



WOODBURN Transit System

Transit Development Plan (TDP)

Peer Review

DRAFT

January 2023



Table of Contents

	Page
Introduction and Key Findings	1
Peer Review Key Findings.....	4
Boardings per Revenue Hour.....	5
Boardings per Capita.....	6
Revenue Hours per Capita	7
Operating Cost per Revenue Hour	8
Operating Cost per Capita	9
Operating Cost per Boarding.....	10
Farebox Recovery Ratio.....	11

Table of Figures

	Page
Figure 1 Woodburn Peer Communities.....	1
Figure 2 Woodburn Peer Community Service Overview.....	2
Figure 3 Peer City Overview	3
Figure 4 Boardings per Vehicle Revenue Hour Peer Comparison.....	5
Figure 5 Boardings per Capita Peer Comparison.....	6
Figure 6 Revenue Hours per Capita Peer Comparison	7
Figure 7 Operating Cost per Revenue Hour Peer Comparison	8
Figure 8 Operating Cost per Capita Peer Comparison	9
Figure 9 Operating Cost per Boarding Peer Comparison.....	10
Figure 10 Farebox Recovery Ration Peer Comparison	11

INTRODUCTION AND KEY FINDINGS

As a supplement to the State of the System report, a high-level peer analysis was conducted to identify where Woodburn excels, or falls short, relative to the transit service it provides. The primary goal of the peer review is to identify potential opportunities for transit service improvements based on how they compare to their peers.

Figure 1 Woodburn Peer Communities



Peer Selection Process

The first step in the peer review was to identify possible communities that could be compared to Woodburn. A total of 13 potential peer communities were identified. Most of the peer communities are in Oregon due to the unique statewide funding opportunities for transit, but several potential out-of-state peers were also identified. Next, the following four evaluation factors were used to identify communities that are most comparable to Woodburn:

- **Total city population** was used to identify communities that have a similar number of people, and thus have a similar potential market for transit.
- **Population density** was used to ensure that the urban form and average household size is comparable to Woodburn.
- **2010-2020 population growth** was used to identify communities that are experiencing a similar level of economic activity and growth as Woodburn.
- **Hispanic or Latino population** and **Limited English Proficiency** were used to identify peer communities that exhibit a similar demographic profile as Woodburn.

Based on the 13 potential peer cities/regions, five peers were selected for this evaluation, as shown in Figure 1.

Peer Community Overview

Figure 2 below provides a high-level summary of the fixed route and demand response transit services provided in Woodburn as well as in each peer community. To provide additional context, a summary of the existing fare structure is also provided.

