

Appendix A








Existing Conditions Report



PARADIGM
PLANNING



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Executive Summary

Purpose

The purpose of the Existing Conditions report is to form a basic understanding of the planning and transit environment surrounding the Salem-Keizer region (defined as the area within the Salem Urban Growth Boundary) as it pertains to Salem-Keizer Transit. The report also aims to investigate in detail the study areas within the region as well as the populations that currently reside within these areas, and begin to identify possible barriers to accessing transit services.

The report provides a snapshot of land uses and transportation facilities as well as a profile of the populations served by each of the identified study areas. Information on land uses and transportation facilities will help identify potential barriers within each study area during the analysis of alternatives. Study area profiles will serve as a complementary piece of data gathered during the outreach process.

This report along with survey results from the Initial Outreach Phase will assist in developing potential alternatives for each study area and inform final recommendations to the Salem-Keizer Transit Board of Directors.



A bus stop on Chemawa Road N in Keizer.

Significant Findings

Keizer

- Since 2000, density has increased 15%, twice that of the Salem-Keizer area
- Largest growth in share of minority population, from 18% to 25%
- Highest share of carless households of the study areas, seven percent
- Route 9 has the most average daily wheelchair boardings (10) of all the routes in Keizer
- Route 14 has the fewest boardings (74) and lowest productivity (five boardings per revenue hour) of any route in the Cherriots system

South Salem

- Lowest share of minority population compared to the other study areas
- Route 1 has the most average daily wheelchair boardings (13) of the study areas

West Salem

- Highest median household income of the study areas
- Only study area where the population is getting younger
- Only place where car ownership increased between 2000 and 2012
- Route 12 has the most average daily wheelchair boardings (seven) of routes in West Salem
- Ridership on Routes 22 and 23 is driven by nearby high and middle schools

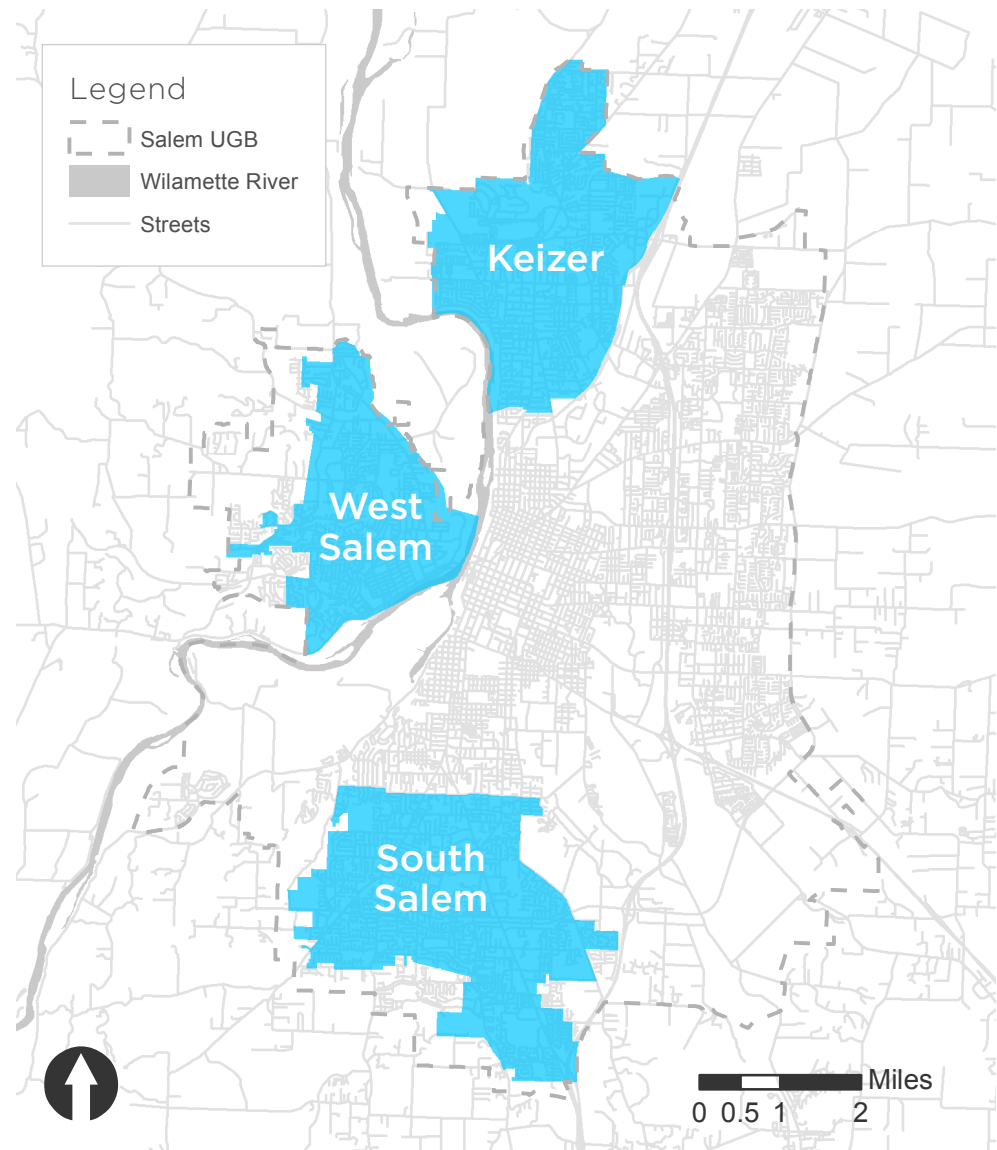
All Areas

- Median household income is higher than that of the region
- Share of minority population is lower than that of the region
- Rates of car ownership are higher than the region
- A large majority of jobs in each study area (80% or more) are being filled by people who live outside of that study area

Introduction

Paradigm Planning gathered information about each study area, the cities of Salem and Keizer, and the region as a whole in order to provide context for the Capturing the Ride project. For the purposes of this report, the region was defined as the area within the Salem Urban Growth Boundary. The three study areas are West Salem, South Salem, and Keizer. Instances where one study area stood out from the others are noted as well. Specifically addressed in this report are statistics regarding demographic groups considered most likely to be impacted by or benefitted from changes to transit service. Demographic groups selected for analysis include youth (under 18), seniors (over 65), minorities (non-white, including Hispanics), families living below the poverty line, and households without cars. This analysis focused on share of population, change in share of population, population density and location, and changes in household income and car ownership. Employment statistics are also examined for the three study areas. Finally, an overview of the Cherriots system is provided, with an in-depth look at the transit routes within each study area. Please refer to the methodology section for an explanation of the data sources that were used in this report.

Study Areas



The Salem-Keizer Region

Demographics

The Salem-Keizer region is located in the Willamette Valley with an estimated 2012 population of 226,000 people within the urban growth boundary. The region contains the cities of Salem and Keizer, portions of Marion and Polk counties, and unincorporated areas of Four Corners and Hayesville. The population density for the region is approximately 3,719 people per square mile.

Roughly one quarter of the population is under the age of 18 and approximately 12% of the population is 65 years

of age or older. The Salem-Keizer region is comprised of approximately 32% minorities. The Hispanic and Latino population is the largest minority group with approximately 22% of the total population. In 2012, there were an estimated 84,000 occupied housing units in the Salem-Keizer region. Of those, roughly nine percent did not own a vehicle. The median household income (inflation adjusted for 2013) was \$46,000.

	West Salem	South Salem	Keizer	Salem-Keizer	Metro Area (UGB)
Population	20,486	39,192	36,402	191,237	225,933
Area (Square Miles)	6.11	8.39	7.09	54.98	60.76
Population Density (Per Sq Mile)	3,352	4,672	5,135	3,478	3,719
Median Household Income	\$62,668	\$56,520	\$51,708	\$46,642	\$45,837
Income Change since 2000	-2.5%	-14.3%	-17.9%	-16.8%	-16.7%
Youth (Under 18)	24.6%	24.7%	26.3%	25.4%	26.2%
Seniors (65 and Over)	14.2%	14.5%	13.5%	12.7%	12.4%
Minority (Non-White)	19.6%	16.9%	25.4%	28.5%	31.6%
Households with No Car	6.3%	5.4%	7.2%	8.9%	9%
Families in Poverty	8.2%	7.7%	12.2%	12.3%	14.7%

The Salem-Keizer Region

Cherriots System

The Cherriots bus system is a largely radial network with Salem's downtown as the center. The network is composed of corridors, circulators, and centers, in which low frequency circulator routes connect outlying neighborhoods to transit centers that allow for easy transfer to more frequent corridor routes. Many of the corridors have a one-way loop at their ends, some of which are long and circuitous forcing riders to go significantly out of their way to get to their destinations. Circulator routes serve the West Salem, South Salem, and Keizer study areas. Salem-Keizer Transit (SKT) uses pulses to connect routes at transit centers.

Routes serve the Salem-Keizer region at various frequencies throughout the day. For this analysis, the day is broken into four sections: AM peak (5:00 to 9:00 am), Midday (9:00 am to 3:30 pm), PM peak (3:30 to 6:30 pm), and Evening (6:30 to 10:00pm). Nearly half of the bus routes (10 of 23) have greater frequency during the AM and PM peaks, aiming to capture

people commuting to and from work. Three bus routes have the same frequency for the AM peak, Midday, and the PM peak with less frequency in the evening, suggesting steady ridership throughout the day and less demand after 6:30 pm. The remaining ten routes maintain the same frequency throughout the day. Most often this is for routes with 30 to 60 minute headways with the exception of Route 11 - Lancaster Drive, which runs at 15 minute intervals all day.

On average, 13,800 people board Cherriot buses during the day. The average daily productivity of the transit system as a whole is 26.7 boardings per revenue hour. Breaking ridership down by time of day reveals that most routes are more productive during Midday and the PM peak, averaging 26.1 and 26.7 passengers per revenue hour, respectively.

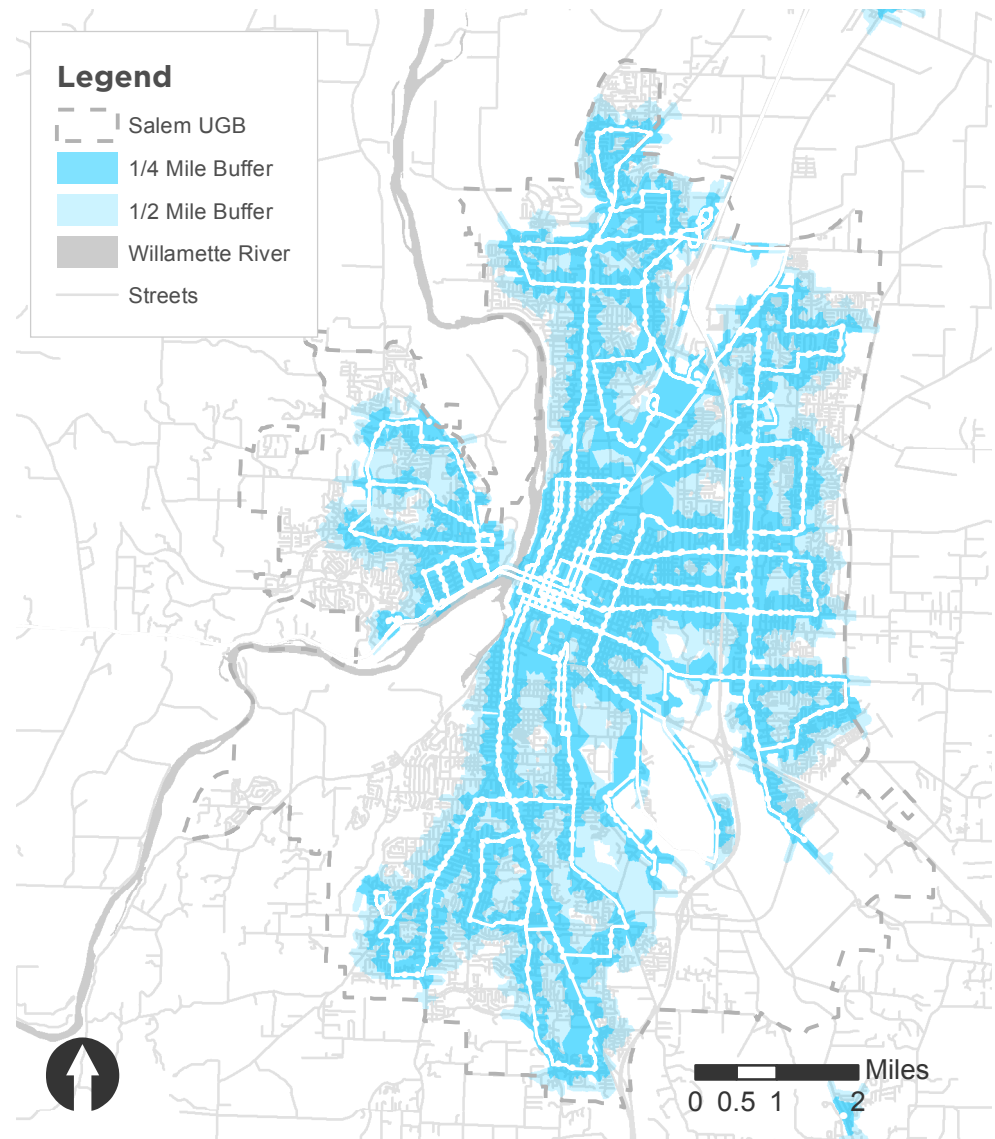


Coverage and Use

Of the people residing within the the Salem-Keizer region, 52% are within a one-quarter mile walking distance and 79% are within a half-mile walking distance of bus stops.

Analysis of riders' travel patterns indicates that riders have similar origins and destinations for both trips related to school and/or work and trips that are not. Additionally, there is a demonstrated demand for service that does not radiate from downtown. This means that there is strong, all day demand for transit along certain routes; however, the network cannot be a purely radial system based out of downtown. In an effort to balance the goals of ridership and coverage, SKT focuses most of its investment on supporting corridor routes while maintaining basic service for circulators, typically running on 60 to 120 minute headways. Circulators and the one-way loops that exist on the end of some corridor routes often have low productivity and, thus, are costly to operate. These are the routes that would likely be the best candidates for flexible transit service.

Bus Stop Accessibility



The Salem-Keizer Region

CherryLift

CherryLift is the complementary paratransit service (mandated by the ADA) provided by SKT for the elderly and disabled. CherryLift, a dial-a-ride service, serves the entire UGB. Ridership has rapidly increased over the past decade, which corresponds with national demographic trends of an aging population.

Annual boardings have increased from over 200,000 in 2003 to 400,000 by 2012. Although much of the increase is due to these demographic shifts, it can be speculated that service cuts and service changes to the Cherriots system have resulted in larger increase in ridership than expected. It is important to note that CherryLift service costs SKT five times as much per customer as fixed-route service due to the additional staffing needed.

RED Line

The RED Line is an additional service provided by SKT for the disabled and elderly. This is a dial-a-ride shuttle system that makes trips to popular shopping destinations at one-third the price as CherryLift. The line has scheduled shifts in each Salem-Keizer neighborhood and visits each neighborhood twice a week--once on a weekday afternoon and once on a weekday morning. Like CherryLift, it requires a reservation and picks you up at your home.



Existing Transportation Plans

Mid-Willamette Valley Council of Government's Regional Transportation System Plan

The 2011 Regional Transportation System Plan (RTSP) included six projects dedicated to transit improvements. Three of the six have already received dedicated funding and are now complete or underway. They include the new Keizer Transit Center, completed in 2013, improvements to the Downtown Transit Mall, and corridor improvements along high-frequency transit routes. The remaining three projects in the RTSP include a new South Salem Transit Center, a new Paratransit Facility, and improvements to the existing dispatch facility.

Salem Transportation System Plan

The Salem Transportation System Plan, updated in 2012, provides policy guidance for SKT. The City recognizes that accessibility and convenience are the primary barriers to increased transit ridership and sets a policy goal and objectives to overcome them.

Keizer Transportation System Plan

The Keizer Transportation System Plan, updated in 2009, provides policy guidance and performance measures for transit within city limits. The City recognizes that accessibility and mobility are priorities for its transit goal. The TSP also sets performance measures for monitoring TSP implementation. The measure related to transit sets requirements on the number of units, or square footage of commercial development, within a transit influenced area.

Keizer





Many streets in Keizer have a lack of sidewalks.



An open field near a bus stop on Chemawa Rd NE.



A typical commercial intersection.



Two women outside of their home in Keizer.

Demographic & Employment Analysis

The City of Keizer is located just north of Salem. In 2012, it had an estimated population of just over 36,000 people. Since 2000, density has increased 15%, nearly twice the growth rate of Salem-Keizer as a whole. Outside of sections along River Road N and the Keizer Station Shopping Center, Keizer is predominantly residential. There is a high volume of single-family homes, as well as a few apartment complexes scattered throughout the area. The street network does not follow a grid pattern, and is characterized by many small, disconnected local streets radiating off of arterials. The lack of connected streets makes it difficult to serve this area with traditional bus service.

