and 27.

In addition to the three main service types, there is one route with 20-minute headways – Route 22, Kuebler Link.

A full fare on Local routes is $1.60 for one ride and $3.25 for a day pass.



Corridor Routes and Coverage Routes

In addition to categorizing Local routes as Frequent, Standard, or Basic, Cherriots also distinguishes between Corridor routes and Coverage routes.

Corridor routes mainly serve commercial corridors in Salem-Keizer. They tend to be, but are not always, Frequent routes.

Coverage routes serve lower density areas, and most, but not all, fall into the category of Basic service. Cherriots has different productivity targets for Corridor and Coverage routes, which will be described later in this chapter.

Corridor Routes

Route		Category
2	Market / Brown	Frequent
5	Center St	Frequent
11	Lancaster / Verda	Frequent
17	Edgewater St	Frequent
19	Broadway / River Rd	Frequent
21	South Commercial	Frequent
3	Portland Rd	Standard
4	State St	Standard
9	Cherry / River Rd	Standard
13	Silverton Rd	Standard
8	12th / Liberty	Basic
18	12th / Liberty	Basic

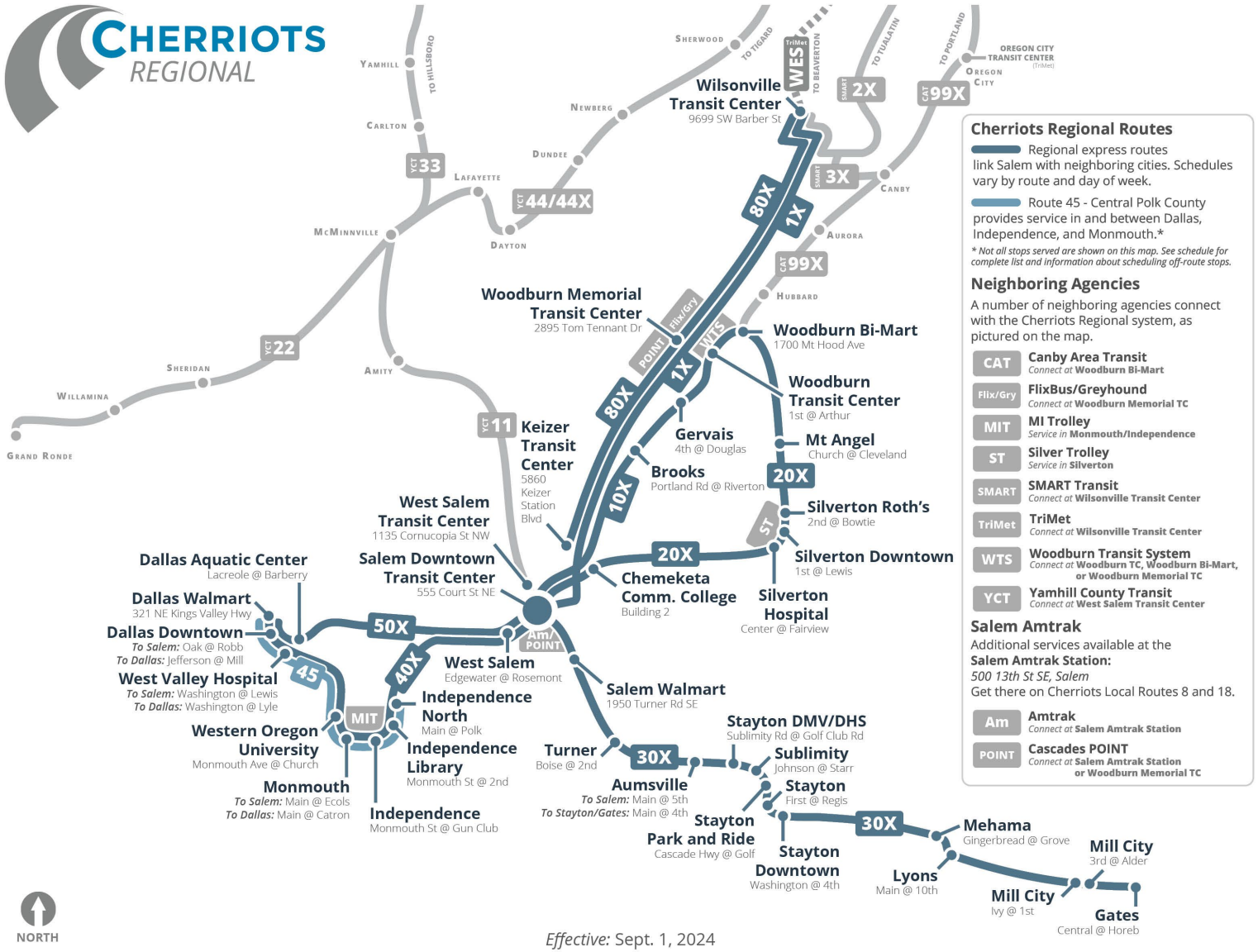
Coverage Routes

Route		Category
22	Kuebler Link	Frequent
7	Mission / Hawthorne	Standard
14	Windsor Island Rd	Standard
6	Mission / Fairview Industrial	Basic
12	Hayesville Dr	Basic
16	Wallace Rd	Basic
23	Lansing / Hawthorne	Basic
26	Glen Creek / Orchard Heights	Basic
27	Glen Creek / Eola	Basic

Cherriots Regional

Cherriots provides service to communities outside Salem/Keizer with eight Regional routes. All Regional routes operate Monday-Friday, with four routes operating on Saturdays. No Regional services operate on Sundays or holidays.

Fares on Regional routes are the same as Local services. For passengers paying a full fare, the cost is $1.60 for one ride, or $3.25 for a day pass. This fare structure has been in place since August 1, 2023. Prior to this, the Regional routes had a higher fare than the Local services.



Effective: Sept. 1, 2024

Cherriots Regional

Cherriots has three classifications for Regional routes:

- **Regional Express:** Bus services between towns and cities mostly in Marion and Polk Counties. This service type is the most common type of Regional route.
- **Regional Deviated Fixed Route:** Service within and between the cities Dallas, Monmouth, and Independence. Off-route pick-ups and drop-offs can be scheduled for locations within designated areas around each of the three cities. Route 45 is the only route of this type.
- **Local Commuter Express**: Connects metro areas with no stops in between. Route 1X is the only Local Commuter Express route. Cherriots partners with SMART to fund and operate this route.

The adjacent chart shows the total number of round trips operated on the Regional routes on weekdays and Saturdays.

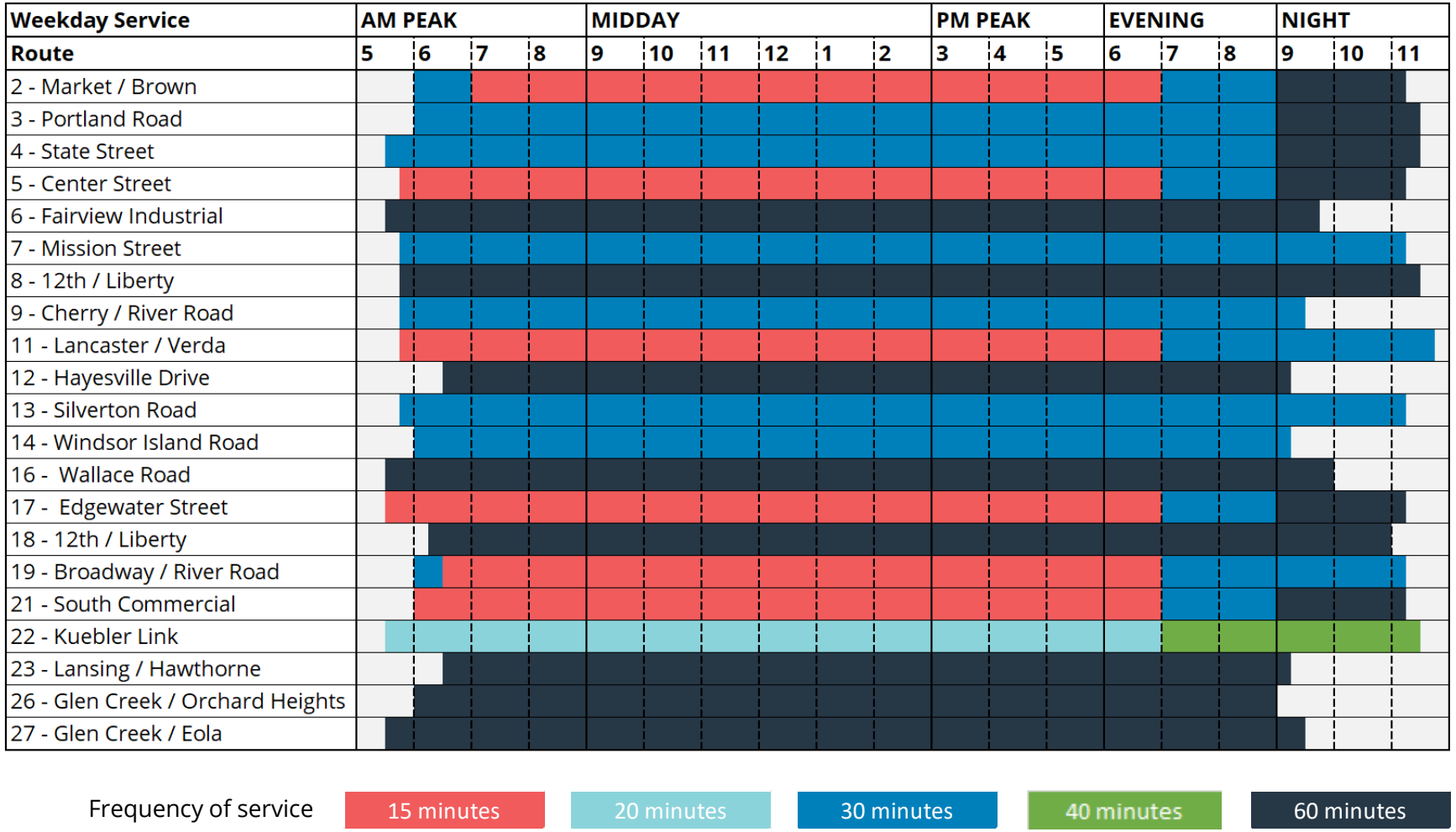
Route	Service Type	Roundtrips	
		Weekdays	Saturdays
1X – Wilsonville / Salem Express	Local Commuter Express	16*	-
10X – Woodburn / Salem Express	Regional Express	8	3
20X – North Marion County / Salem Express	Regional Express	5	3
30X – Santiam / Salem Express	Regional Express	4	2
40X – Polk County / Salem Express	Regional Express	10	6
45 – Central Polk County	Regional Deviated Fixed Route	5	-
50X – Dallas / Salem Express	Regional Express	4	-
80X – Wilsonville / Keizer Express	Regional Express	4	-

*Cherriots operates six of the 16 daily 1X trips, and SMART operates the other 10 trips.

Span and Frequency of Service (Weekdays)

The adjacent chart presents weekday frequencies and spans of service for all designated Local routes in the Cherriots network. Service spans are rounded to the quarter hour.

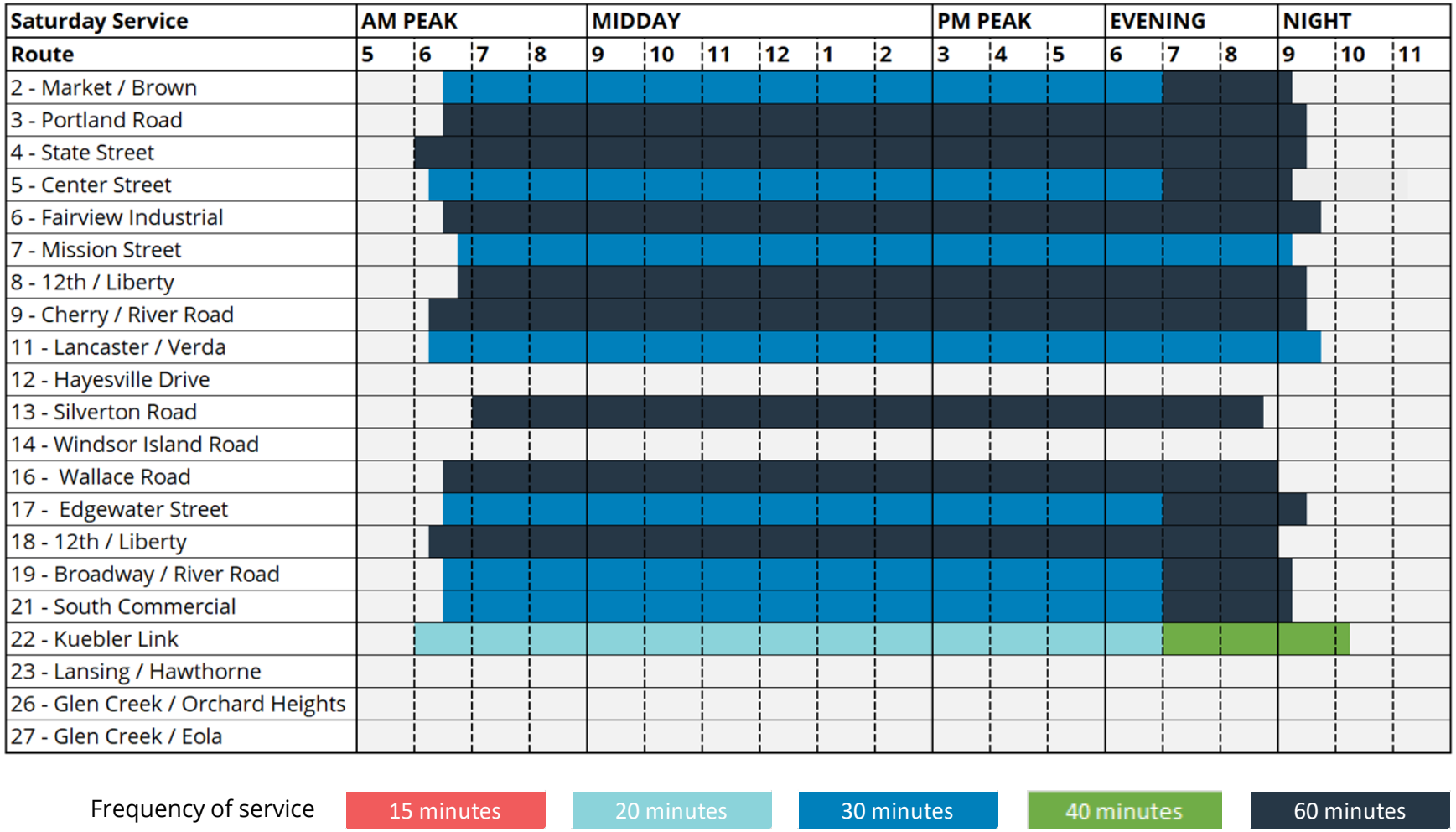
Service on most routes begins at or before 6:00 AM. All Local routes run until at least 9:00 PM, and twelve run past 11:00 PM. Six routes run with 15-minute headways for most of the day, six operate with 30-minute headways, and eight operate with 60-minute headways. Service decreases in the evening for most routes. There is no 15-minute service past 7:00 PM.



Span and Frequency of Service (Saturdays)

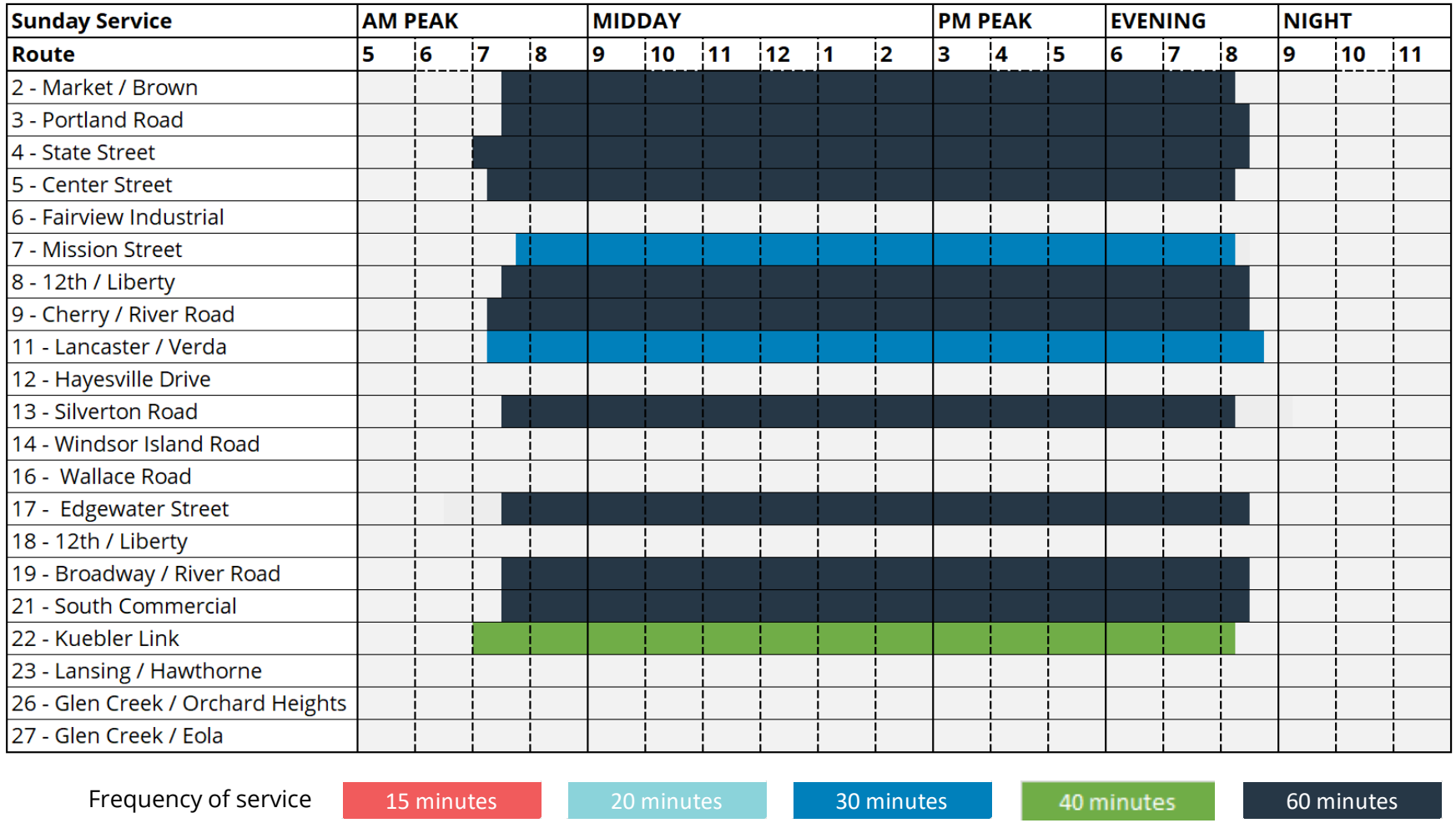
The adjacent chart presents Saturday frequencies and spans of service for all designated Local routes in the Cherriots network.

There are no routes that operate at 15-minute headways on Saturdays. Saturday service starts slightly later and ends slightly earlier than on weekdays, with only Route 22 operating until 10 PM or later.



Span and Frequency of Service (Sundays)

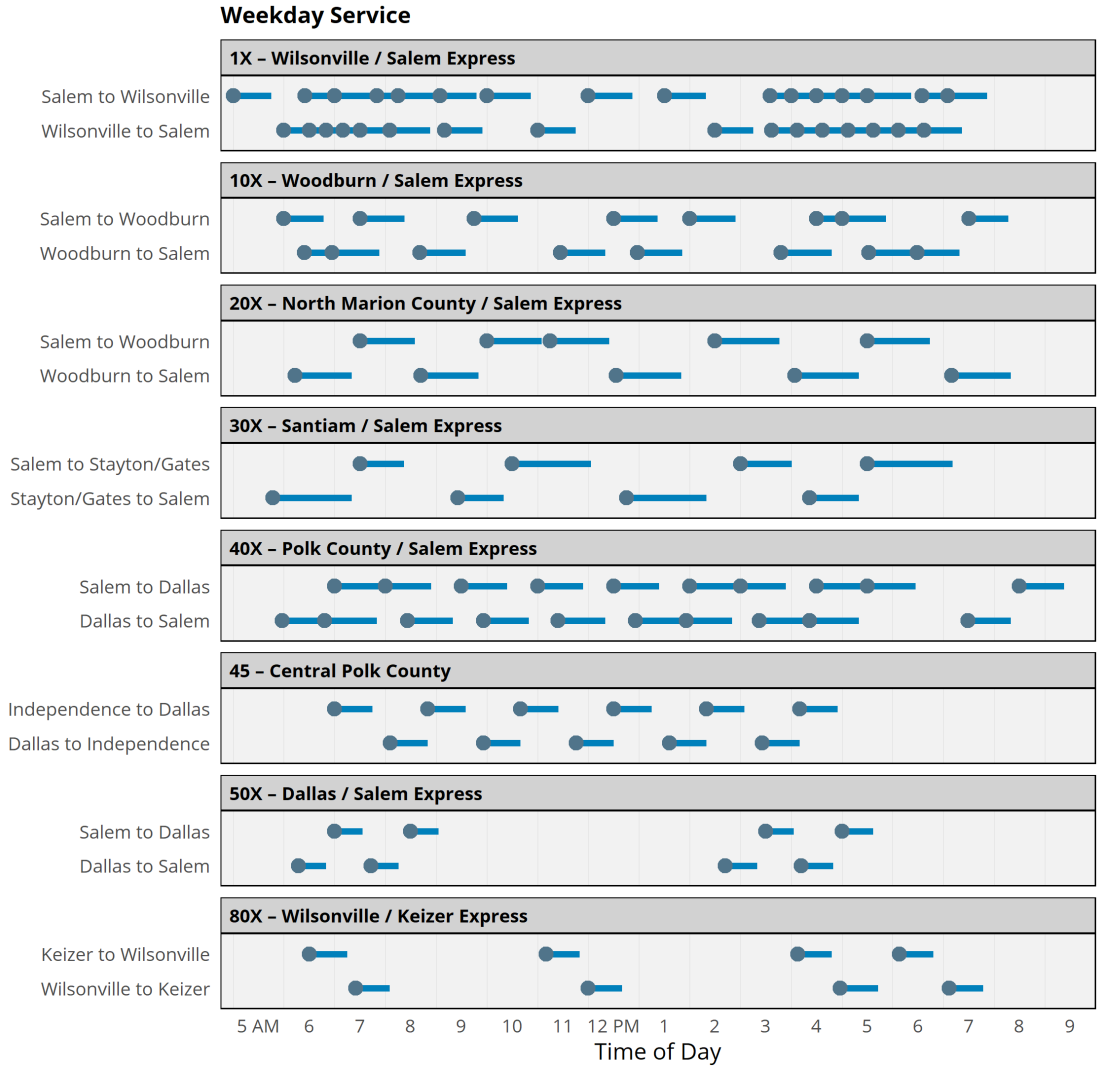
Thirteen Local routes operate on Sundays, and only two of these routes (7 and 11) operate at 30-minute headways. Only one Coverage route – Route 7 – operates on Sunday. The rest of the routes operating on Sunday are Corridor routes.



Span and Frequency of Service – Weekdays

All eight Regional routes operate at different frequencies throughout the day. The adjacent chart show each trip scheduled on weekdays. The dots indicate the start time, and the line indicates the time each trip is in service. Some routes operate at relatively consistent intervals throughout the day, though some are more focused on morning and evening peak commute times.

Cherriots' Service Guidelines recommend Regional routes provide a minimum of two round trips per day on weekdays. All routes currently meet this target.



April 2025

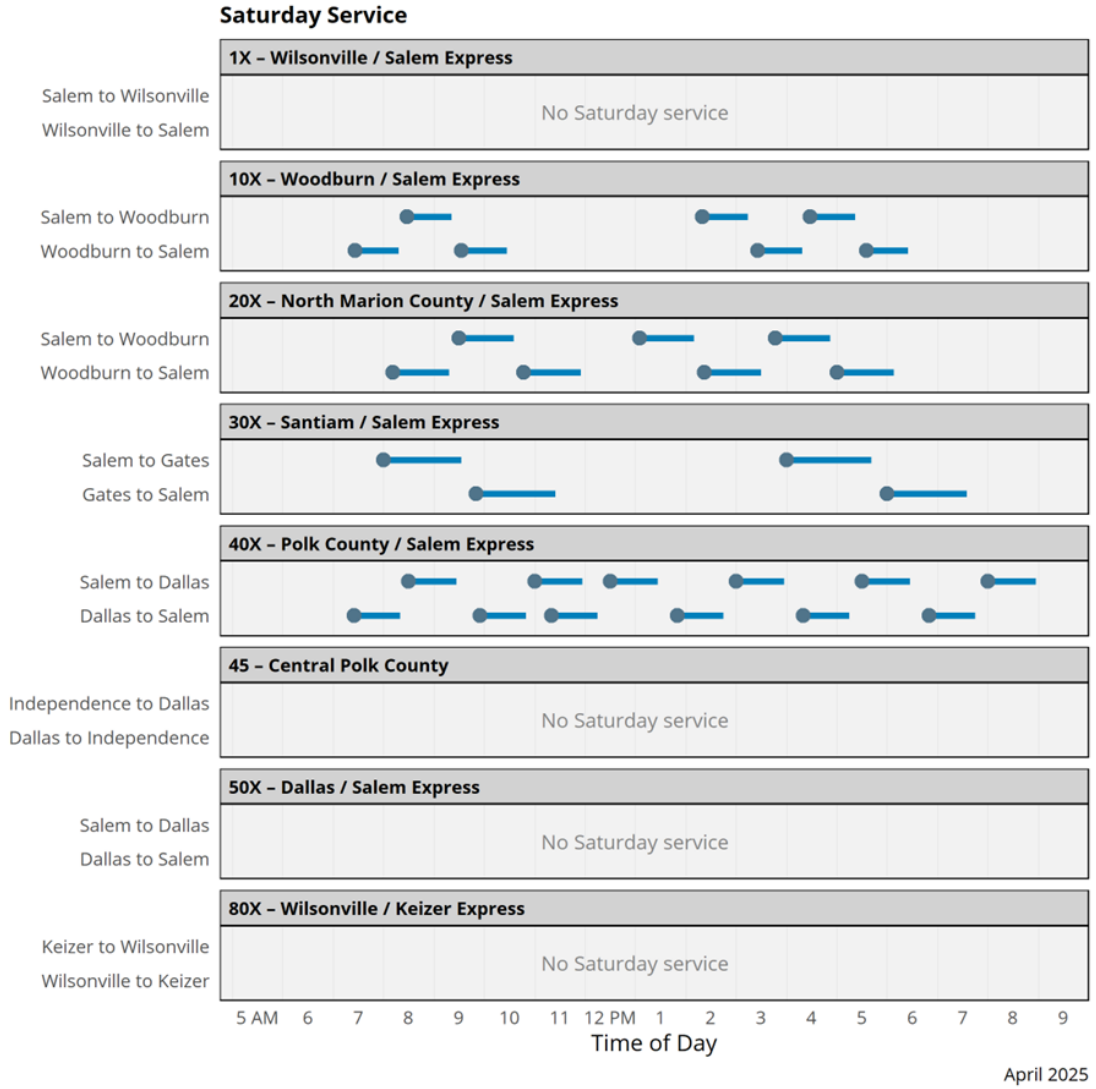
Notes:

- 1X trips include trips operated by Cherriots (six trips) and SMART (10 trips).
- 30X only makes two round trips to Gates but stops from Stayton to Salem receive four daily round trips. Thus, travel times are longer during those trips.

Span and Frequency of Service – Saturdays

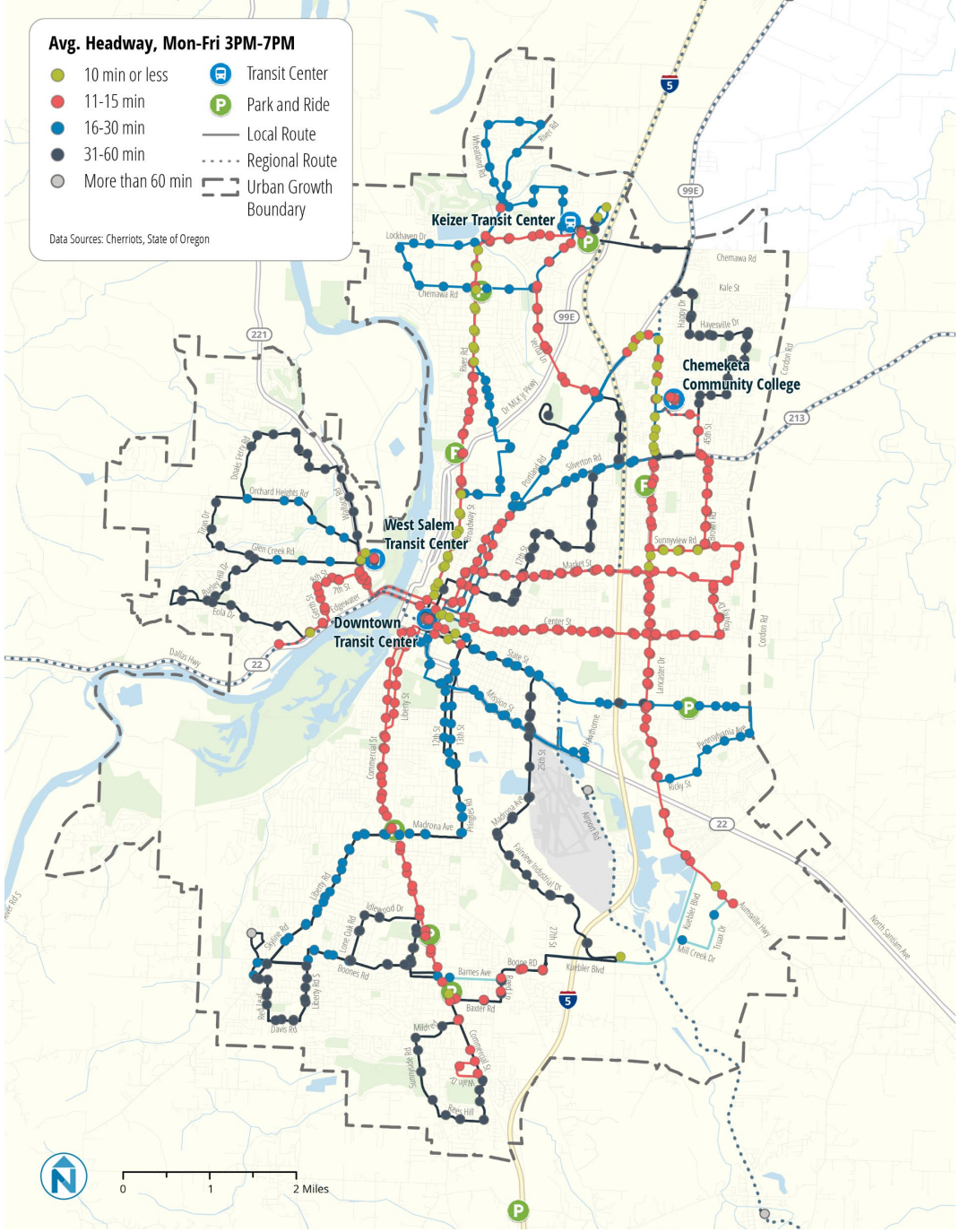
The adjacent chart shows each trip scheduled on Saturdays. Four of the eight Regional routes have Saturday service.

There is no Sunday service on the Regional routes.



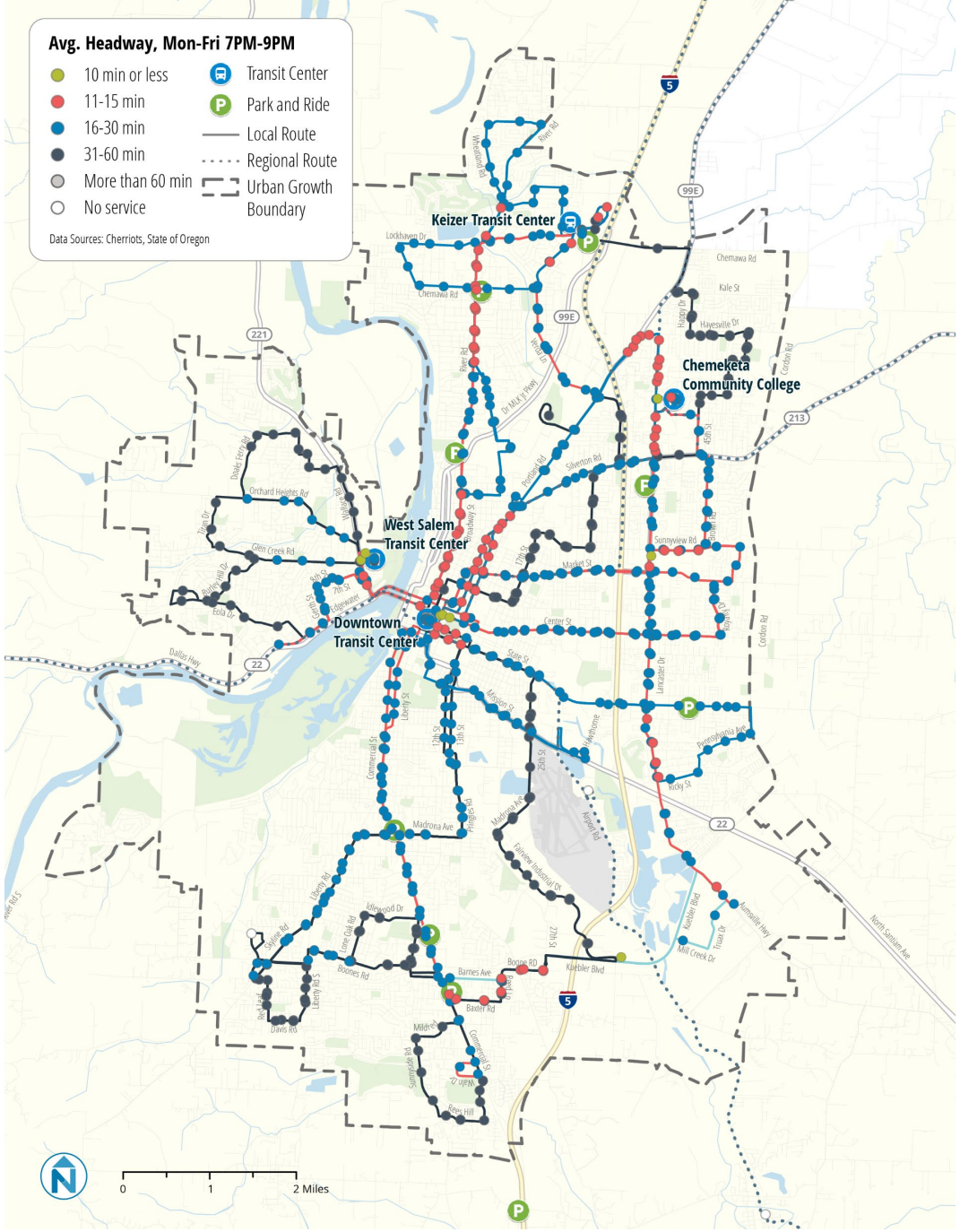
Bus Stop Service Levels, Weekday PM Peak

The adjacent map shows the combined headways for each Local stop in the Cherriots system on weekdays during the afternoon. The stops with the shortest average headways (i.e., the time in between buses) are clustered on the Corridor routes, like Route 11 on Lancaster Drive and Route 19 on Broadway Street NE. The stops with the longest average headways are on the Coverage routes that serve areas with mainly lower-density residential uses.