Figure 2 Woodburn Peer Community Service Overview

Peer Community	Transit Service Overview	Fare Structure Overview
Woodburn Transit System (WTS)	WTS provides two fixed route services within the city limits (fixed route and express route) as well as a Dial-A-Ride service for seniors and people with disabilities. The Dial-A-Ride serves the entire city limits and serves as the complementary paratransit service. Fixed route and paratransit services on WTS are offered seven days a week. WTS also manages a volunteer medical transportation service that provides trips to medical appointments in Salem or the Portland area.	WTS suspended fares on all services during the pandemic. Prior to the suspension of fares, fixed route fares were \$1.25 for a single ride, \$3.00 for a day pass, \$5.00 for a four-ride pass, and \$18.75 for a 20-ride pass. The volunteer medical transportation service is free to passengers, but donations are accepted.
Canby Area Transit (CATS)	CATS provides several fixed route services including a regional route connecting Canby to Oregon City and Woodburn (99x) as well as a local loop that operates just within the city. The regional route operates Monday-Saturday and the local loop operates only on weekdays. CATS also provides a complementary paratransit service to the fixed route service and a general-public dial-a-ride for anyone traveling within the urban growth boundary. A shopper shuttle is also provided for registered users of the paratransit service.	Fares on the local fixed route and shopper shuttle are free, but \$1.00 per one-way trip on the regional route (99x) as well as the dial-a-ride. A 24-ride punch pass and a monthly pass is also available, both for \$20.00.
Josephine Community Transit	JCT operates four local fixed routes and three commuter routes to Medford, Cave Junction, and Wolf Creek. In addition, a local complementary paratransit service (dial-a-ride) within ¾ of a mile of the local fixed route network. All transit services are offered Monday-Friday only.	Fares on the local fixed routes are \$1.00 for a single ride, \$3.00 for a day pass, and \$38.00 for a monthly pass. The commuter routes are \$2.00 for a single ride, \$6.00 for a day pass, and \$50.00 for a monthly pass. There are also a variety of reduced fare options. The dial-a-ride fares are \$2.00 each way.
Lebanon Inter-Neighborhood Express (LINX)	LINX provides a local loop fixed route (Monday through Saturday) as well as a regional connector route to Brownsville on Tuesday and Friday. In addition, LINX provides a dial-a-ride for seniors, people with disabilities and the general public.	LINX is currently fare free.
Yamhill County Transit (YCT)	YCT offers 11 fixed route services, including local service in McMinnville and Newberg and regional services to Grand Ronde, West Salem, Hillsboro, and Tigard. A Dial-A-Ride is also provided for riders who are unable to use the local and commuter fixed route services. All services operate Monday-Friday except the routes to Grand Ronde and Tigard that also offer reduced service on Saturday.	YCT suspended fares during the pandemic and continue to be fare free. Previously, fares on the local and regional services were \$1.25 for a one-way trip, \$2.50 for a day pass, \$18.00 for a 10-day pass book, and \$35.00 for a monthly pass. Dial-a-Ride fares were \$1.75 for a single ride and \$40.00 for monthly pass.
Sandy Area Metro (SAM)	SAM operates local fixed route service as well as regional services to Gresham and Estacada. SAM also provides a dial-a-ride service (called Sandy Transit Area Rides – or STAR) that provides both complementary paratransit service as well as general-public, curb-to-curb service. In addition, a shopper shuttle is provided locally. The route between Sandy and Gresham operates seven days a week, while the route to Estacada operates Monday through Saturday and the shopper shuttle only operates on weekdays.	All fixed route services within the Sandy city limits are fareless. Fares for service outside of the city limits to reach regional destinations is \$1.00 for a single trip. The dial-a-ride service is also \$1.00 for a single trip. Multi-trip and monthly passes are available for \$20.00 and \$30.00, respectively. SAM also offers a combined SAM/Mt. Hood Express day pass for \$5.00.

The five selected peer communities are listed in Figure 3 along with total city population, population density, and four transit performance statistics for the entire system (fixed route and demand response) from the 2021 National Transit Database (NTD):

- Annual Passenger Trips (Boardings)
- Annual Vehicle Revenue Hours
- Annual Total Operating Costs
- Maximum Vehicles in Operation

Utilizing the performance data listed above, as well as other NTD data organized by mode (demand response and fixed route) for the past three available years (2019, 2020 and 2021), nearly a dozen performance metrics were calculated and evaluated. Based on this evaluation, the following metrics that are most used in the transit industry have been evaluated further to compare Woodburn with the peer communities.

- Boardings per Revenue Hour
- Boardings per Capita
- Revenue Hours per Capita
- Operating Cost per Revenue Hour
- Operating Expenditures per Capita
- Operating Cost per Boarding
- Farebox Recovery

Figure 3 Peer Community Demographic and Service Overview

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

Sources: US Census (2020) ACS 5-Year Estimates Detailed Tables; 2021 National Transit Database (Fixed Route and Demand Response)

As shown above, population density in Woodburn is the highest of any of the peer communities. While several of the peers operate in larger geographic areas (and thus have a lower population density), this also indicates that Woodburn’s land uses are somewhat more compact compared to the peer communities. More compact land uses, as well a higher average household size¹, indicates a higher latent demand for transit in Woodburn compared to the peer communities.

¹ Woodburn’s average household size is 2.99 compared to 2.76 for Marion County and 2.49 for Oregon as a whole (US Census (2021) ACS 5-Year Estimates).