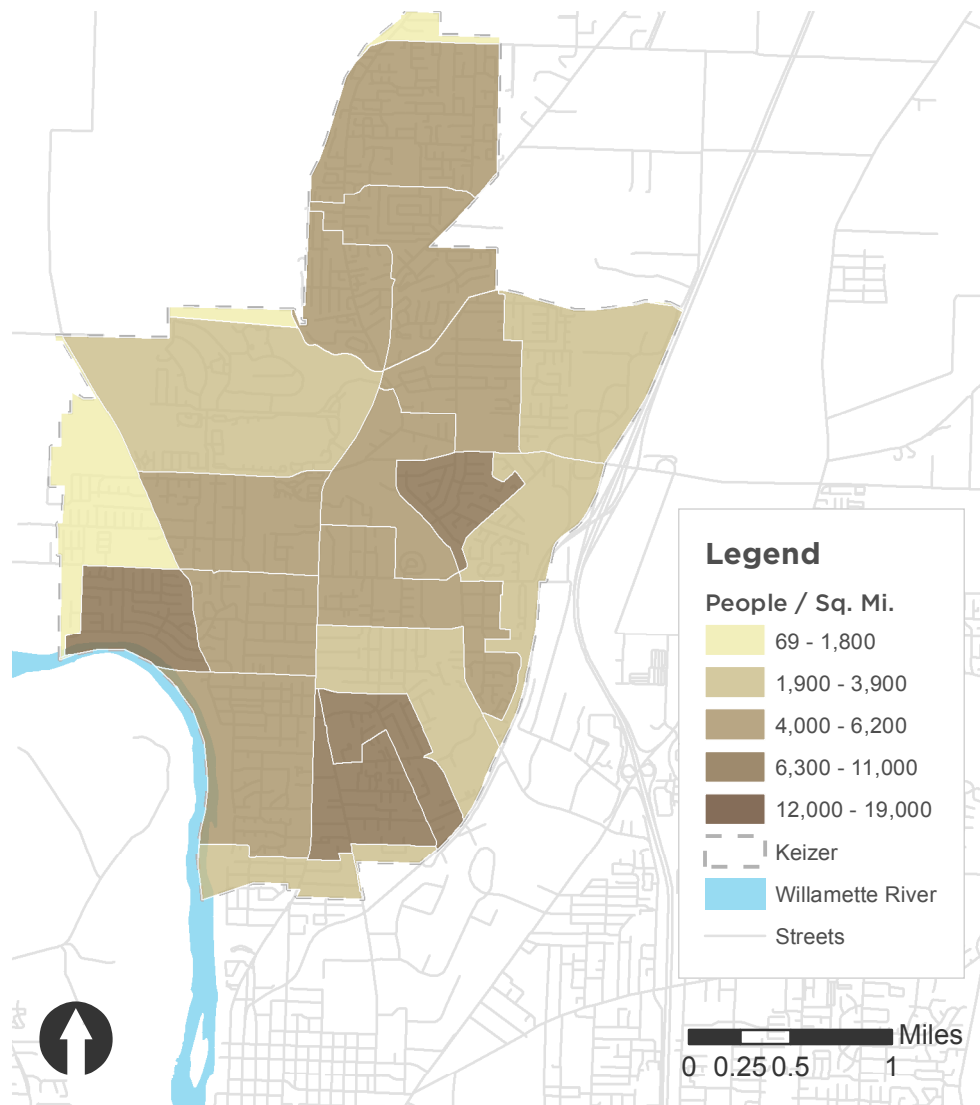


A typical residential street in Keizer where sidewalk infrastructure is lacking.

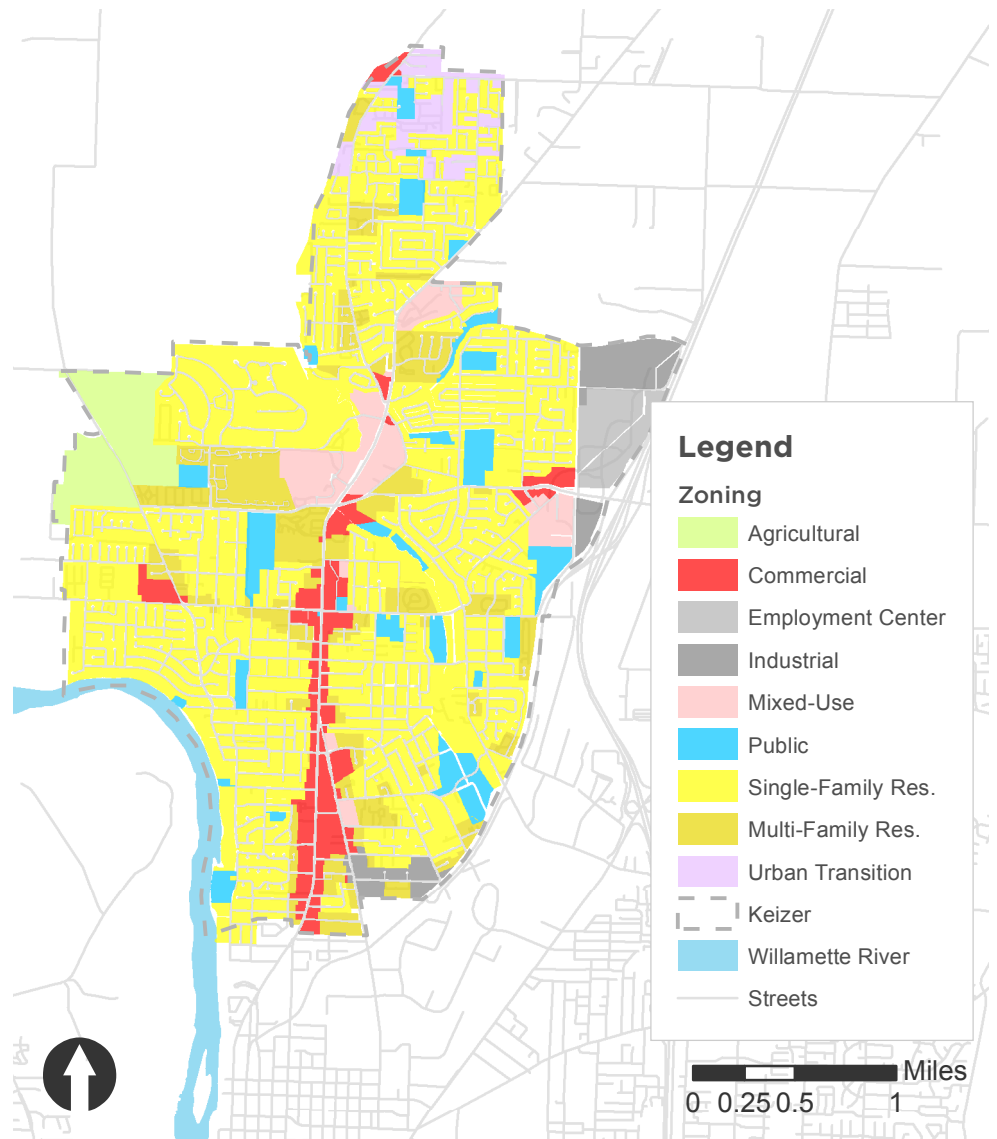
	Keizer
Population	36,402
Area (Square Miles)	7.09
Population Density (Per Sq Mile)	5,135
Median Household Income	\$51,708
Income Change since 2000	-17.9%
Youth (Under 18)	26.3%
Seniors (65 and Over)	13.5%
Minority (Non-White)	25.4%
Households with No Car	7.2%
Families in Poverty	12.2%

Source: 2008-2012 American Community Survey & 2000 US Census

Population Density



Zoning

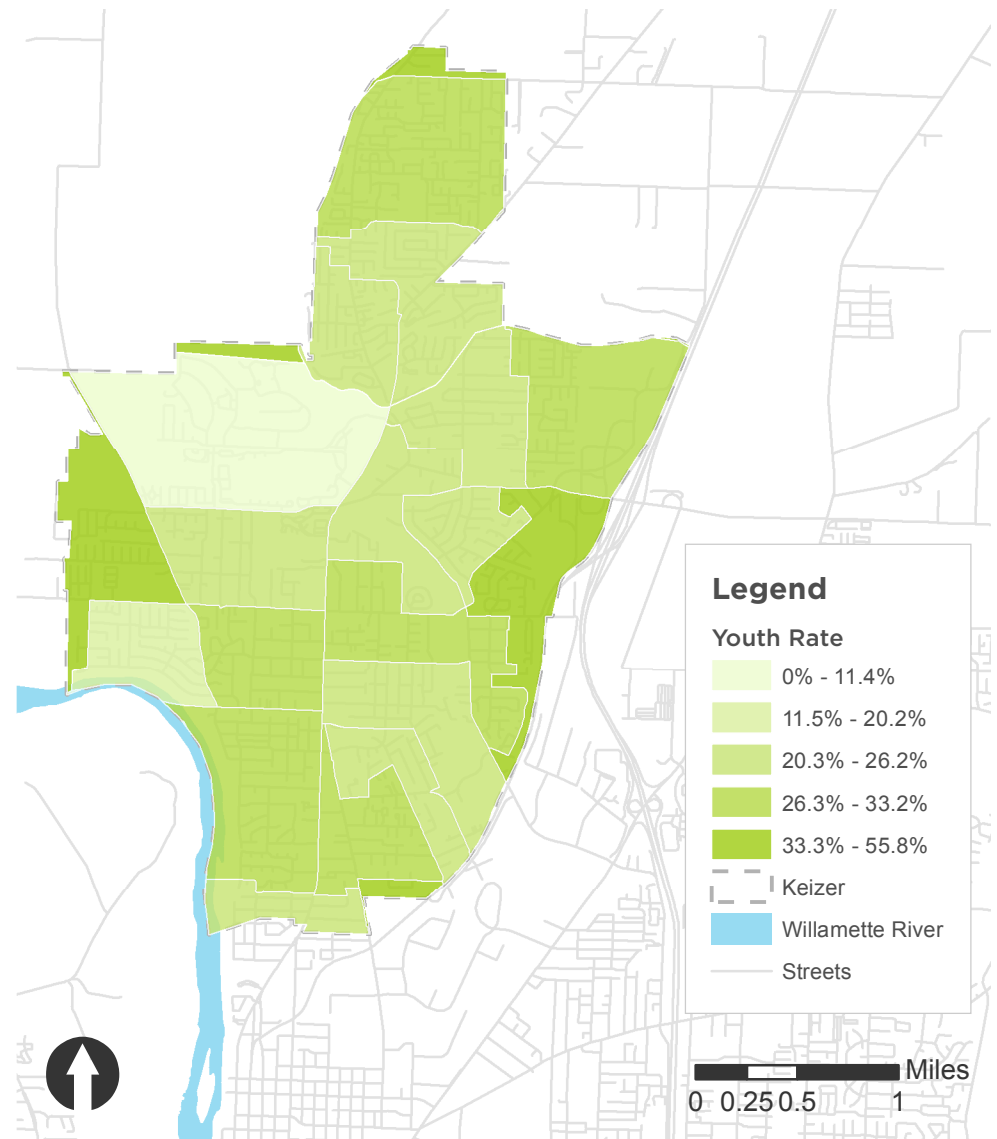


Demographic & Employment Analysis

Youth (Under 18)

The youth population share is on par with that of the Salem-Keizer region on the whole. The average youth density is 1,350 youths per square mile with the highest concentrations at the eastern and western edges of the study area. From 2000 to 2012, the youth population share fell by one and a half percentage points to 26.3%.

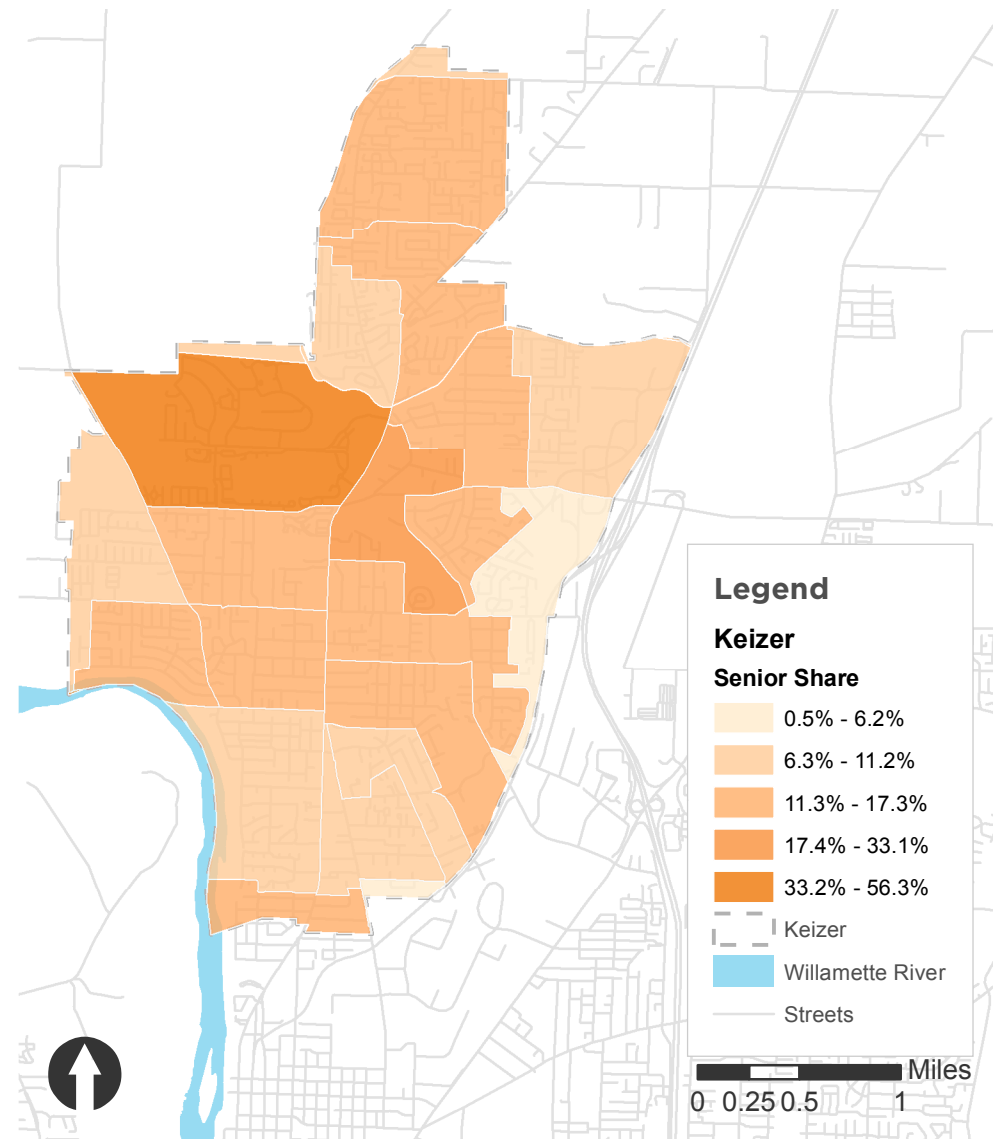
Youth Share



Seniors (65+)

Seniors make up a slightly higher share of the population in Keizer than in the region. The average senior population density is 700 seniors per square mile, with the highest concentration of seniors in the northwest-most block group, a low-density area which is home to the McNary Golf Club. Changes from 2000 to 2012 suggest that the area as a whole is aging. The share of senior population increased by approximately two percentage points. Both the decrease in the youth population share and the increase in the senior population share were greater than the regional averages.

Senior Share

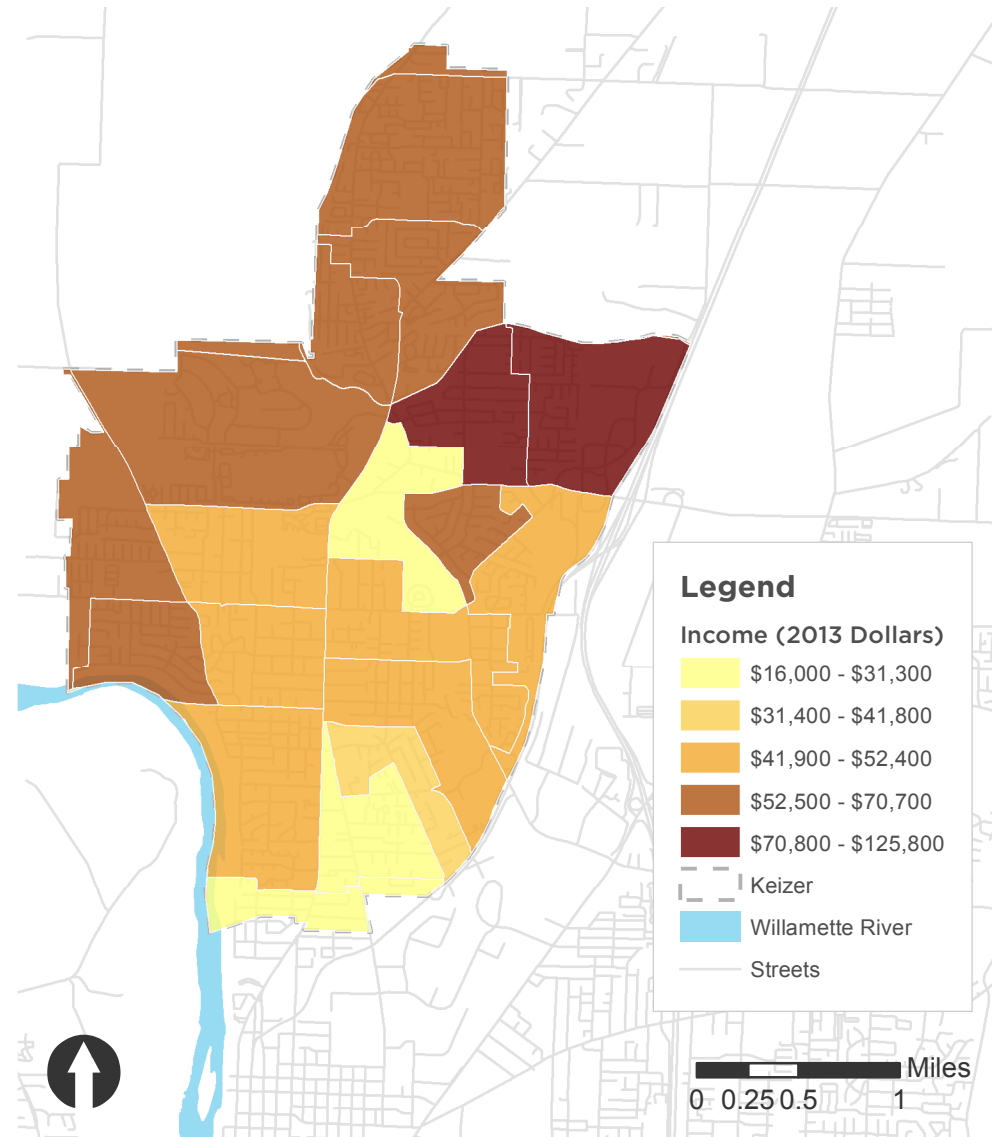


Demographic & Employment Analysis

Income

The median household income in Keizer is approximately \$51,700, which is 10% higher than the median household income for the whole Salem-Keizer area. Adjusted for inflation, household income has fallen 18% since 2000 in the area. Household income tends to be higher in the northern half of Keizer. The northeastern-most corner of Keizer features the greatest concentration of wealth, with household income above \$70,000 in two block groups.