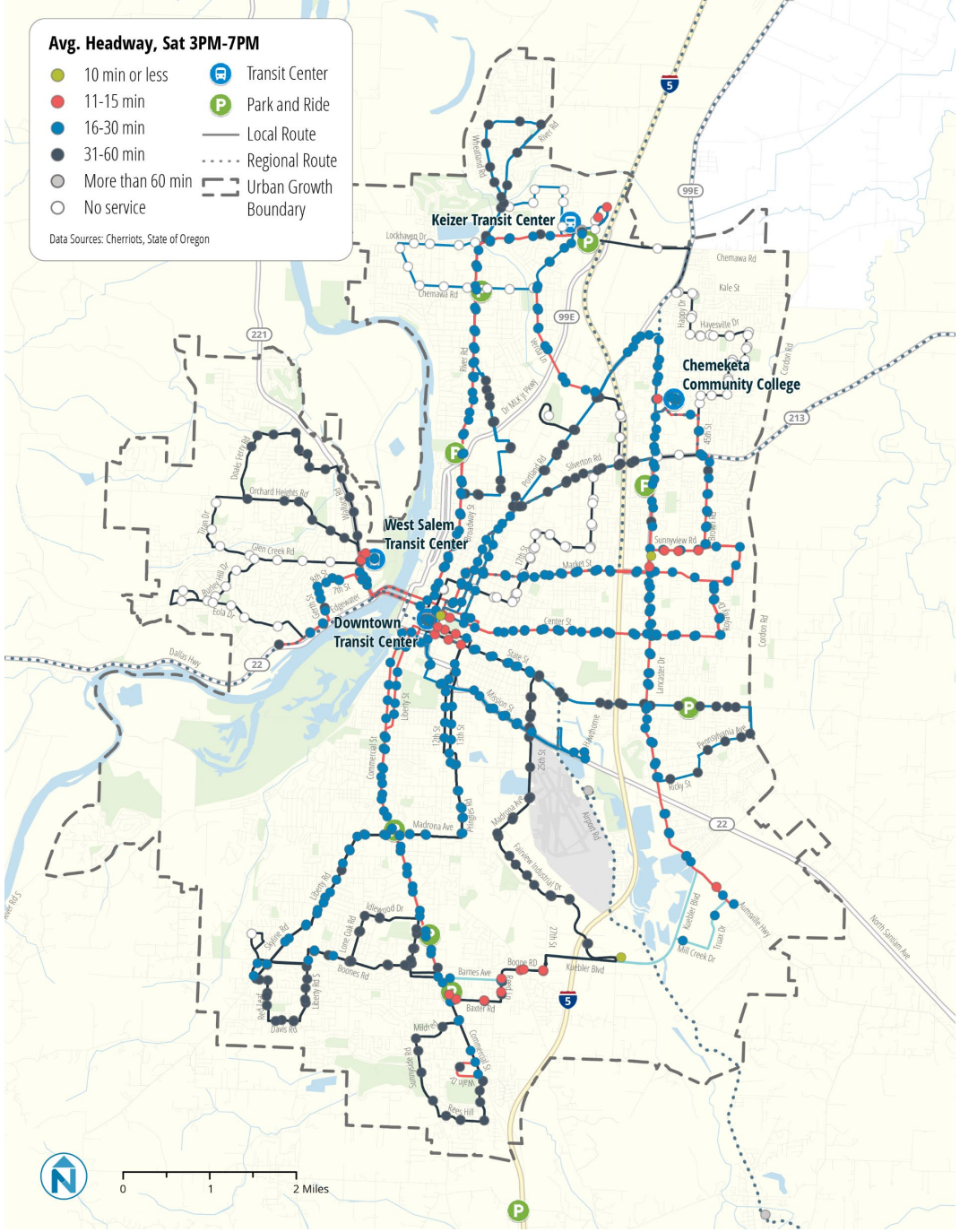
Bus Stop Service Levels, Weekday Evening

During weekday evenings, average headways increase for most of the system. The stops with average headways of 15 minutes or less are found for the most part near transit centers and on major corridors.



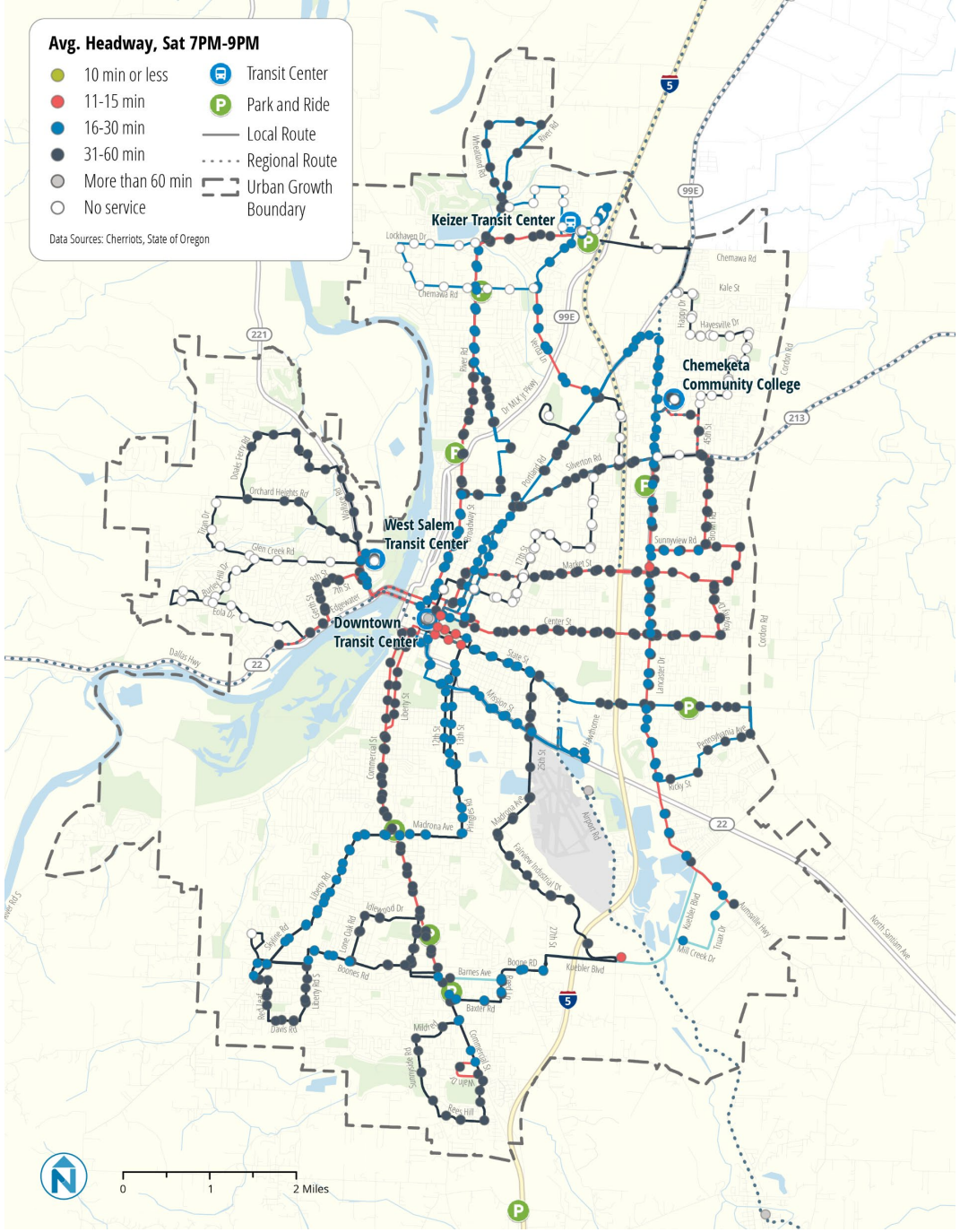
Bus Stop Service Levels, Saturday PM Peak

On Saturdays during the day, there are only a few remaining pockets of stops with average headways of 15 minutes or less: near the Downtown Transit Center, in south Salem where Route 22 and Route 6 overlap, and in east Salem where Routes 2 and 5 overlap. Many of the routes have service every half hour, either from one thirty-minute route or two overlapping hourly routes.



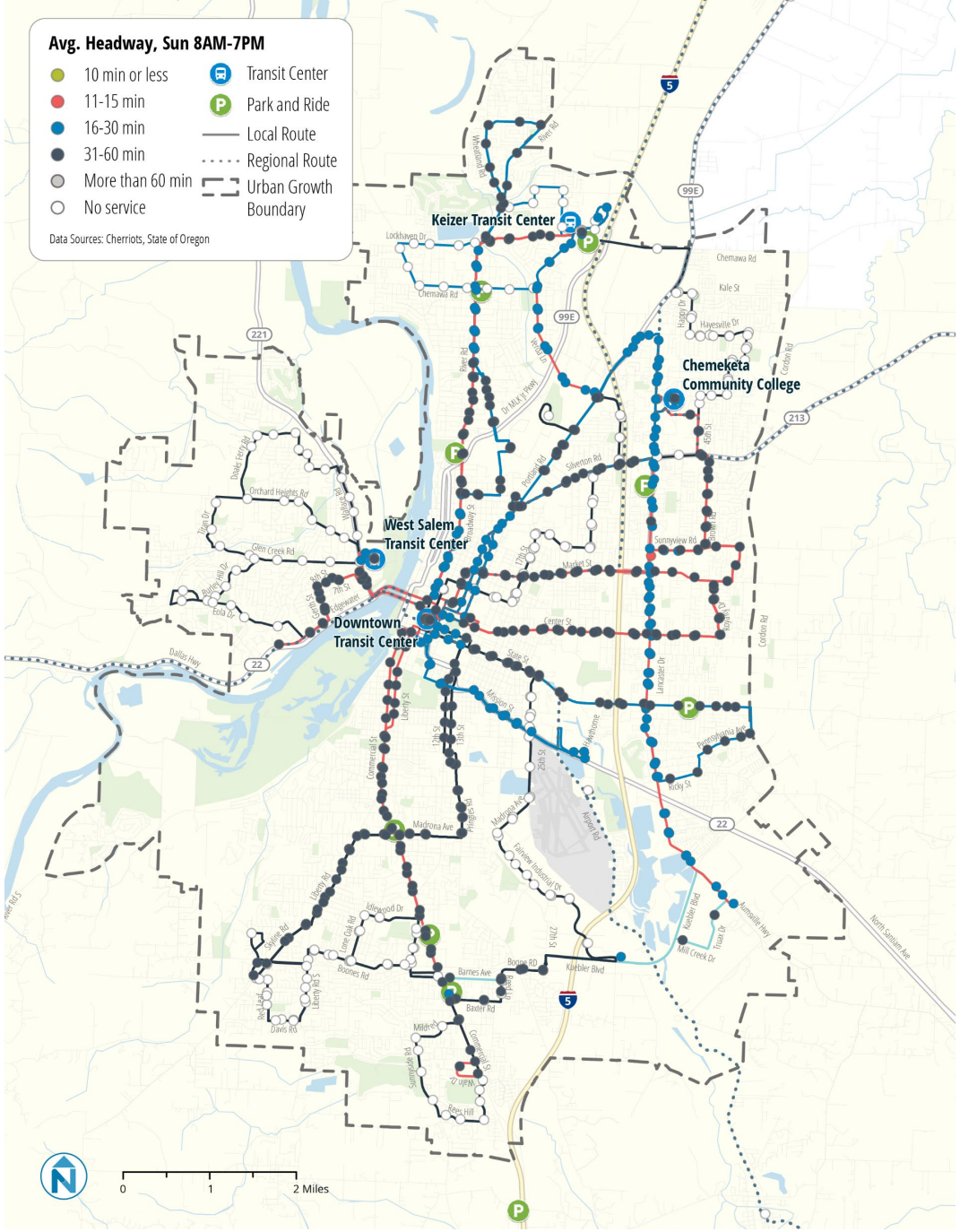
Bus Stop Service Levels, Saturday Evening

On Saturday evenings, most stops have service either every half hour (from one route with 30-minute headways or two routes with hourly headways) or every hour.



Bus Stop Service Levels, Sunday

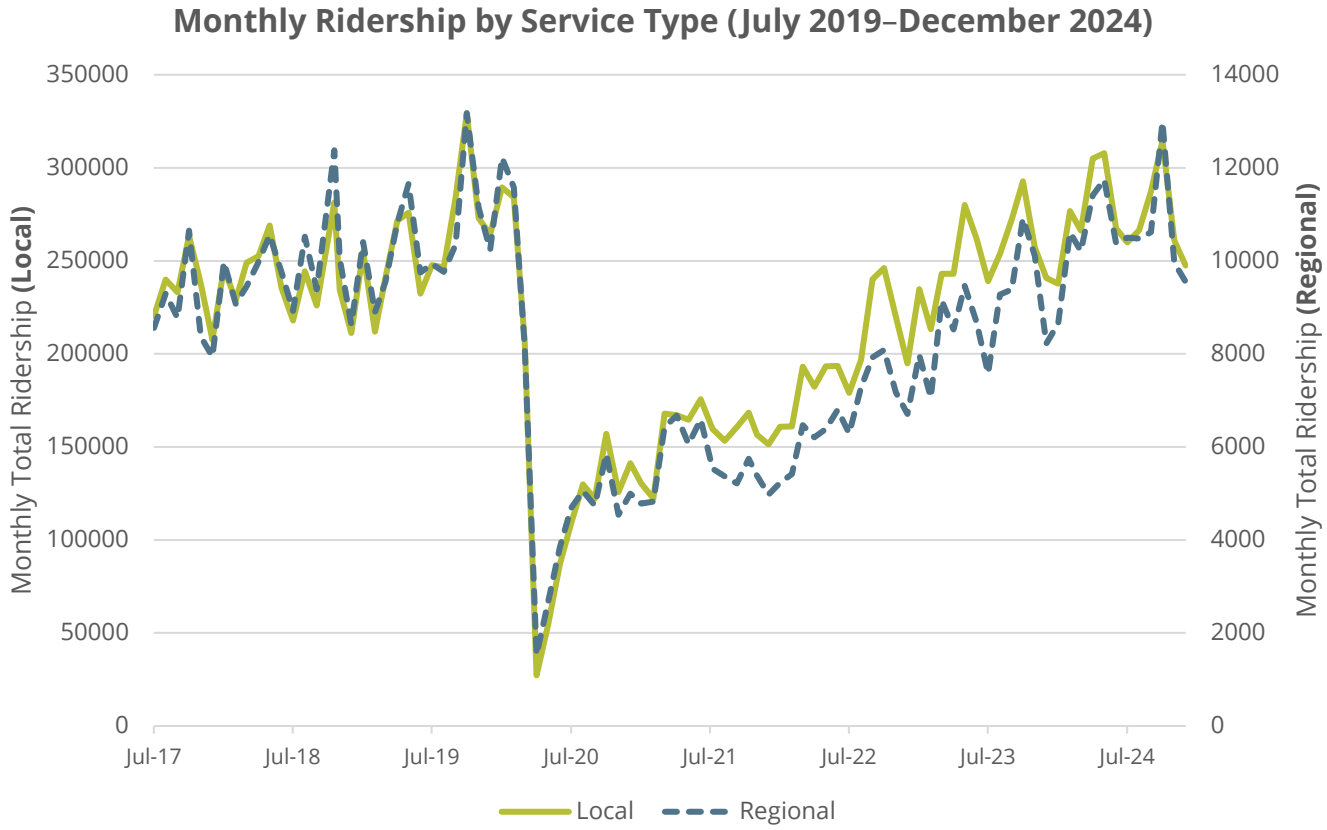
Service is least frequent on Sunday during the day. Most routes end between 8 and 9 PM on Sundays.



Monthly Ridership

Like most transit agencies in the United States, ridership on Cherriots fell sharply during the COVID-19 pandemic. Unlike most transit agencies, however, ridership on Cherriots has generally recovered to pre-COVID levels, though not quite to the pre-COVID peaks. This continued growth in ridership is partially due to the high increase in youth riders after the free youth pass program began in June 2023.

Local ridership peaked in October of 2019 and was close to matching this peak in October of 2024. Regional ridership peaked in October of 2019 and fell just shy of that peak in October of 2024. Cherriots suspended service for six days starting March 31st, 2020, before resuming limited service for essential trips only with mask requirements in place on April 7th. From its lowest point in April of 2020, ridership increased sharply through the rest of 2020 and has followed an upward trajectory since. Average monthly ridership was higher in 2024 than in 2019.



Note: The axis for Local service is on the left, and the axis for Regional service is on the right

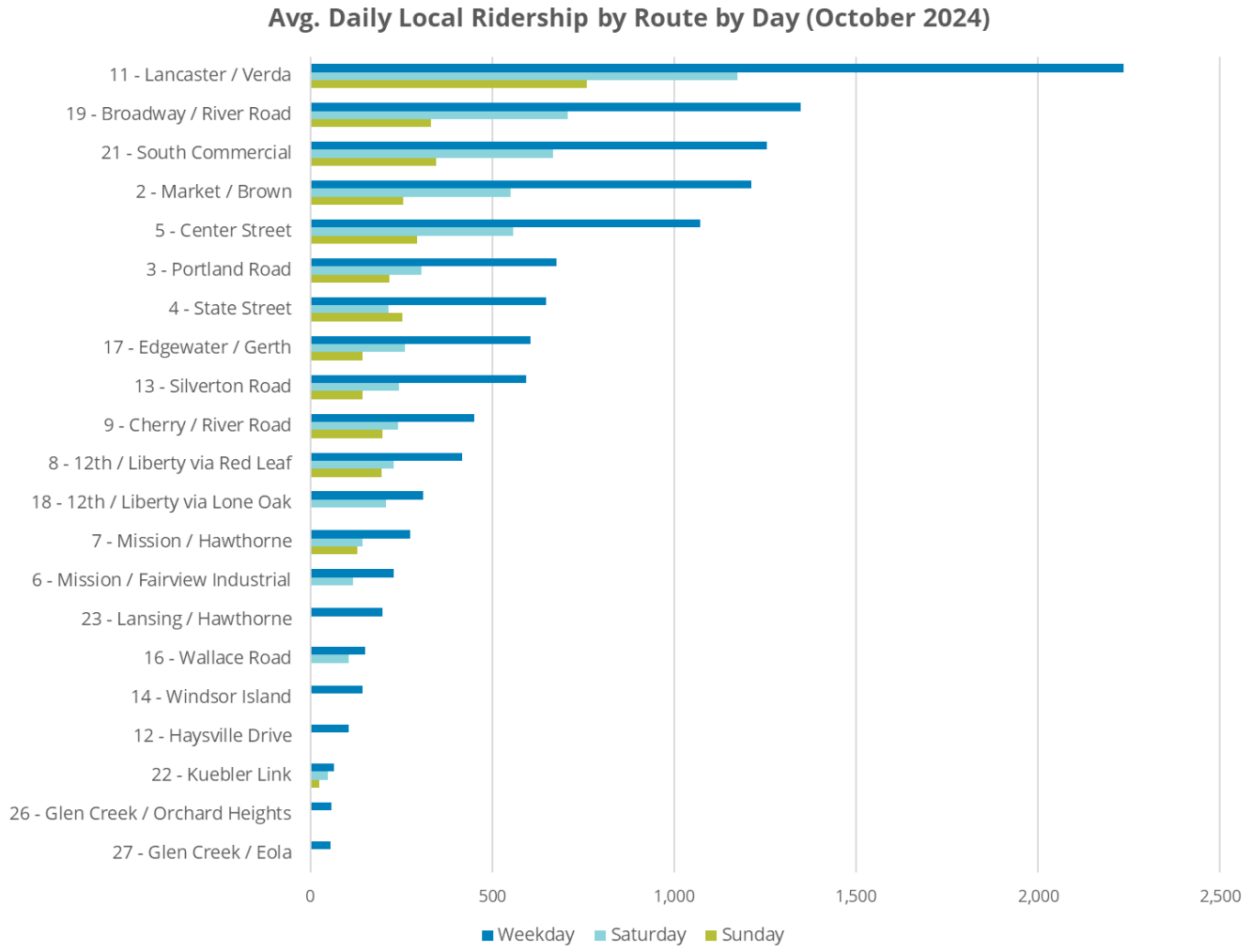
Daily Ridership by Route

Of the Local routes, Route 11 has the highest ridership by a substantial margin. This is largely due to the length of the route and surrounding land uses that have high rates of travel by transit users.

Other routes that surpass the goal of 1,000 riders per weekday are Routes 19, 21, 2, and 5. These routes are all Frequent service routes with service every 15 minutes during peak hours on weekdays.

The two lowest ridership routes are both found in West Salem. These are Basic routes with hourly headways and operate on weekdays only.

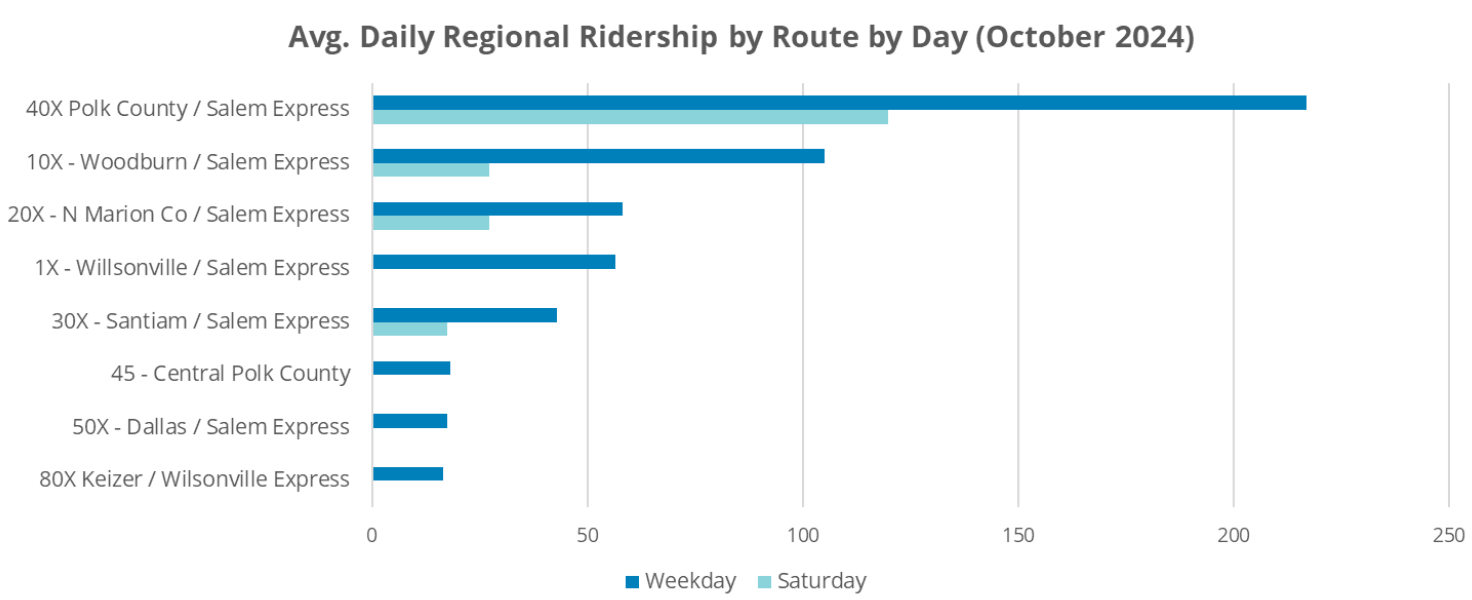
Route 22 - Kuebler Link is the only Frequent service route of the ten lowest ridership routes. Route 22 is also the newest route in the system, with service that began in May of 2024. Route 22 operates with 25-foot buses rather than the standard 35- or 40-foot buses.



Daily Ridership by Route

Of the Regional routes, 40X Polk County/Salem Express has the highest ridership, while 80X Keizer/Wilsonville Express has the lowest. Ridership is correlated with service frequency: Route 40X has the highest number of daily trips of the Regional routes at ten trips a day, while Route 80X has only four trips a day between Keizer and Wilsonville.

For the four Regional routes with Saturday service (10X, 20X, 30X and 40X), ridership is substantially lower on Saturdays than on weekdays.



Monthly Ridership

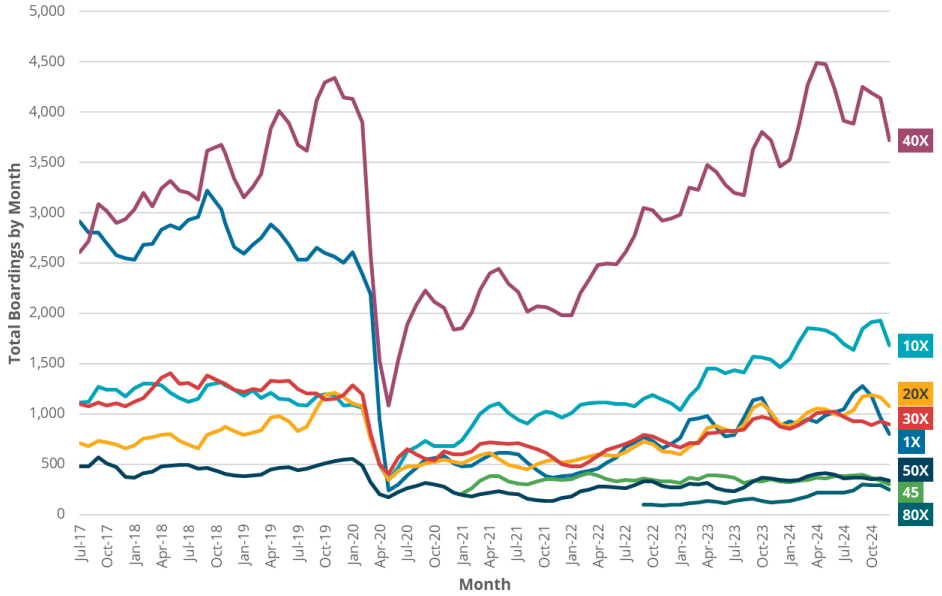
The two adjacent charts show the trend in monthly weekday and Saturday ridership on the Regional routes from July 2017 through December 2024. The trends show relatively steady ridership pre-COVID, with consistent growth on all routes since 2021. Routes 10X, 20X, and 40X have met or exceeded their pre-COVID ridership levels.

Route 45 was introduced in 2021 and has experienced relatively stable ridership. It provides supplemental service to 40X, but does not connect into Salem, thereby improving frequency for trips within or between Dallas, Monmouth, and Independence.

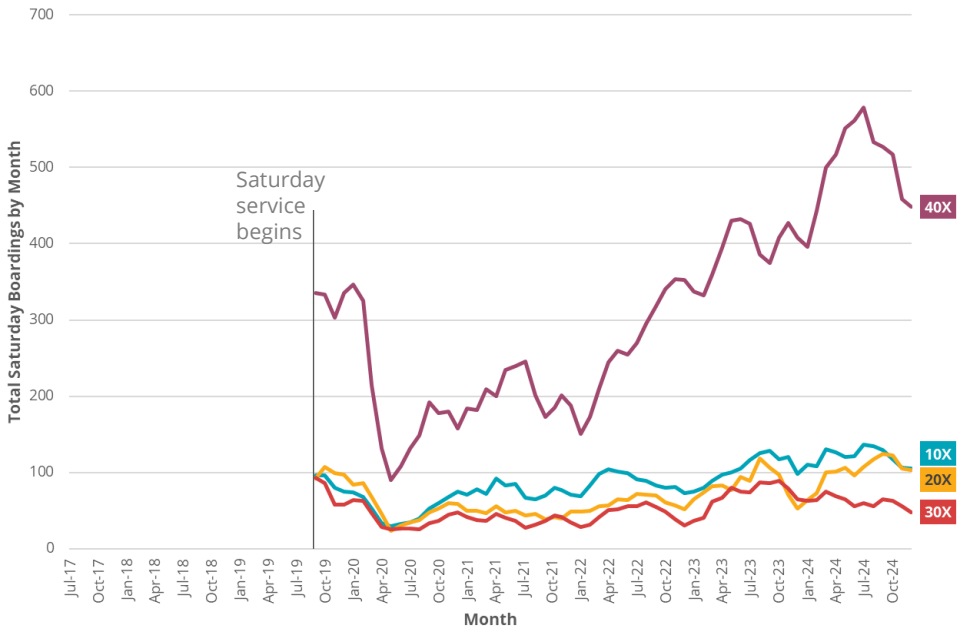
Route 80X has seen steady growth since its introduction in 2022. The route provides direct service between Wilsonville and Woodburn that previously did not exist, as well as providing service to Woodburn's Memorial Transit Center and Park and Ride (Routes 10X and 20X serve the downtown Woodburn Transit Center and Bi-Mart on Mt. Hood Avenue but do not serve the Memorial Transit Center).

Saturday service began on four routes in 2019. All routes have seen stable ridership growth. However, the increase on Route 40X has been very strong, and corresponds to the increase in ridership on weekdays for Route 40X.

Weekday Ridership by Month, Regional Routes (July 2017 – December 2024)



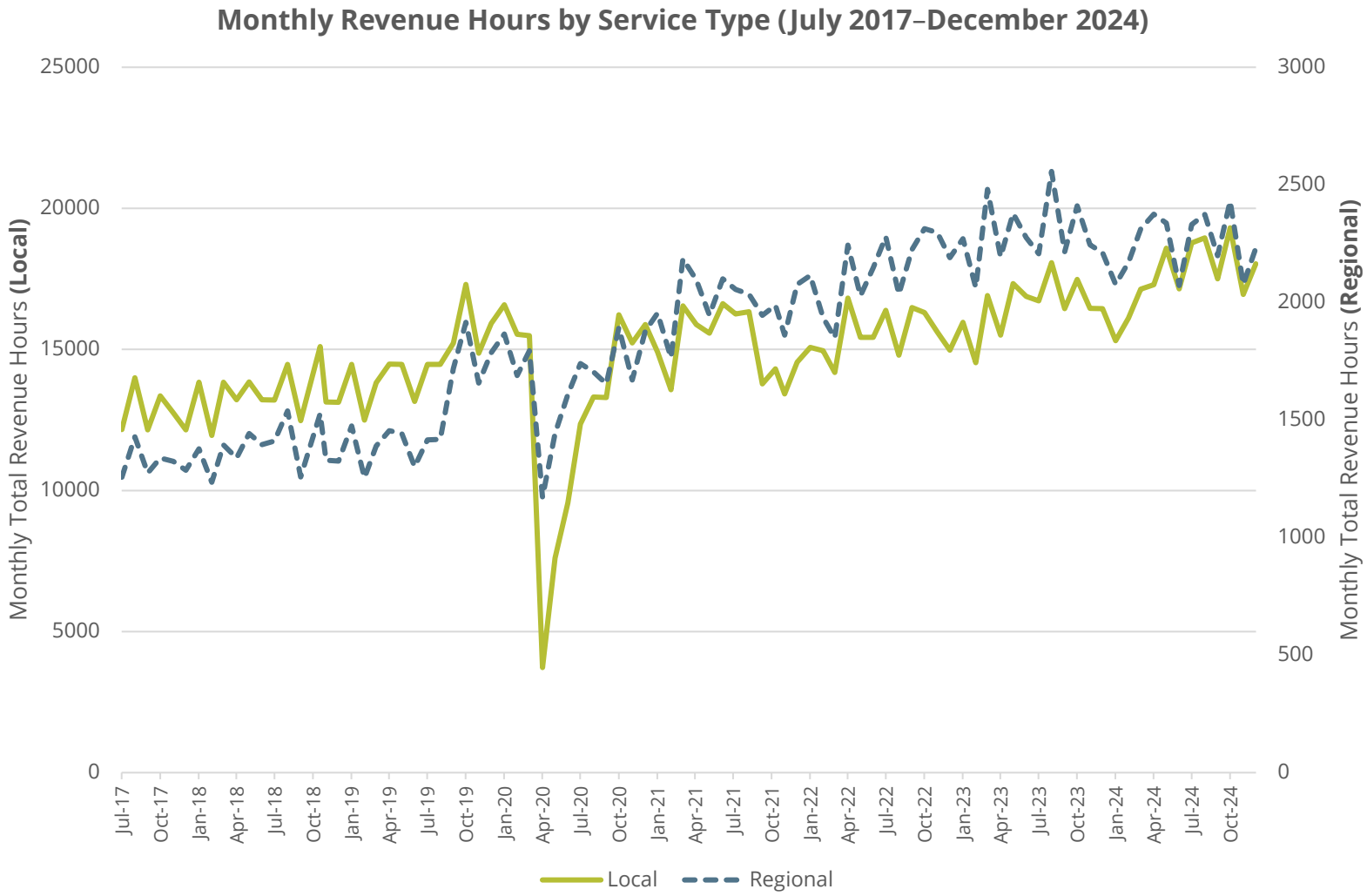
Saturday Ridership by Month, Regional Routes (July 2017 – December 2024)



Monthly Revenue Hours

This chart shows the total revenue hours per month for Local and Regional service.