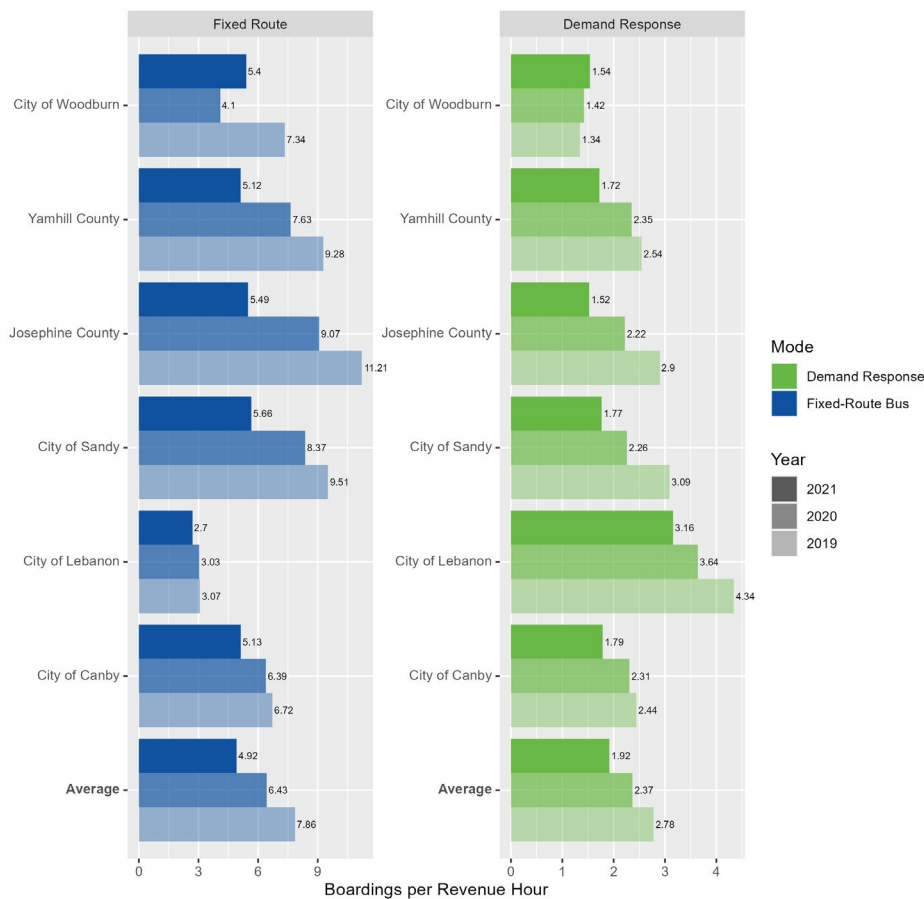
PEER REVIEW KEY FINDINGS

- Woodburn is the only peer where boardings per revenue hour (productivity) showed any annual increase during the three-year period. While productivity declined between 2019 and 2020 (as expected due to the pandemic), fixed route productivity in Woodburn increased by about 32% between 2020 and 2021 and increased slightly each of the three years on demand response. The increase in ridership could be attributed to the suspension of fares, although fares were also suspended at other peer communities that did not see similar productivity trends.
- The average number of annual revenue hours per capita (an indicator of the investment in transit in that community) remained relatively steady over the past three years for all peers. While boardings declined, many peer communities (including Woodburn) were able to maintain service levels during the pandemic. This is likely due to federal recovery funds that helped maintain service levels.
- Woodburn offers less service (both in terms of revenue hours and operating dollars) per capita than the peer cities. As a result, the number of boardings per capita in Woodburn is also on the lower end when compared to the peers. This contrasts with higher population density and higher average household size in Woodburn compared to peer communities, which could indicate latent demand for transit.
- The efficiency of providing transit service in Woodburn is mixed between services, but on par with peer communities overall. Operating cost per revenue hour (a measure of efficiency) is higher than peer communities for fixed route services, but lower on demand response services. Similarly, the operating cost per boarding is on the higher end for fixed route services in Woodburn compared to peer communities, but on the lower end for demand response services.
- The farebox recovery ratio for all peer communities dropped significantly over the past three years as ridership declined and fares on some peers were suspended during the pandemic (and still suspended in Woodburn and Yamhill County). Woodburn's farebox recovery ratio prior to the pandemic was close to the average of all peers for fixed route and higher than the average for all peers on demand response.

BOARDINGS PER REVENUE HOUR

This performance metric (also referred to as “productivity”) measures how well the service is being used in relation to the amount of service available. Higher boardings per revenue hour indicates a service that is more effective at attracting passengers to the services that are offered.