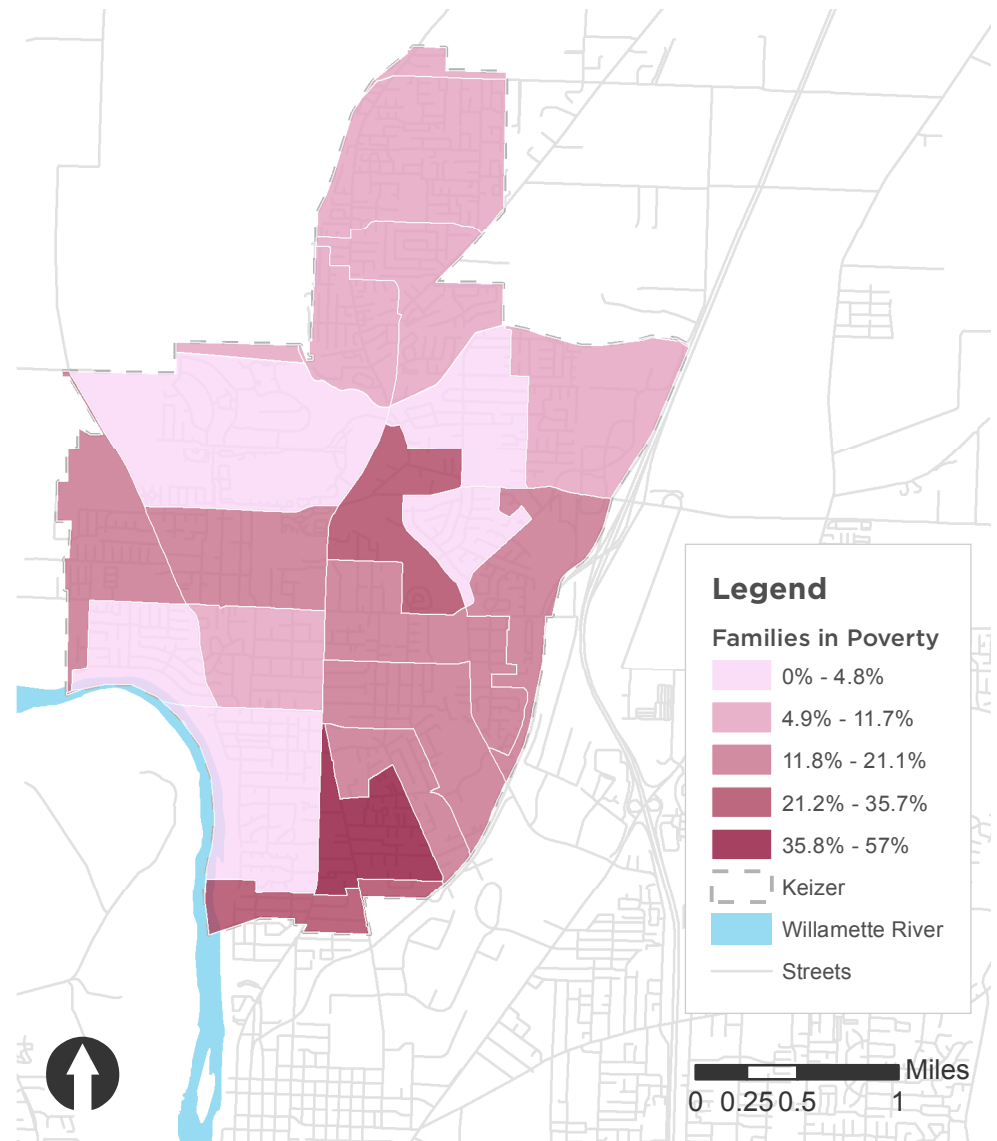
Median Household Income



Poverty

Approximately 12% of families in Keizer live below the poverty line. Since 2000, the poverty rate has doubled in Keizer. Families living below the poverty line are concentrated along the southern border of Keizer.

Families in Poverty



Demographic & Employment Analysis

Diversity

Roughly one quarter of the Keizer population identifies as a minority, which is slightly below the regional average but highest among the three study areas. Even though the area's minority population is below average, Keizer has experienced increasing diversity. Since 2000, the share of Keizer's minority population has shown the largest growth, changing from 18% to 25% of the area's population. The percent change in share of minority population occurred at the same rate as the region, approximately 40%.

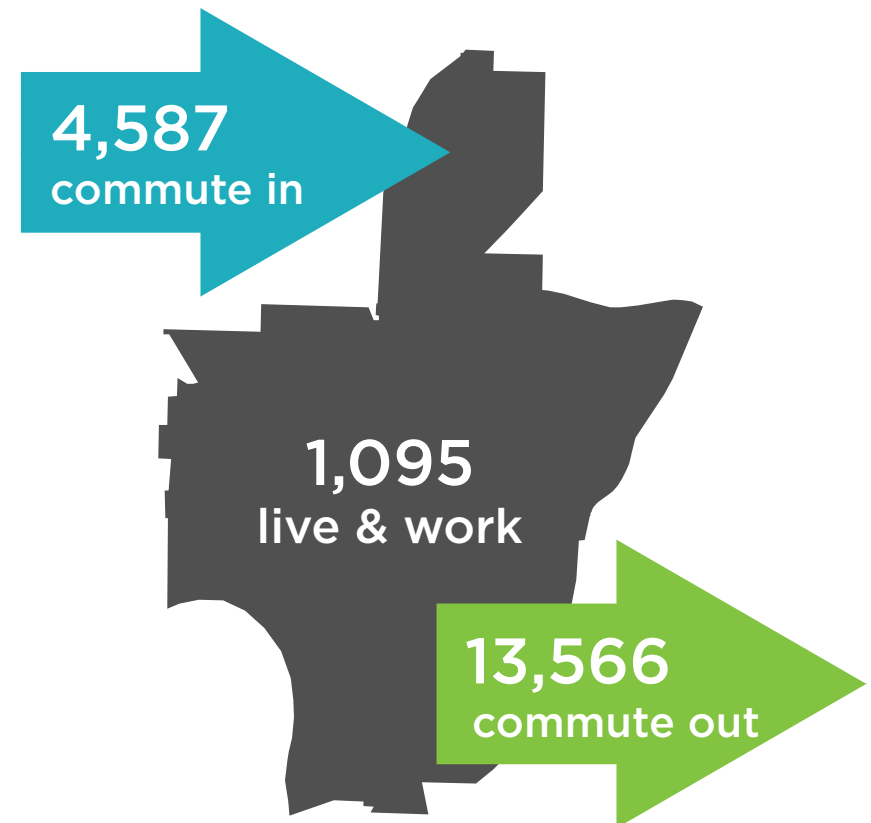
Car Ownership

Just over seven percent of households in Keizer do not have access to a car, compared to nine percent for the region as a whole. Although the share of households with no car is lower than the regional average, Keizer has the highest share compared to other study areas. Between 2000 and 2012 the percentage of carless households in Keizer has increased by a little more than one percentage point, from six percent to seven percent. However, the rate at which the share of households without cars is increasing is much higher in Keizer (29%) than the regional average of nine percent. The density of households without a car by block group is most concentrated towards the southern portion of the study area, closest to the Salem city center.

Employment

There are 5,682 jobs located in Keizer, with the highest concentration of jobs located along River Road and at the Keizer Station Shopping Center. Workers in Keizer live throughout the region, with the highest concentration residing within Keizer's city limits. However, over 80% of the jobs in Keizer are filled by workers who do not reside in Keizer. An additional 13,566 Keizer residents work outside of Keizer, and a high number of these jobs are located in downtown Salem.

Jobs Inflow-Outflow



Source: U.S. Census Bureau. 2013. OnTheMap Application.

Existing Cherriots Service

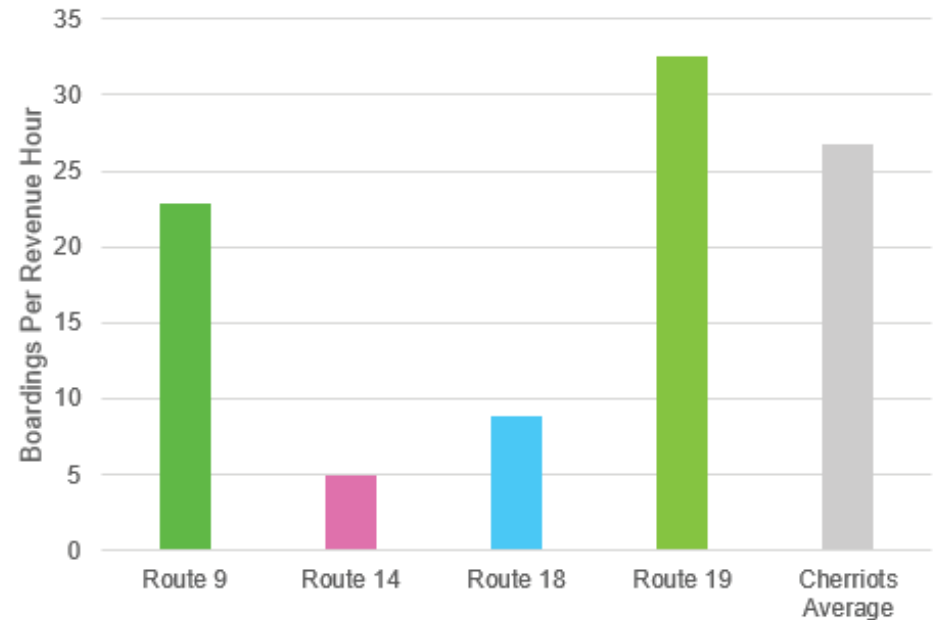
Overview

There are four frequent service routes providing service in Keizer. Two of the routes, Routes 9 and 19, provide connections to downtown Salem and the Salem Transit Center. Routes 14 and 18 are circular loops providing service

within city limits. Route 19 is the most productive route in terms of boardings per revenue hour while Route 18 is the least productive. Only Routes 18 and 19 provide service and connections to the Keizer Transit Center.

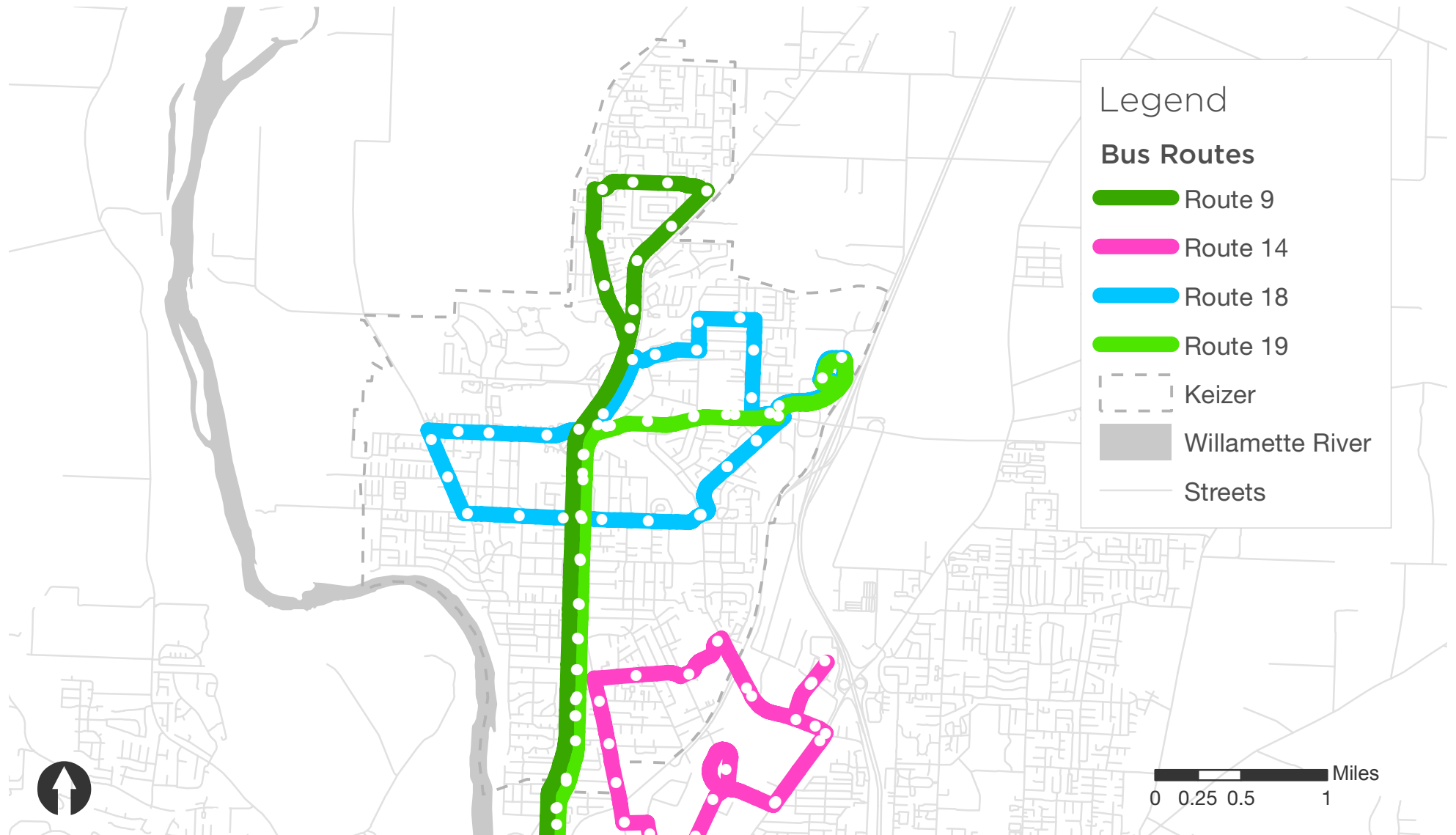


Buses lining up at the Keizer Transit Center.



Source: Jarrett Walker + Associates

Keizer Bus Network



Existing Cherriots Service

Route 9

River Road North/Park Meadow

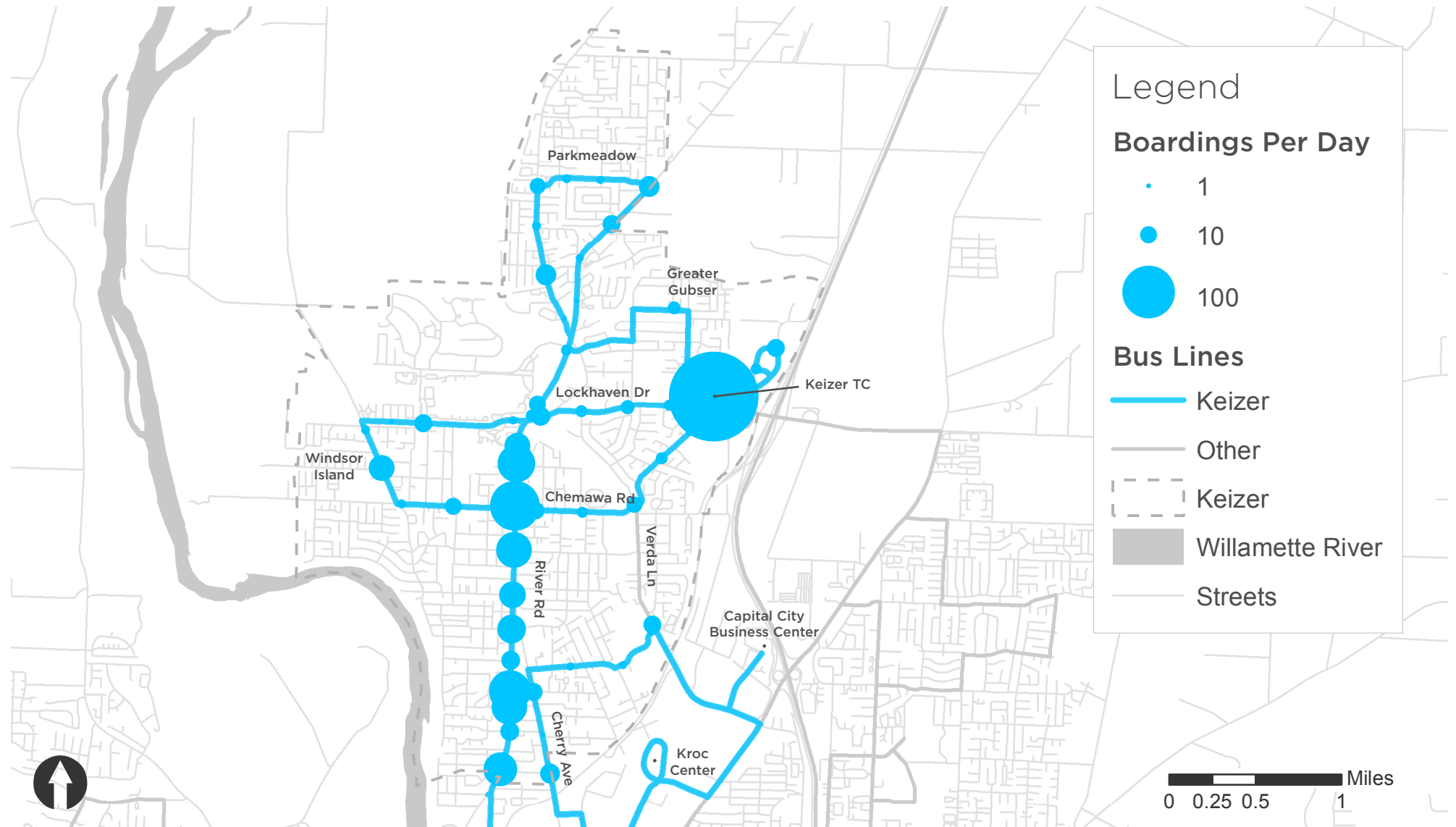
The Route 9 River Road North/Park Meadow runs north from Salem's downtown to the Park Meadow neighborhood in Keizer. It is a corridor route with 30 minute headways all day. All of the route south of the one-way loop at the far north is overlapped by Route 19 that also runs on 30 minute intervals, yielding 15 minute headways along River Road. Route 9 is more productive than the average route during the PM peak with 33.2 boardings per revenue hour. The number of total average daily boardings is 620. Route 9 also has the highest number of wheelchair boardings of any route in Keizer, with an average of 10 per day. Most of the boardings and alightings take place along River Road south of Chemawa Road. The average passenger trip length is 2.98 miles. When headed outbound, the bus is on time during a majority of its operation (68%). However, when it is inbound, the bus operates on schedule less than a quarter of the time (23%), typically arriving early (71%).