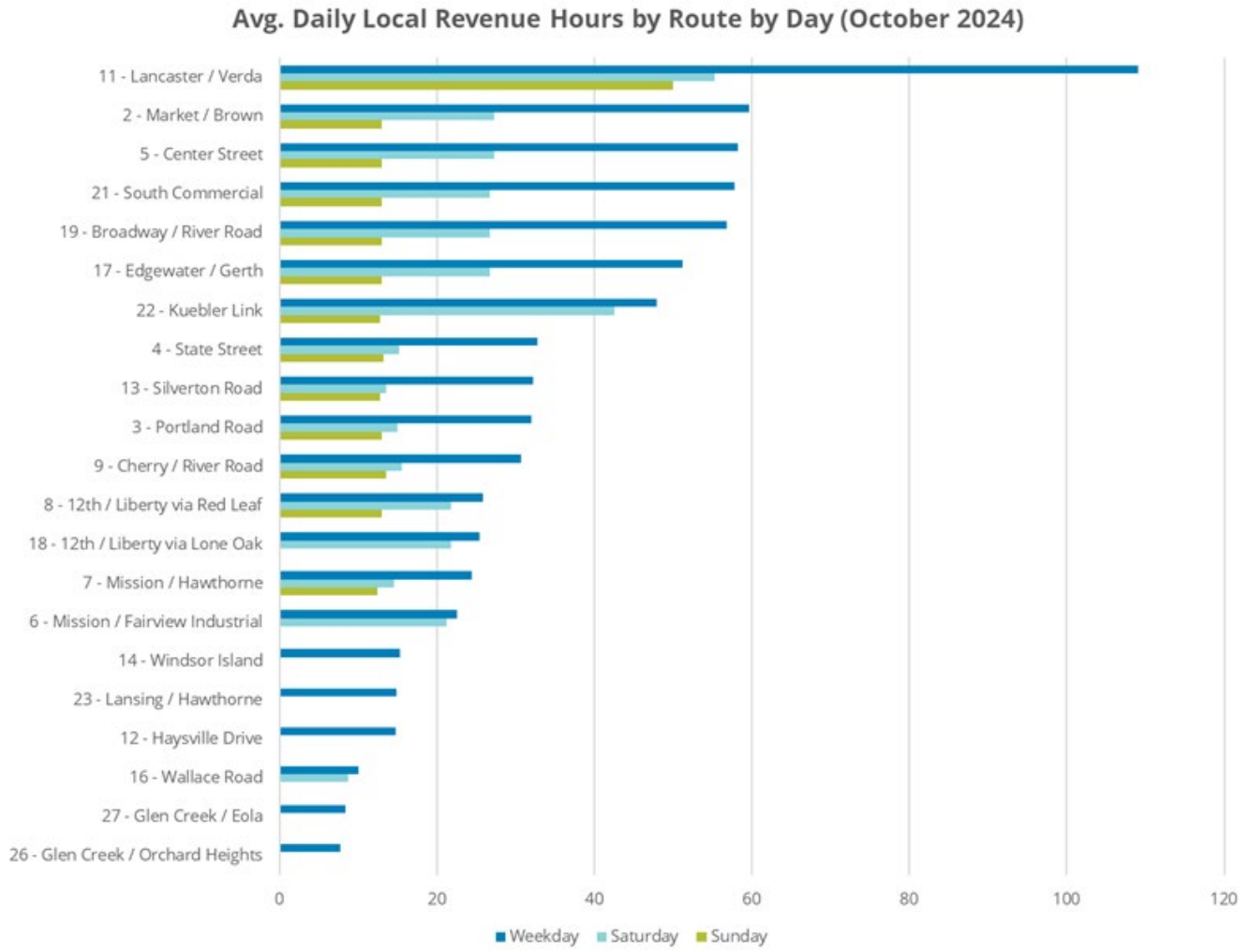
In 2019, revenue hours increased as Cherriots resumed Saturday service for the first time in a decade with funding from House Bill 2017. The steep drop in 2020 represents the six-day closure of all Cherriots service during the early days of COVID-19, after which service resumed at slightly lower levels. In April of 2021, revenue hours increased as STIF funding made Sunday service possible for the first time in Cherriots history. However, operator shortages slowed the roll-out of increased service levels. In Spring 2024, Local service hours were increased as Route 22 was introduced.



Note: The axis for Local service is on the left, and the axis for Regional service is on the right

Daily Revenue Hours by Route

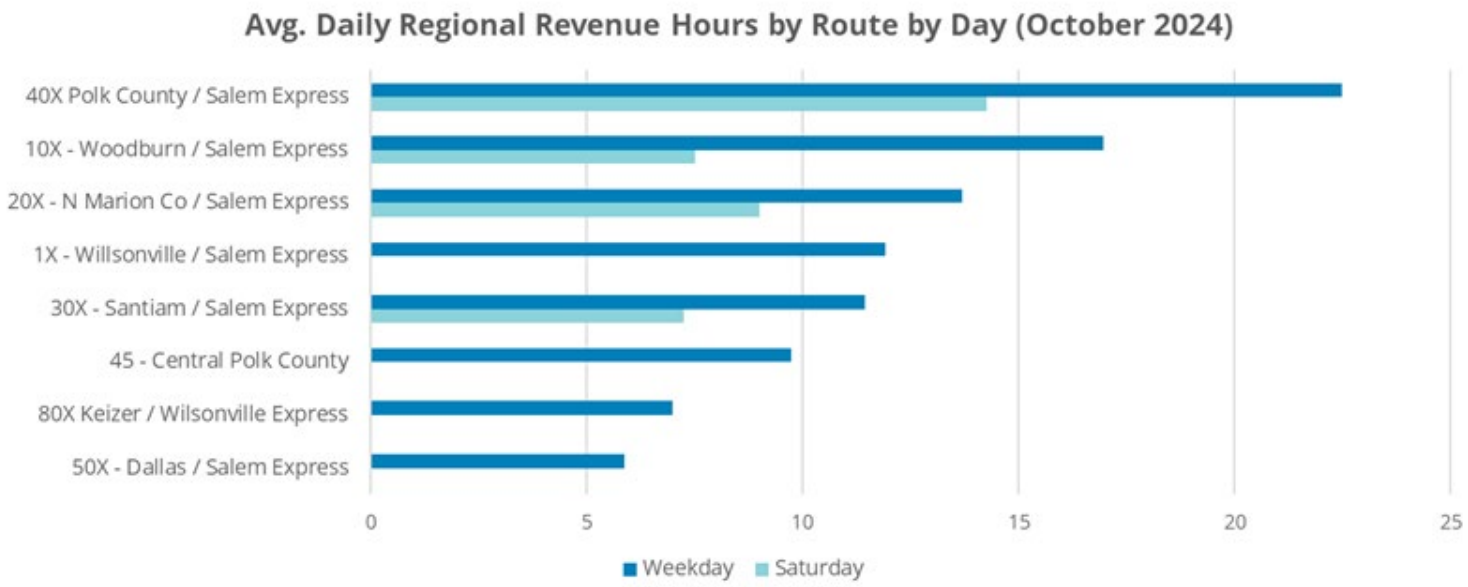
Daily revenue hours is a function of the daily service span and the number of daily vehicles that serve that route. Therefore, revenue hours approximate the range of operating costs of various routes. Revenue hours is the amount of time the buses operate in service (picking up and dropping off passengers), including recovery time at the end of each trip. Route 11 has the highest daily revenue hours by a large margin.



Daily Revenue Hours by Route

The Regional routes have more limited service than many of the Local routes in terms of frequency, service hours, and weekend service. Therefore, they also have lower daily revenue hours.

Route 40X has the highest revenue hours, while Route 50X has the lowest.

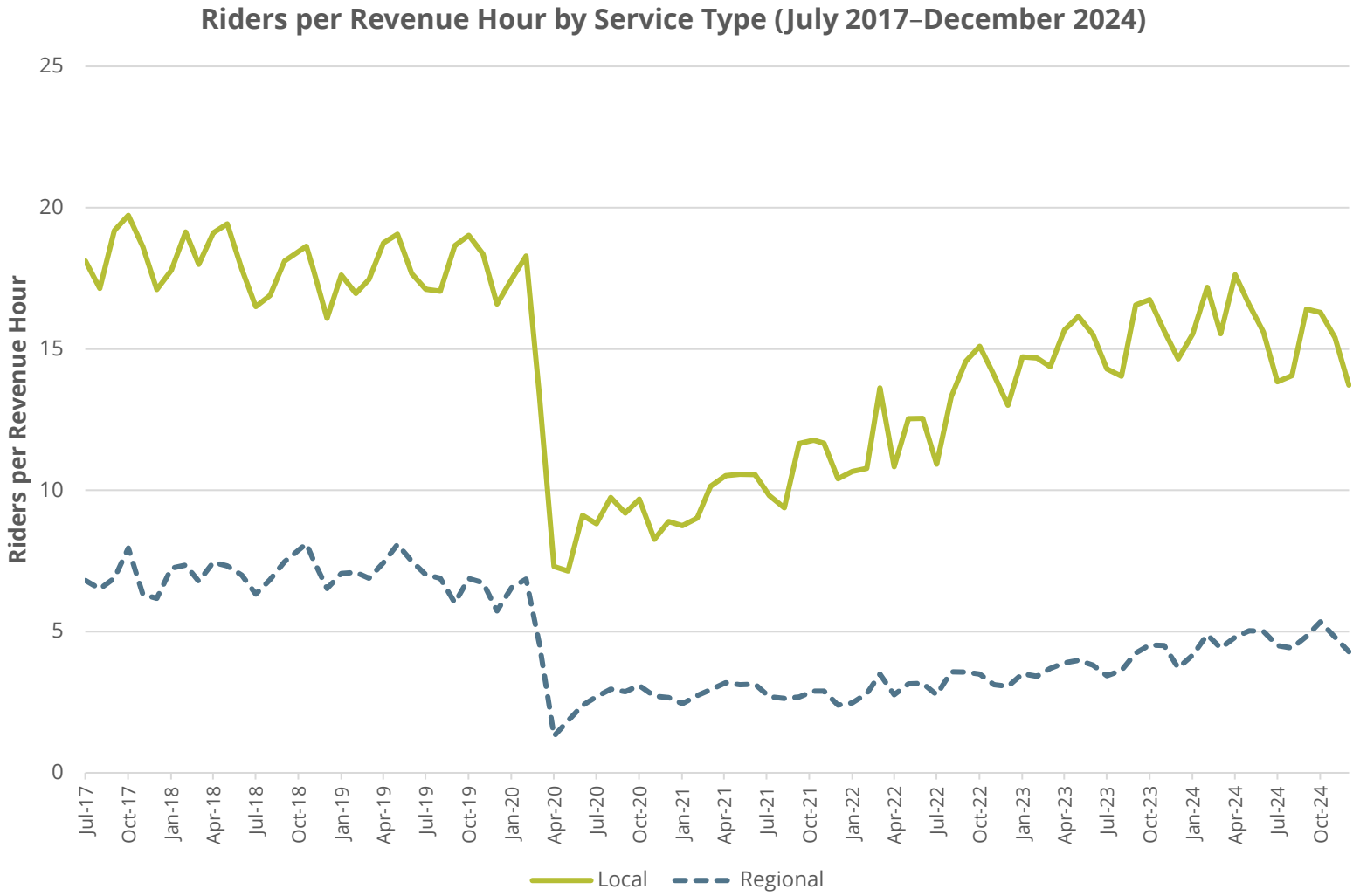


Riders Per Revenue Hour

Riders per revenue hour is used as a measure of service productivity.

Productivity on Local routes has rebounded but is still just below pre-COVID levels, whereas Regional routes have remained at a lower level than they were before COVID, despite an upward trend since spring of 2024.

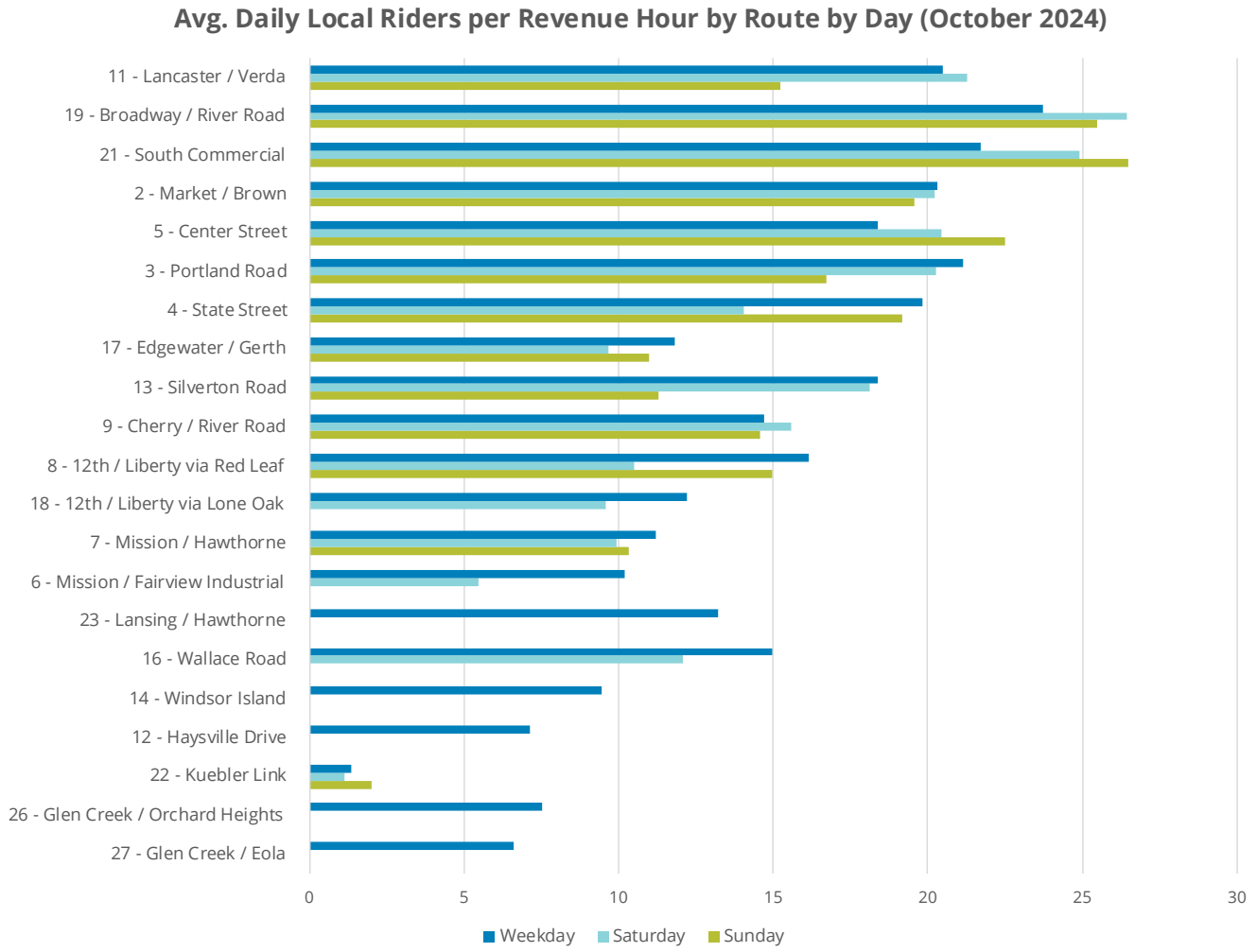
Between 2017 and 2020, the number of riders per revenue hour was between 17 and 19 riders for Local routes and between 6 and 8 for Regional routes. In 2024, Local routes averaged 15.6 riders per revenue hour, and Regional routes averaged 4.7 riders per revenue hour.



Riders Per Revenue Hour by Route

Route 19 has the highest average daily riders per revenue hour, followed by Route 21. Both are frequent-service routes. Route 3, a Standard route with 30-minute headways during weekday peak hours, has the third highest riders per revenue hour. Route 22, Route 26, and Route 27 are the least productive routes.

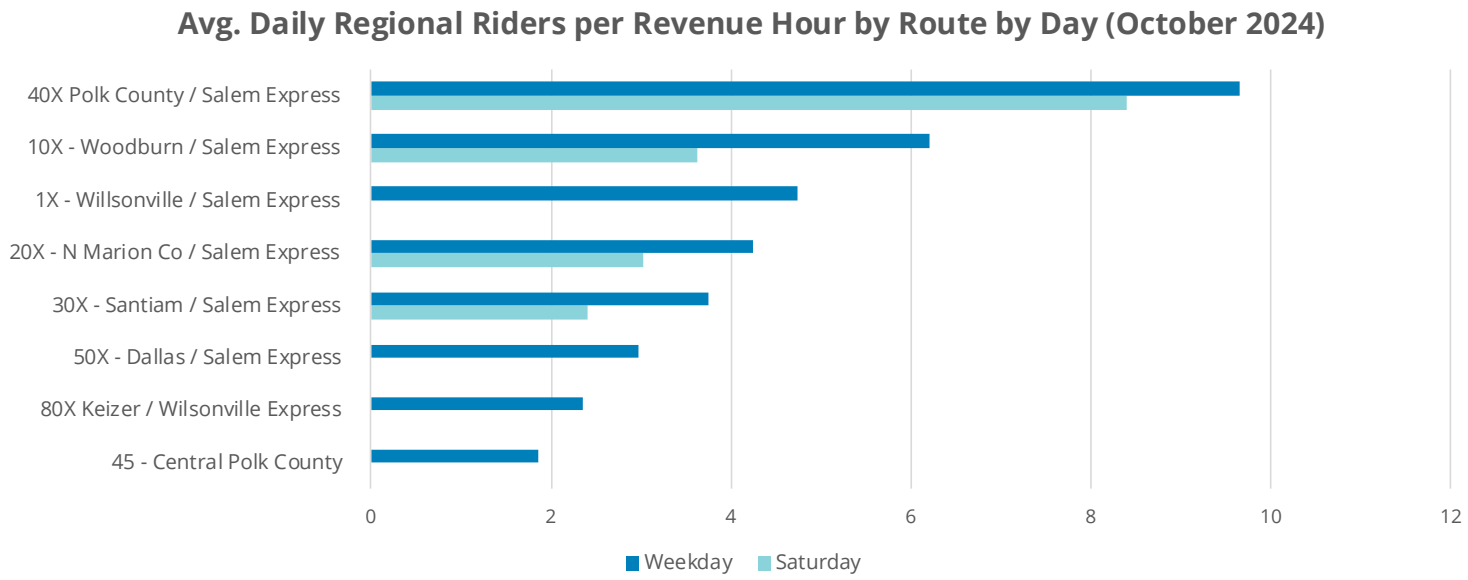
Riders per revenue hour can help transit agencies calibrate the appropriate amount of service to provide on any given day. For some of the routes, weekday productivity is lower than Saturday and/or Sunday service, even though ridership is higher. This is a function of lower revenue hours on weekends due to shortened service spans and decreased frequency. These could be potential opportunities for service increases.



Riders Per Revenue Hour by Route

Productivity for regional services can be expressed in two ways. The first productivity metric is riders per revenue hour, which measures the number of boardings relative to the cumulative hours that individual buses are operating on the route. As shown in the adjacent chart, the routes with the highest productivity using this metric are Routes 40X, 10X and 1X. Route 40X's weekday productivity from October 2024 is nearly 10 passengers per revenue hour. Route 45, the only deviated fixed route in the system, is the lowest productivity route in the entire system, with less than two riders per revenue hour.

Per Cherriots' Service Guidelines, Commuter express and Regional express routes have a target of 10 riders per hour. All routes fall below this threshold, though 40X is close. If recent ridership trends continue, it is likely this route will surpass the target.

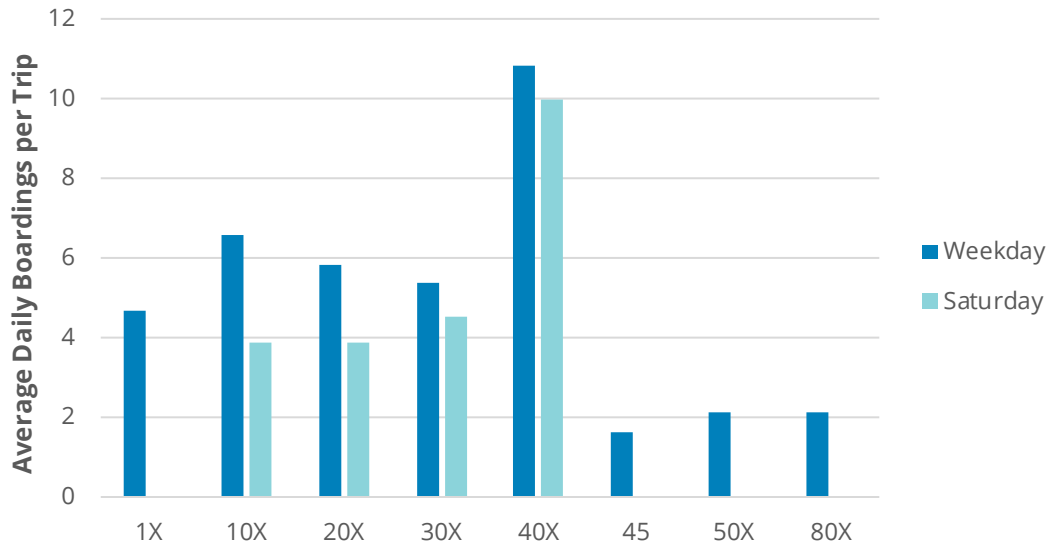


Riders Per Trip by Route

Another way of evaluating productivity of the Regional routes is riders per trip. This metric accounts for limited schedules and longer distances of Regional routes.

Overall, Route 40X performs best on weekdays and Saturdays with 10 to 11 boardings per trip (see adjacent chart). Routes 10X, 20X, and 30X follow with approximately 6 boardings per trip. Routes 1X, 45, 50X, and 80X have the fewest riders per trip at approximately 2 riders per trip or less. Cherriots does not have a standard or guideline for riders per trip.

Avg. Daily Riders per Trip on Regional Routes (October 2024)



Riders Per Revenue Hour by Category

Cherriots sets different productivity targets for the two types of Local routes, Corridor routes and Coverage routes:

- Corridor routes: 20 rides/revenue hour
- Coverage routes: 10 rides/revenue hour

Routes that are shaded in green met these productivity targets on weekdays in October 2024.

Corridor Routes

Route		Rides/Rev Hour
8	12th / Liberty	11.9
18	12th / Liberty	11.9
17	Edgewater St	11.6
9	Cherry / River Rd	14.8
13	Silverton Rd	18.0
5	Center St	18.7
4	State St	19.4
11	Lancaster / Verda	20.2
2	Market / Brown	20.3
3	Portland Rd	20.8
21	South Commercial	22.1
19	Broadway / River Rd	24.0

Coverage Routes

Route		Rides/Rev Hour
22	Kuebler Link	1.3
27	Glen Creek / Eola	6.6
12	Hayesville Dr	7.1
26	Glen Creek / Orchard Heights	7.5
14	Windsor Island Rd	9.4
6	Mission / Fairview Industrial	9.5
7	Mission / Hawthorne	11.0
23	Lansing / Hawthorne	13.2
16	Wallace Rd	14.6

Note: Shading denotes routes that met productivity target on weekdays in October 2024

Riders Per Revenue Hour by Category

Cherriots sets different productivity targets for the two types of regional routes, Regional Express and Deviated Fixed-Route:

- Regional Express: 10 rides/revenue hour
- Deviated Fixed-Route: 5 rides/revenue hour

No routes met their productivity targets on weekdays in October 2024.

Regional Express

Route		Rides/Rev Hour
80X	Keizer / Wilsonville	2.4
50X	Dallas / Salem	3.0
30X	Santiam / Salem	3.6
20X	N Marion Co / Salem	4.1
1X	Wilsonville / Salem	4.7
10X	Woodburn / Salem	6.0
40X	Polk County / Salem	9.5

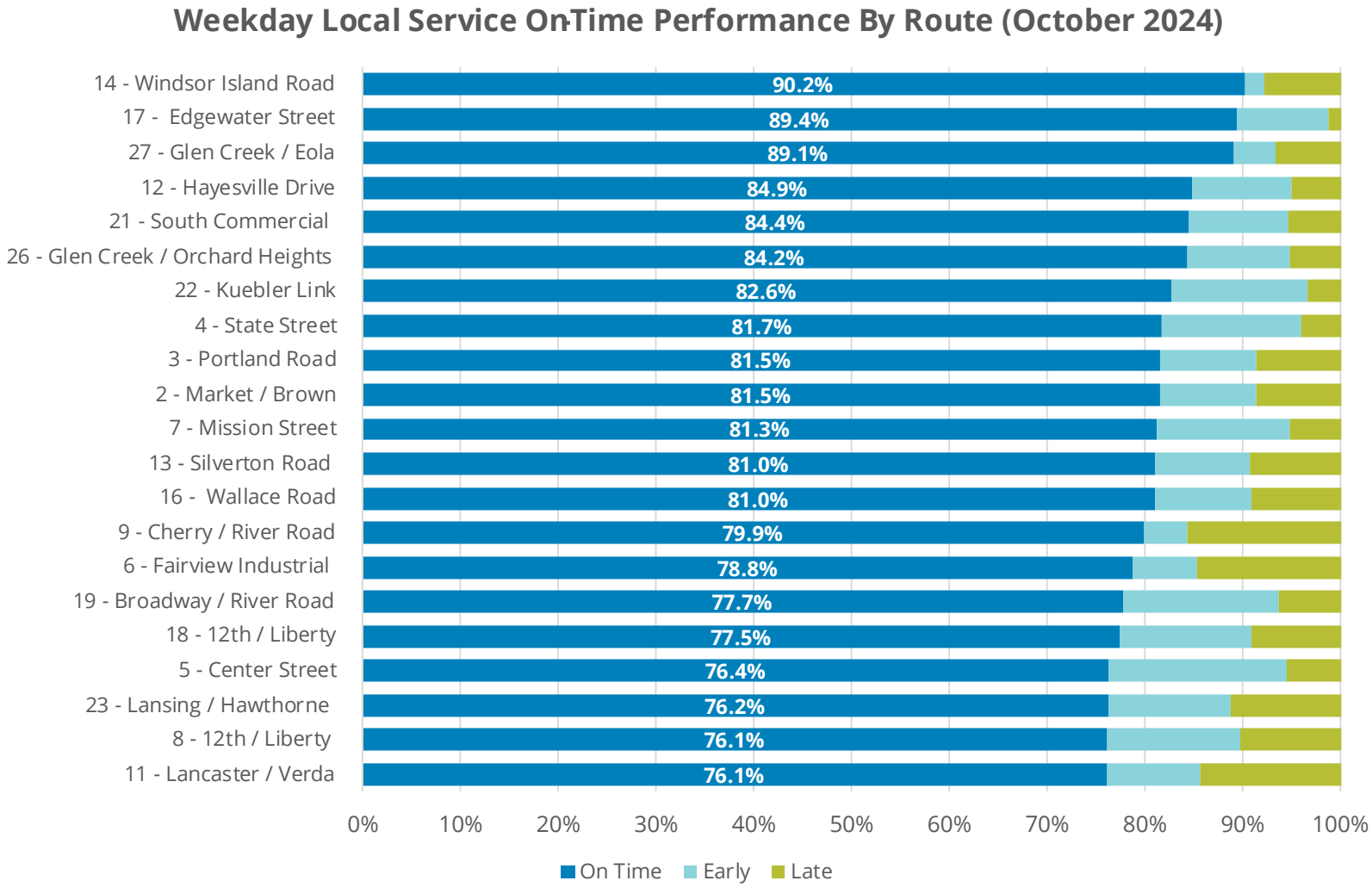
Deviated Fixed-Route

Route		Riders/Rev Hour
45	Central Polk County	1.9

Weekday On-Time Performance

Cherriots' on-time performance standard is that at least 85% of buses should depart time points no more than five minutes late. During peak periods, this goal is 75%. No buses should be leaving their timepoints early. On average, 81.5% of Local weekday buses are on-time, 10.5% are early, and 8% are late.

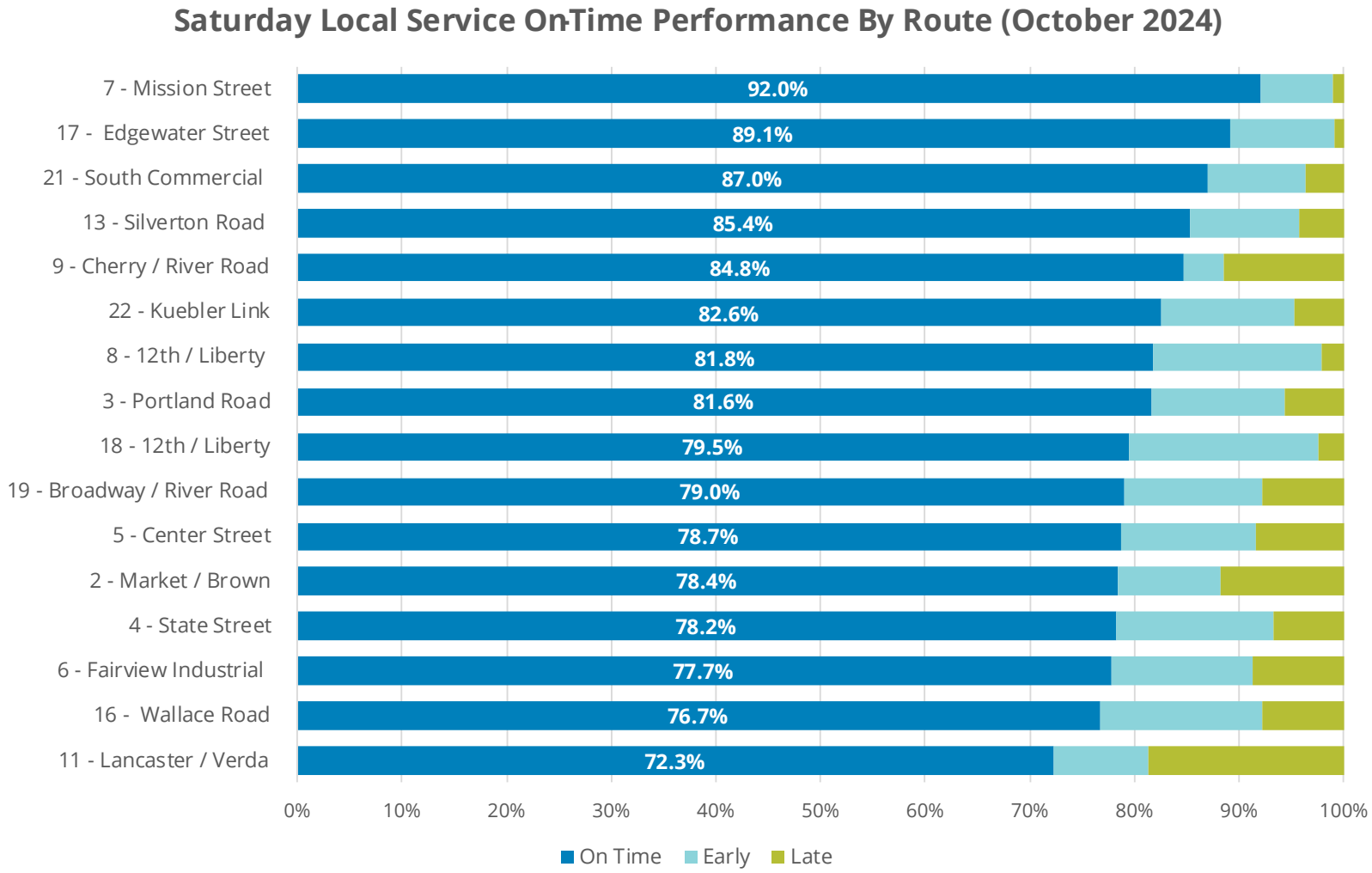
The route with the worst on-time performance, Route 11, is also the highest ridership route. This is significant because wait times multiplied across many riders leads to high daily passenger delay. The three routes with the lowest on-time performance operate in different parts of the city, indicating that the delay is not necessarily concentrated to a particular area.