Figure 4 Boardings per Vehicle Revenue Hour Peer Comparison



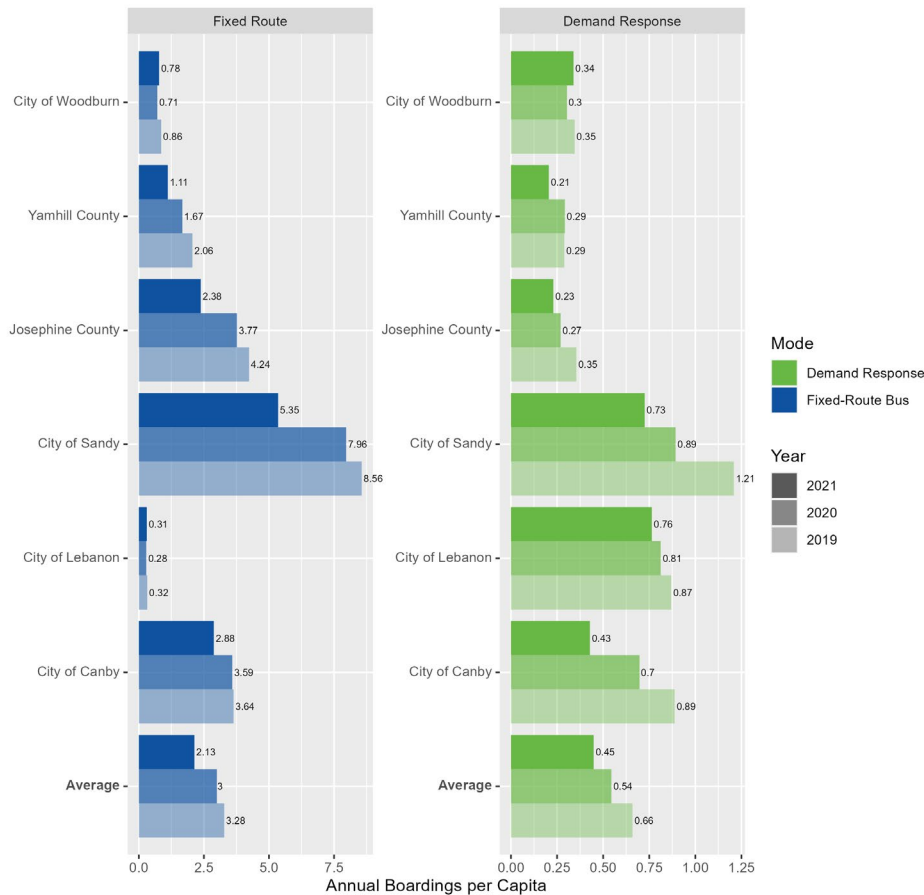
Summary

- Productivity for all peer systems has declined over the past three years – largely due to lower ridership during the pandemic. The average productivity expressed as boardings per revenue hour is just under 5.
- Woodburn has a slightly higher number of boardings per revenue hour than the average of other peers (fixed route) and average productivity for demand response services.
- Woodburn was the only peer where boardings per revenue hour showed any year-over-year increase during the three-year period. While productivity declined between 2019 and 2020 (as expected due to the pandemic), fixed route productivity increased by about 32% between 2020 and 2021 and increased slightly each of the three years on demand response.
- These findings indicate that while service levels have fluctuated over the past three years, Woodburn has been more effective than its peers at attracting passengers back to transit.

BOARDINGS PER CAPITA

The number of boardings per capita measures the utilization of the provider’s transit services compared to service area population. This measure normalizes the utilization of transit services in Woodburn compared to peer agencies and is an indicator of transit’s market share in the region. A higher number of boardings per capita indicates a higher utilization of transit services.