Route 14

Cherry Avenue/Kroc Center

Route 14 Cherry Avenue/ Kroc Center runs in a loop from Del Webb Ave NE near Salem-Keizer Transit to Capitol City Business Center. The route is a circulator in South Keizer that runs on a 30 minute headway all day. Serving mostly an industrial area with a circuitous street pattern, the Route 14 has the fewest boardings (74) and lowest productivity (five boardings per revenue hour) of any route in the Cherriots system, and should be considered for replacement with flexible service. The route currently requires a transfer to get anywhere outside of the area, which may be contributing to its underperformance. On average the trip length is 2.32 miles and most of the buses run early on this route, with 77% of all inbound and outbound trips running early. Ten percent of inbound trips, in comparison, are late. On average, 20% of outbound trips and 13% of inbound trips are on time.

Boardings



Source: Jarrett Walker + Associates

Existing Cherriots Service

Route 18

Windsor Island Loop

Route 18 Windsor Island Loop is a circulator in North Keizer that runs every 30 minutes, pulsing out of the Keizer Transit Center. This route runs quite frequently for being a one-way loop in a low-density area and ridership is only an average of 131 boardings per day. Therefore, it is an unproductive route with only 8.9 boardings per revenue hour, and a good candidate for replacement with flexible transit service. Average trip length on Route 18 is 3.08 miles. The route runs on time for 69% of outbound trips, but only nine percent of inbound trips, because it is early for 91% of inbound trips.

Route 19

River Road North/Keizer Station

Route 19 River Road North/Keizer Station is the second-most productive bus route in the Cherriots system. It connects Keizer Transit Center to downtown via River Road and Broadway. South of Chemawa Road, Route 19 overlaps with Route 9, providing 15 minute frequency. However, Route 19 has significantly higher ridership than Route 9, with average daily boardings at 1,038. In addition, high northbound ridership indicates a demand for trips to Keizer Transit Center, which Route 9 does not provide. Route 19 is more productive than the average bus route with 32.6 boardings per revenue hour. Midday ridership is nearly twice as high as any other part of the day, which may indicate riders commuting for purposes other than work and school. Average trip length on Route 19 is 3.04 miles. The route runs on time for 17% of outbound trips and 59% of inbound trips.

Additionally, Routes 18 and 19 are interlined, making a trip from downtown Salem to Windsor Island Road possible without a transfer, but with a layover at Keizer Transit Center.

South Salem





Large lot retail land uses along Commercial St. SE in South Salem.



No sidewalks along the busy corridor of Commercial St. SE.



More retail along Commercial St. SE in South Salem.



Speaking to seniors at the South Salem Senior Center.

Demographic & Employment Analysis

South Salem encompasses a number of neighborhoods. For the purposes of this project, South Salem is defined as the area within Salem's city limits, south of Madrona Ave S, west of Pringle Road SE (which turns into Battle Creek Road SE), and east of Croisan Creek Road S. This area is roughly eight square miles and home to nearly 40,000 people. The population density is 4,672 people per square mile, 23% higher than population density in the entire region. Since 2000, population density has increased just over 10%, which is nearly identical to the growth rate of the region as a whole.



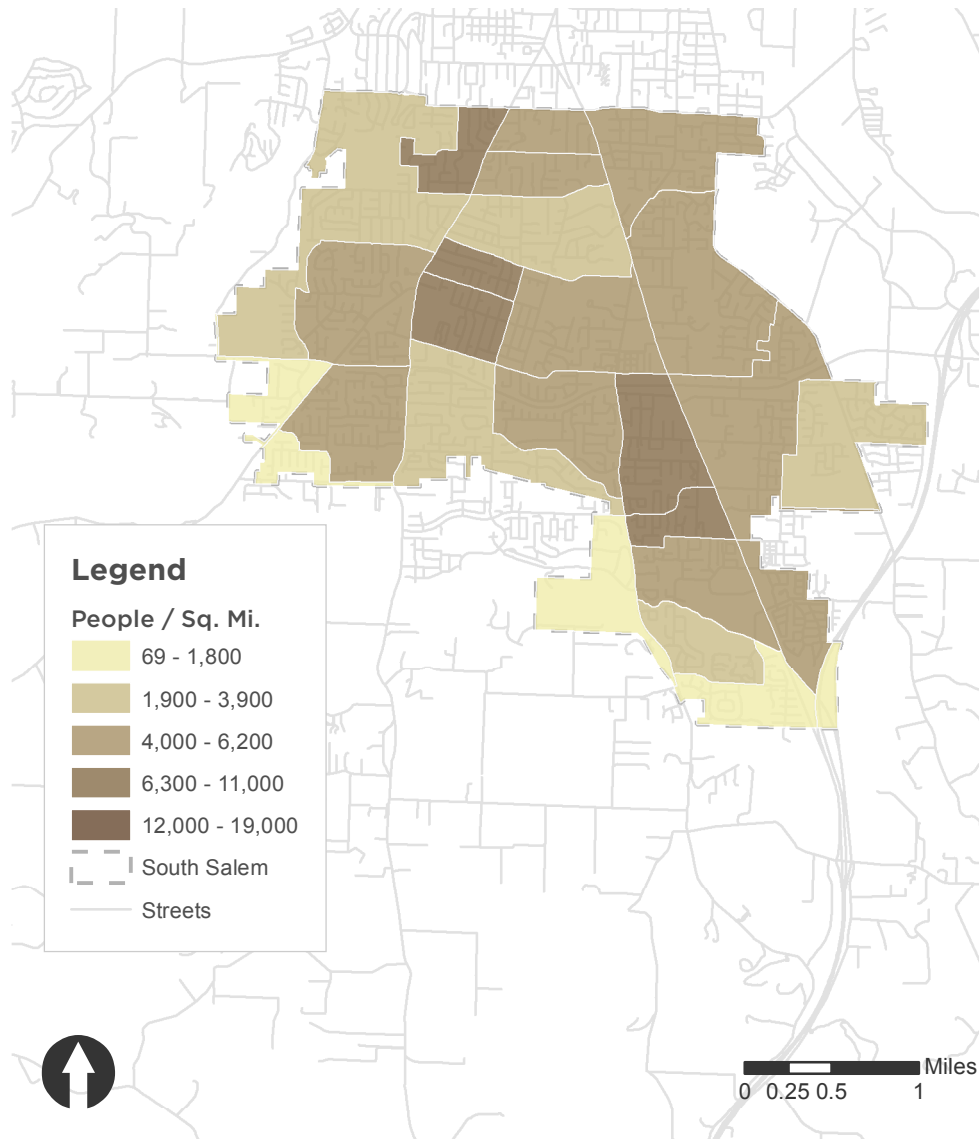
A typical commercial strip on Commercial Street SE.

South Salem	
Population	39,192
Area (Square Miles)	8.39
Population Density (Per Sq Mile)	4,672
Median Household Income	\$56,520
Income Change since 2000	-14.3%
Youth (Under 18)	24.7%
Seniors (65 and Over)	14.5%
Minority (Non-White)	16.9%
Households with No Car	5.4%
Families in Poverty	7.7%

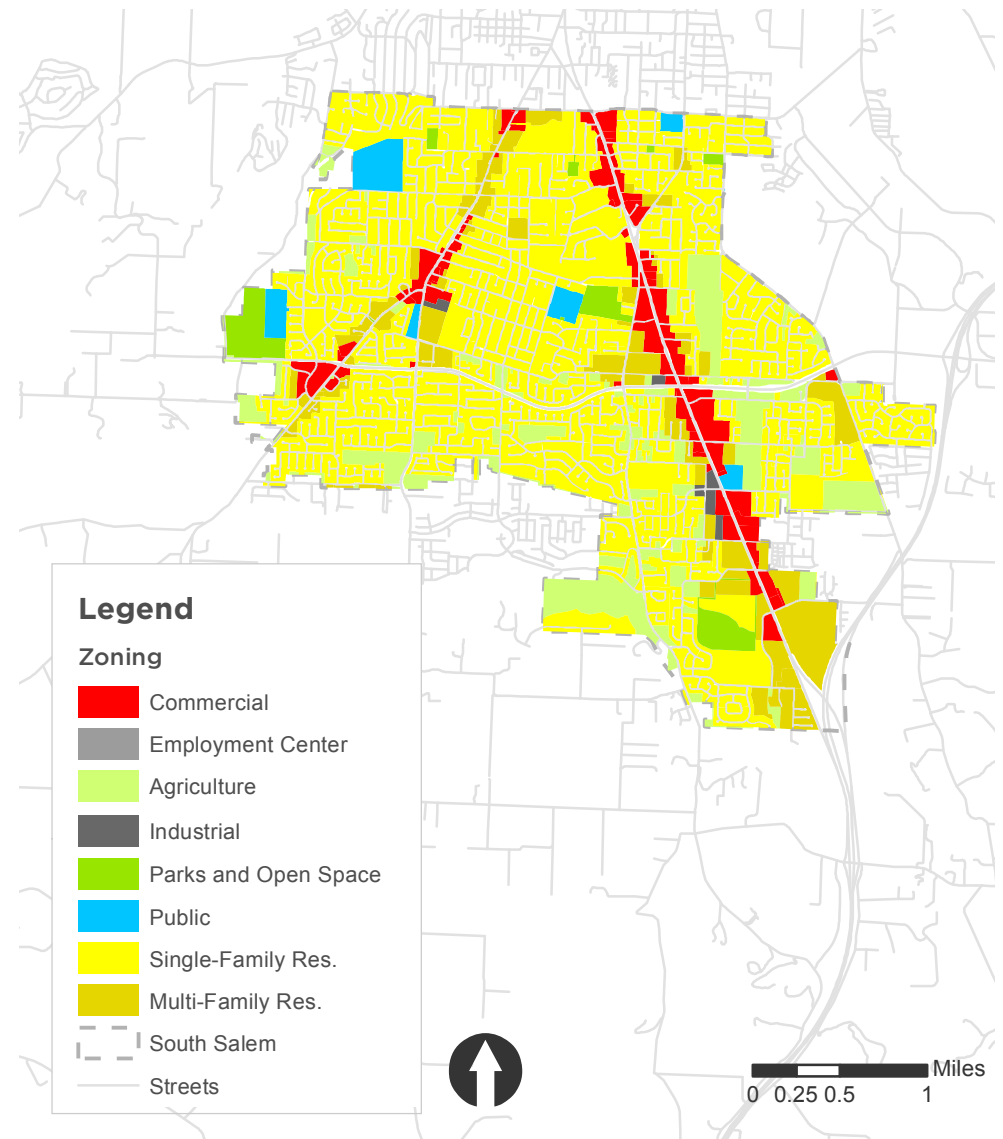
Source: 2008-2012 American Community Survey & 2000 US Census

Commercial Street SE is the major arterial running through South Salem and is the location of most of its retail space. Development along Commercial Street SE is auto-orientated, and features a combination of big-box retail stores and smaller strip malls. These retail strips attract residents from throughout the city. There are also pockets of retail stores along Liberty Road S. Beyond Commercial Street and Liberty Road, the area is primarily residential with a mix of single- and multi-family housing.

Population Density



Zoning

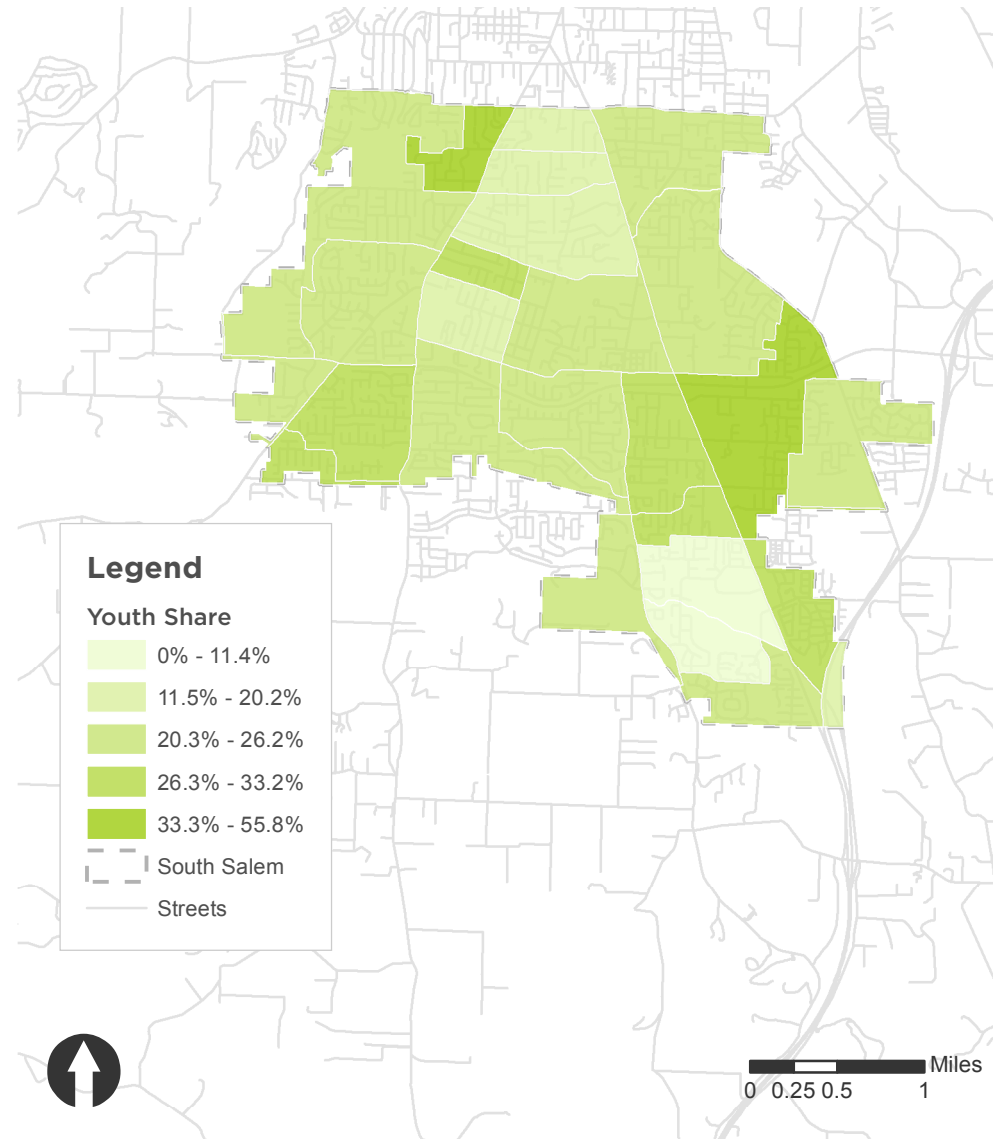


Demographic & Employment Analysis

Youth (Under 18)

The share of the youth population in South Salem is slightly under the regional average. Since 2000, it has decreased from 27% down to 25%. For the most part, the youth population is spread evenly throughout the study area.