Saturday On-Time Performance

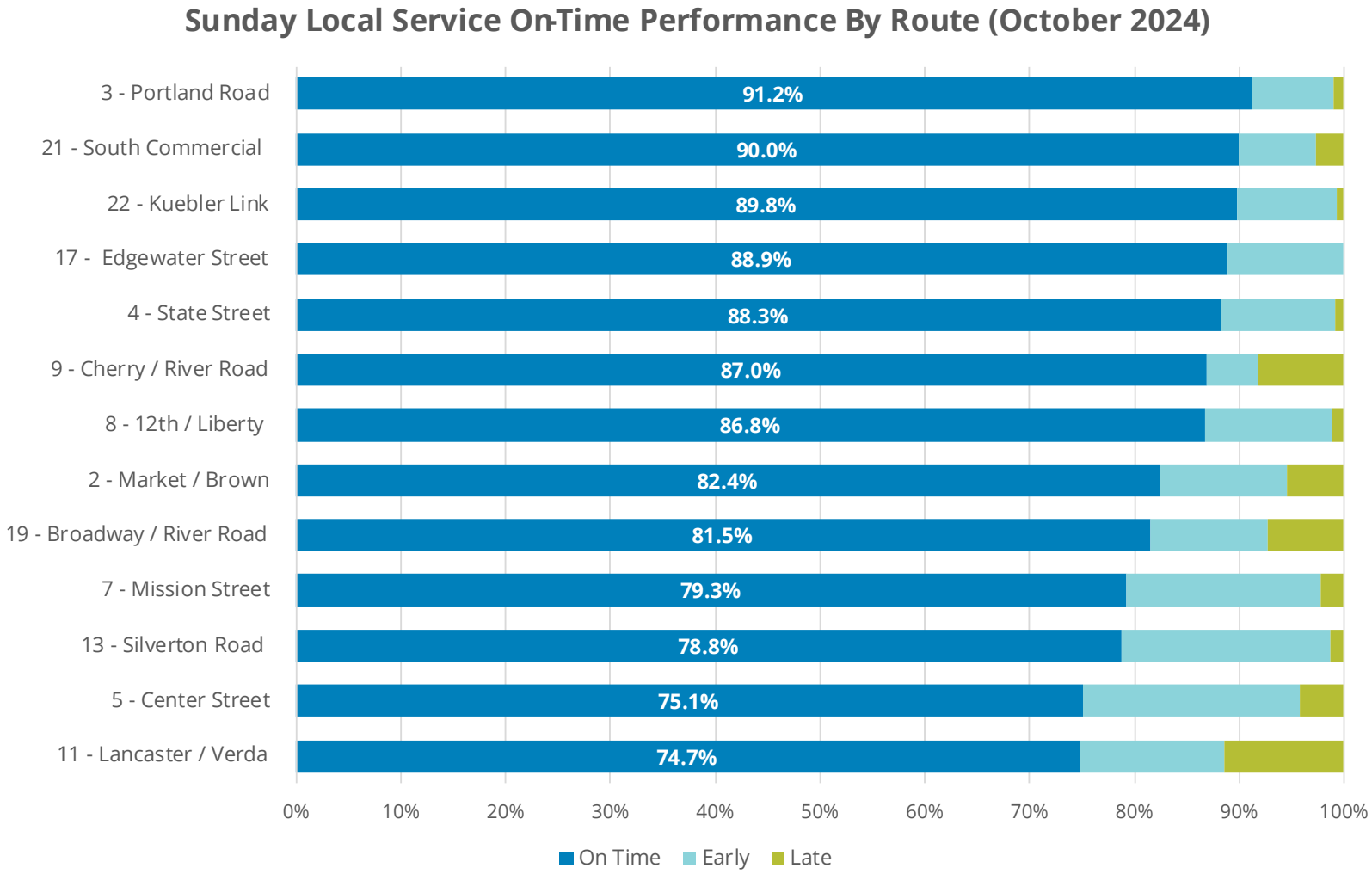
On-time performance for Local buses on Saturdays has a larger range than on weekdays, with the lowest performing route (Route 11) operating 72% on-time, and the highest performing route (Route 7) operating 92% on-time.

On Saturdays, 81.6% of buses are on-time, 11.8% are early, and 6.6% are late.



Sunday On-Time Performance

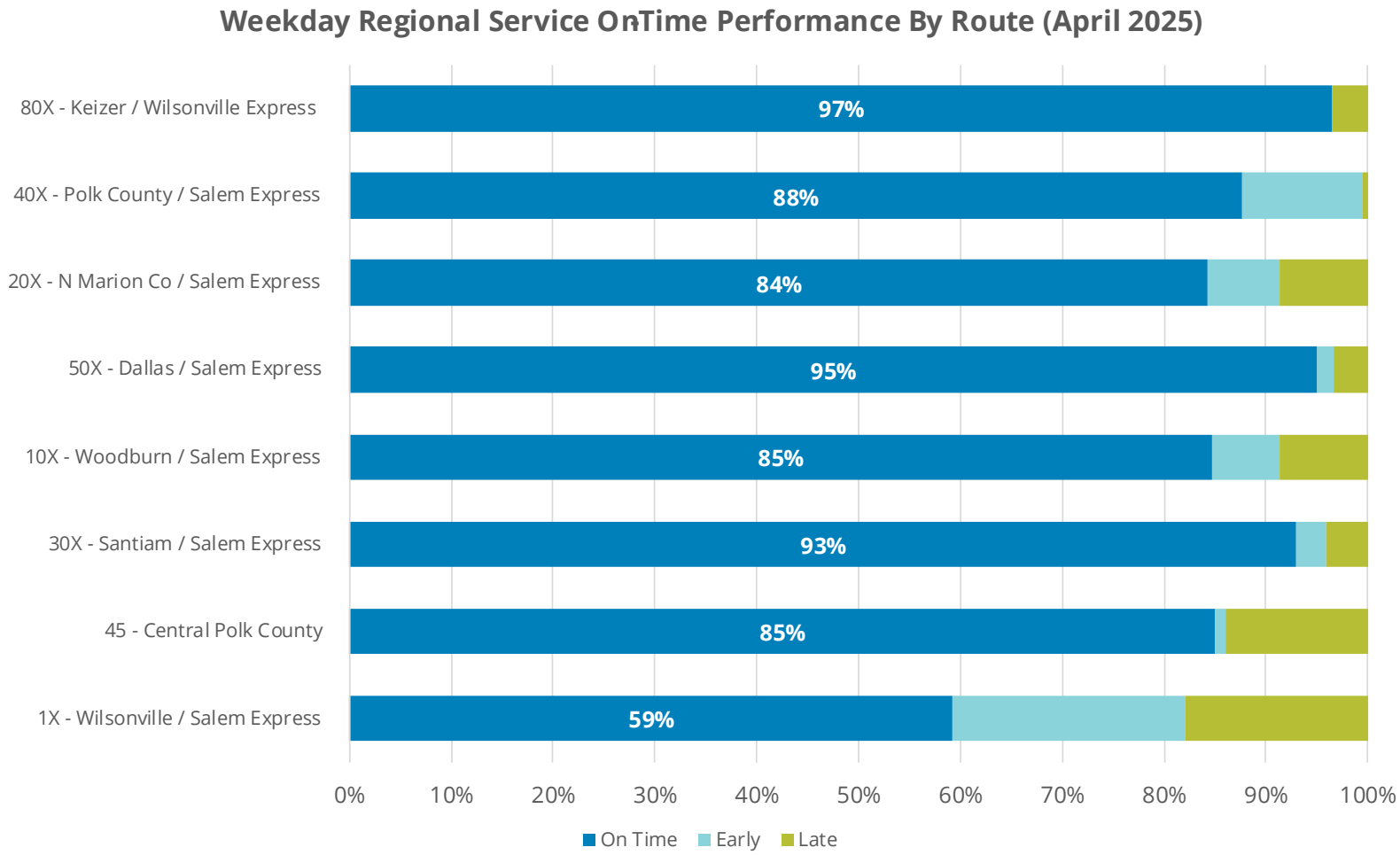
On average on Sundays, 84.1% of buses arrive on-time, 12.3% are early, and 3.6% are late. The decrease in late buses and increase in early buses likely reflects lower levels of congestion and lower ridership on Sundays compared to other days of the week.



Regional On-Time Performance

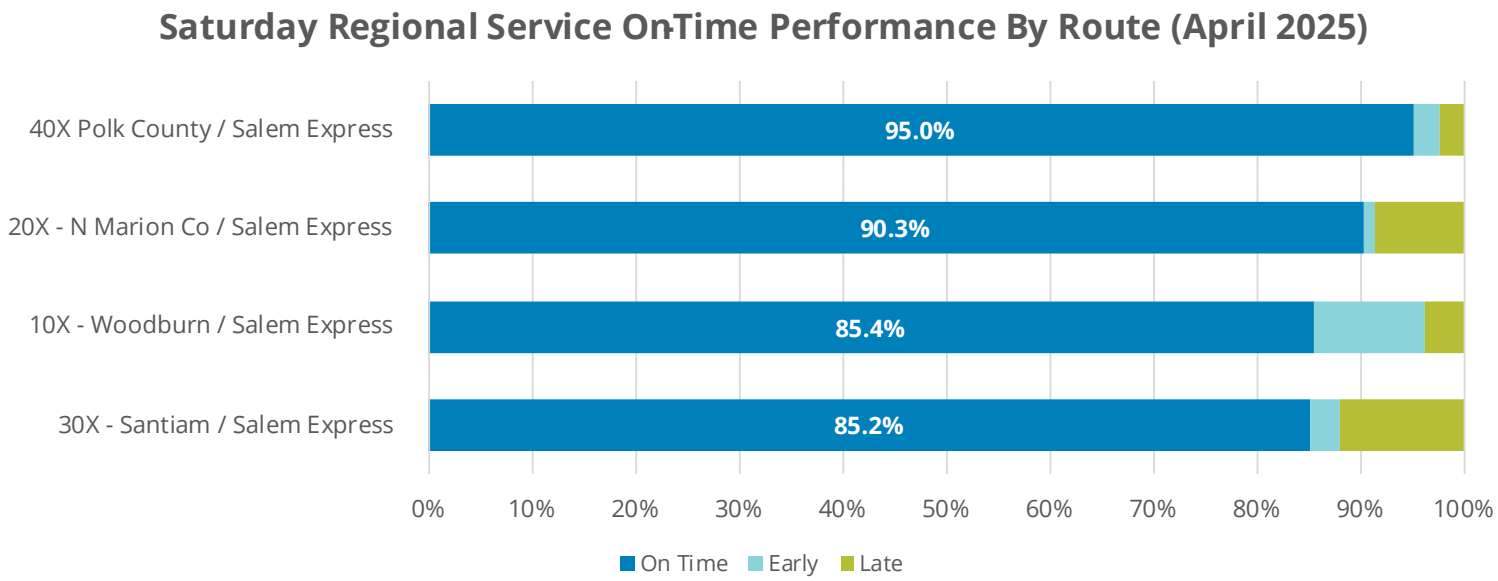
The Regional routes have a strong on-time performance route. As of April of 2025, 89% of Regional buses left on time, 7% departed late, and 5% departed early. This is a significant improvement since October of 2024, in which 76.8% of Regional route buses were on time, 16.1% are early, and 7.1% are late.

Route 10X is just below the on-time departure target of 85%. The low on-time performance for Route 1X was related to an issue with how timepoints in Salem were being treated at the time and has since been corrected.



Saturday On-Time Performance

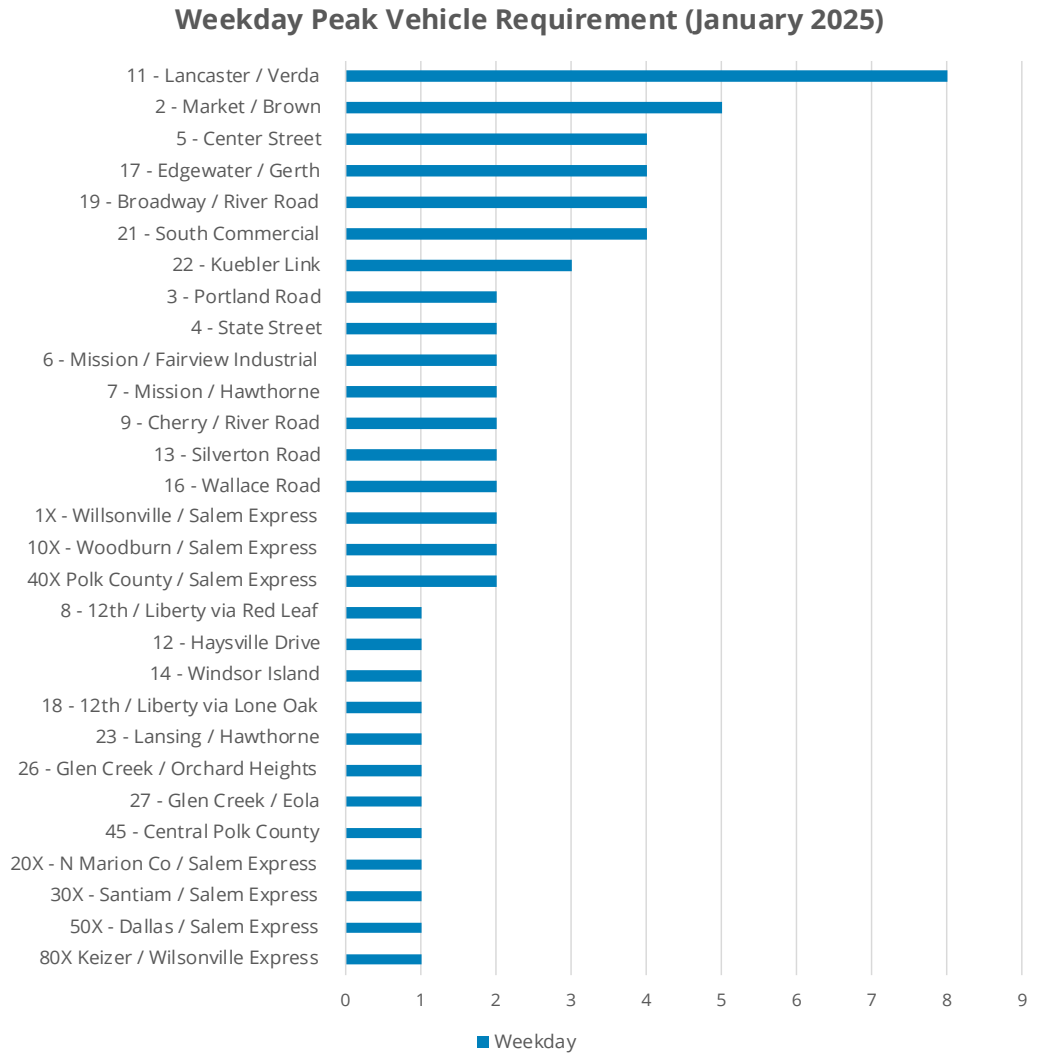
On Saturdays, the percentage of trips leaving on time is higher than on weekdays, with 89% of trips leaving on time, 6.7% leaving late, and 4.3% leaving early. All buses that operate on Saturdays are meeting the target of 85% of buses leaving on time.



Peak Vehicle Needs

The peak vehicle requirement is the number of vehicles needed to operate a route during the busiest period of the day. It is a function of the frequency, running time, blocking, and layover requirements. Because each bus on the route needs a driver, and labor is one of the primary costs for Cherriots service, examining peak vehicle needs gives insight into the operational expense of each route and the overall system.

It should be noted that Route 11, with the highest peak vehicle needs, utilizes battery electric buses, which have different range constraints and layover needs than CNG or diesel buses and therefore increases the number of vehicles required to operate this route.



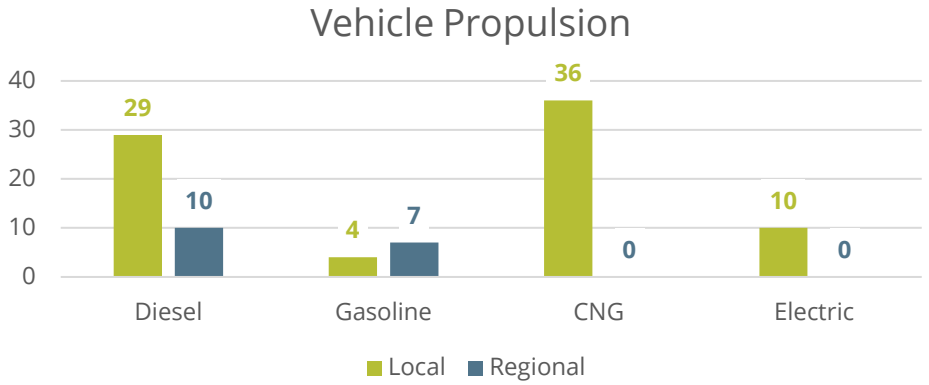
Note: Routes 10X and 20X share 3 vehicles during peak periods.

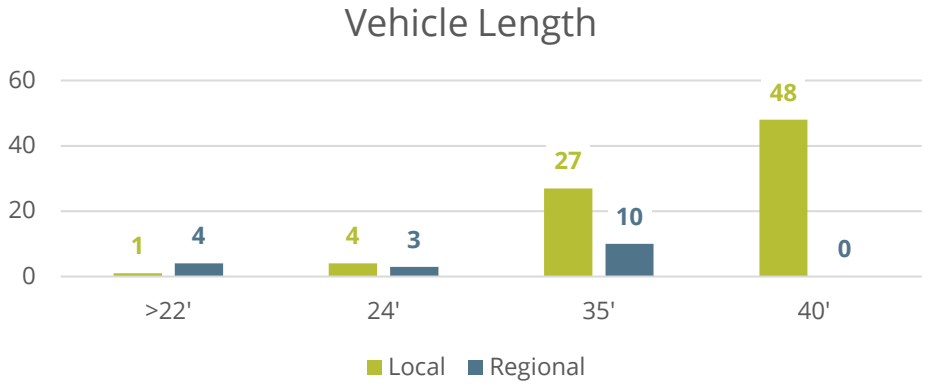
Fixed-Route Fleet

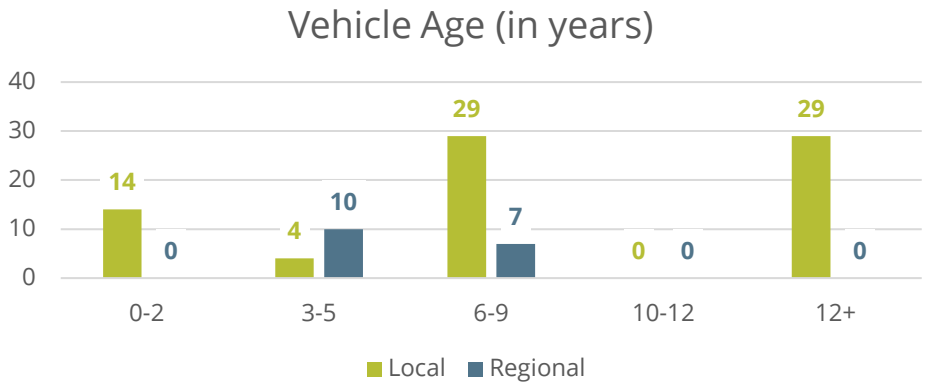
Cherriots currently has a fleet of 93 buses for its fixed-route services. This includes 75 vehicles for the Local service and 17 for the Regional service. This is well above the FTA's recommended spare ratio of 20% on both service types.

Buses used for the Local service include a mix of diesel, gasoline, compressed natural gas (CNG), and battery electric. Bus size also varies in the fleet, though most of the Local buses are either 35 or 40 feet in length and most Regional buses are 35 feet long. It should be noted that the diesel buses in the Local fleet are beyond the FTA's useful life benchmark of 12 years.

Currently, the 10 battery electric buses are operated on Route 11 only. However, Cherriots has more battery electric buses on order, and the SAMTD Board of Directors has adopted a policy to have a 100% zero-emission fleet by 2040.







4 Transit Demand Analysis

Assessing the Transit Market

To better evaluate Cherriots service, the project team analyzed the underlying market and potential demand for transit service. Transit demand is strongly driven by:


Population density


Employment density


Development patterns


Activity centers


Socioeconomic characteristics


Regional travel demand

This chapter is divided into four sections: land use, demographic characteristics, regional population and employment trends, and regional travel demand.

The **land use** section identifies factors that drive transit demand – population density, employment density, zoning, the density of multifamily housing, and key destinations – and maps these characteristics for Salem-Keizer and for the surrounding towns served by Cherriots Regional service.

The **demographics** section identifies demographic characteristics that shape how likely someone is to use transit: race and ethnicity, income, vehicle availability, age, and disability status. For each demographic characteristics, a local and regional map identifies where these populations reside in Salem-Keizer and in the broader Cherriots service area. This section provides a combined measure of the likelihood of transit use for each Census block group based on demographic characteristics of residents within the block group.

The **regional population and employment trends** section focuses on just the regional communities outside of Salem and Keizer and compares current and future trends with service levels.

The **regional travel demand** section highlights the LOCUS travel demand tool that will be used for this project to evaluate origin-destination travel flows between different geographies in the study area.

Land Use

Land Use and Transit Demand

Transit demand is strongly shaped by land use patterns. This section explores factors related to land use and development patterns to identify areas that are most supportive of transit.

Population Density

Transit relies on people, so higher population density makes it more feasible to provide higher levels of service. Population densities that support various types of transit are presented on the next page.

Employment Density

Travelling to and from work are the most frequent and predictable trips for most people. Places with a high density of jobs can reliably support transit services. Trips to schools are also important markets for transit.

Low-Wage Employment Density

Low-wage jobs are particularly likely to employ people who depend on transit to reach their jobs, as these workers have less disposable income available for car ownership and maintenance.

Zoning

Zoning and transit demand are closely linked. Areas that are zoned for mixed use, commercial use, industrial use, and multifamily housing are more likely to support transit usage than areas that are zoned for single-family use alone.

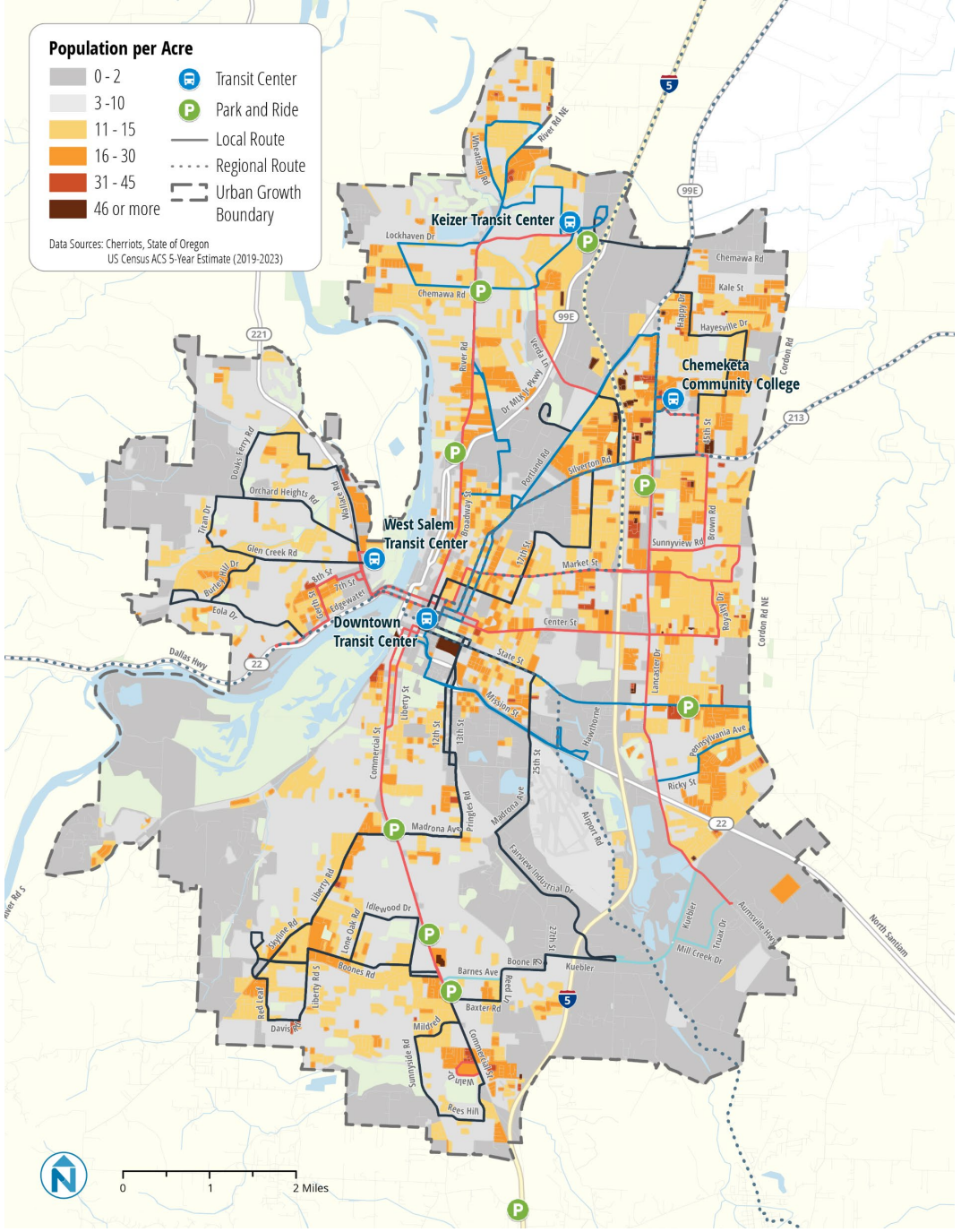
Multifamily Housing

Residents living in multifamily housing are more likely to use transit, for a few reasons. Denser housing options are less likely to have extensive parking available for residents, especially with changing statewide regulations regarding provision of parking for multifamily housing. Residents of multifamily housing are also likely to have other demographic characteristics that drive transit demand, such as lower incomes.

Population Density

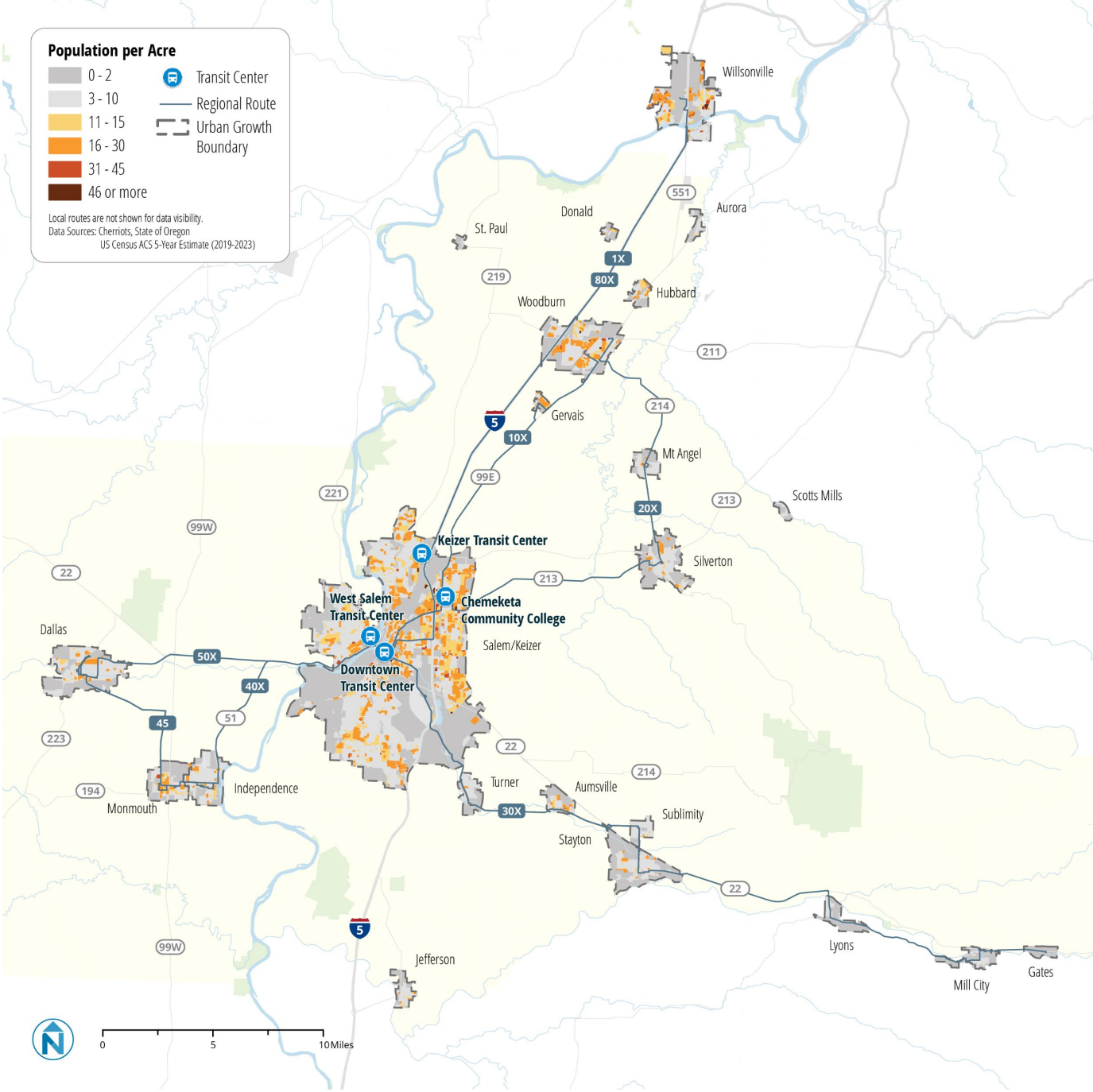
Where people live within the service area, especially where people are concentrated, tells us where transit service can be best supported or where potential riders might live. According to the Portland State University Population Research Center estimates for 2025, which are based on the 2020 Census, 224,994 people live within the Salem urban growth boundary (UGB), and 39,116 live within the Keizer UGB. The Population Research Center estimates these numbers to grow to 253,951 and 43,821 by 2040. Density is substantially lower in Salem, with 5.6 people per acre, than in Keizer, which has a population density of 8.6 people per acre. Block groups with higher density are generally found in Downtown Salem (in particular, the block group containing Willamette University), northeast Salem, and parts of south Salem. The lowest density block groups are found in southeast Salem and parts of West Salem.

For the most part, Cherriots Local routes are well aligned with population distribution. There is a higher concentration of Frequent routes in northeast Salem, which has higher population density than the rest of Salem-Keizer. In West Salem, Coverage routes provide hourly service through low-density neighborhoods. In areas of relatively high density in south Salem, hourly routes are offset to provide service every 30 minutes.



Population Density

The towns surrounding Salem-Keizer tend to have a lower population density, with few areas with a population density of 13 people per acre or higher. An exception is Woodburn, which has a higher population density than Salem at 6.9 people per acre. Other towns with pockets of the highest category of density are Wilsonville and to a lesser extent Dallas, Independence, and Monmouth. The lower population density outside of Salem-Keizer is reflected by the less frequent regional service.

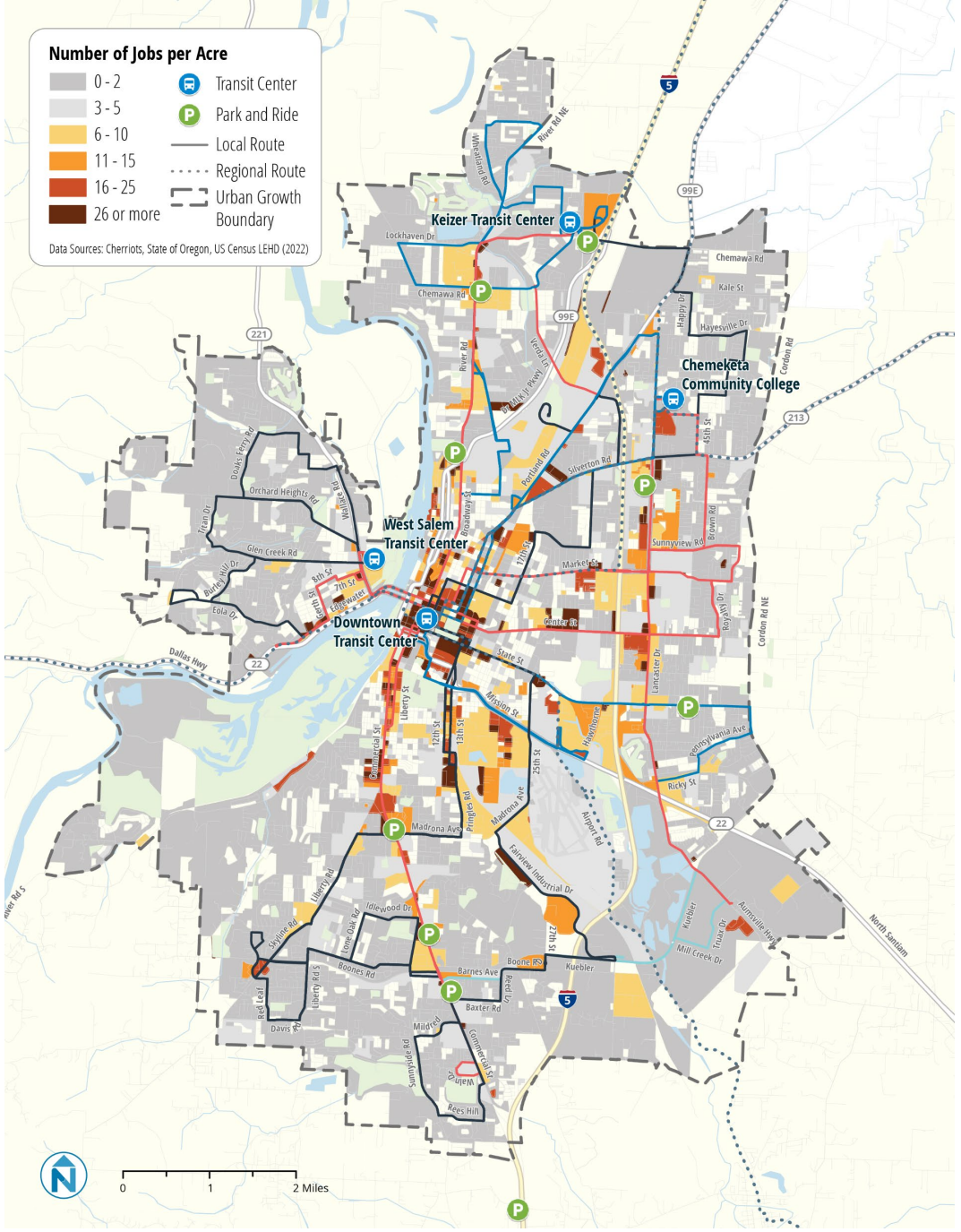


Employment Density

Where people work within the service area, especially where jobs are concentrated, tells us where transit riders might be traveling, specifically for work trips. It's also important because locations of jobs show where people also travel for services and shopping in the community. In Salem-Keizer, jobs are concentrated primarily in and around Downtown Salem, roughly between Mission Street to the south and Market Street to the north. This area includes the Salem Health main campus (the largest private employer in Salem); Willamette University; and the Oregon State Capitol. It also includes various retail and service industry jobs found in the downtown core. Another concentration of jobs is found in the industrial area directly to the west of the Salem-Willamette Valley Airport. Other high concentrations of jobs are found in the Lancaster Drive commercial corridor in north- and southeast Salem. Residential areas in West Salem and south Salem have the lowest job density in Salem-Keizer.