Figure 5 Boardings per Capita Peer Comparison



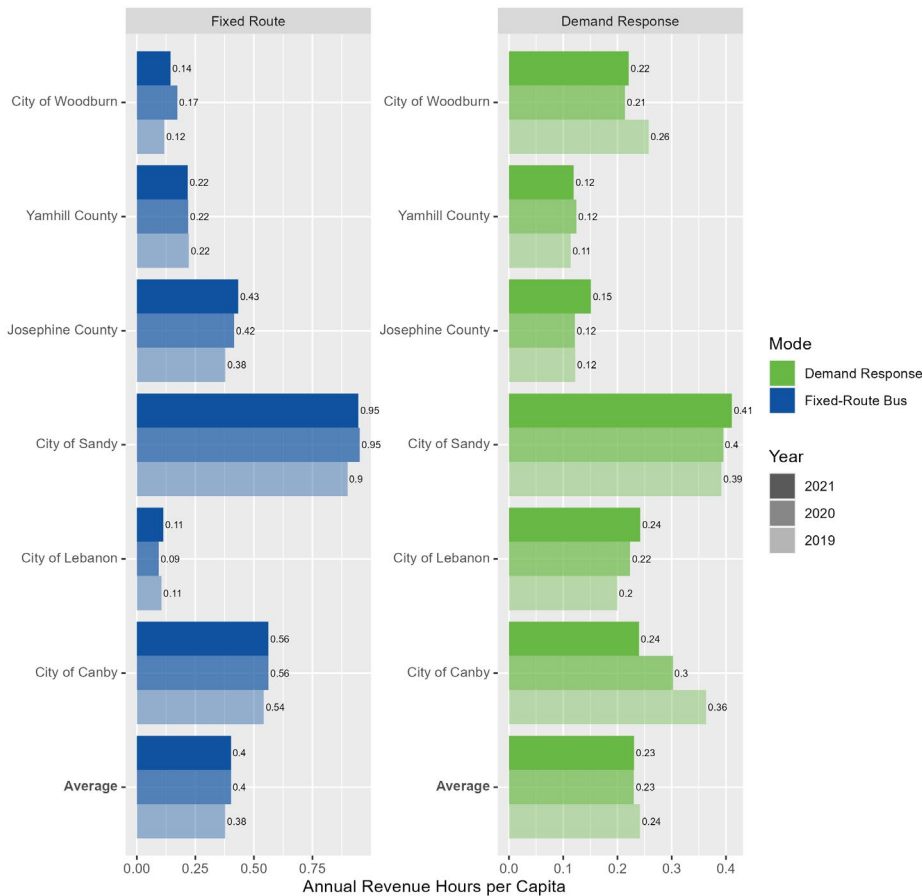
Summary

- As total boardings have declined for all peers over the three-year period, the number of boardings per capita for all peers has also declined. The average number of fixed route annual boardings per resident for all peers in 2021 is 2.13 (and 0.45 for demand response).
- For fixed route services, Woodburn averages about 0.8 boardings per resident, which is on the lower end compared to other peers. Only Lebanon has fewer boardings per capita than Woodburn.
- For demand response services, Woodburn is closer to the average for all peers with about 0.35 boardings per resident.
- This metric indicates that relatively few residents of Woodburn utilize transit – especially fixed route transit. On the other hand, the number of boardings per capita increased between 2020 and 2021, a trend none of the peers could claim.

REVENUE HOURS PER CAPITA

Revenue hours per capita is an indicator of the overall investment of transit in each peer community. A higher number in this measure indicates a higher transit investment.