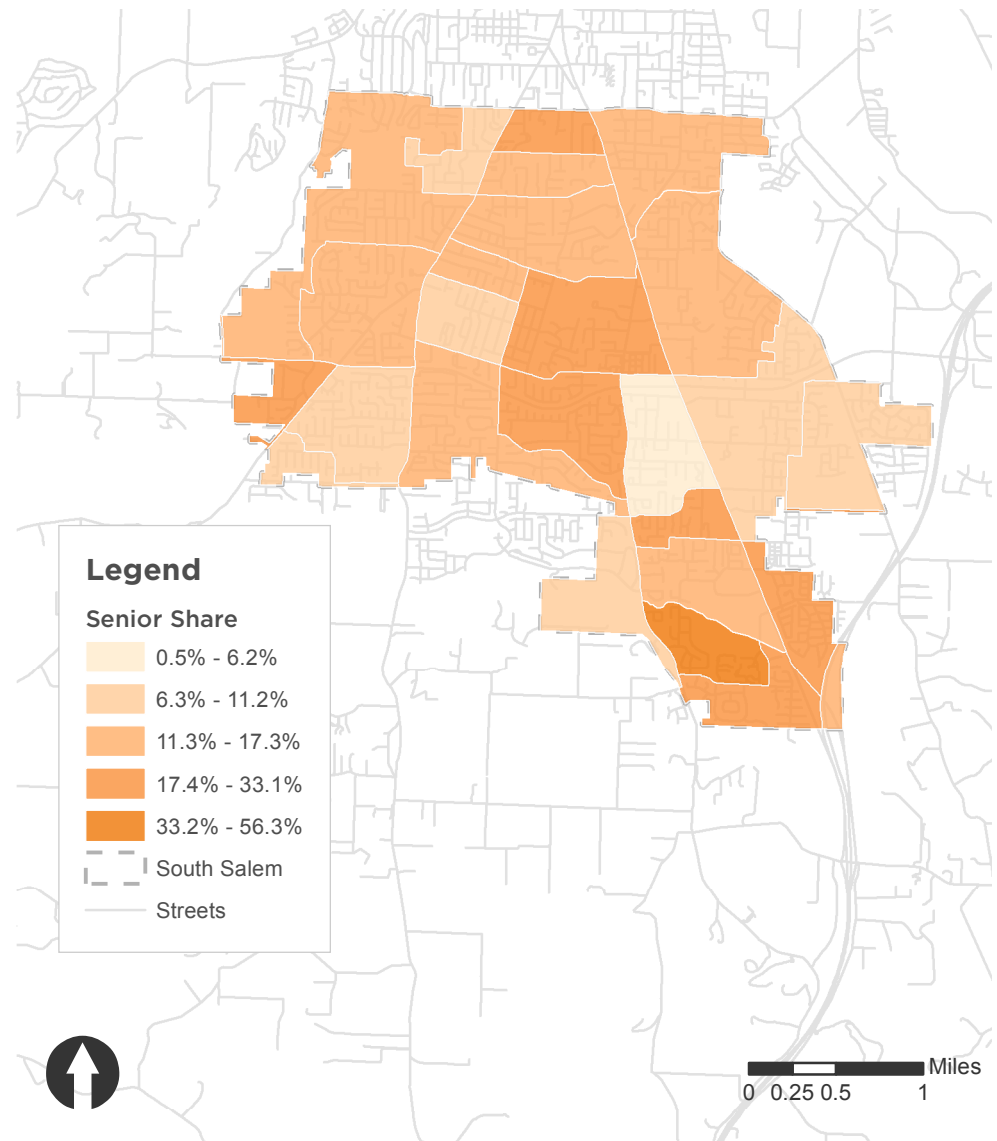
Youth Share



Seniors (65+)

Seniors in South Salem make up a slightly higher share than the regional average and the highest share of the three study areas. The highest density of seniors is located in the far southeastern corner of South Salem. Similar to Keizer, South Salem appears to be aging as a whole. Between 2000 and 2012, the share of seniors increased by approximately two percentage points from 13% up to 15%. The rates at which the senior population is increasing and the youth population is decreasing are both beyond the regional averages

Senior Share

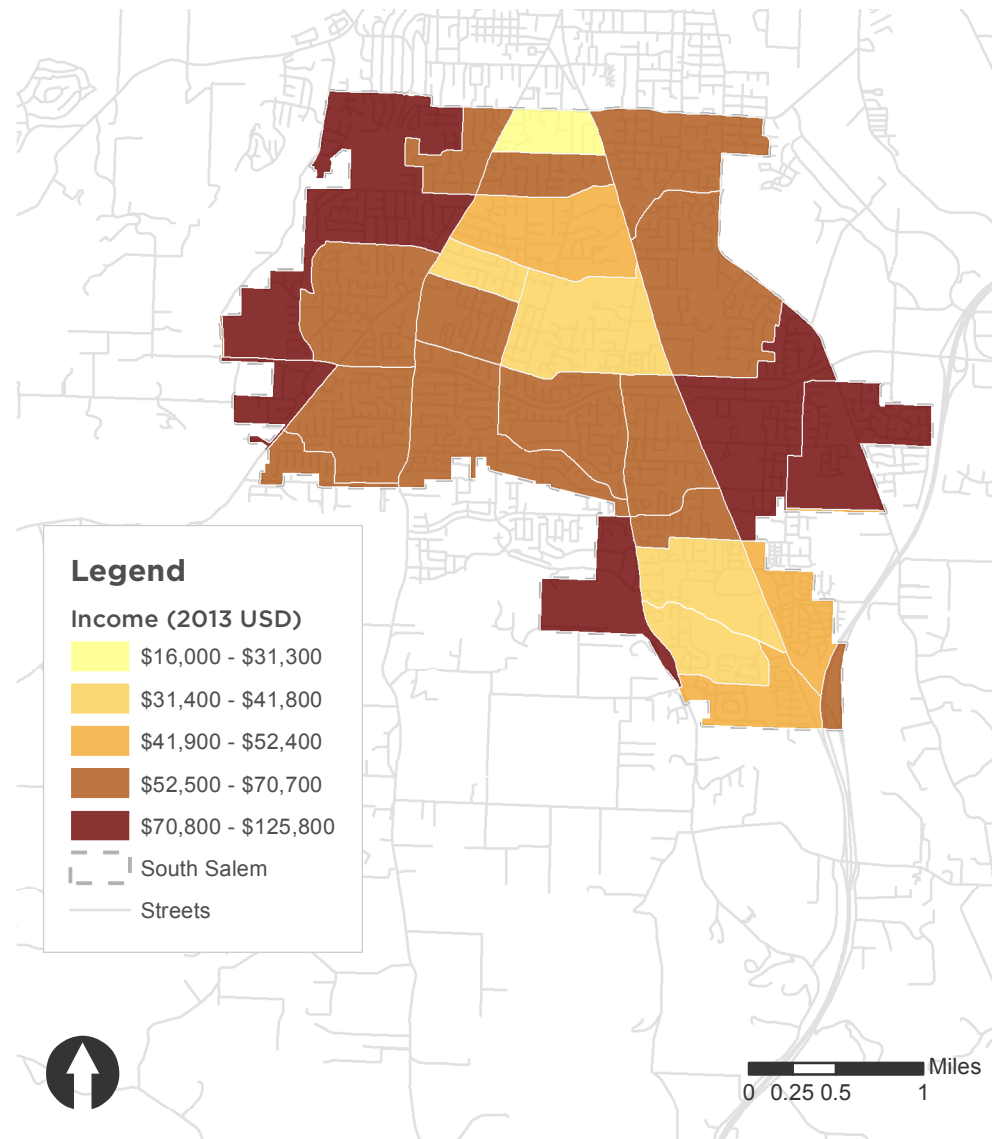


Demographic & Employment Analysis

Income

The median household income in South Salem is \$56,520. This is significantly higher than the median household income for the Salem-Keizer region. Household income has fallen 14% since 2000, compared to a 17% decrease for the entire region. Wealthy households are primarily concentrated along the eastern and western edges of the study area.

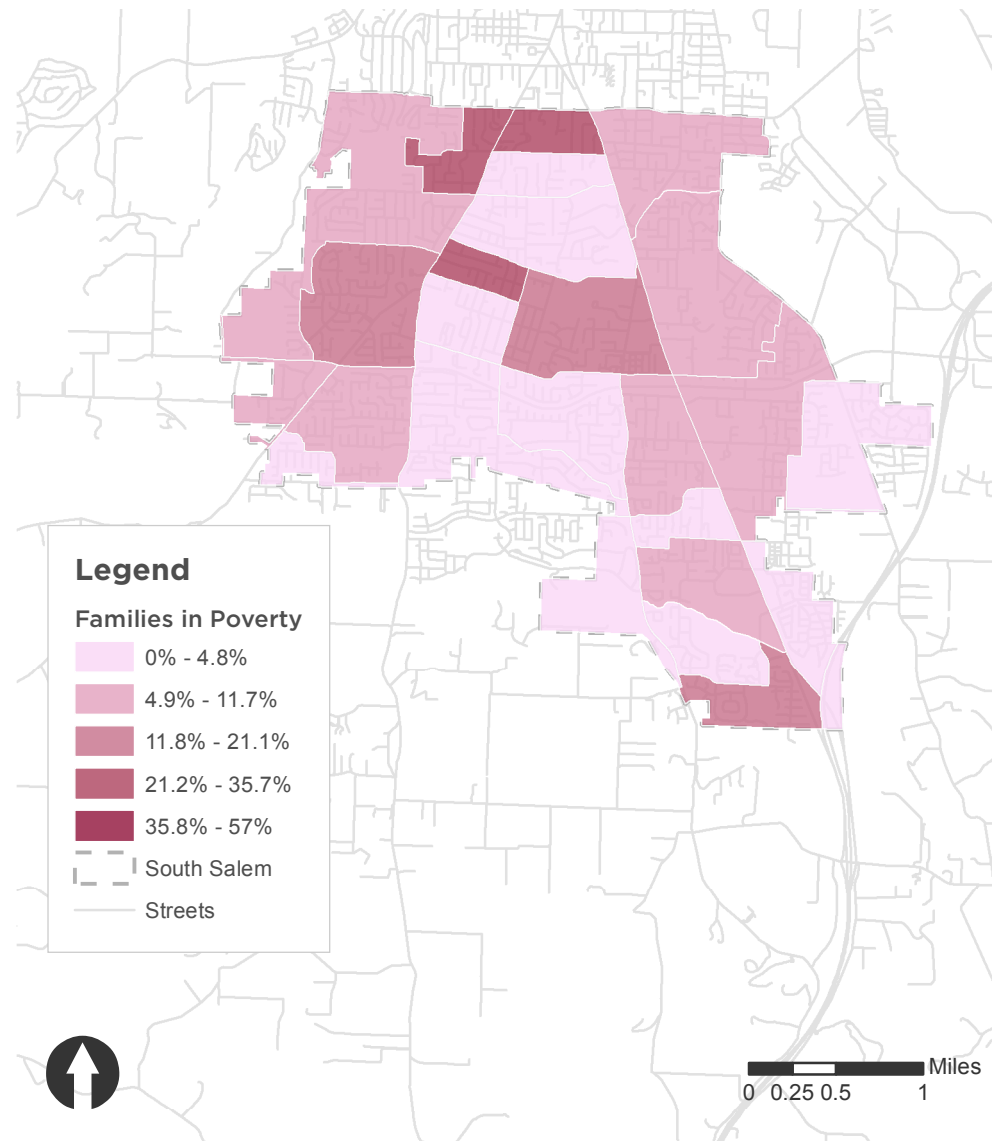
Median Household Income



Poverty

Approximately eight percent of families in South Salem live below the poverty line. Since 2000, the poverty rate has increased two percentage points. Despite this increase, the poverty rate in South Salem is still significantly below the regional rate of 14%.

Families in Poverty



Demographic & Employment Analysis

Diversity

South Salem is less diverse than the Salem-Keizer area as a whole, with less than 17% of the population identifying as a minority. The area's share of minority population is well below the regional average and lowest among the three study areas. However, the share of the minority population has increased by five percentage points up to 17% of the population, since 2000. At 42%, the rate of growth for the area's share of minority population is slightly higher than the regional average.

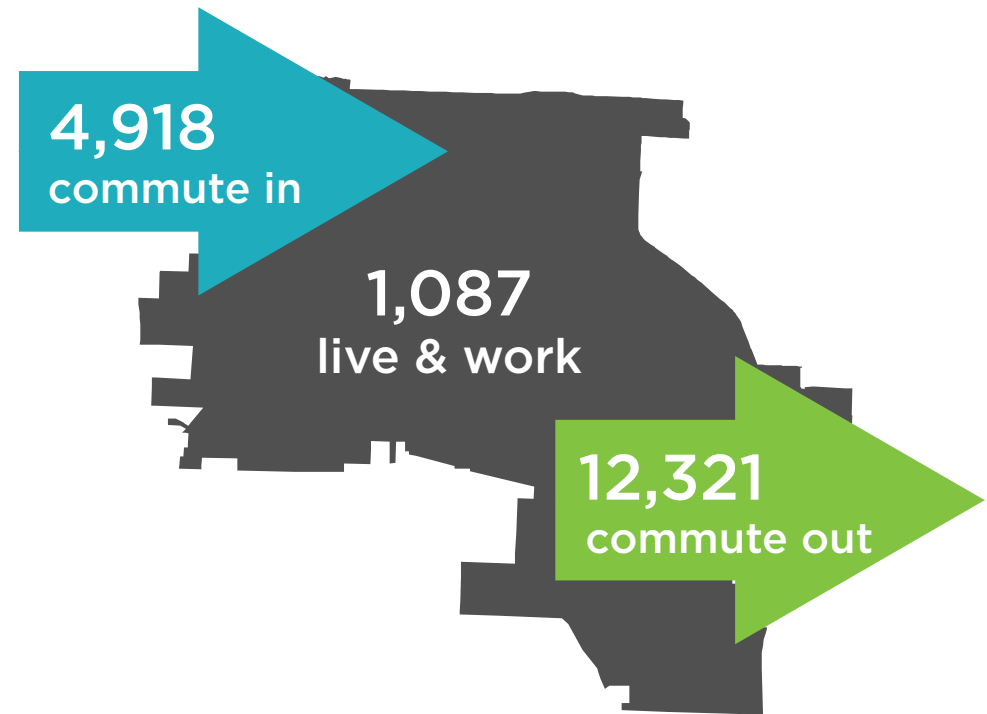
Car Ownership

The auto-oriented development in South Salem, as well as the low rate of households without a car, make it difficult to attract and maintain bus riders in this area. Households without a car in South Salem are below the regional average below the regional average, but the area is seeing similar rates of change in share of carless households. The share of carless households has increased approximately 10% over time in the study area and regionally. Five percent of households in the area do not have a car, up from just over four percent in 2000.

Employment

The South Salem study area has approximately 6,000 jobs within its boundaries. Just under 82% of these jobs are filled by individuals who do not reside in South Salem. The highest concentration of jobs are along Commercial Street, as well as along a portion of Skyline Road in the southwest corner of the study area. Over 12,000 South Salem residents commute out of the study area to work. A large portion of these residents work in downtown Salem. An additional 4,900 people commute into South Salem to work.

Jobs Inflow-Outflow



Source: U.S. Census Bureau. 2013. OnTheMap Application.

Existing Cherriots Service

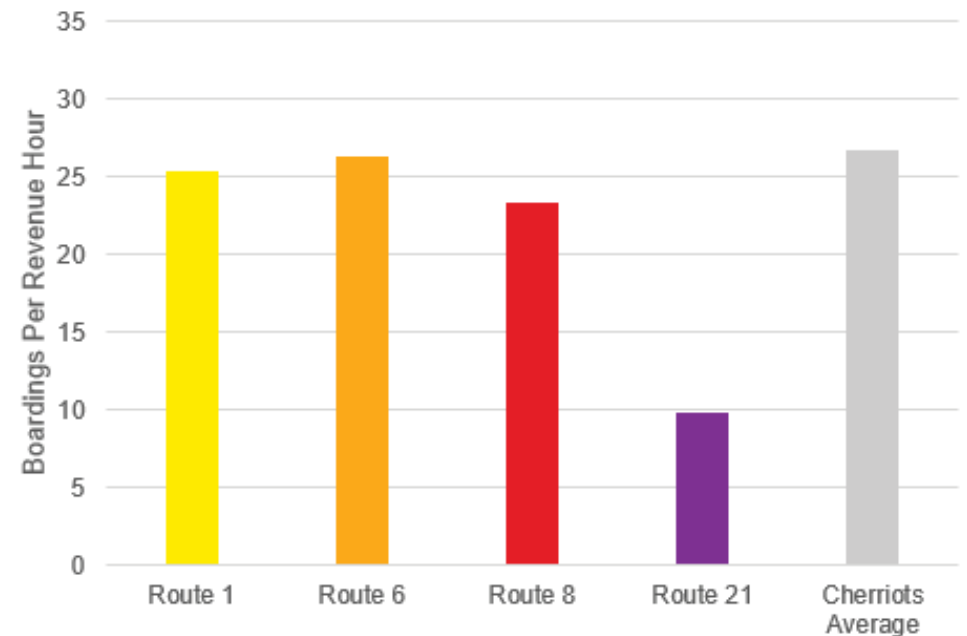
Overview

There are three frequent service routes and one peak hour service route providing service in South Salem. Three of the routes, Routes 1, 6, and 8, provide connections to downtown Salem and the Salem Transit Mall. Many of the routes in the area have one-way loops, which tend to draw little ridership and lower the productivity of the routes overall. Studies have been conducted to develop a transit

center in South Salem similar to the Keizer Transit Center. Planning for a South Salem transit center is under way (preliminary recommendations place it within a half mile of the intersection of Commercial Street and Kuebler Blvd.) and will impact the design of transit routes in the immediate area once the project is completed.