The map shows that most of the higher-density census blocks are served by transit, though some of the blocks with the highest density of jobs are served by hourly service only, such as the industrial areas in south Salem.

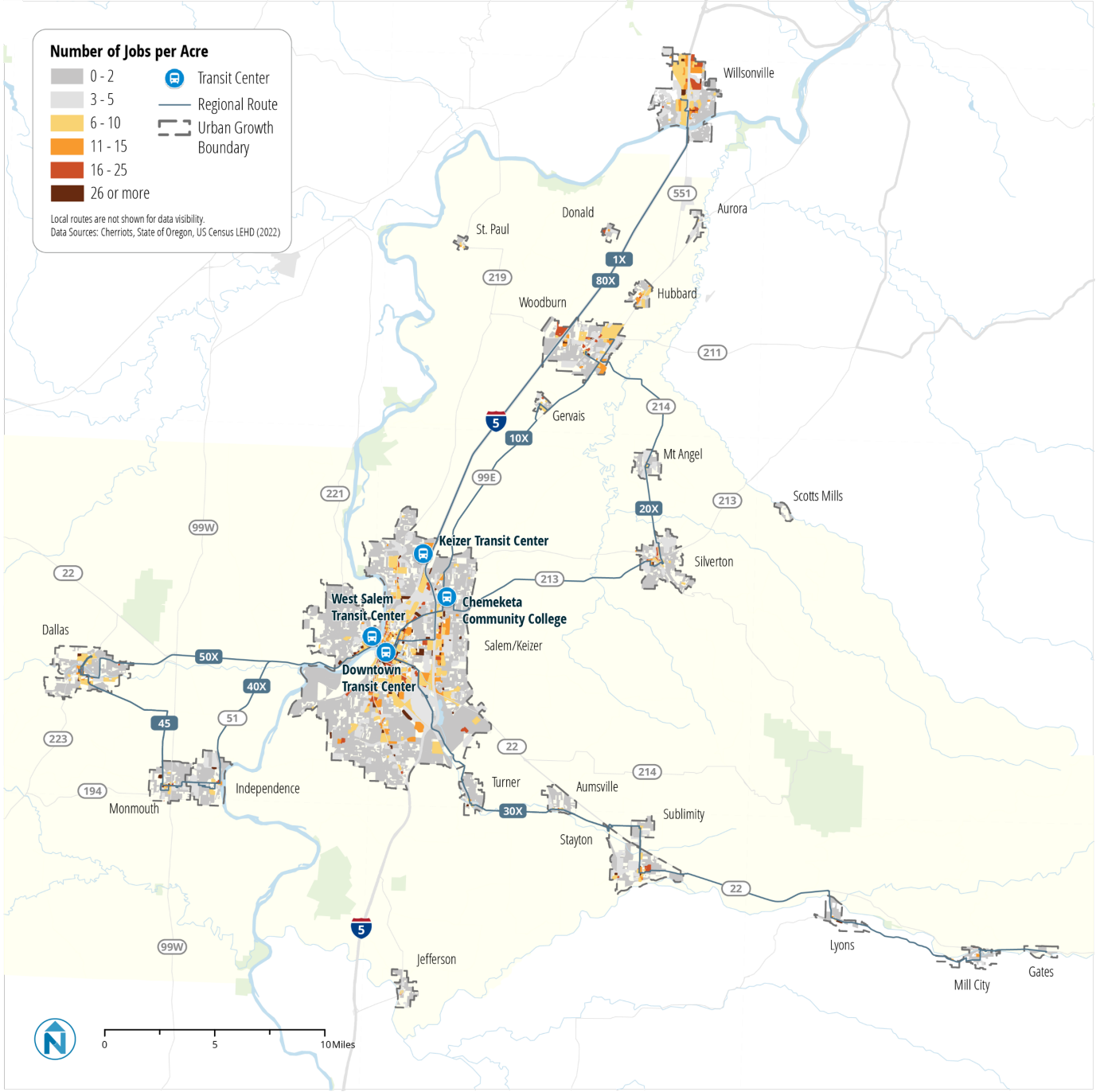
Note: due to availability and the way that LEHD data assigns job locations, some distribution centers are not well-represented on the map. This includes the Home Depot and Amazon distribution centers located at OR 22 and Cordon Road.



Employment Density

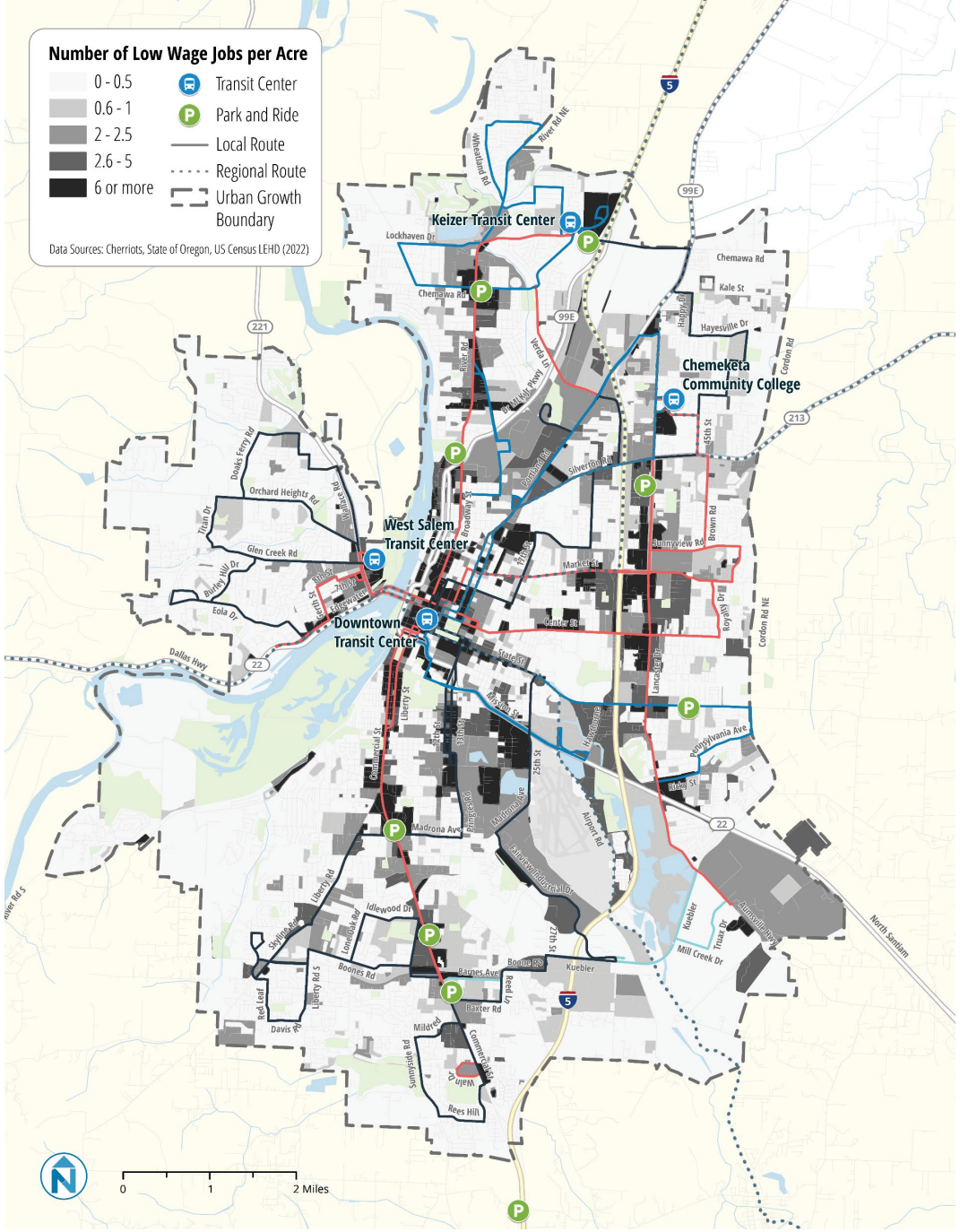
Salem-Keizer is the main job center of the region. Many of the surrounding towns have very low job density, with most of the land in these towns having a density of five or fewer jobs per acre. The relative concentration of jobs in Salem-Keizer compared to the rest of the region underscores the importance of transit that connects residents of surrounding towns to Salem-Keizer. For towns that do have substantial pockets of job density, like Wilsonville and Woodburn, the regional routes are also important means of accessing jobs for residents who live in Salem-Keizer and work elsewhere.

Note: because the analysis only includes areas within the urban growth boundaries, the map does not visualize agricultural labor, which is an important employment sector in the region. Serving agricultural jobs by fixed route is challenging due to shifting work locations and hours throughout the year.



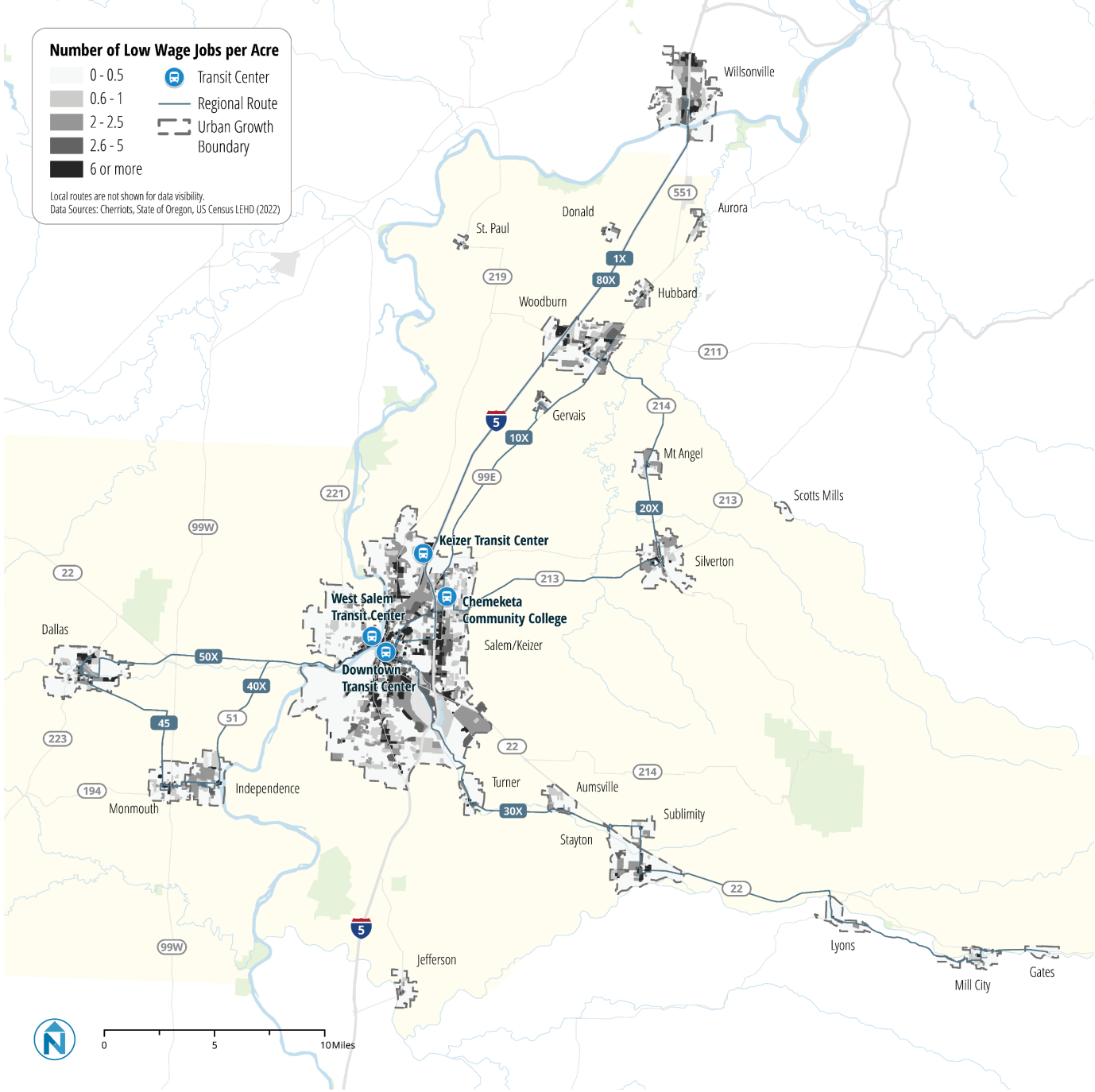
Low-Wage Job Density

Low-wage jobs, which are defined here as those that pay $3,333 or less per month, for an annual total of $39,999 or less, are more likely to generate transit demand than high-wage jobs due to the high cost of vehicle ownership and maintenance. The largest concentration of low-wage jobs is in Downtown Salem. Other areas of low-wage jobs in Salem include the area around McGilchrist Street, which has many light industrial uses, along Commercial Street, which is one of the main commercial corridors in South Salem, and along Lancaster Drive, which is a major commercial corridor in east Salem. In Keizer, higher concentrations of low-wage jobs are found along River Road North and at the Keizer Station shopping mall.



Low-Wage Job Density

The towns outside of Salem-Keizer generally have a lower low-wage job density than within Salem-Keizer. This does not mean that the average wage of jobs is higher outside of Salem-Keizer: Since the data is presented as jobs per acre, areas with a higher overall job density are also likely to have a higher density of low-wage jobs.



Transit-Supportive Densities

Where people and jobs are concentrated is one of the strongest indicators for where fixed-route transit can be most successful. The graphic on this page and the maps that follow show us where different levels of transit frequency might be supported based on the density of people and jobs.

This is an input into the service planning process that helps provide a baseline for where the land uses can support fixed-route service and the demand for transit in the service area. It is not intended to be prescriptive and is one of many things that need to be considered as part of the transit planning process.

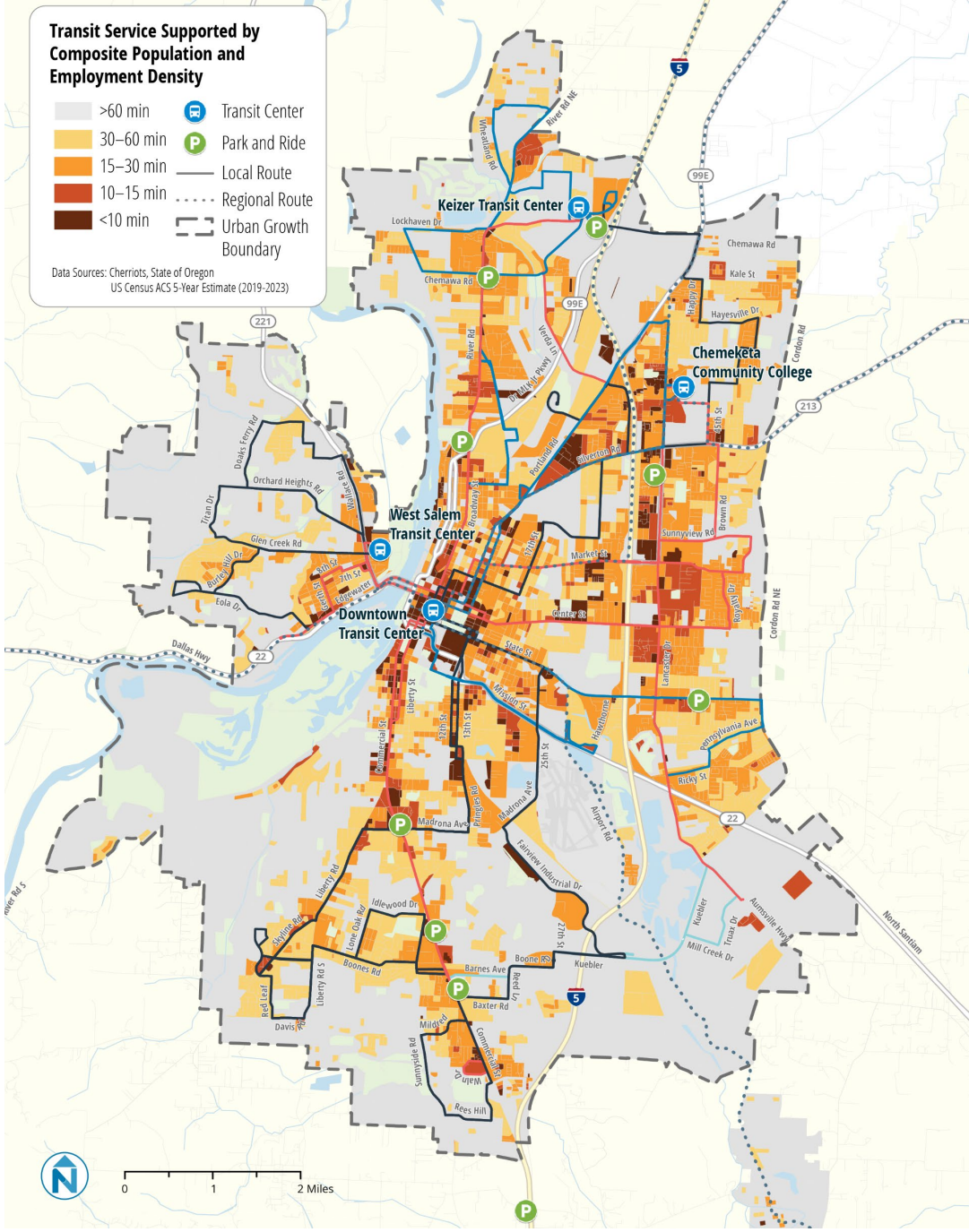
LAND USE			TRANSIT	
Land Use Type	Residents per Acre	Jobs per Acre	Appropriate Types of Transit	Frequency of Service
Downtowns & High Density Corridors	>45	>25	Light Rail, BRT, Rapid Bus, Local Bus	10 mins or better
Urban Mixed-Use	30-45	15-25	BRT, Rapid Bus, Local Bus	10-15 minutes
Neighborhood & Surburban Mixed-Use	15-30	10-15	Local Bus	15-30 minutes
Mixed Neighborhoods	10-15	5-10	Local Bus, Micro-transit	30-60 minutes
Low Density & Rural	<10	<5	Micro-transit, Ride-share, Volunteer Driver Pgm	60 mins or less or On Demand

Composite Demand

Composite demand accounts for job density, population density, and transit propensity (i.e., how demographic characteristics impact likelihood of taking transit – see more in the next section, Demographics) to identify where different levels of transit frequency might be supported.

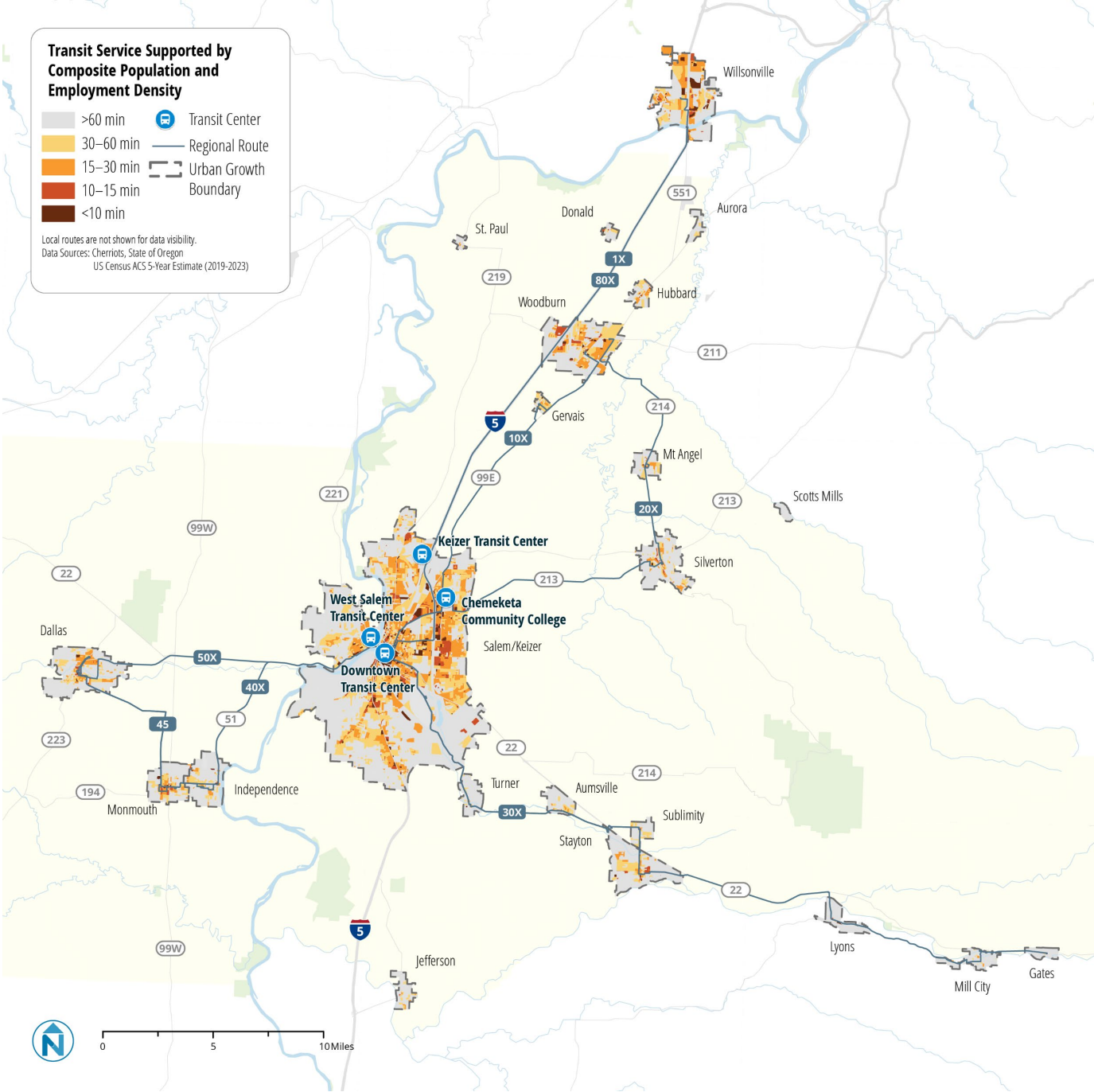
This map shows that there are strong pockets of demand in Downtown Salem, in northeast Salem along Lancaster Drive, and in southeast Salem near some of the industrial sites.

Densities broadly indicate demand across contiguous and nearby areas. Clusters of density throughout an area or along a corridor are strong indicators of demand, while a dense but small block in an isolated area would not produce sufficient demand in and of itself. For example, while there are census blocks that have demand sufficient to support 10-minute service, these blocks are not contiguous to support entire corridors of 10-minute service. There are, however, corridors that support 15-minute service, and many of these corridors are already served with Frequent routes.



Composite Demand

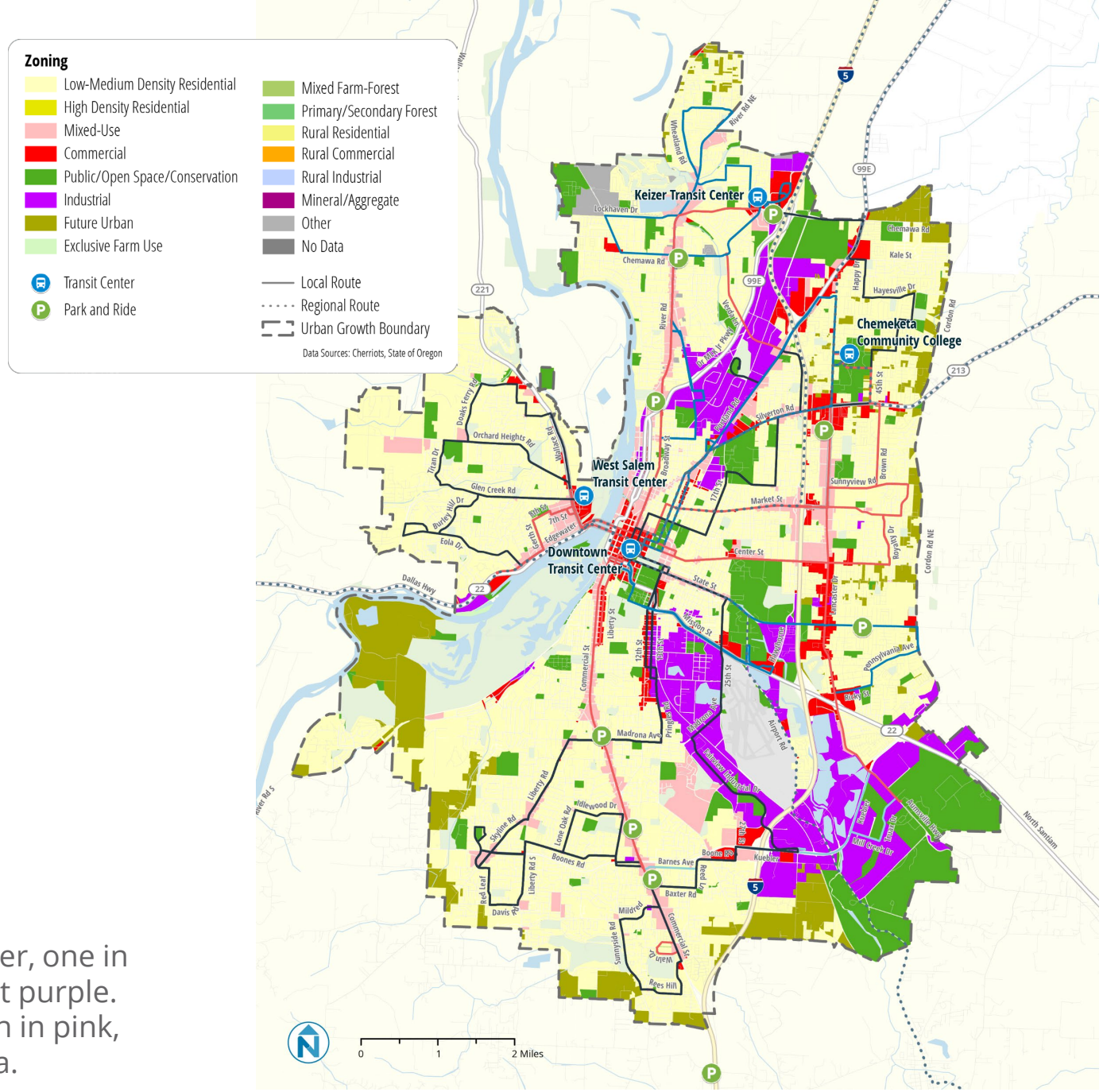
The regional composite demand map shows that demand for transit is most concentrated in Salem-Keizer. However, there are notable pockets of demand elsewhere: Wilsonville and Woodburn stand out as having a higher composite demand for transit than many of the other surrounding towns. Both cities are served by other transit agencies: Wilsonville is served by South Metro Area Transit (SMART) and TriMet's Westside Express Service (WES) commuter rail, and Woodburn is served by the Woodburn Transit System (WTS).



Zoning

Zoning laws shape land use, which drives transit demand. While much of Salem-Keizer is zoned for low-medium density residential, which is shown in light yellow, the City of Salem made zoning changes in 2022 to implement House Bill 2001, which allows duplexes to be constructed on any residential lot in Salem-Keizer and allows triplexes, quadplexes, townhouses, and cottage clusters in all areas zoned for residential use (with maximum density dependent on lot size). This has functionally removed single-family residential zoning from the zoning code. While many of the formerly single-family neighborhoods will be slow to densify, the zoning changes are an important step toward building housing at transit-supportive densities. The City of Salem's Comprehensive Plan (Our Salem) also adopted transit-supportive land uses along the Cherriots Core Network in August 2022 with the understanding that higher density housing and employment would be encouraged and/or required within a quarter mile of these high-frequency transit corridors.

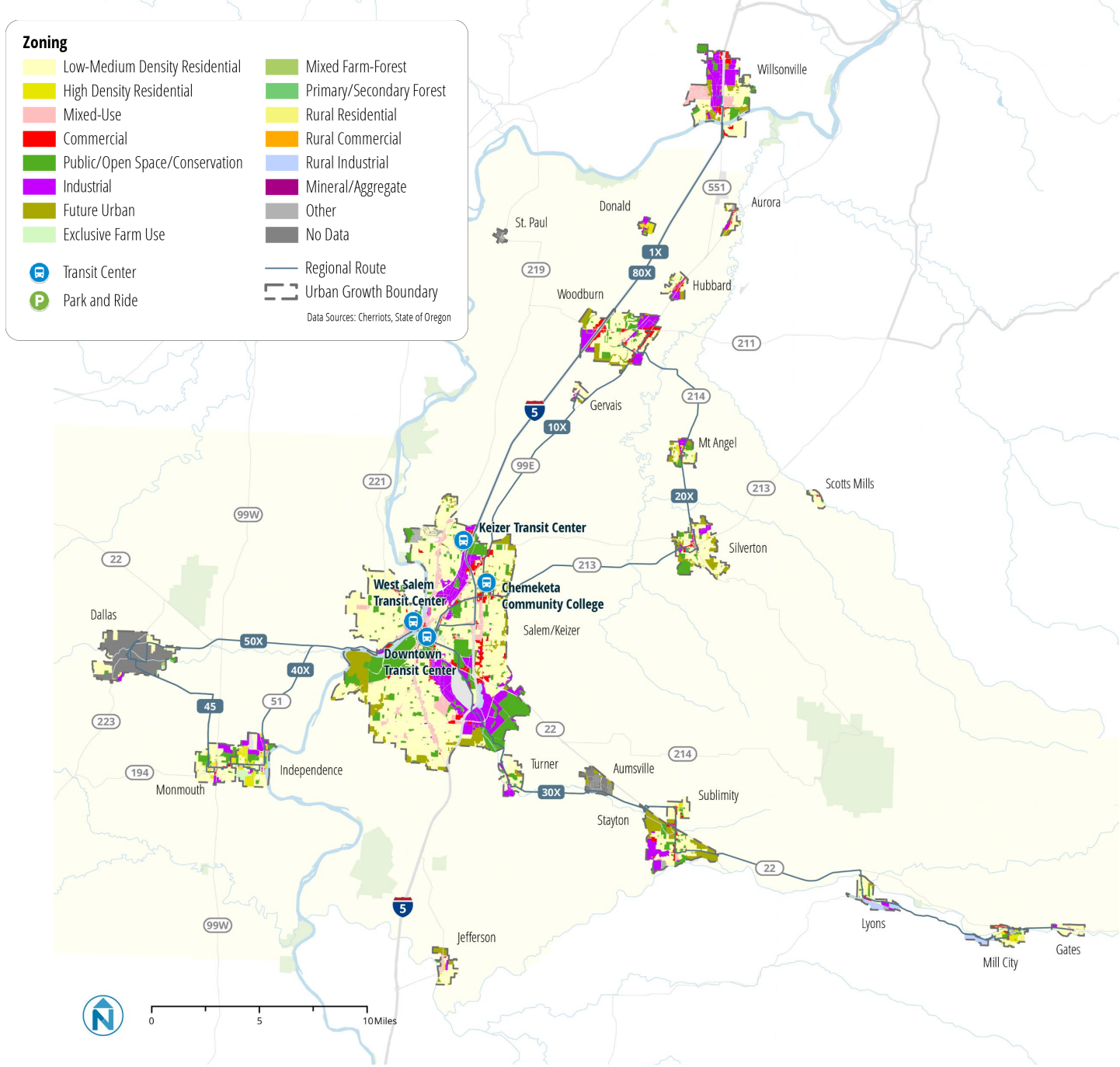
There are two large swaths of industrial zoning in Salem-Keizer, one in southeast Salem and one in northeast Salem, shown in bright purple. Commercial areas, shown in red, and mixed-use areas, shown in pink, represent important destinations for transit riders in the area.



Zoning

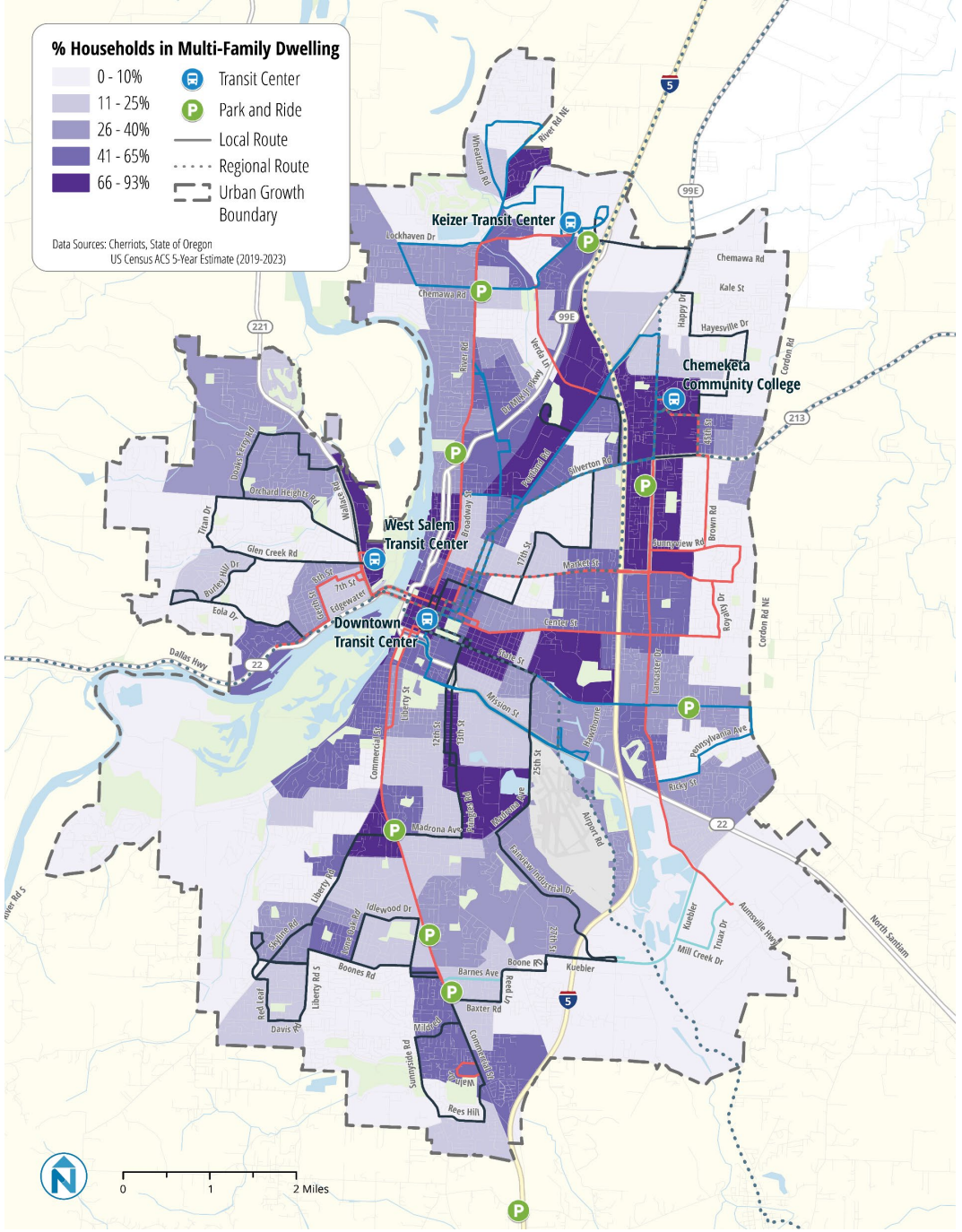
The mix of zoning in the towns surrounding Salem-Keizer mostly matches that of Salem-Keizer. Notable zoning in the regional area includes large industrial areas in Wilsonville, Woodburn, and – to a lesser extent – in Stayton and Monmouth/Independence.