Figure 6 Revenue Hours per Capita Peer Comparison



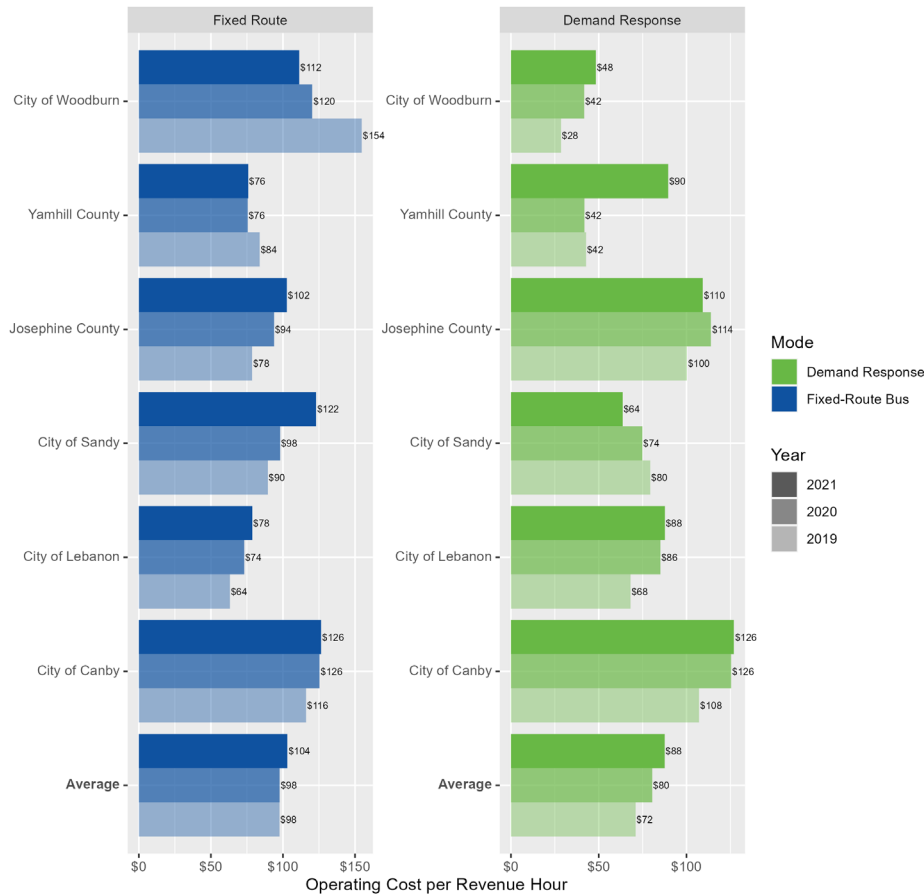
Summary

- Unlike boardings per capita, the average number of annual revenue hours per capita for all peers remained relatively steady over the past three years. While boardings declined, many cities were able to maintain service levels during the pandemic.
- For fixed route services, Woodburn averages between 0.12 and 0.17 annual revenue hours per resident, which is second lowest when compared to other peers (only Lebanon has fewer revenue hours per capita than Woodburn).
- For demand response services, Woodburn is close to the average for all peers with between 0.21 and 0.26 annual revenue hours per resident.
- As with passengers per capita, this metric indicates that Woodburn residents have less access to fixed route transit service than most peer cities (except Lebanon).
- On the other hand, Woodburn residents have more access to demand response services when compared to peers but are lower than the peers that are more contained small cities (Sandy, Lebanon, and Canby).

OPERATING COST PER REVENUE HOUR

Operating cost per revenue hour measures how efficiently resources are provided by the transit provider. It reflects a combination of factors outside of agency control, such as prevailing wage rates as well as considerations within a provider’s influence, like staffing practices and assignments, and resources not used in revenue service (i.e., deadhead hours). A lower operating cost per revenue hour is generally preferable.

Figure 7 Operating Cost per Revenue Hour Peer Comparison



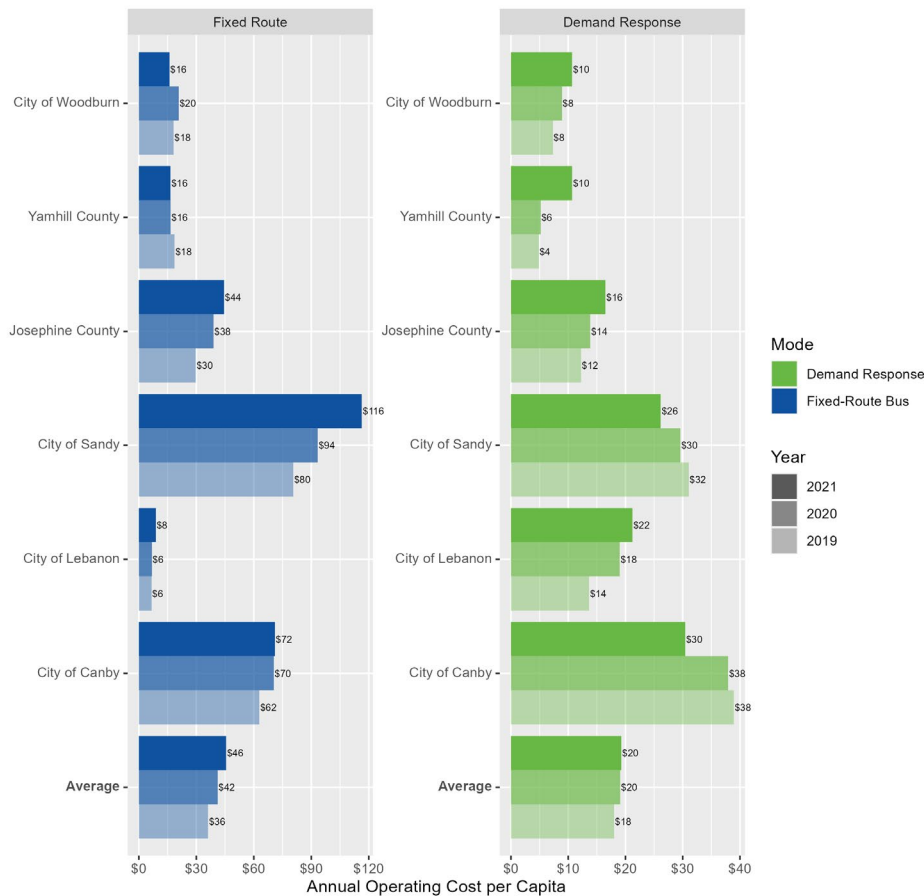
Summary

- The average operating cost per revenue hour for all peers ranged from about \$100 for fixed route services (for all three years) but increased between 2019 and 2021 for demand response services (increasing from \$72 to \$88).
- For fixed route services, Woodburn is slightly higher than the peer cities. On the other hand, this metric has been trending down over the past three years, which only one other peer (Yamhill County) can claim.
- For demand response services, Woodburn is lower than nearly all other peers and well below the average. Like many other peers, operating cost per revenue hour on demand response services has been increasing over the past three years.
- Overall, this metric indicates that Woodburn is slightly more efficient than its peers because of the lower average for demand responsive services.