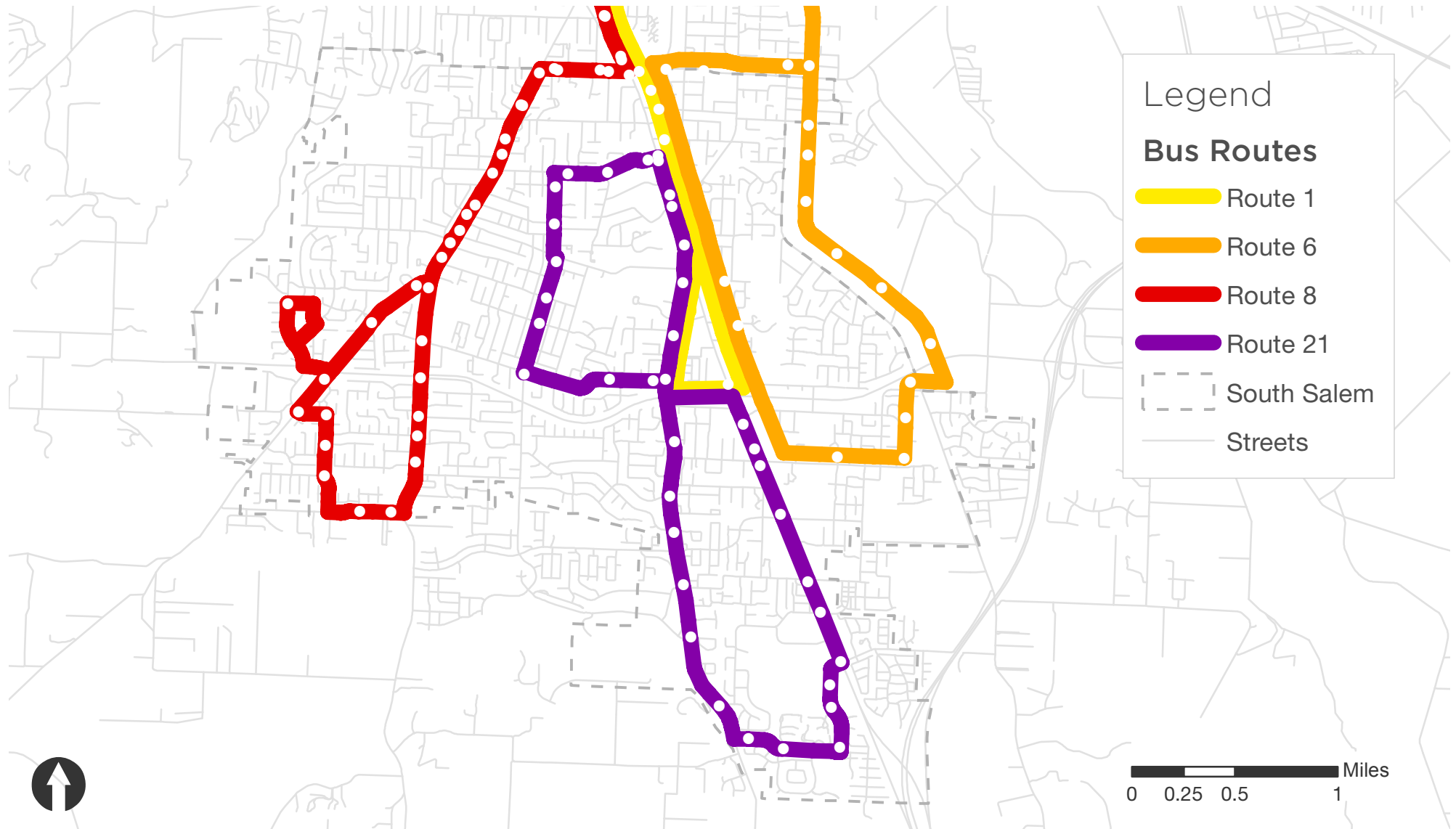


A bus shelter along Commercial Street SE in South Salem.



Source: Jarrett Walker + Associates

South Salem Bus Network



Existing Cherriots Service

Route 1

South Commercial

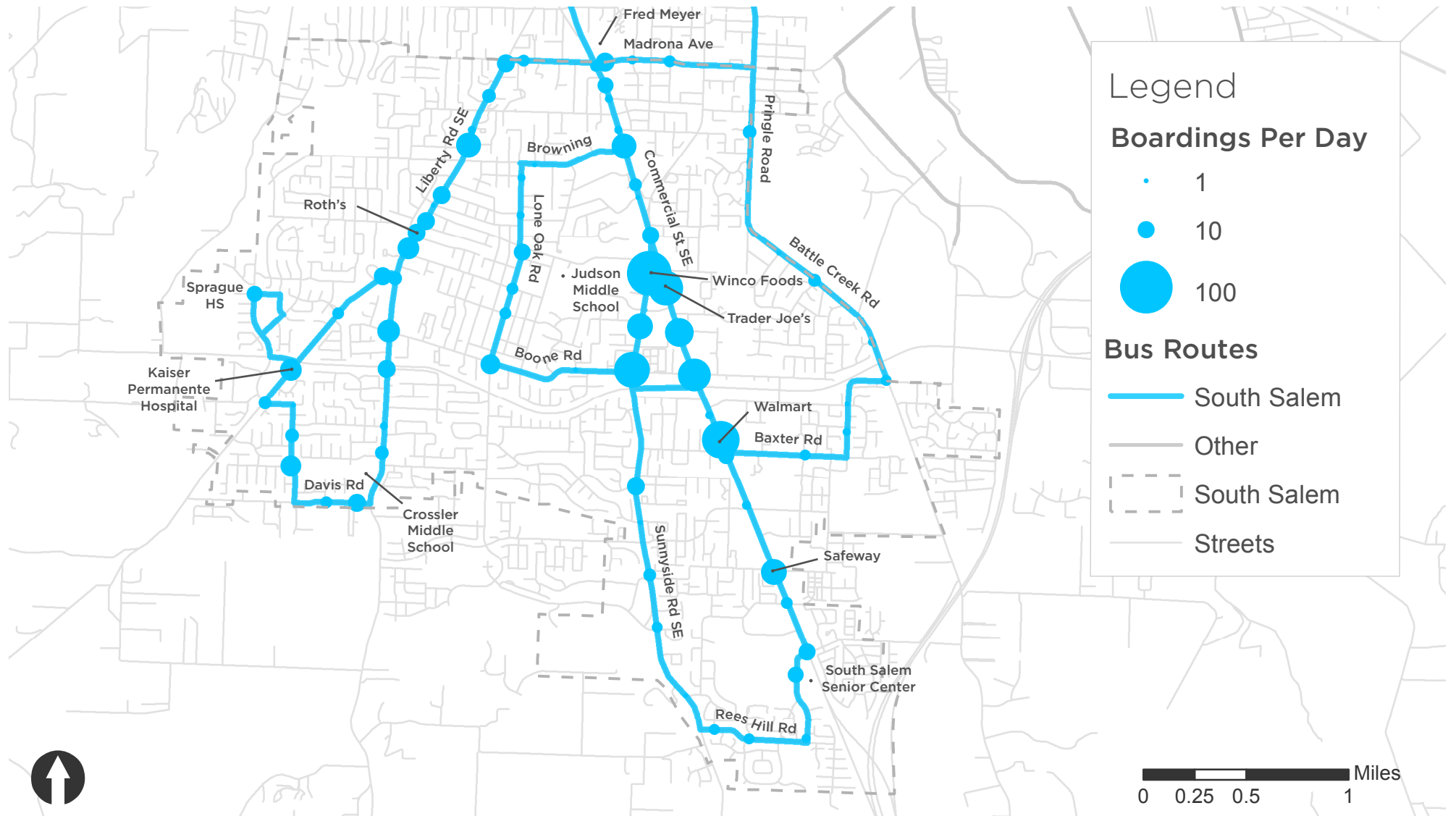
Route 1 South Commercial runs south from the Downtown Transit Mall to Sunnyside Road and Hilfiker Lane. The route operates as a corridor route with 15 minute headways in the AM and PM peaks, and 30 minute headways in the Midday and Evening. The route currently runs along a highly-developed commercial area in South Salem. With 1,125 daily boardings, Route 1 is most productive during the Midday and PM peak with 36.7 and 29.3 boardings per revenue hour, respectively. Route 1 also has the highest number of wheelchair boardings of any route in South Salem, with an average of 13 per day. The route connects with the 21 Rees Hill Loop circulator, which covers the less dense residential areas in South Salem. Route 1 is able to stay productive by remaining in the commercially dense areas and reaches an average of 25.4 boardings per revenue hour. Average trip length for the route is 2.81 miles, with most trips occurring between downtown and Hoyt Street. Traveling inbound, Route 1 is early for 96% of its stops, running on time a mere four percent of the time. As for its outbound trips, the route is early 59% of the time and on time 39% of the time.

Route 6

12th Street/Battle Creek

Route 6 12th Street/Battle Creek runs south from the Downtown Transit Mall to Commercial Street and Baxter Road in South Salem. South of Madrona, this route transforms into a one-way loop covering the eastside of South Salem. This connector runs on 30 minute headways in the AM and PM peaks, but operates hourly during the Midday and Evening times. Route 6 is considered a fairly productive route, with 620 daily boardings. The route runs above the system average in the Midday with 27.1 per revenue hour. Parts of Route 6 overlap with the Route 1 along Commercial Street, potentially causing less ridership due to the higher frequency on Route 1. Over half of the daily boardings on this route occur on the northernmost segment between downtown and Rural Ave. Still, there is a demand for service to South Salem, with 168 boardings south of Madrona, most of which take place at the Walmart on Baxter Road. Route 6 is early to its stops 72% of the time on all inbound trips, but seems to run mostly on time moving outbound, with 84% of trips arriving on schedule.

Boardings



Source: Jarrett Walker + Associates

Existing Cherriots Service

Route 8

Liberty Road South

Route 8 Liberty Road South runs south from the Downtown Transit Mall to Davis Road S and Crossler Middle School. The connector route travels down Commercial Street and then switches over to Liberty Road at Madrona Avenue. North of Madrona, Route 8 overlaps with Route 1, whose higher frequency allows it to pick up most of the demand in this area. Regardless, this route demonstrates strong performance in South Salem. Daily boardings are about 536 passengers, with 30 minute headways in the AM and PM peaks, and hourly headways in the Midday and Evening. Only 18% of boardings occur south of Madrona, most of which are generated by businesses along Fairview Industrial Drive, though it is worth noting these boardings are predominantly southbound. Thus, this route could benefit from flexible transit service that could provide coverage without the current 30 minute frequency south of Mission Street SE where boardings generally begin to decline. Route 8 has nearly average productivity with 23.3 boardings per revenue hour. Average passenger trip length is 4.09 miles, with most riders boarding and alighting between Rural Avenue SE and Downtown. On average, the outbound trips are on time 70% of the time, while in contrast, inbound trips are early 91% of the time.

Route 21

Rees Hill Loop

Route 21 Rees Hill Loop consists of two large, one-way loops stretching from Browning Ave SE at the northernmost end to Rees Hill Road SE in the south. These loops connect to the southern end of Route 1 and the western edge of Route 6. Despite being a circulator, Route 21 runs on 30 minute intervals. It has 181 boardings on average per day, 181 boards on average per day, which is typical of circulators but the higher frequency on Route 21 means that productivity is only 9.9 boardings per revenue hour. Such low ridership as compared to Route 1, which Route 21 overlaps, suggests that flexible transit could serve this area instead of the current fixed route. Ridership is greatest during the Midday and PM peak. Average trip length is 5.67 miles. Route 21 arrives on time for 91% of its outbound trips and 47% of its inbound trips.

West Salem





Intersection of Wallace Road NW and Taggart Dr.



A typical residential cul-de-sac in West Salem.



Pedestrian walks along Edgewater St. NW.



Another pedestrian walks along Edgewater St. NW.

Demographic & Employment Analysis

West Salem is comprised of the area of Salem that is west of the Willamette River. It is connected to the rest of Salem by a motor vehicle bridge, as well as a parallel pedestrian bridge. These bridges provide the only access points to Salem, which to some extent isolates West Salem from the rest of the city.

West Salem is also the only portion of Salem that lies within Polk County. It has a population of approximately 20,500 people over an area of 6.1 square miles. The population density is lower than in the region as a whole. However, this area is rapidly densifying in relation to the region. Since 2000, the population density in West Salem has increased by 35%. This trend appears likely to continue as there are active construction sites throughout West Salem.



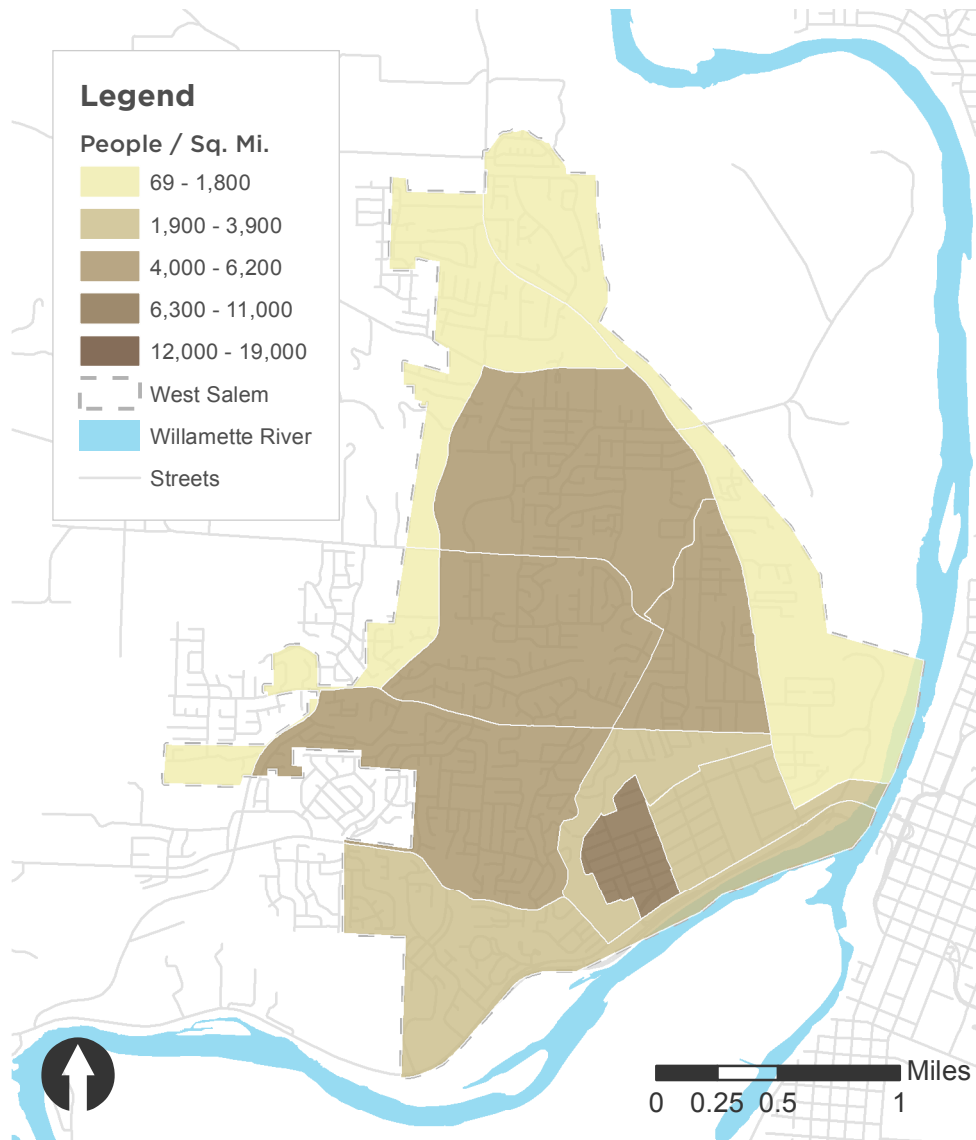
A typical arterial street in West Salem.

West Salem	
Population	20,486
Area (Square Miles)	6.11
Population Density (Per Sq Mile)	3,352
Median Household Income	\$62,668
Income Change since 2000	-2.5%
Youth (Under 18)	24.6%
Seniors (65 and Over)	14.2%
Minority (Non-White)	19.6%
Households with No Car	6.3%
Families in Poverty	8.2%

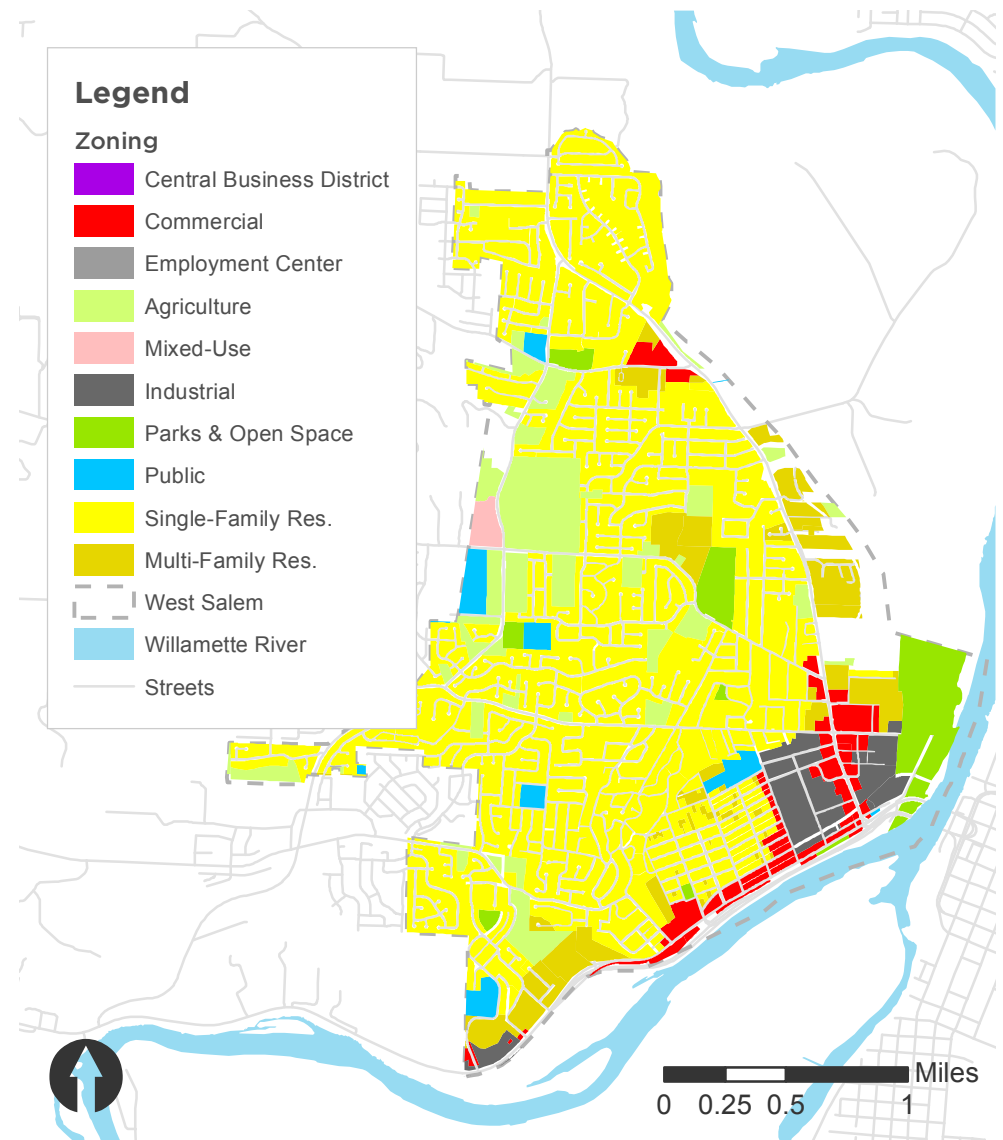
Source: 2008-2012 American Community Survey & 2000 US Census

West Salem features two main retail cores, one on Wallace Road NW and the other on Edgewater Street NW. Just north of Edgewater Street is the only gridded area of the street network in West Salem. This area is home to the highest levels of population density in West Salem. Beyond this area, the street network in West Salem does not follow a grid and features many disconnected streets. As a result, many bus stops in West Salem are hard to reach and serve a limited number of destinations. Additionally, there are significant hills throughout West Salem, creating another challenge to providing transit service in the area.