Protected by each municipality's urban growth boundary is some of the most fertile and productive farmland in the country. As mentioned in the section on employment density, these farms are an important destination for farm workers as well as for agritourists but are challenging to reach by fixed-route transit.



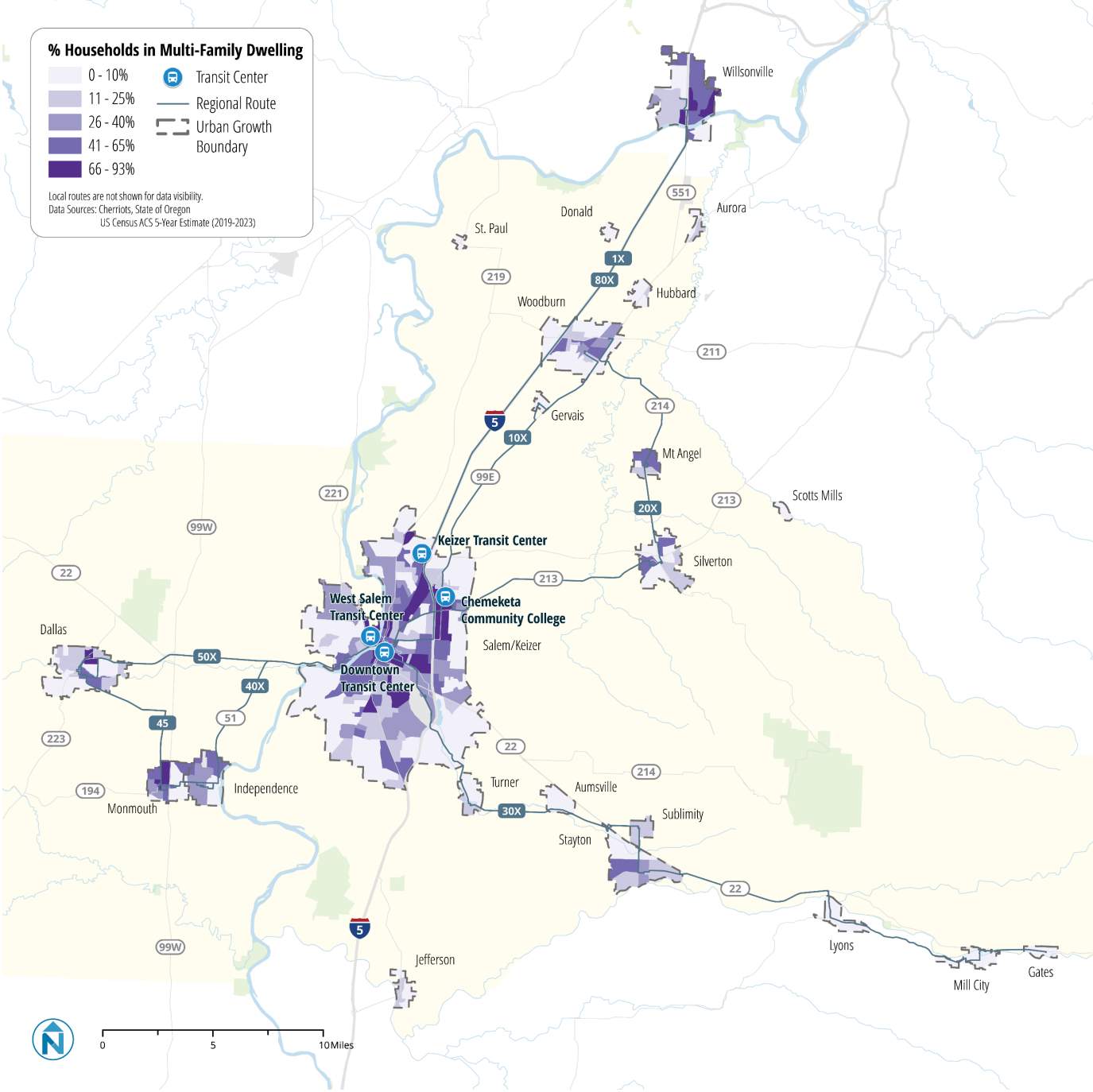
Multifamily Housing

Like population density, multifamily housing drives demand for transit. The highest density of multifamily housing is found in northeast Salem along Lancaster Drive and Portland Road, near Downtown Salem along State Street, and the area east of Wallace Road in West Salem. Other areas that have a high percentage of multifamily housing have a low number of residential units – for example, the deep purple area along 12th/13th Street and Pringle Road in southeast Salem north of Madrona Avenue is mostly light industrial with few residential units.



Multifamily Housing

The surrounding towns in the Salem-Keizer region generally have a lower percentage of multifamily housing than Salem-Keizer, but there are notable pockets of multifamily housing in Wilsonville, Monmouth near Western Oregon University, and Independence. Many of the block groups with the highest percentage of multifamily housing are serviced by the Cherriots Regional routes.



Demographics

Demographic-Based Transit Propensity

In addition to where people live and work, socioeconomic characteristics influence people's propensities toward using transit. Many population groups use transit more often than the overall population – generally speaking, historically marginalized groups are more likely to use transit.

Race and Ethnicity

Race and ethnicity are often indicators of transit propensity. In Salem-Keizer, Black residents are 3.2 times as likely to ride Cherriots as the average resident. Hispanic or Latino residents are 1.2 times as likely to ride the bus. Asian residents, in contrast, are 0.6 times as likely to ride the bus, and White residents are 0.9 times as likely.

Income level

Household income is a strong indicator of transit propensity. Households who live below the federal poverty line are much more likely to have difficulty paying for basic needs – especially transportation costs – and are thus much more likely to use transit.

Car availability

Not having a car available for use is often one of the strongest indicators of transit propensity. In Salem-Keizer, residents without a car are 14.5 times as likely to ride Cherriots than the average resident.

Foreign-born status

Salem-Keizer residents born outside of the United States are 1.15 times as likely to use transit compared to the average resident.

Transit Propensity Index

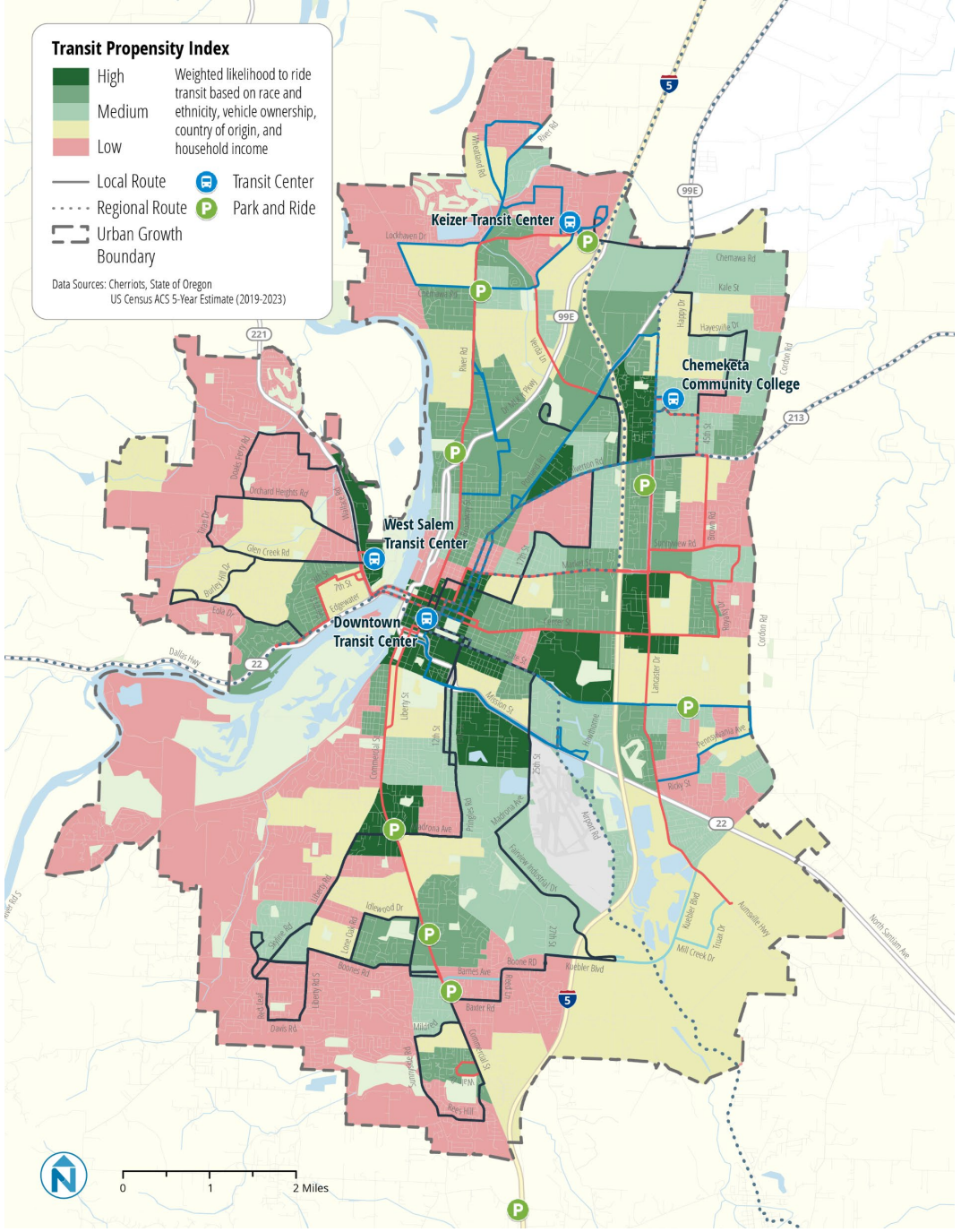
When a significant number of people from the demographic groups described earlier live in clustered areas, the underlying demand for transit in these areas may be higher than is captured by just looking at population density. Conversely, in areas where populations that are likely to take transit have lower representation, the transit demand may be lower than what is captured purely by population density. To account for these factors, the project team calculated a measure called the transit index factor, which measures the relative demand for transit of different demographic groups compared to the average resident in Salem-Keizer. These numbers are calculated by comparing the demographics of Cherriots riders using the 2024 Cherriots Customer Satisfaction Survey with the demographics of Salem-Keizer as a whole. The table to the right shows transit index factors among different groups. A factor greater than 1 means that the group is more likely to use transit than the average resident and indicates that the group is over-represented in Cherriots ridership compared to their share of the population.

Demographic Group	Transit Index Factor
RACE AND ETHNICITY	
White Alone (Not Hispanic or Latino)	0.92
Black or African-American (Not Hispanic or Latino)	3.21
Asian (Not Hispanic or Latino)	0.63
Other Race (Not Hispanic or Latino)	1.49
Hispanic or Latino	1.18
HOUSEHOLD VEHICLE OWNERSHIP	
No Car	14.52
One Car	1.77
Two or More Cars	0.35
COUNTRY OF ORIGIN	
Native	0.97
Foreign	1.15
HOUSEHOLD INCOME	
Less than $10,000	2.57
$10,000 - $15,000	2.15
$15,000 - $25,000	1.42
$25,000 - $35,000	1.66
$35,000 - $50,000	0.64
$50,000 - $65,000	0.56
$65,000 - $75,000	0.64
More than $75,000	0.17

Transit Propensity

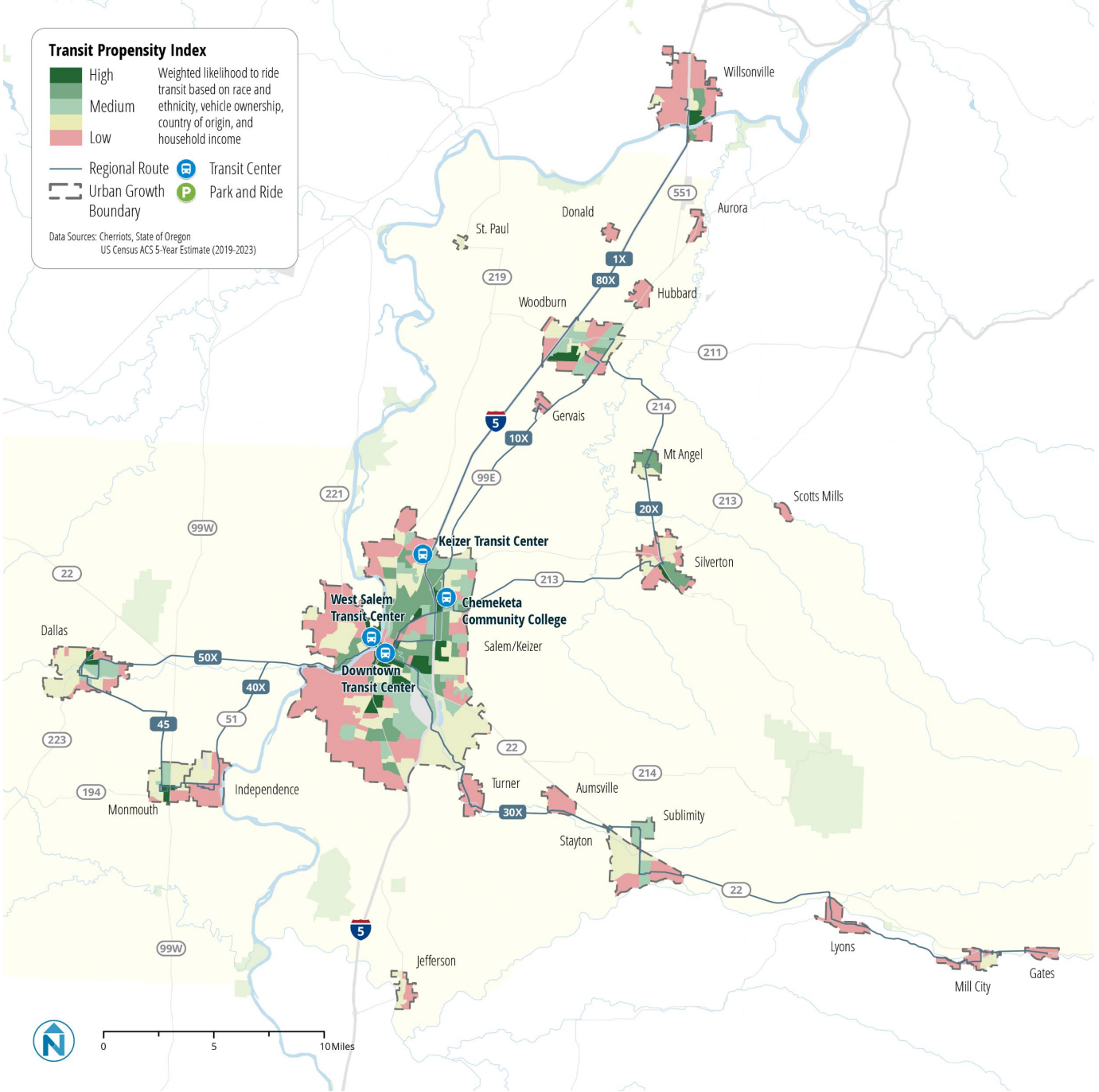
This map shows the total transit propensity index for each census block group in the Salem-Keizer service area. The transit propensity index is the weighted likelihood of riding transit based on race and ethnicity, vehicle ownership, country of origin, and household income, using the transit index factors shown on the previous page. This index allows us to visualize which parts of Salem-Keizer have the highest demand for transit based on demographic characteristics. Some of the key areas with high likelihood to ride transit include:

- In and around downtown Salem
- South of Mission Street and north of McGilchrist Street
- Around the intersection of Commercial Street South and Madrona Avenue in south Salem
- Between Silverton Road and Portland Road
- Sections of northeast Salem along Lancaster Drive
- East of Wallace Road in West Salem



Transit Propensity

Outside of Salem-Keizer, block groups with high transit propensity are found in Woodburn, Wilsonville, Dallas, and Monmouth. It is important to note that the transit propensity index accounts for demographic characteristics of residents, not for land use or population/job density. Therefore, areas with high transit propensity might have land use patterns that are challenging to serve with transit. The composite demand map presented earlier in the report combines transit propensity, population density, and job density to show a fuller picture of which areas can support transit.



Where are these populations located?

It is also helpful to understand in detail where specific populations live in the service area. When we look to make transit improvements and to advance local equity goals through the provision of public transit service, we want to understand who Cherriots is serving and how we can provide a better service to each population.

We mapped the following groups:

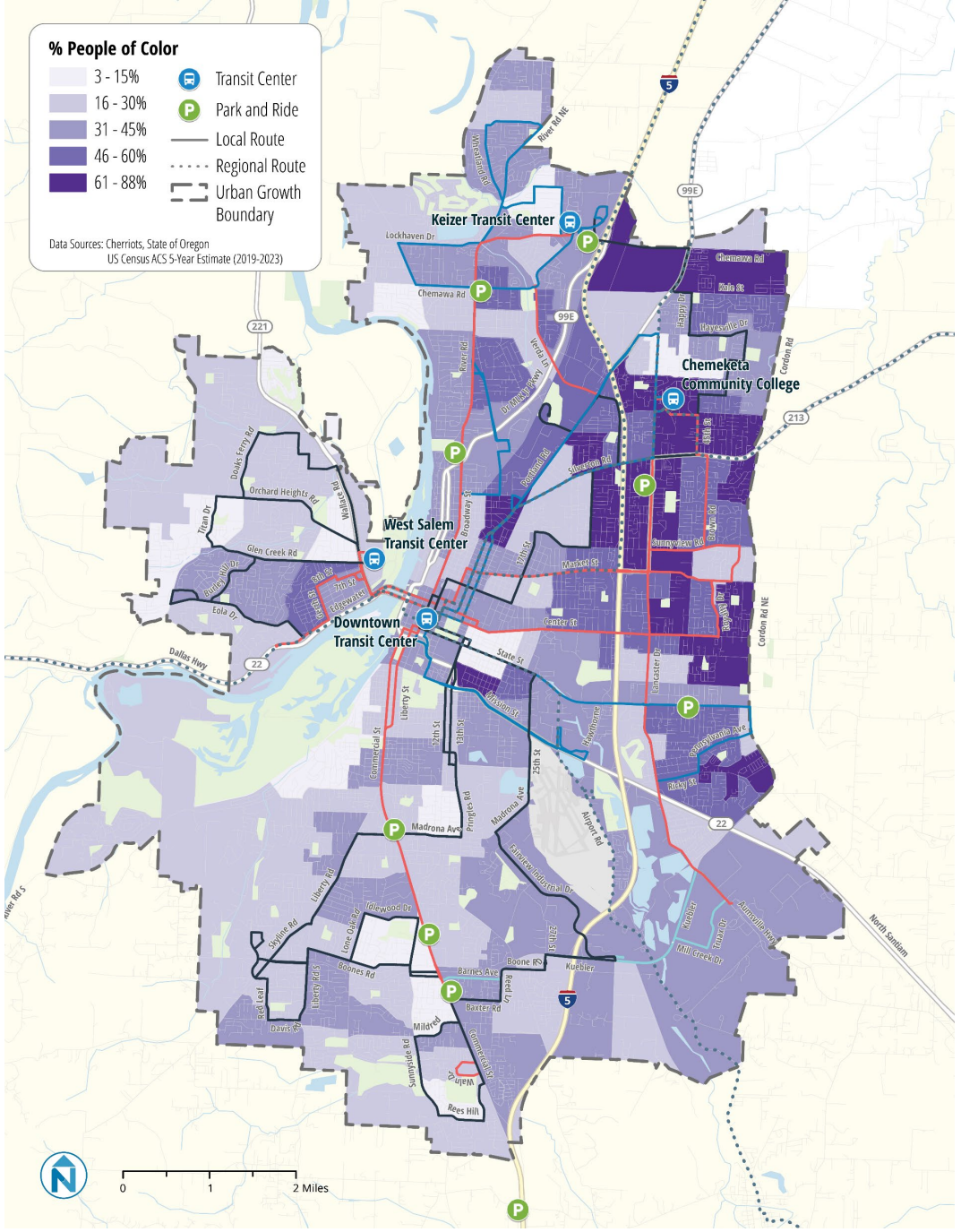
- Residents who identify as Black, Indigenous, or a person of color (BIPOC)
- Residents who, due to their age, are more likely to use transit (Youth under 18 and Seniors)
- Households with lower incomes
- Households without access to a car
- Veterans

In addition to the Salem-Keizer area, Cherriots fixed-route service serves many nearby cities and towns via its regional express service: Wilsonville, Woodburn, Gervais, Mt. Angel, Silverton, Dallas, Monmouth, Independence, Turner, Aumsville, Stayton, Sublimity, Lyons, Mill City, and Gates.

Residents Who Identify as Black, Indigenous, or People of Color

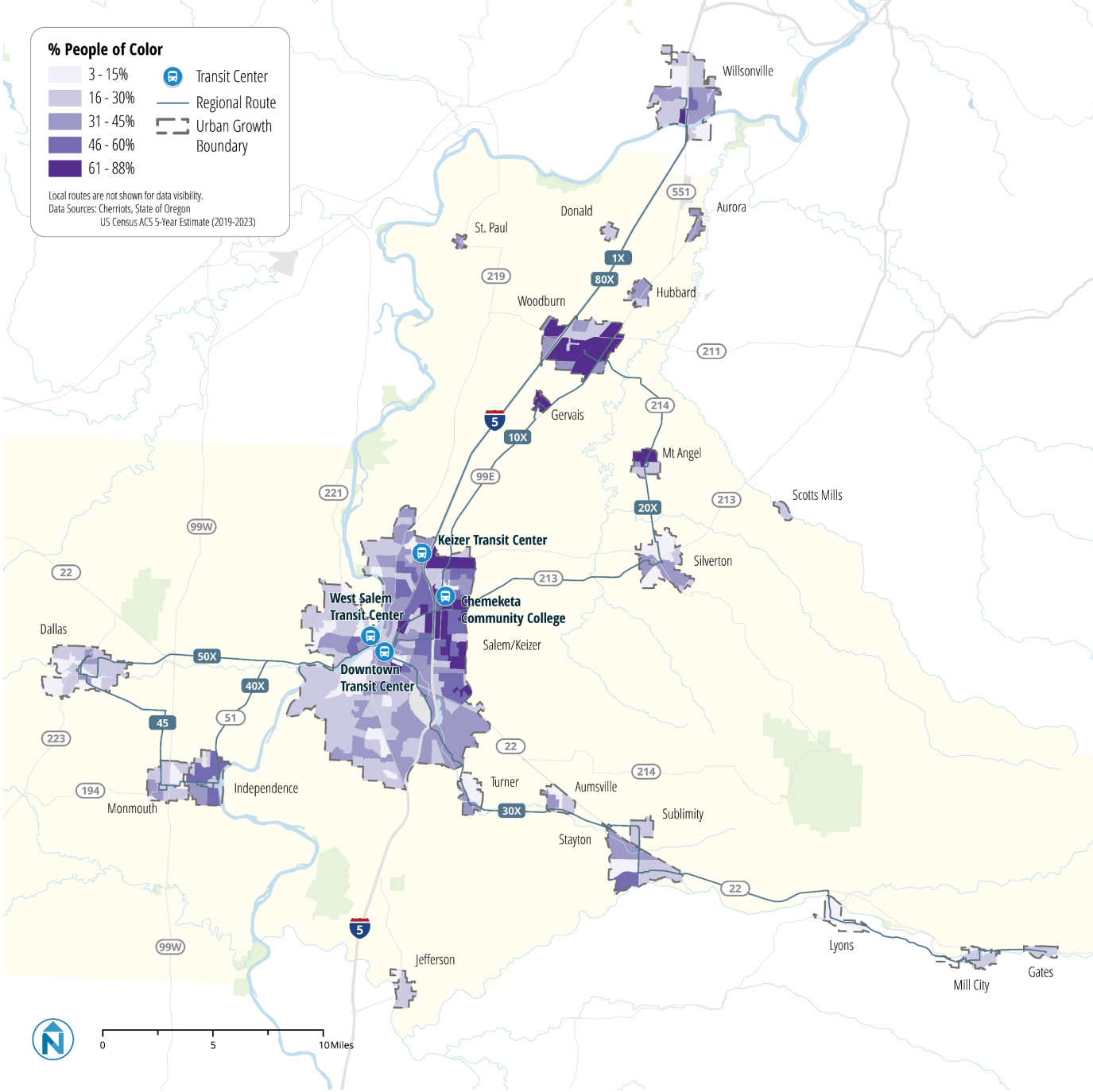
Different racial and ethnic groups have different levels of demand for transit, with Black and Hispanic populations being most likely to use transit in Salem-Keizer.

The percentage of BIPOC residents varies throughout Salem-Keizer. Generally speaking, Lancaster, Northgate, and Hayesville have the highest percentage of residents who are people of color, with many block groups in which over two-thirds of residents are BIPOC. South Salem, southeast Salem, and West Salem have lower percentages of BIPOC residents.



Residents Who Identify as BIPOC

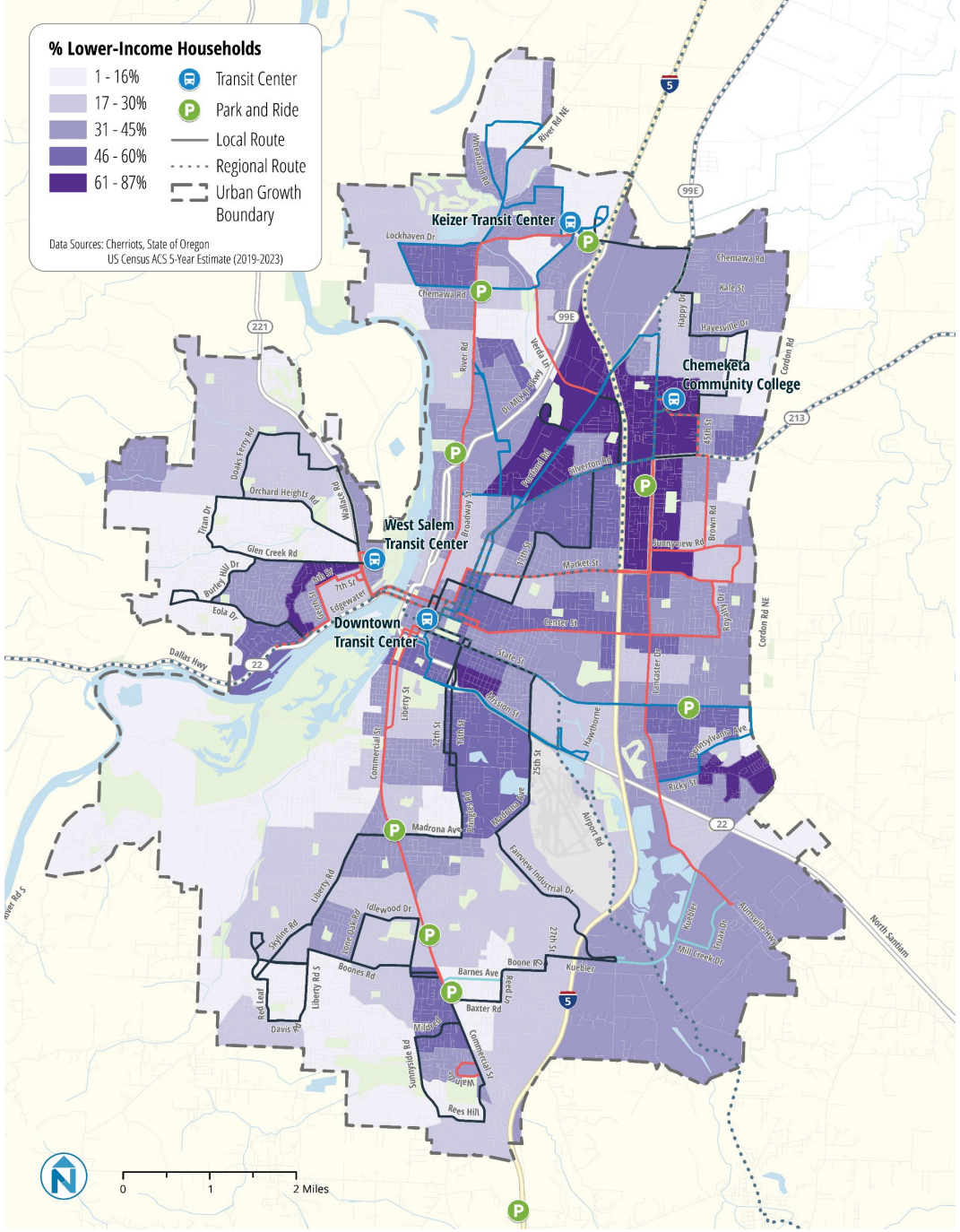
The distribution of BIPOC residents varies substantially across the region. In the least diverse towns, like Dallas, the population is overwhelmingly non-Hispanic white (79.8%). In towns with large produce industries, like Woodburn, the non-Hispanic white population drops down to 32.8%, with 62.6% of all respondents identifying as Hispanic or Latino. Salem and Keizer have a non-Hispanic white population of 63.9% and 67.5%, respectively.



Lower-Income Residents

Lower-income households are defined as those making 200% or less of the federal poverty line. Lower-income households have less disposable income for transportation, which is on average the second largest expense for households behind housing.

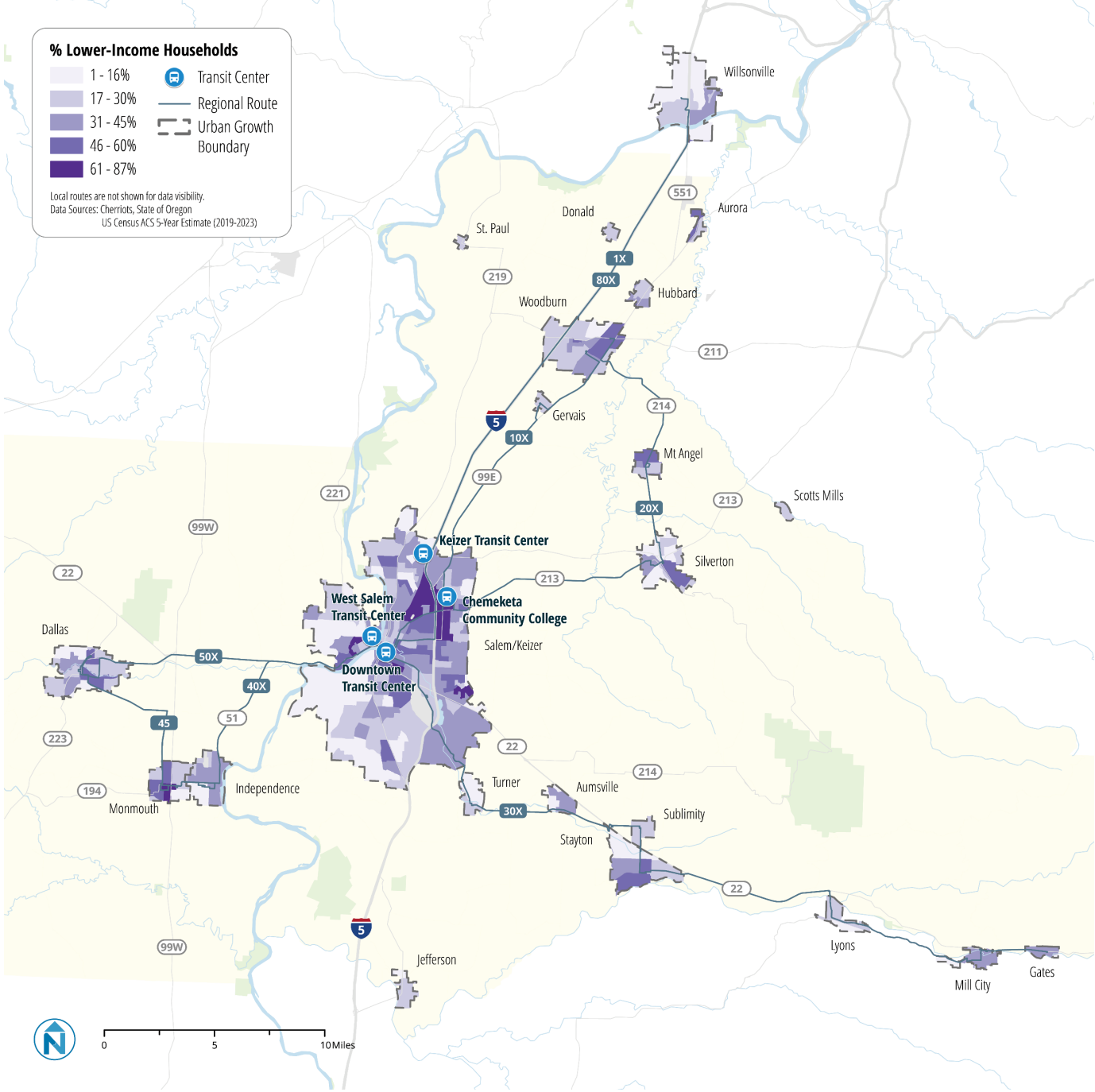
The highest concentrations of lower-income households are found on the east side of Salem, particularly in the northeast close to Chemeketa Community College. The lowest concentrations of lower-income households are found in West Salem and south Salem.