OPERATING COST PER CAPITA

Operating cost per capita is another measure of the investment in transit service, but this time compared to the population. A higher operating cost per capita indicates a higher investment in transit.

Figure 8 Operating Cost per Capita Peer Comparison



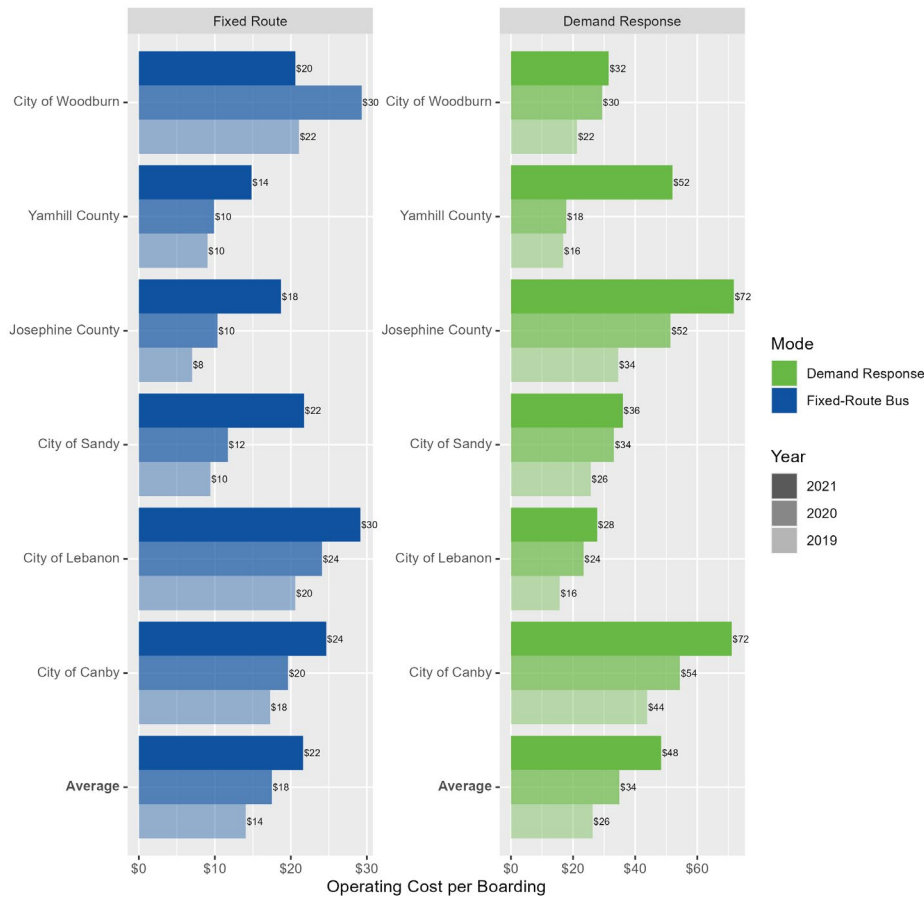
Summary

- For all peers, the average operating cost per capita ranged from \$36 to \$46 over the three-year period.
- The operating cost per capita for demand response services for all peers was about half that of fixed route, ranging from \$18-20 over the three-year period.
- As with revenue hours per capita, Woodburn has lower operating cost per capita for fixed route services when compared to peer cities.
- For demand response services, Woodburn also has low operating cost per capita but closer to the average than for fixed route services. On the other hand, the operating cost per capita on demand response services has been increasing over the past three years, whereas several peers have declined (Sandy and Canby).
- Overall, this metric indicates that Woodburn provides fewer dollars for transit per resident than most of its peer cities. It should be noted that both Sandy and Canby provide significantly higher operating dollars per resident because they have a payroll tax dedicated to transit operations.

OPERATING COST PER BOARDING

Operating cost per passenger is a provider’s total operating cost divided by the total number of passengers carried per year and is a basic measure of cost effectiveness.