Population Density



Zoning

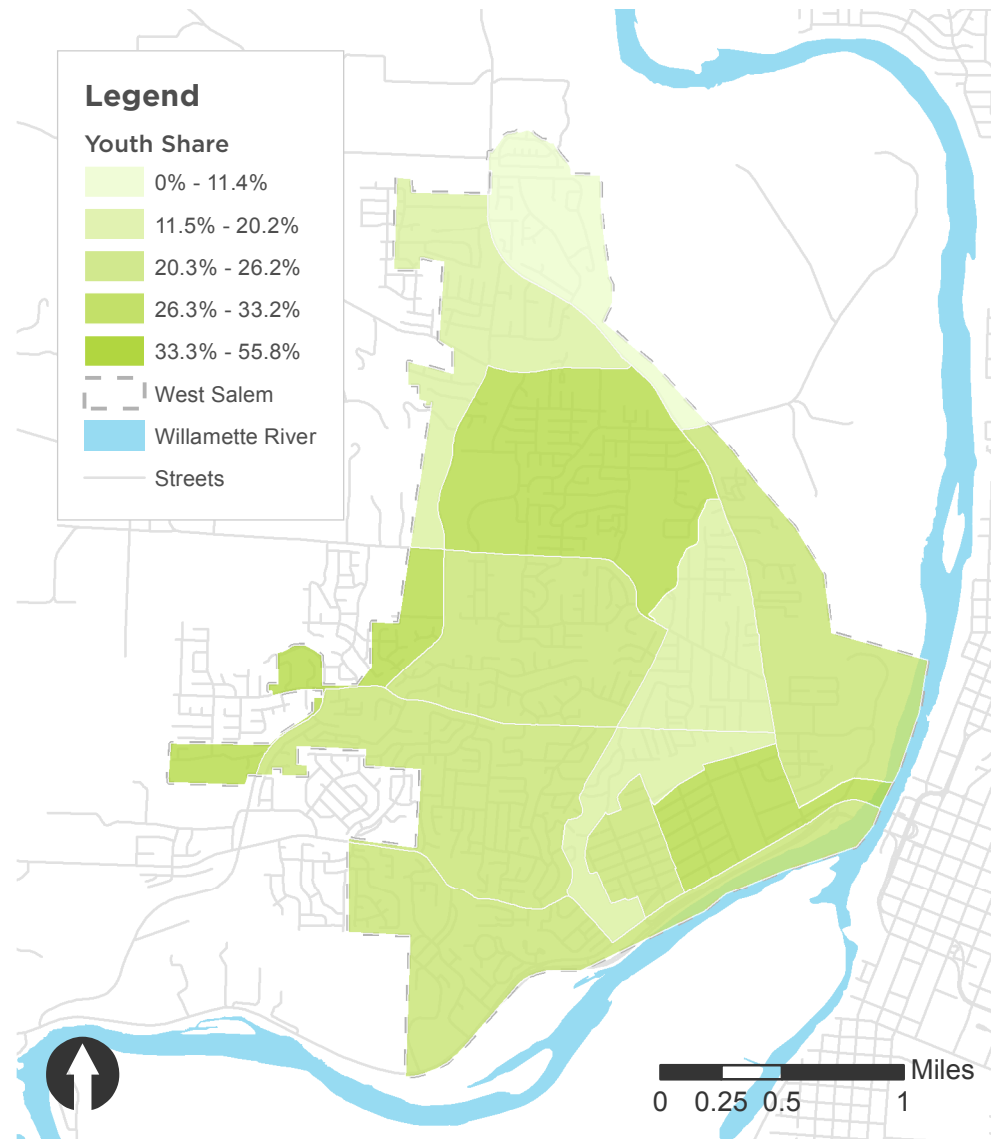


Demographic & Employment Analysis

Youth (Under 18)

West Salem's share of youth population (25%) is slightly below the regional average (26%). Since 2000, the change in youth population has followed the regional downward trend, although the percent change in share is the smallest among the three study areas.

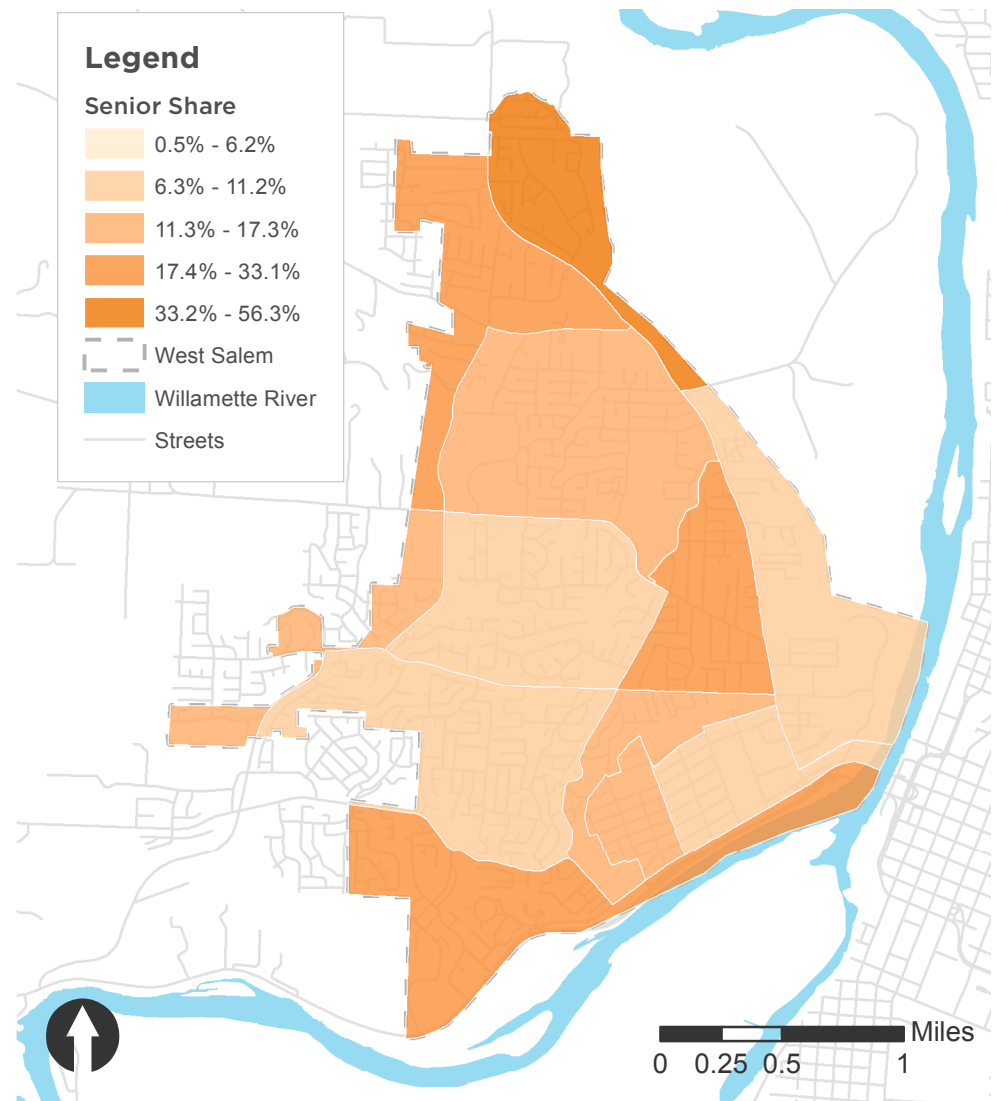
Youth Share



Seniors (65+)

The share of senior population is slightly higher than the regional average with the largest concentration in the northernmost portion of the study area. However, the change in share of the senior population between 2000 and 2012 has not followed regional trends. The area's share of seniors has dropped from approximately 17% down to 14%, whereas the region's share of senior population has grown slightly.

Senior Share

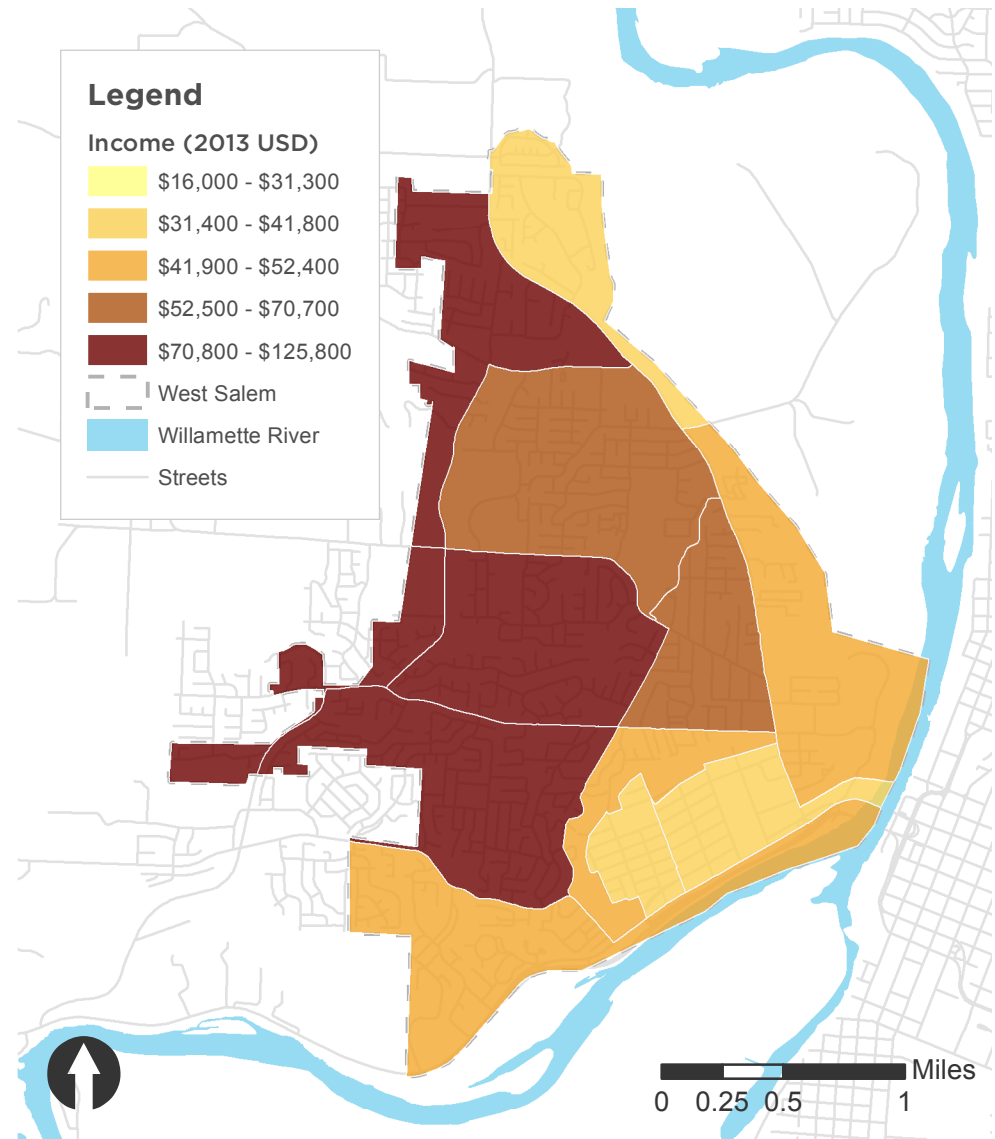


Demographic & Employment Analysis

Income

The median household income in 2012 was over \$62,000, which is 30% higher than the rest of the region. Household income is not evenly distributed throughout West Salem. The parts of West Salem closer to downtown Salem have significantly lower household incomes than the rest of the study area.

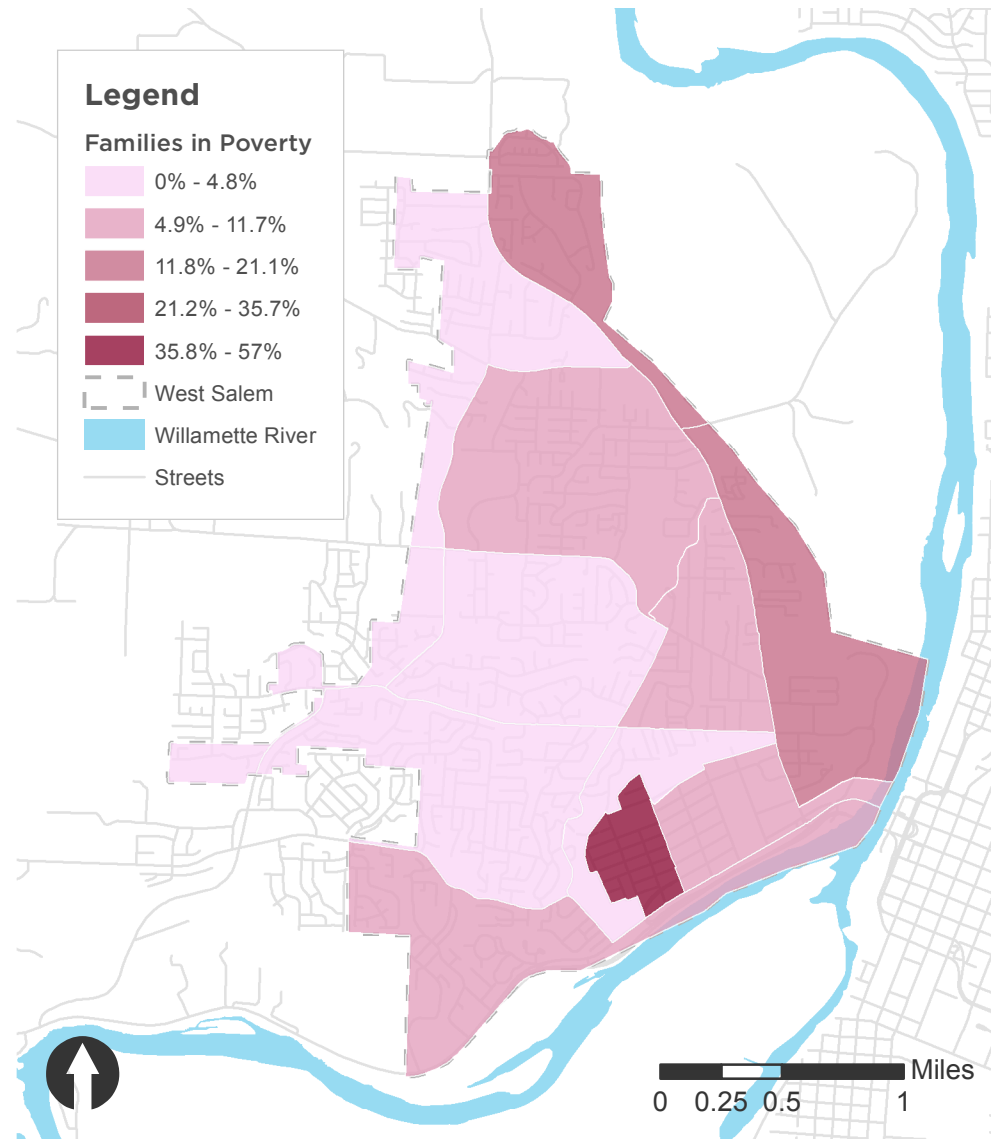
Median Household Income



Poverty

While median income levels in West Salem are high, eight percent of families still live below the poverty line. Poverty is primarily concentrated in the southwest corner of West Salem, which contains multi-family housing and as well as Kingwood West, a HUD-operated housing facility.

Families in Poverty



Demographic & Employment Analysis

Diversity

Even though all areas in the Salem-Keizer region experienced some form of growth among minorities, West Salem's growth rate and percent change in share of minority population are below the regional average. Approximately 20% of West Salem's population identifies as a minority, up from 14% in 2000. However, the rate of growth for the area's share of minority population is well below the regional average--31% compared to a regional average of 40%.