Lower-Income Residents

Salem-Keizer has a higher concentration of lower-income households when compared to the towns in the region. The percentage of lower-income residents varies by town: Wilsonville has a very low percentage of low-income residents, while Woodburn, Monmouth, and Mt. Angel have a higher percentage. For all municipalities in the region, the percentage varies substantially within each town.

It is important to note that many of the communities served by Cherriots Regional service (such as Mt. Angel, Turner, Sublimity and all Santiam Canyon communities) do not have a major grocery store. Low-income residents in these communities need to travel long distances to access fresh food.

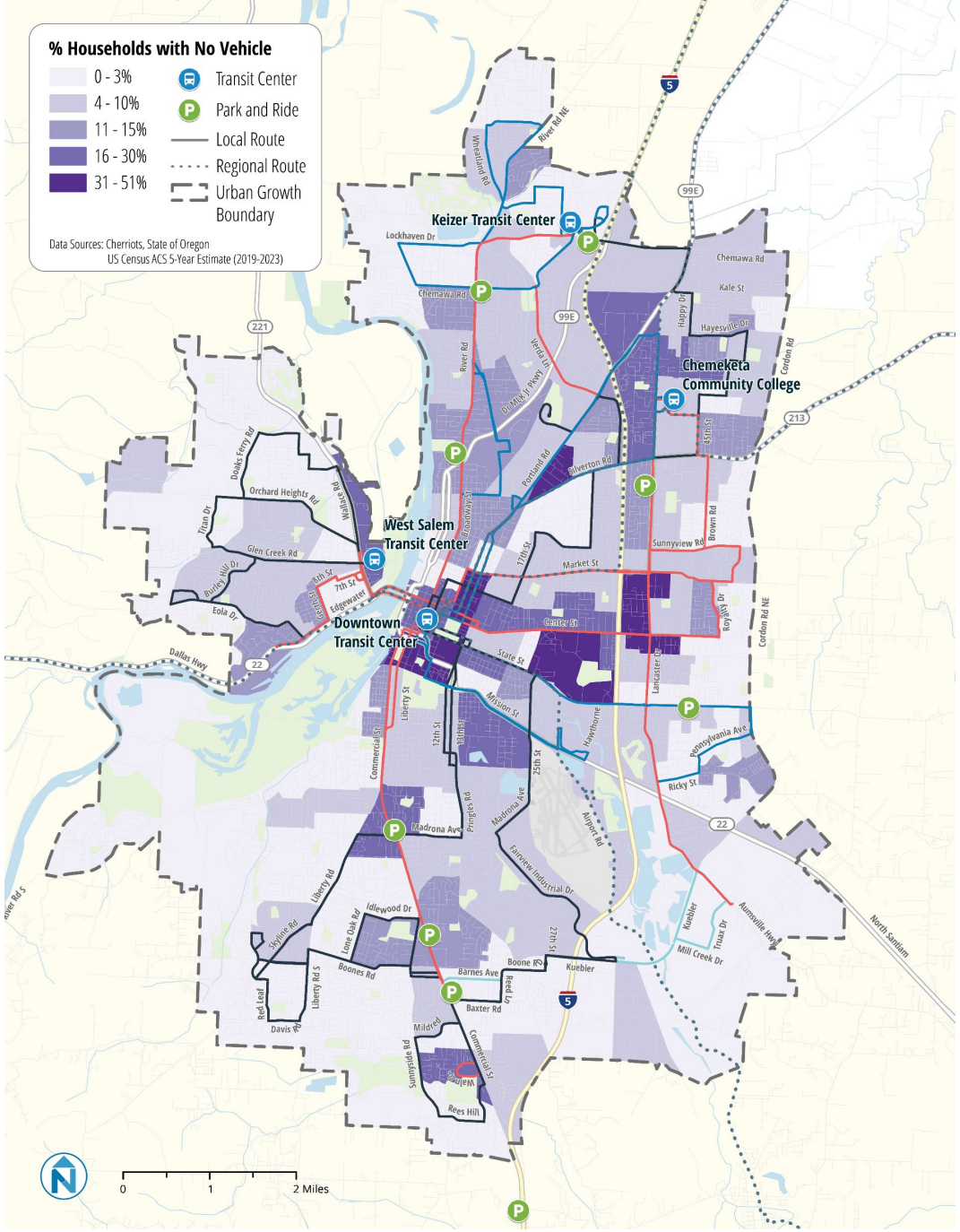


Zero-Car Households

As seen in the transit propensity analysis, not having access to a personal vehicle is the single largest predictor of transit use.

Salem has a few areas in which one-third to one-half of all households do not own a vehicle: in and around Downtown Salem, along Lancaster Drive between Auburn Road and Market Street, and in an area of the Northgate neighborhood with a concentration of multi-family apartments.

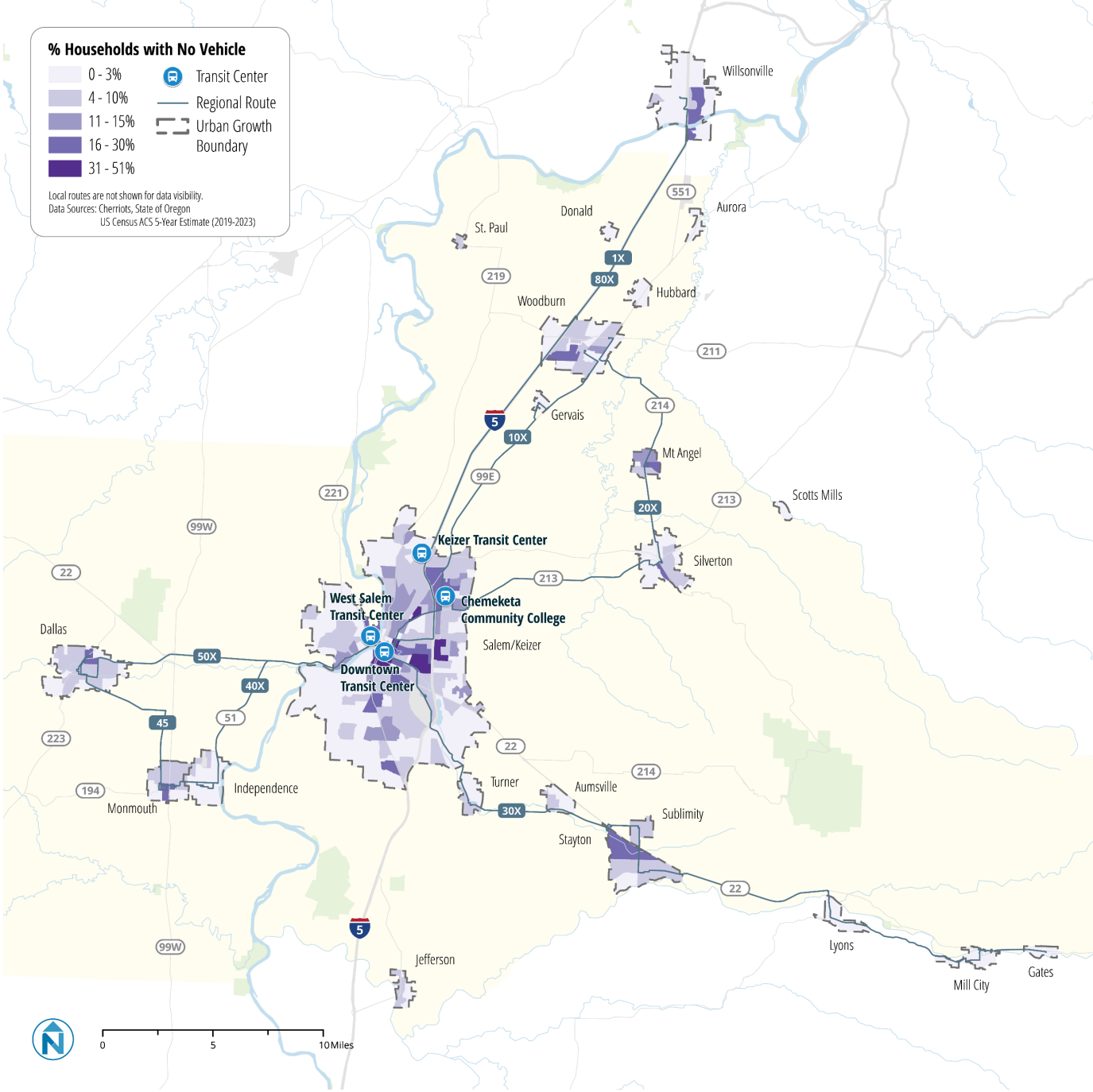
Another area with a high concentration of zero-car households is the census block that contains the Oregon State Hospital and the Oregon State Penitentiary. The US Census counts psychiatric patients and incarcerated people in the block group of the facility where they reside. While the State Hospital and Penitentiary are not major origins of trips, they are important destinations for those who visit incarcerated or institutionalized family or friends.



Zero-Car Households

While the highest concentrations of zero-car households are found east of downtown Salem and along Lancaster Drive, there are pockets of zero-car households in Stayton, Wilsonville, Woodburn, Mt. Angel, Dallas, and Monmouth.

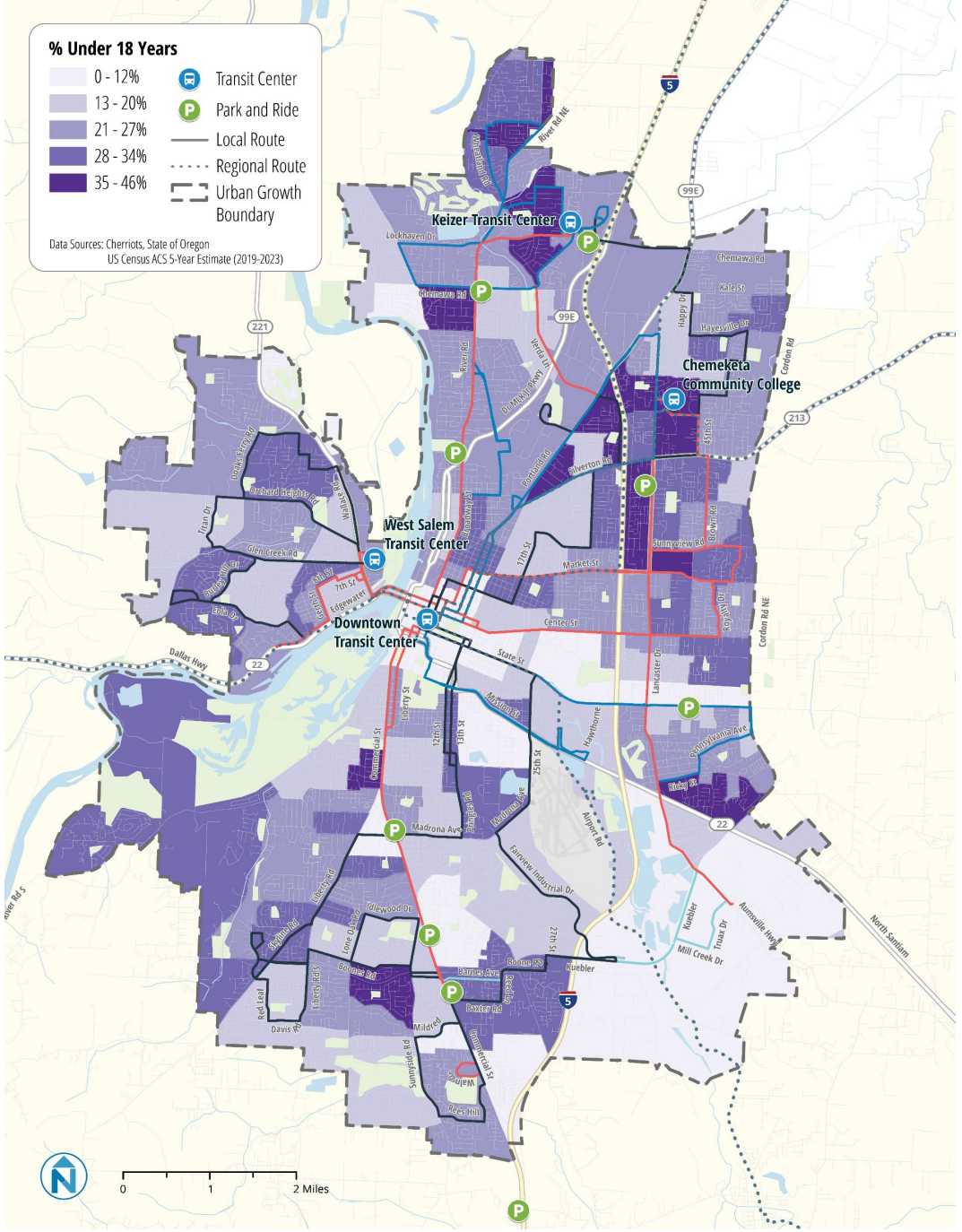
As with low-income households, households without access to a car outside are more likely to need transit to access basic needs that may be lacking in their communities, like fresh groceries.



Youth Residents

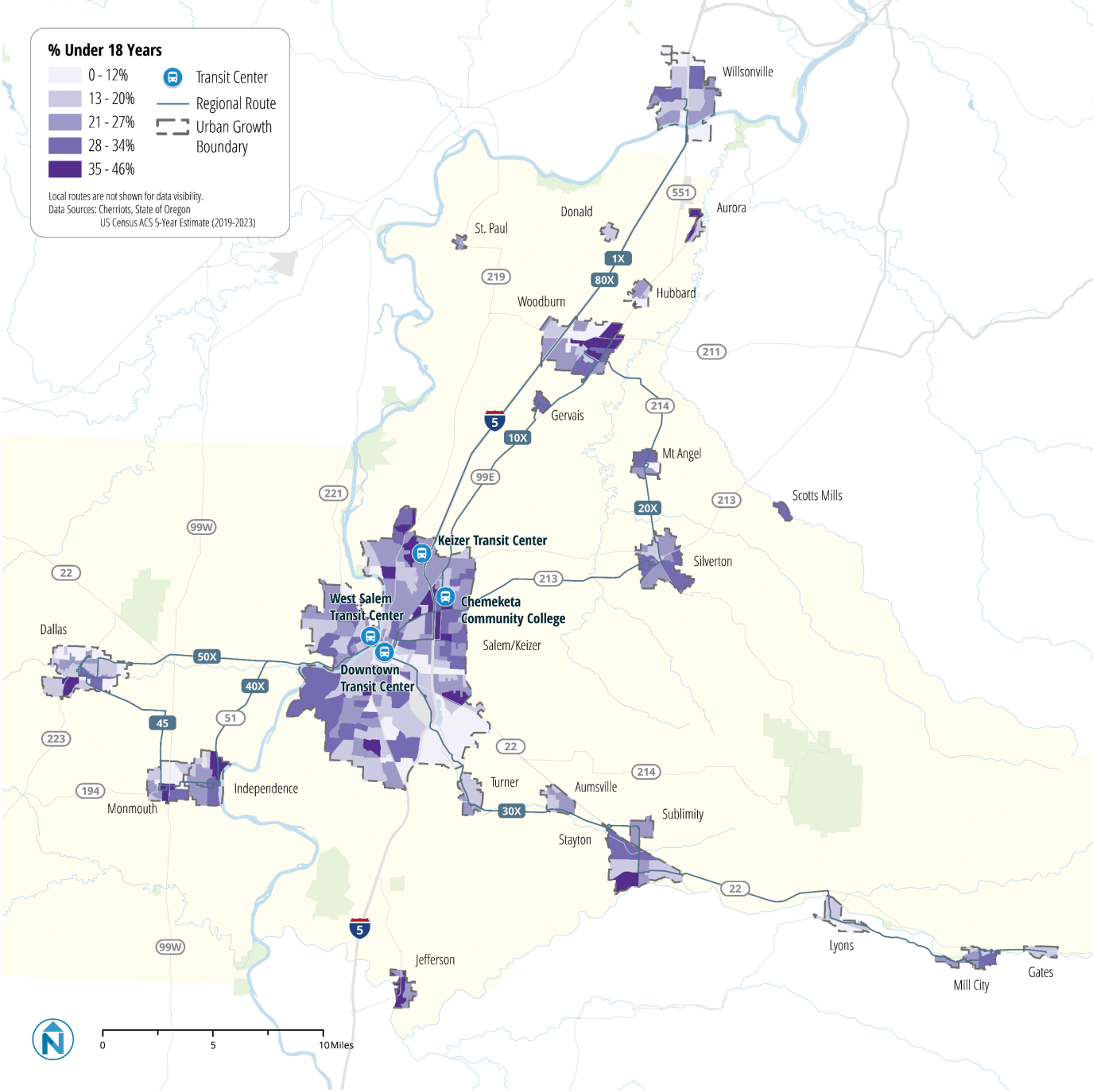
Age is an important factor in determining how people get around. People who are younger than 18 are more likely to rely on transit because they are too young to drive, do not have a driver's license, or lack a personal vehicle.

Concentrations of youths are found in north and southeast Salem, particularly around Chemeketa Community College, and in Keizer. Other pockets of youth are found in areas with elementary, middle, and high schools.



Youth Residents

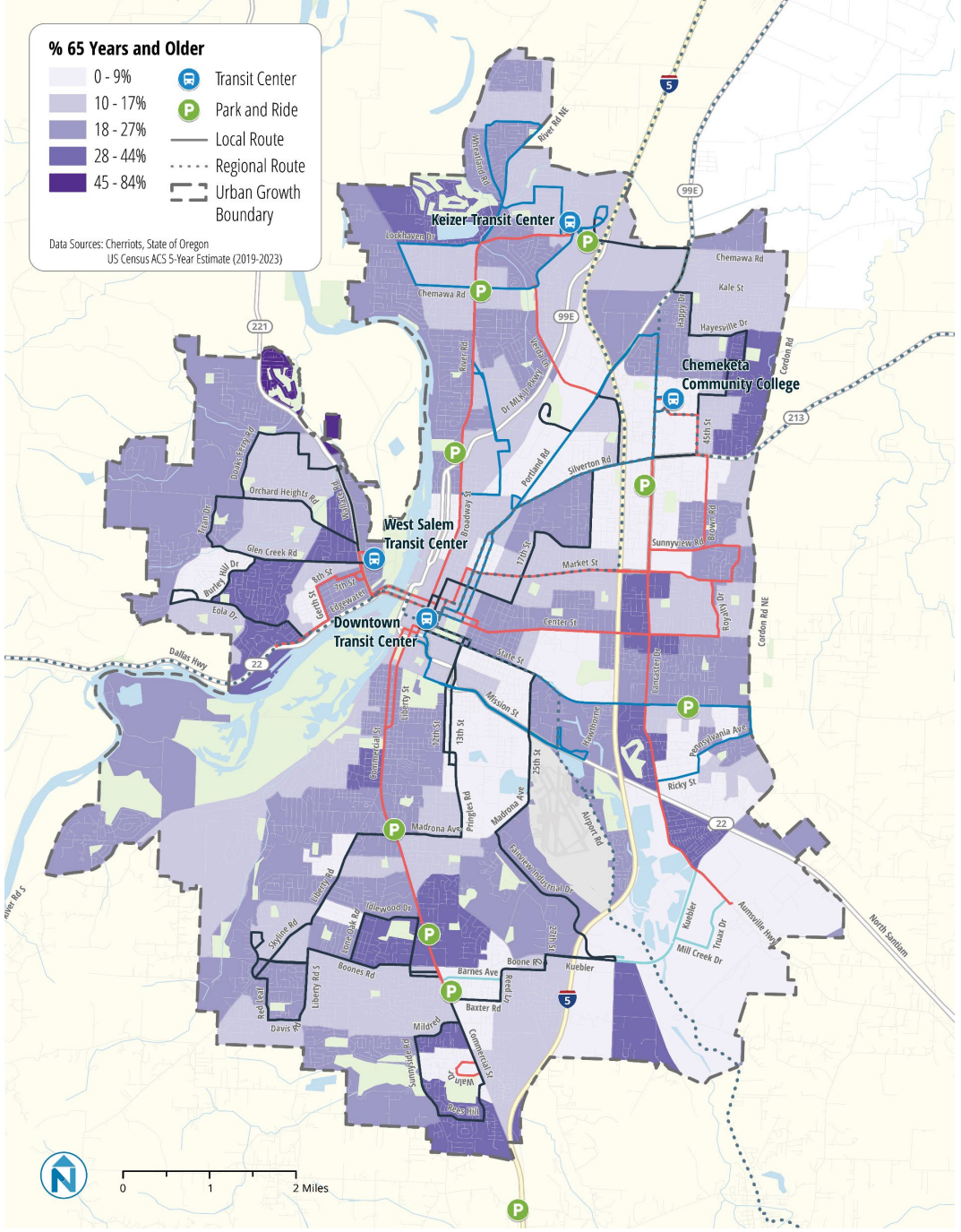
According to US Census estimates for 2024, approximately one quarter of residents in Salem, Keizer, Stayton, and Woodburn are under the age of 18, while in Dallas and Wilsonville, the population skews a little older, with a fifth or less of their population under the age of 18.



Older Adult Residents

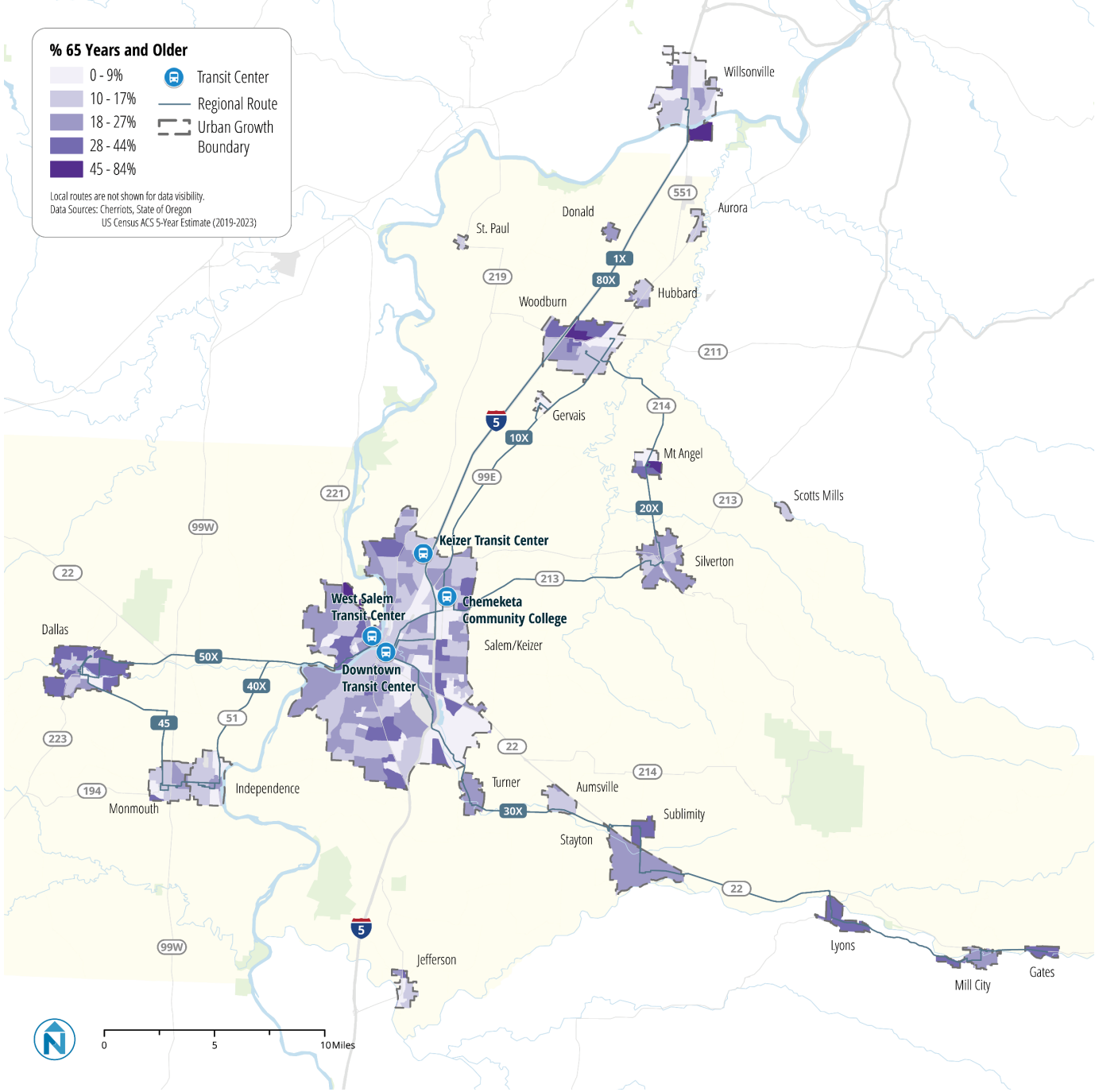
People who are 65 years or older can be more likely to use transit as they lose the ability to – or desire to – drive, bike, or walk long distances. Typically, older adults are not a primary fixed-route ridership market.

For the most part, the distribution of adults over 65 is the inverse of the distribution of youths under 18 . Concentrations of seniors are found in Salemtowne, a 55+ community in West Salem, Hayesville, Inland Shores and McNary Estates in Keizer, and portions of West Salem and south Salem.



Older Adult Residents

Some of the towns surrounding Salem-Keizer have a larger percentage of residents aged 65 and older than Salem-Keizer: 23% of Dallas residents and 22% of Stayton residents are over the age of 65, compared to 15% of Salem residents. Other concentrations of older adults are found in Marion Estates in Sublimity, the Mt. Angel Towers in downtown Mt. Angel, and the Senior Estates neighborhood of Woodburn.

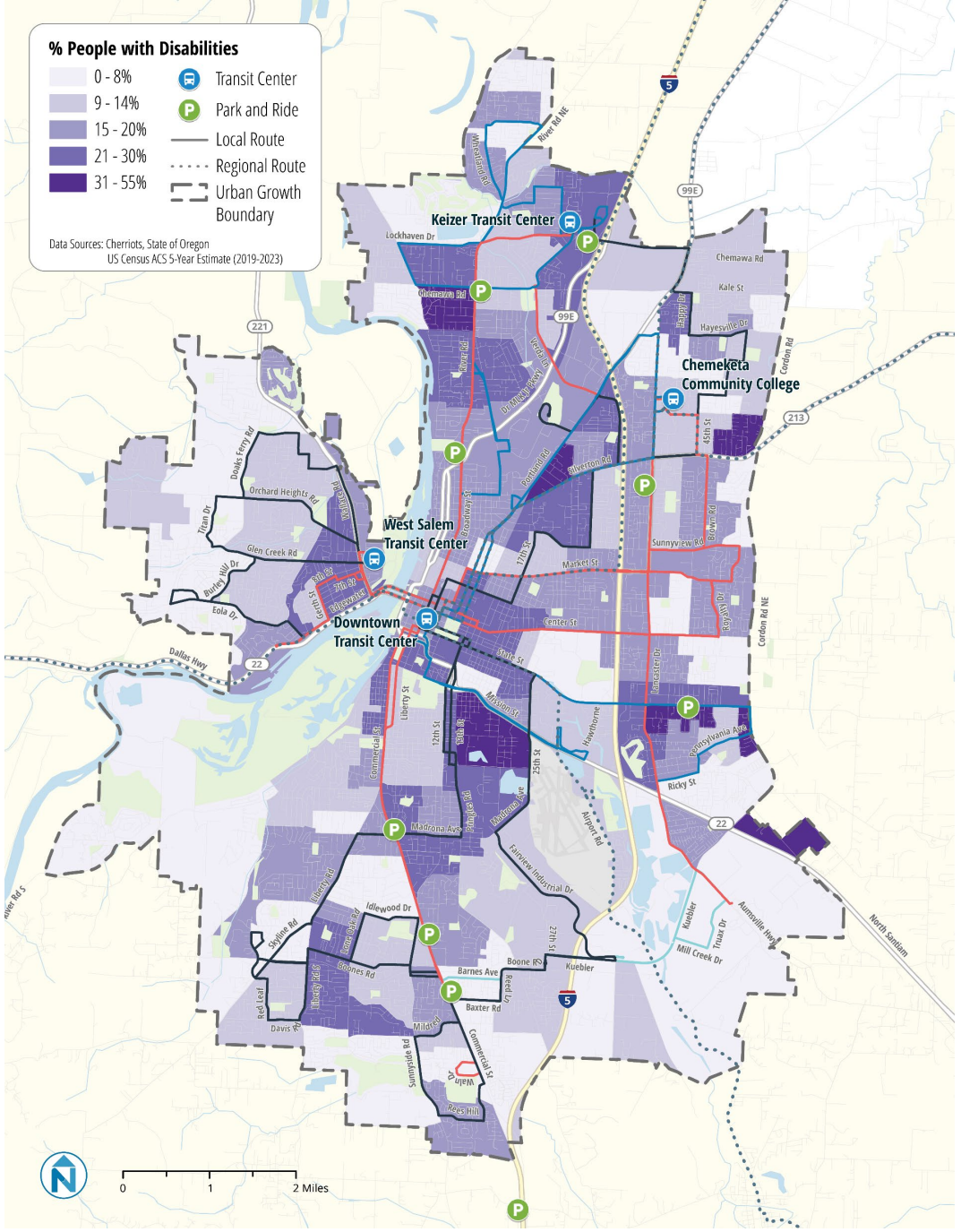


Residents with Disabilities

People with disabilities are also more likely to use transit than those without. Disability is also correlated with age: As people get older, they are more likely to develop disabilities that prevent them from driving.