Figure 9 Operating Cost per Boarding Peer Comparison



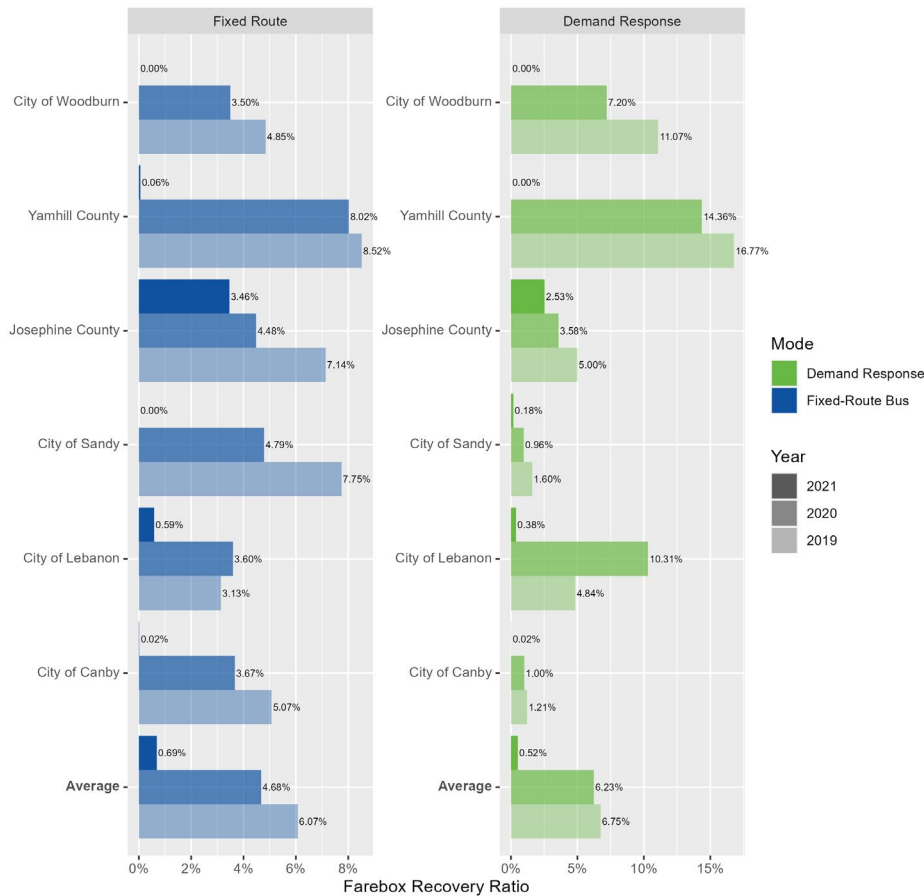
Summary

- The average cost per boarding for both fixed route and demand response services has been increasing over the past three years – which is likely a result of the pandemic where operating costs were increasing faster than boardings.
- For fixed route, Woodburn is close to the average for all peers, but the cost per boarding in 2021 is close to 2019. This is because fixed route ridership in Woodburn in 2021 is close to 2019 levels, while all other peers (except Lebanon) have seen steady declines in ridership during the three-year period.
- Woodburn’s cost per boarding for demand response services is lower than the average for all peers but has seen a slight year-over-year increase. As with fixed route, ridership on demand response in Woodburn has recovered to 2019 levels, but operating costs have increased somewhat.

FAREBOX RECOVERY RATIO

Farebox recovery is measured to understand how much of a provider’s operating costs are recovered from fares and is another way to measure cost effectiveness.

Figure 10 Farebox Recovery Ration Peer Comparison



Summary

- Over the three-year period, the farebox recovery ratio for all peers declined sharply, both on fixed route and demand response. This decline is largely due to suspension of fares during the pandemic for several peers (including Woodburn), but also a decline in ridership on those systems that continued to collect fares.
- In Woodburn, fares were suspended in March 2020, and as a result the farebox recovery dropped in 2020 on both fixed route and demand response and was zero in 2021.
- Prior to the suspension of fares, WTS had similar farebox recovery ratio when compared to its peers. Comparing 2019 data (the last full year prior to the pandemic), the farebox recovery ratio on WTS fixed route services was just under 5%, which was on par with both Lebanon and Canby, whereas Sandy, Josephine County and Yamhill County were all slightly higher (between 7-8%). On demand response services, however, WTS had a farebox recovery ratio higher than the average (11% compared to about 7%) and was only lower than Yamhill County (17%).