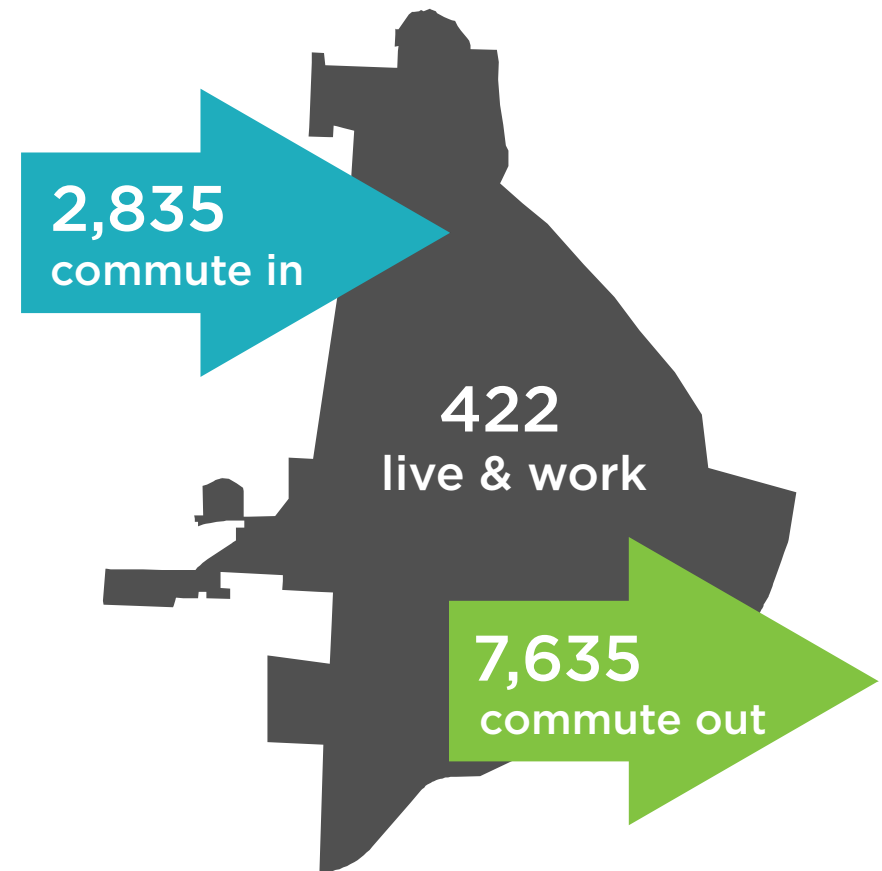
Car Ownership

Car ownership in West Salem is higher than the regional average and has increased over time. The share of households in the area without a car went down by approximately two percentage points, from eight percent down to six percent.

Employment

There are 3,257 jobs located within West Salem and they are mostly concentrated in the eastern half of the study area. Only 422 individuals live and work within West Salem. The vast majority of jobs are filled by people who commute to West Salem from around the region. Additionally, over 7,000 West Salem residents work outside of the area. Most of these workers have jobs located in downtown Salem.

Jobs Inflow-Outflow



Source: U.S. Census Bureau. 2013. OnTheMap Application.

Existing Cherriots Service

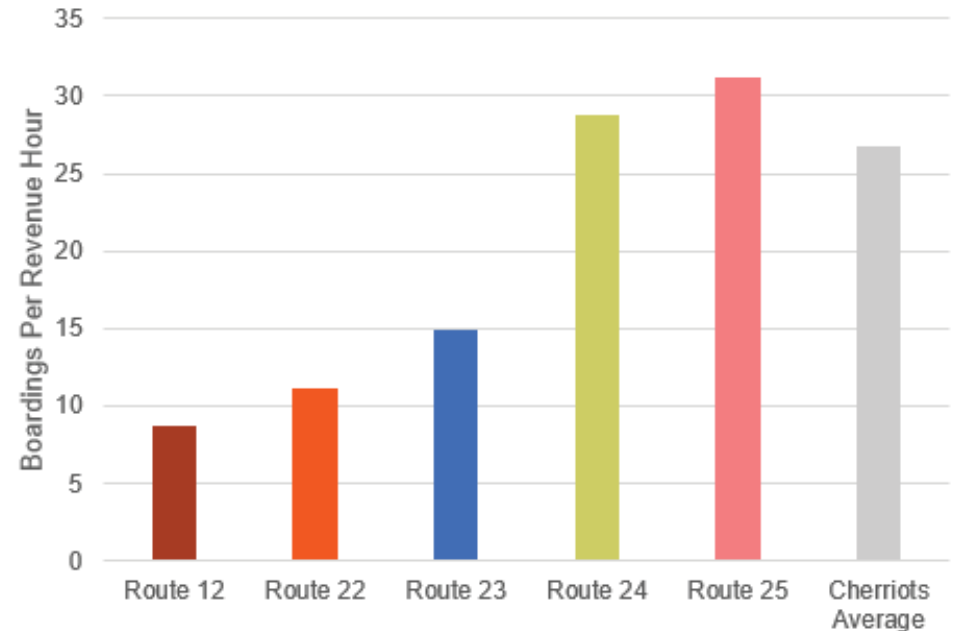
Overview

West Salem is serviced with five transit routes, all of which are standard service. It is the only study area not currently served by frequent or peak hour service. Two of the routes, 24 and 25, provide connections to downtown Salem and the

Transit Mall via the only bridge over the Willamette River in the immediate vicinity. Routes 12, 22, and 23 are circulators providing service in the community with connections and pulses at Glen Creek Transit Center.

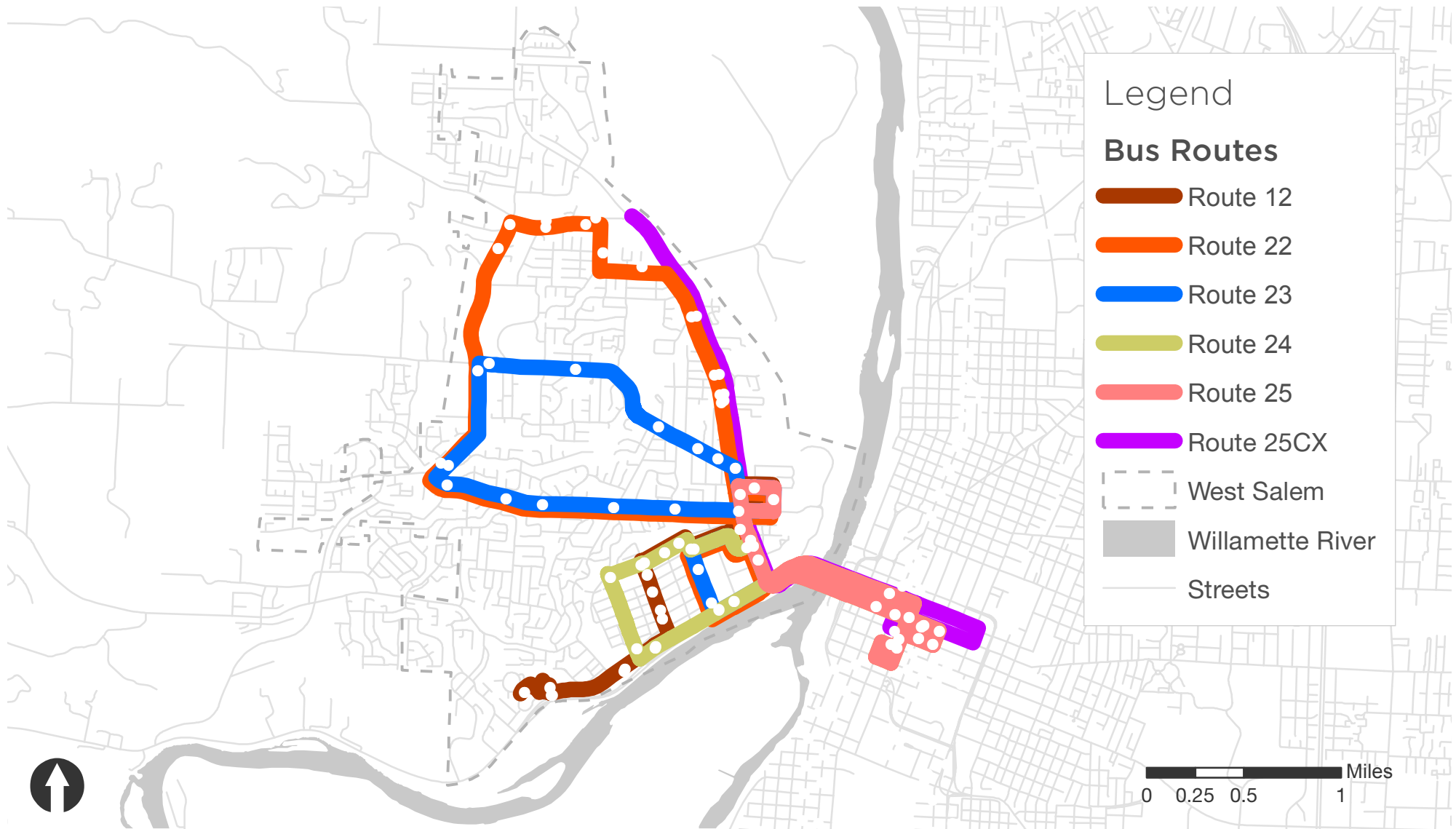


A 12 bus arrives at its stop next to Roth's in West Salem.



Source: Jarrett Walker + Associates

West Salem Bus Network



Existing Cherriots Service

Route 12

Edgewater Loop

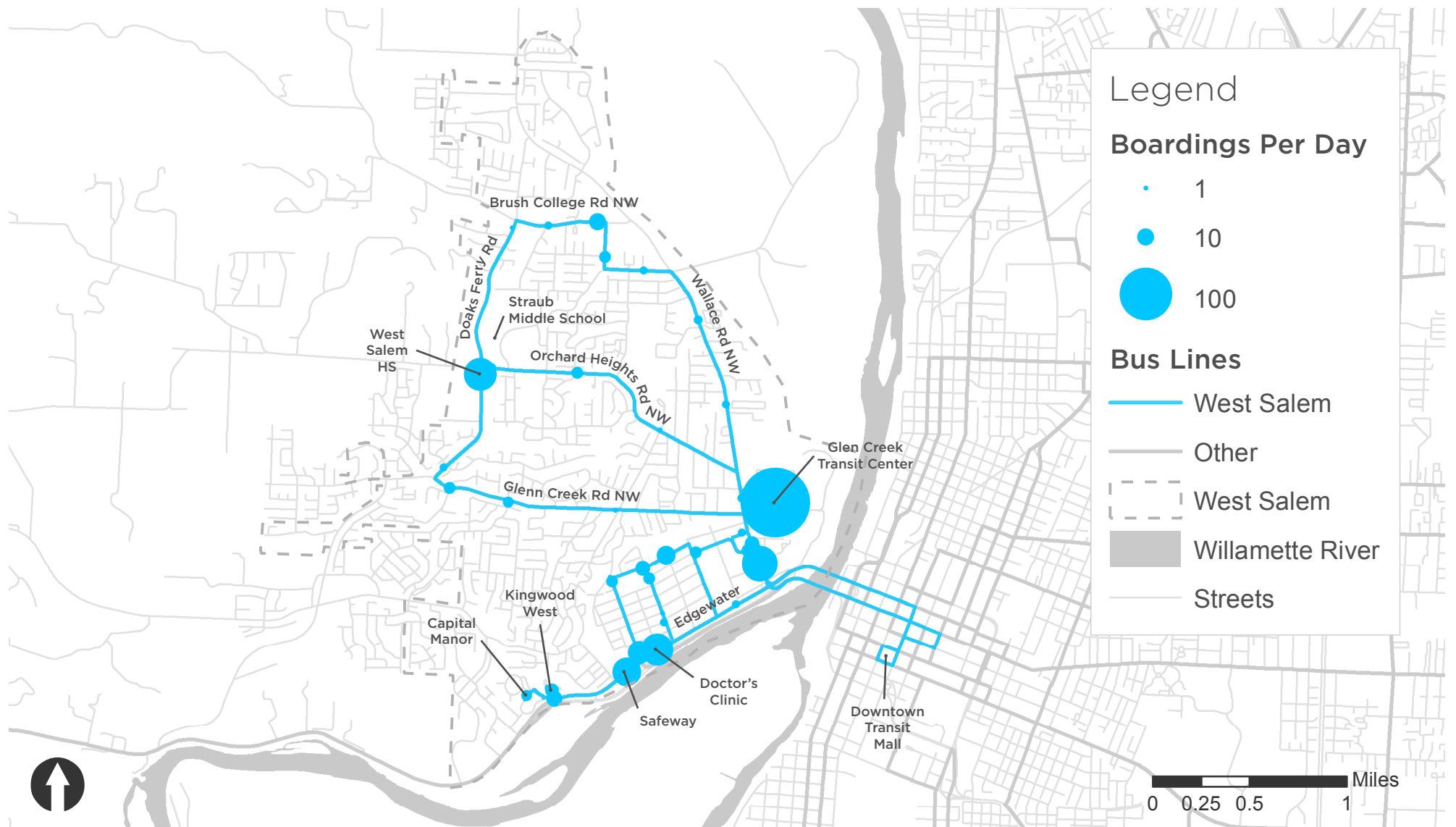
The Route 12 Edgewater Loop runs southwest from Glen Creek Transit Station to Capital Manor. The route serves a link between West Salem's main transit hub to senior housing in the Manorview area. It is a circulator route with 30 minute headways in the AM peak, PM peak, and Evening. During the Midday, it runs once every hour. Although the route runs less frequently in the Midday, most boardings (44) occur in the Midday time. Passenger trips are 1.85 miles on average. Route 12 also has the highest number of wheelchair boardings of any route in West Salem, with an average of 7 per day. The route runs on time 75% of the time when outbound and 54% of the time on inbound trips. Overall, Route 12 is one of the least productive routes in the Cherriots system, with 8.7 boardings per revenue hour on average. With only 98 boardings per day, this route currently serves a very small and specific transit market in the Manorview area.

Route 22

Brush College Loop

Route 22 Brush College Loop is a one-way loop into West Salem, beginning and ending at the Glen Creek Transit Center where the buses pulse. It runs on hourly intervals with the exception of Midday when it runs every two hours. It overlaps with Route 23 providing 30 minute frequency on Glen Creek Road NW for inbound trips. During the Midday, one bus is shared between Routes 12, 22, and 23, creating two-hour headways for Routes 22 and 23 and an one-hour headway for Route 12. Ridership on this route is quite low, with 71 boardings on an average day, as is productivity at 11.2 boardings per revenue hour. Most boardings and alightings take place near West Salem High and Middle schools, suggesting that school-based trips may be driving ridership for this route. The average passenger trip length is 3.42 miles. The route runs on time for 82% of outbound trips and 36% of inbound trips.

Boardings



Source: Jarrett Walker + Associates

Existing Cherriots Service

Route 23

Orchard Heights Loop

Similar to Route 22, Route 23 Orchard Heights Loop is a one-way loop into West Salem, beginning and ending at Glen Creek Transit Center where the buses pulse. It runs on hourly intervals with the exception of Midday when it runs every two hours. It overlaps with Route 22 providing 30 minute frequency on Glen Creek Road NW for inbound trips. Ridership is low, with 69 passengers boarding per day. However, because of low frequency the bus is somewhat productive with 14.9 boardings per revenue hour. Most all of the boardings and alightings (95%) take place at stops near West Salem High and Middle schools, indicating that school trips may be a main source of ridership for this route. The average passenger trip length is 2.72 miles. The route runs on time for 73% of outbound trips and 64% of inbound trips.

Route 24

Edgewater/Downtown

Route 24 Edgewater/Downtown runs from the Downtown Transit Mall to 8th and McNary with a loop around Rosemont. This circulator is very productive for a 60 minute frequency route. The Route has 208 daily boardings, with an average of 28.8 boardings per revenue hour. Route 24 is most productive during the PM peak, with 50 boardings per revenue hour. Boardings and alightings are greatest between Edgewater and Downtown. The average trip length on Route 24 is 2.38 miles. Outbound trips are on time 93% of the time, while only 33% of inbound trips are on time. Route 24 is considered to be very productive due to its combined route with Route 25. Both routes cross the bridges over the Willamette River in 30 minute (combined) frequencies, providing a corridor-like service from West Salem to Downtown.

Route 25

West Salem/Downtown

Similar to the Route 24, Route 25 West Salem/Downtown also runs from the Downtown Transit Mall, but ends at the Glen Creek Transit Station. The circulator is considered the third most productive route in the Cherriots system. Although it only has 225 daily boardings, it has an average of 31.2 boardings per revenue hour. Its 60 minute headway is improved by its combined route with Route 24. This route is above system averages during the AM peak, Midday, and PM peak. A major reason both Routes 24 and 25 are so productive is that they share the same inbound route on Wallace Road. They both travel to downtown from West Salem using the only bridge located within the city over the Willamette River. Although they both operate at 60 minute headways, their opposite schedules double their frequency. Their connection to downtown over the bridge benefits West Salem riders. On average, the passenger trip length is 1.89 miles. The inbound trips are early 73% of the time, while only 36% of outbound trips are early and 57% of outbound trips are on time.

Route 25CX

Wallace Commuter Express

Route 25CX Wallace Commuter Express is a route meant to connect commuters between West Salem and downtown Salem. Since it shares buses with other routes and only makes three trips during the AM and PM peaks, it has the lowest operating costs of the Cherriots system. However, daily boardings only amount to 25 passengers, so boardings per revenue hour (12.9 in the AM peak and 15 in the PM peak) never exceed the system average and cost per passenger is still high. On average, Route 25CX carries passengers 2.43 miles. The bus is either early or on time for all of its trips.

Methodology

Data from the 2008-2012 American Community Survey and the 2000 Census was used to calculate the statistics for the three study areas. The statistics for the Keizer study area were drawn from the Keizer Census designated place geography. For South Salem and West Salem, block group data was used. The geographic boundaries of Census block groups do not precisely follow jurisdictional boundaries. As a result, block groups with a majority of their area within the study areas were included in this analysis. Block groups that did not meet this criteria were excluded from this analysis.

Employment statistics and maps were produced using 2011 Longitudinal Employer-Household Dynamics (LEHD) data from the US Census Bureau. The Census Bureau's mapping application, OnTheMap, was used to analyze data related to jobs for each of the study areas.

All of the information on Cherriots service was obtained from the Comprehensive System Analysis report, which was produced by Jarrett Walker and Associates in January 2014.