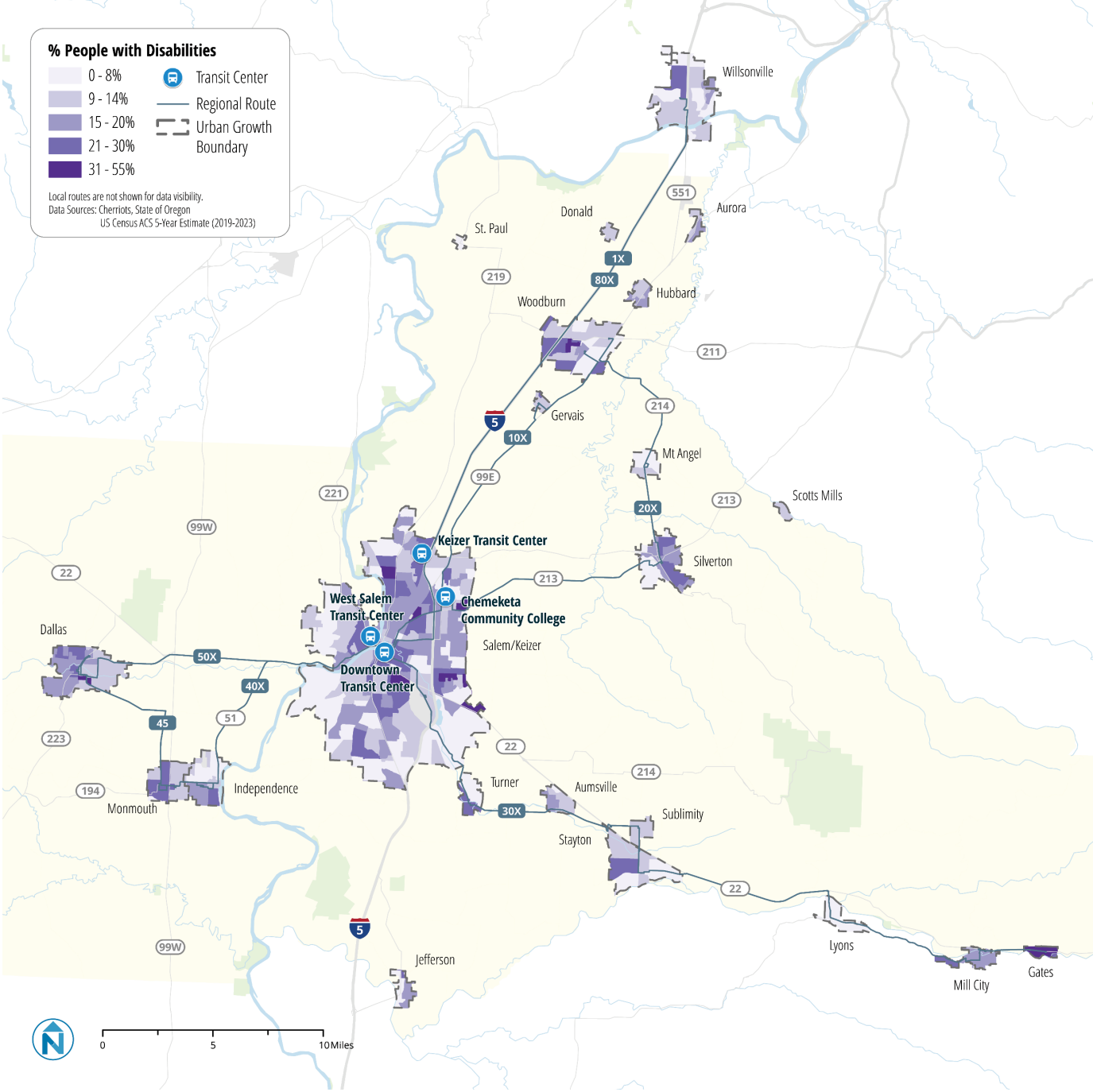
There are a few census groups of note where residents with disabilities make up approximately one-third to one-half of all residents:

- South of Mission Street between 13th and 25th Streets around McGilchrist Street
- At the southwest corner of Chemawa Road and River Road
- Along Silverton Road in northeast Salem, near the intersection of Portland Road and on the edge of the UGB between Cordon Road and 47th Street
- South of State Street and north of Oregon Highway 22 in Southeast Salem



Residents with Disabilities

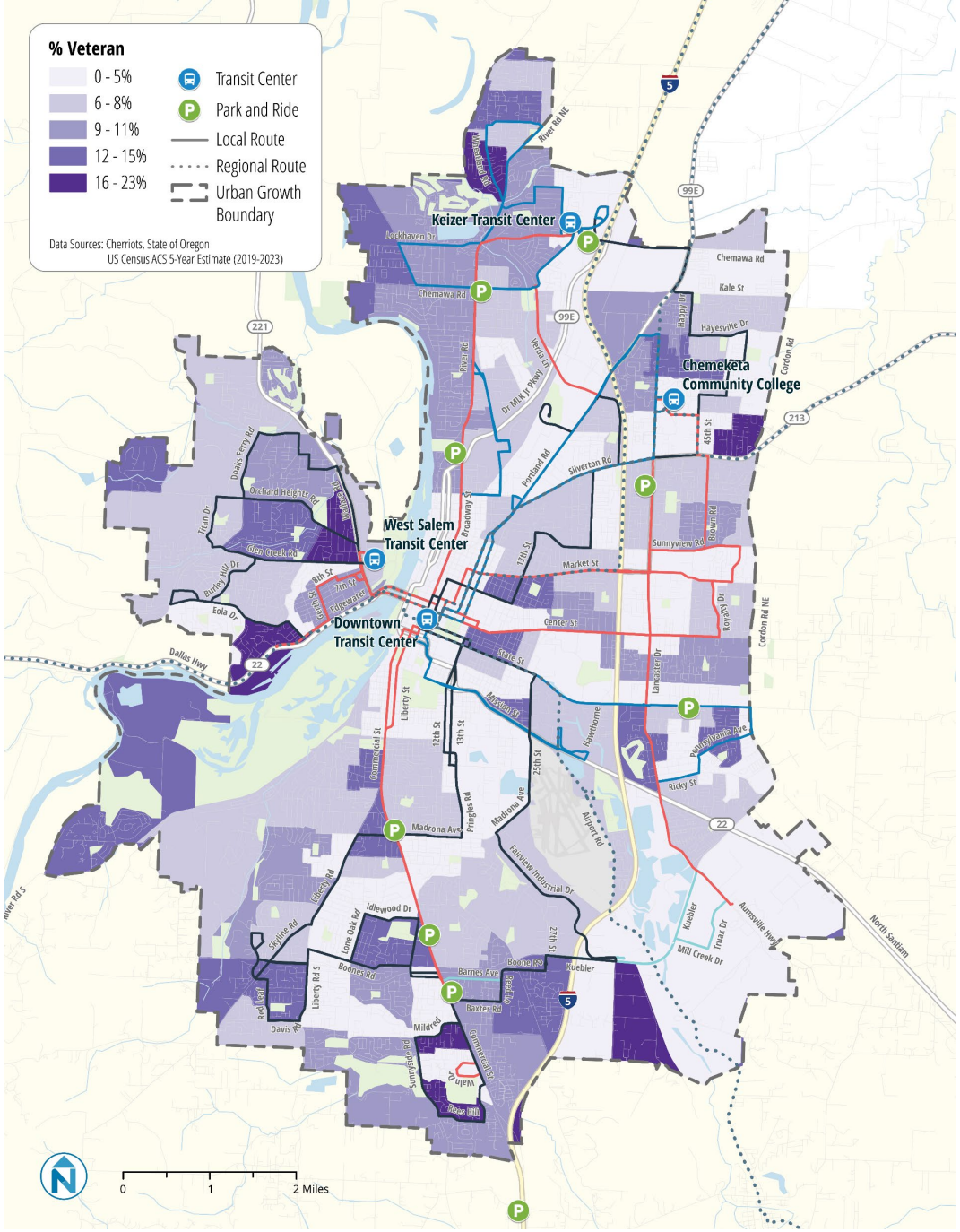
The percentage of residents with disabilities varies across the region, with some towns, such as Gates, standing out as having a higher percentage, and others, like Mt. Angel, having a lower percentage. Most municipalities are more mixed, with some census groups with higher percentages and others with lower.



Veteran Residents

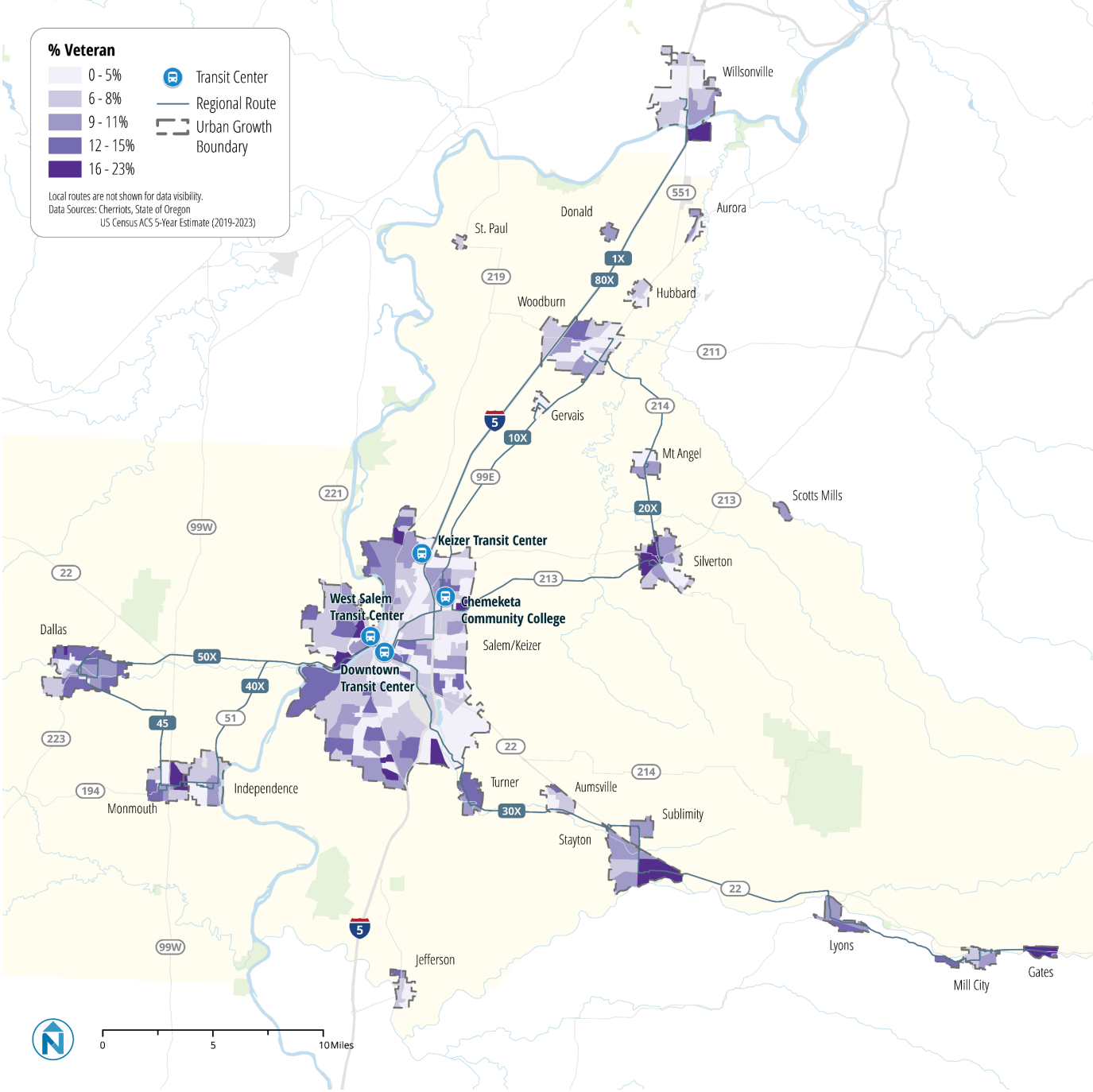
Transit access is important for veteran reintegration, particularly for veterans with disabilities and older veterans.

There are an estimated 11,133 veterans living in Salem-Keizer as of 2024, with pockets found in West Salem, south and southeast Salem, and Keizer.



Veteran Residents

Dallas, Stayton, and Monmouth have substantial concentrations of veterans, while a smaller percentage of veterans are found in Wilsonville and Woodburn.



Regional Population and Employment Trends

Population and Employment Trends

This section provides more focused population and employment trends in the communities served by the Regional routes. The analysis is based on the population and jobs in the entire urban growth boundary of the respective communities and not only the areas served by each route's bus stops. This applies to all tables and charts in this section. For example, Woodburn is served by 10X, 20X and 80X. Therefore, the number of people and jobs throughout all of Woodburn are included in the values for all three routes.

The adjacent table lists the change in population (through 2025) and change in jobs (through 2022), compared to change in weekday ridership and weekday revenue hours (through 2024). The population and job values exclude Salem-Keizer; however, ridership and service levels within Salem-Keizer are included in the ridership and revenue hour values.

Relative to 2017, ridership has decreased for Routes 30X, 50X, and 1X. However, service levels have increased for Routes 50X and 1X, as have population and employment in the communities served by these routes. The communities along the Santiam River (served by Route 30X) have experienced the least population growth and have had almost no change in employment relative to 2017.

Routes 45 and 80X were not yet implemented in 2017, so there is no data for the change in ridership and revenue hours between 2017 and 2024.

Route	Change in Population (2017–2025)	Change in Employment (2017–2022)	Change in Weekday Ridership (2017–2024)	Change in Weekday Revenue Hours (2017–2024)
1X – Wilsonville / Salem Express	+21%	+6%	-62%	+20%
10X – Woodburn / Salem Express	+16%	+4%	+50%	+38%
20X – North Marion County / Salem Express	+14%	+4%	+52%	+14%
30X – Santiam / Salem Express	+7%	+<1%	-14%	-3%
40X – Polk County / Salem Express	+11%	+4%	+46%	+62%
45 – Central Polk County	+11%	+4%	-	-
50X – Dallas / Salem Express	+13%	+15%	-23%	+120%
80X – Wilsonville / Keizer Express	+19%	+6%	-	-

Note: Population and jobs values exclude Salem-Keizer.

Source: PSU Population Research Center (population) and US Census Bureau LEHD (employment)

Population and Employment Trends

Based on data from PSU's Population Research Center, all communities are expected to grow in population over the next 15 years. Growth may be slowest for routes north and northeast of Salem (Routes 1X, 10X, 20X, and 80X) with increases of less than 10% expected. Growth is expected to be strongest for communities west of Salem and east of Salem along the Santiam canyon (with growth of 13 to 17%).

Route	2025	2040	Change	% Change
1X – Wilsonville / Salem Express	29,756	30,566	+270	+1%
10X – Woodburn / Salem Express	33,868	37,093	+2,267	+7%
20X – North Marion County / Salem Express	45,730	50,584	+3,409	+7%
30X – Santiam / Salem Express	23,128	27,630	+3,094	+13%
40X – Polk County / Salem Express	41,618	52,222	+7,167	+17%
45 – Central Polk County	41,618	52,222	+7,167	+17%
50X – Dallas / Salem Express	19,143	23,814	+3,163	+17%
80X – Wilsonville / Keizer Express	60,377	64,022	+2,262	+4%

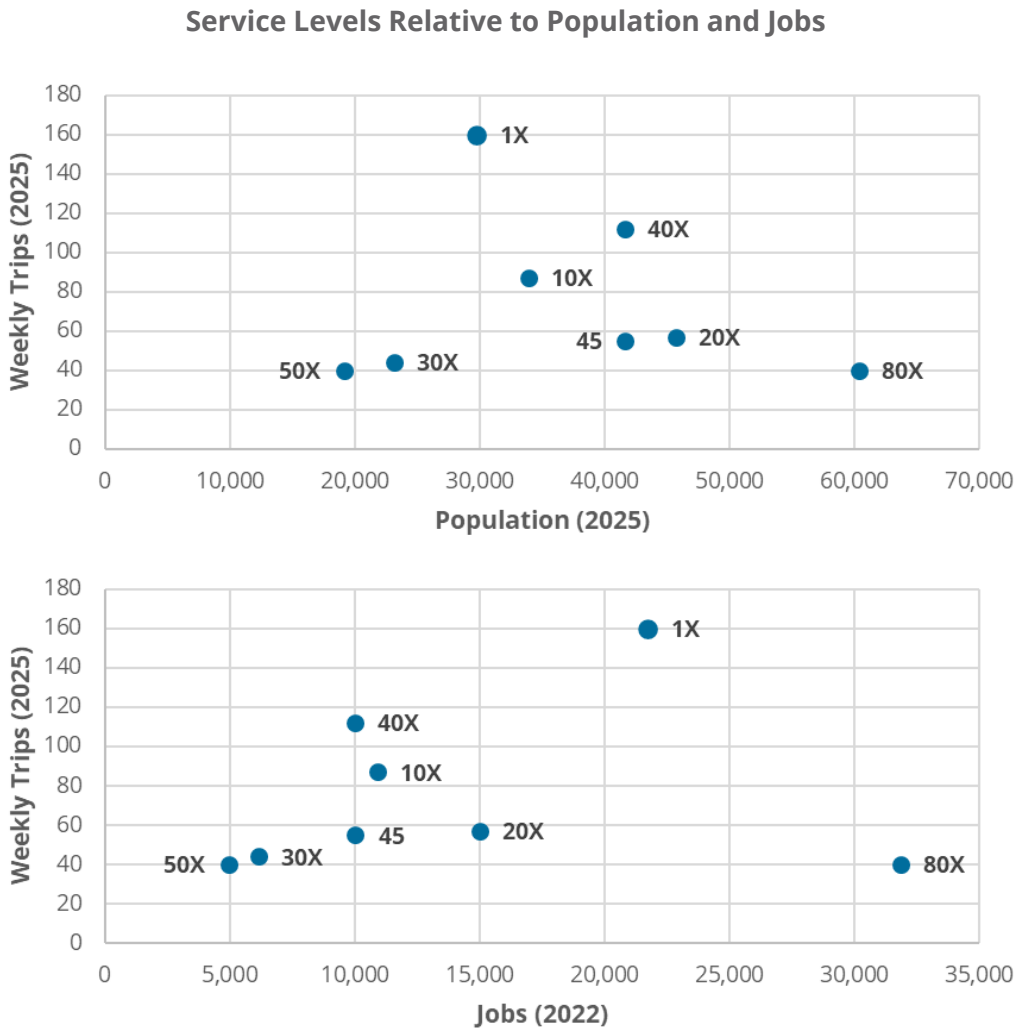
Note: Population and jobs values exclude Salem-Keizer.

Source: PSU Population Research Center

Service Levels Relative to Population and Jobs

The two adjacent charts show the population and jobs for each Regional route (excluding Salem-Keizer) relative to the number of weekly trips.

Route 80X serves the most people and jobs outside Salem-Keizer but has some of the lowest service levels. Route 1X, with the most trips throughout the week, serves a moderate level of population and relatively high number of jobs.



Source: PSU Population Research Center (Population) and US Census Bureau LEHD (Jobs). Jobs exclude Salem-Keizer

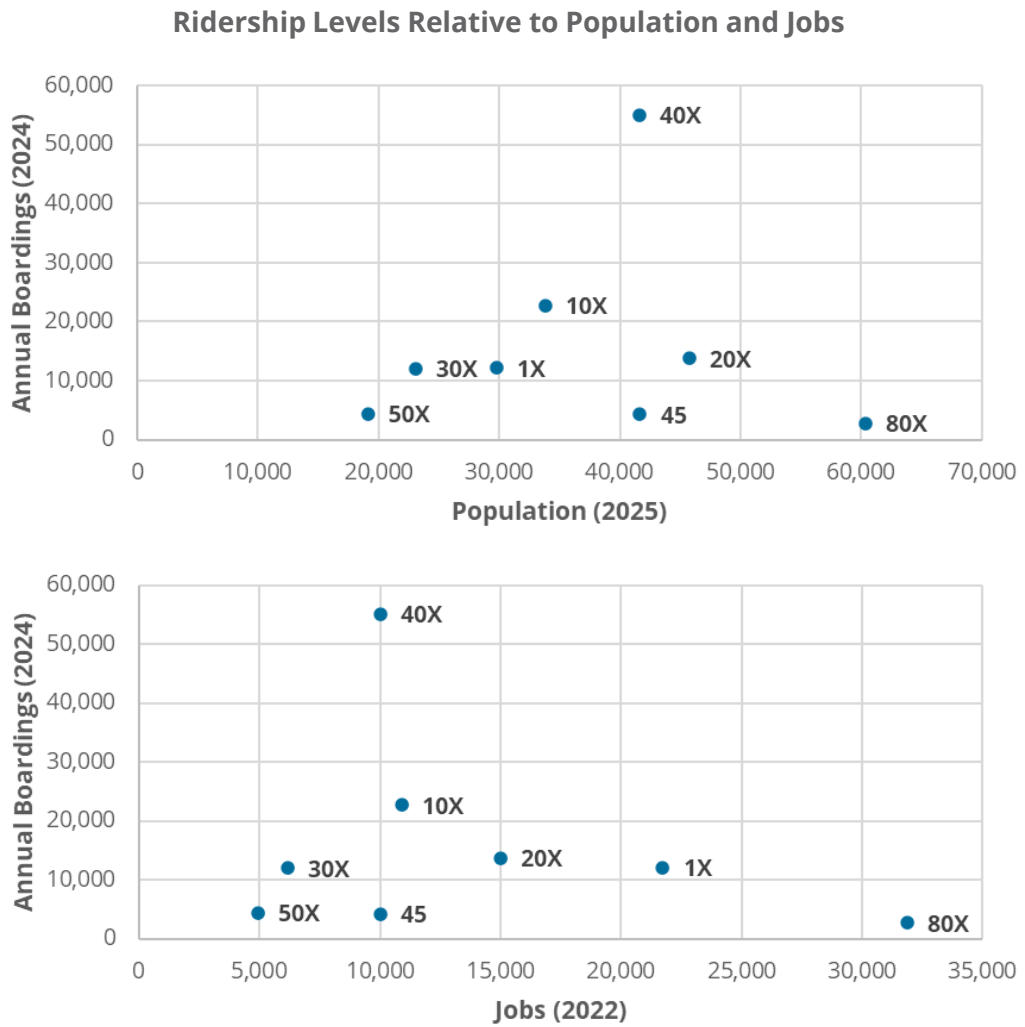
Ridership Levels Relative to Population and Jobs

The two adjacent charts show population and jobs for each Regional route (excluding Salem-Keizer) relative to the annual boardings.

Route 40X has the highest ridership, despite relatively low levels of jobs and moderate population.

Routes 1X, 20X, 45, and 80X, on the other hand, have relatively high jobs and population but have lower levels of ridership.

This analysis indicates that the frequency of service for Regional routes may be a stronger indicator for transit demand than population and employment density.



Source: PSU Population Research Center (Population) and US Census Bureau LEHD (Jobs). Jobs exclude Salem-Keizer

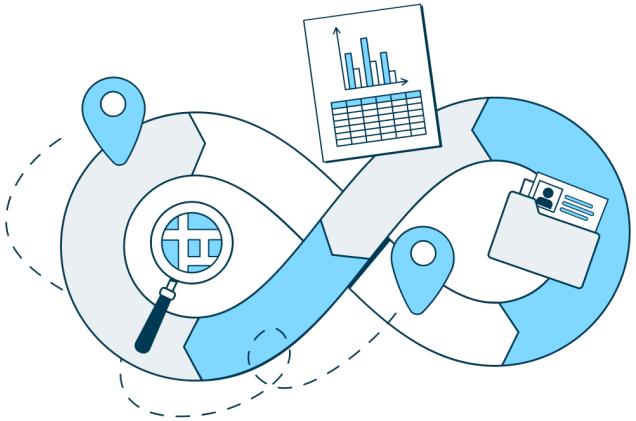
Regional Travel Demand

Overview

To analyze travel patterns throughout the Cherriots service area, the project team has obtained access to LOCUS, a cell phone location data product. This data provides the total market of all travelers, regardless of mode, between Census geographies. Using such data helps to understand the highest possible demand for transit service.

LOCUS is a proprietary location-based travel pattern product developed by Cambridge Systematics (CS). Location data comes from cell phone apps where location services are enabled. No personally identifiable information exists in the raw data.

LOCUS



The core LOCUS product used for this study is origin-destination trips between census block groups. This data is presented in an interactive dashboard so that it can be quickly filtered and sorted according to several criteria, including:

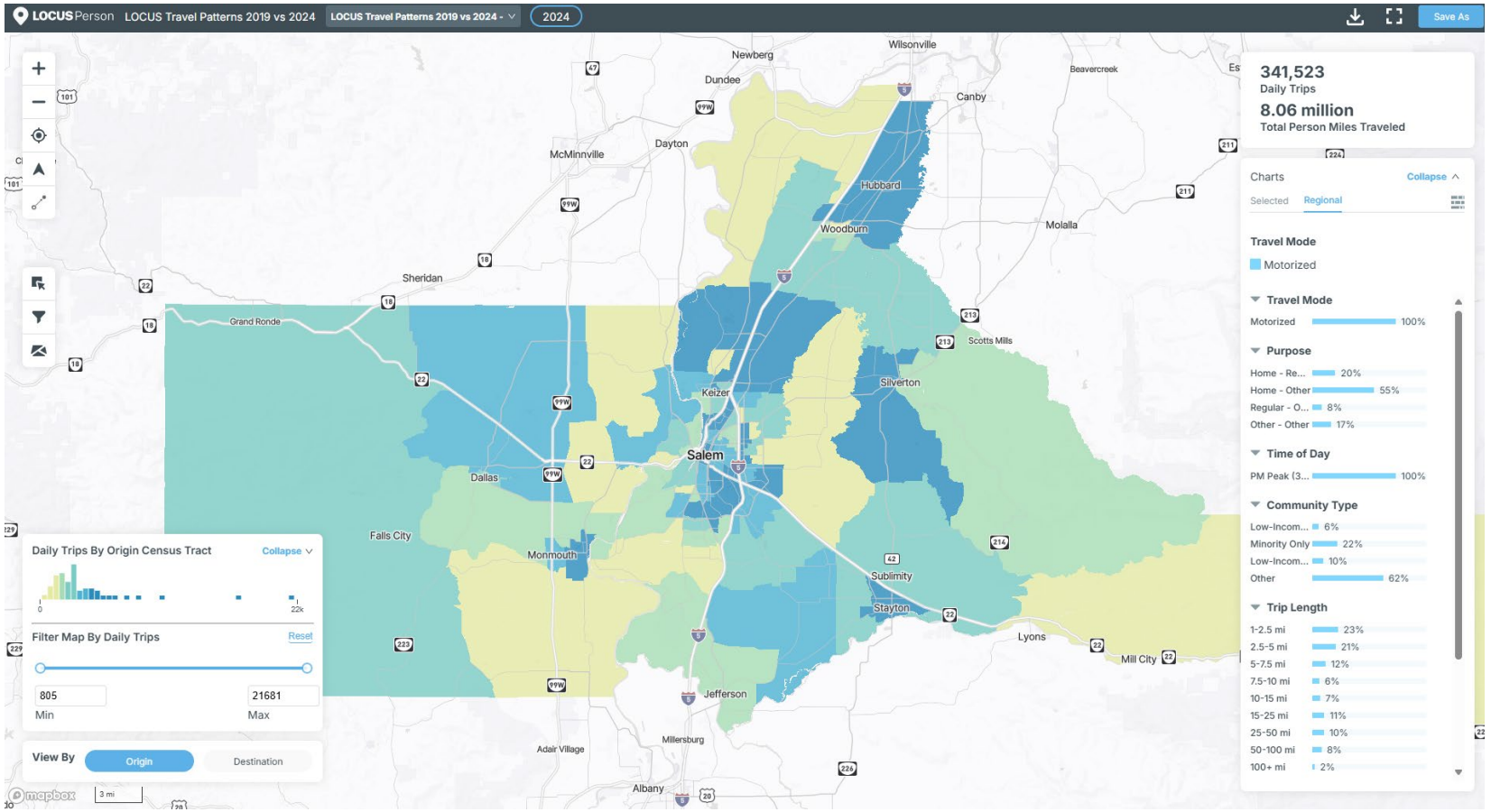
- Travel mode (motorized, bicycle, pedestrian)
- Time of day
- Day of week
- Trip purpose
- Trip length
- Residents vs visitors
- Equity focused trips (low-income and minority communities)
- Year (2019 for pre-pandemic vs 2024 for recent patterns)

This section starts off by talking about what LOCUS is and the platform that was developed before transitioning to a discussion about what the data can be used for.

LOCUS Sample Results

Since LOCUS is intended to be an interactive dashboard, this report will not document all the potential outputs from the tool. Instead, some key features will be demonstrated to convey the power of the tool.

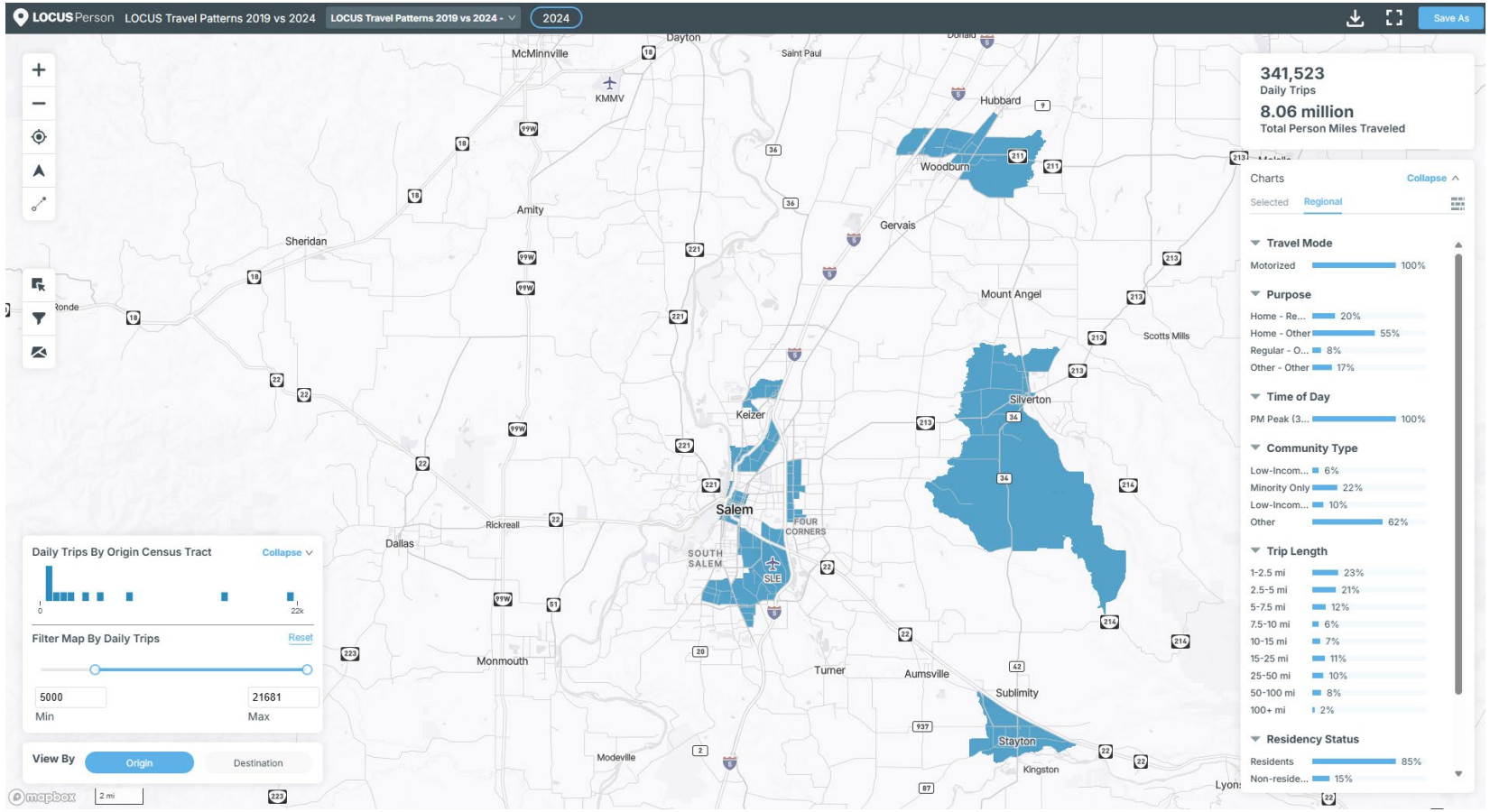
As a demonstration of LOCUS's capabilities, the image to the right shows the output from the dashboard for current (2024) weekday PM peak trips for motorized vehicles that are longer than one mile. This can be considered the universe of potential trips for transit. Darker colors represent a higher density of trips originating in the census tract.



LOCUS Sample Results

The data can be filtered to show block groups with a minimum threshold of trips.

In the image to the right, only block groups with 5,000 or more daily trips are shown. This shows the potential areas where transit could generate enough ridership to make service sustainable, assuming a modest 2% transit mode share and that there is transit service to the places people are trying to get to.

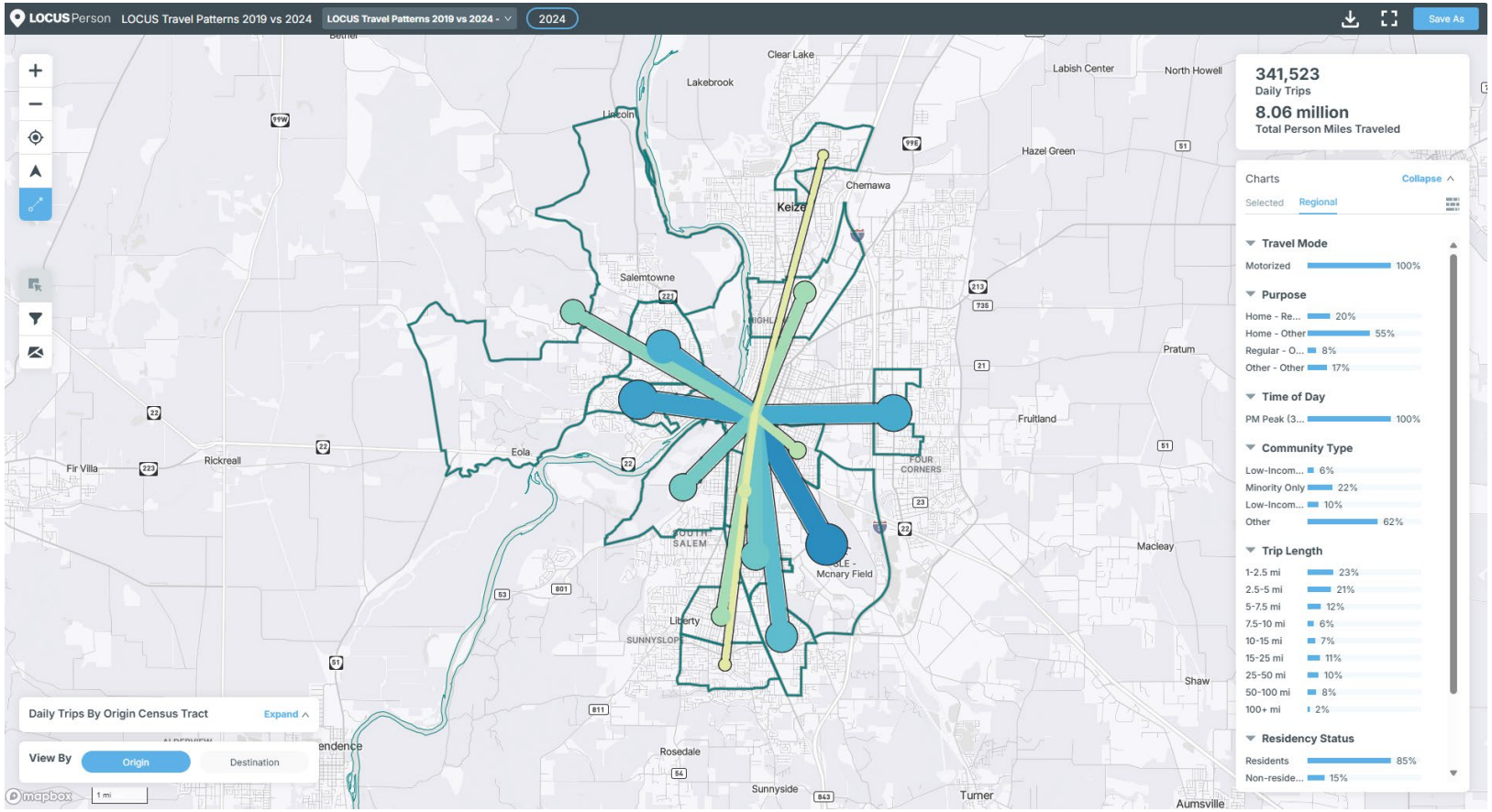


LOCUS Sample Results

This data can then be analyzed further to understand travel flows to specific census block groups, which can help determine if there are gaps in the existing network.

In the example to the right, the block group encompassing Downtown Salem was selected. Thinner lines represent origin-destination pairs with less trips than pairs with thicker lines.

As demonstrated, the LOCUS dashboard is a powerful tool. The project team will use LOCUS later in this project to develop and evaluate recommendations.



5 Route Profiles

6 Transit Opportunities


CHERRIOTS