

VI. Demographics of Transit Demand



Demographics of service area and regional culture:

The reasons that passengers use transit vary widely, and an understanding of patron needs is vital in prioritizing the characteristics of the service offered. Public transportation is essential for those who are income-constrained to connect with employment and job-training opportunities, health and medical services, educational services, and the community at large. A transit system designed to serve this group well would connect affordable housing clusters with commercial employment centers, college campuses, social service agencies, health-care centers and other amenities. Because “trip-chaining” (traveling to multiple destinations in a single trip, such as during the work-to-home commute) can be much more difficult on transit, availability of workforce housing in mixed-use neighborhoods is an important transit strategy for this population.

Alternatively, a small but growing group of passengers choose transit for reasons that may not be derived directly from financial reasons but instead for quality of life reasons. For a commuter traveling from Ashland to Medford each day for example, RVTD would provide a safe and comfortable alternative to the automobile and the passenger can use their time more efficiently than driving. For this population transit is used for some but often not all trips and the choice often depends on external factors such as length of trip, parking constraints and cost and the stress of the commute.

This chapter describes the demographics of Rogue Valley’s citizens and construes the demand for transit based on certain characteristics, such as access to a vehicle. Additional information about the regional demand for transit can be taken from RVTD’s Passenger Surveys, conducted every three years.

Figure 6.1 Demographics in Jackson County: U.S. Census Bureau

Demographic Category	Percentage of Population
Age 2005	
Under 18	22.2%
19 to 64	61.6%
65 and Older	16.2% (PSU 2006 estimate)
Education 2000	
High school graduates	85.0%
Bachelor’s degree or higher	22.3%
Disabilities and Other 2000	
Population 5 to 20 years with a disability	8.2% (Oregon 8.2%)
Population 21 to 64 years with disability	19.1% (Oregon 18.0%)
Population 65 years and over with disability	41.0% (Oregon 41.5%)
Language other than English spoken at home	7.7% (Oregon 12.1%)
Transportation 2000	
Mean Travel time to work	18.9 minutes
Commute to work, drive alone	77.4% (Oregon 73.2%)
Commute to work, carpool	10.9% (Oregon 12.2%)
Commute to work, public transportation	0.7% (Oregon 4.2%)

Commute to work, walk	3.6% (Oregon 3.6%)
Work at home	5.6% (Oregon 5.0%)
No vehicles available	5,006
1 vehicle available	26,038
2 vehicles available	29,195
Housing 2000	
Home ownership rate	66.5%
Grandparents responsible for grandchildren	39.6%
Population living in same house in 1995	46.5%
Population living in same county in 1995	30.4%
Income 2004	
Median household income	\$38,481 (Oregon \$42,568)
Persons below poverty	14.0% (Oregon 12.9%)
Persons unemployed	4.2%
Households with income less than \$24,999	33.2%
Households with income more than \$75,000	16.4%

Current Transit-user Demographics

RVTD has conducted passenger surveys tri-annually since 1991. The following is a summary of some key findings from the 2005 Passenger Survey. The full survey report is available at www.rvtd.org.

Figure 6.2 RVTD 2005 Passenger Survey Household Income Data

Income	2005	2001
< \$15,000	50% (225)	44%
\$15,000 - \$24,999	19% (86)	20%
Prefer not to answer/Refused	17% (75)	20%
\$25,000 - \$44,999	9% (39)	11%
\$45,000 +	5% (25)	5%

Figure 6.3 RVTD 2005 Passenger Survey Trip Purpose Data

Reason for Trip	Per Cent
Work	24%
Shopping	17%
Other	15%
School	12%
Recreation	13%
Home	12%
Medical	7%

Additional Passenger Demographics

74% are between the ages of 19 and 64

69% do not have a valid driver's license

24% are using the bus to get to work

26% would not have made the trip, if they had not taken the bus;

of those 18% were using the bus for work reasons.

83% use the bus 3-5 days per week

54% use the bus 5 days per week

50% say their combined annual household income is less than \$15,000

73% walk to catch the bus

69% travel no more than 3 blocks to connect with the bus system and

74% travel no more than 3 blocks to their final destination from the bus

Relationships Among 2005 Passenger Survey Data

The data suggested the following relationships:

- The higher a person's annual combined household income; the more likely that person is to have a valid driver's license.
- Passengers in the 65+ age category are most likely to be using the bus for recreational or shopping purposes.
- Passengers' incomes tend to reflect socio-economic trends in the neighborhoods served by that route.
- Reasons for the trip vary with age. The youngest (10-18) tend to be using the bus mostly for school and getting home; the eldest (65+) are using the bus

mostly for shopping or recreating; and those aged 19-64 are more likely to be using the bus to get to work.

2005 Passenger Survey Impressions Excerpt

“RVTD is providing an indispensable service for its passengers. People using the bus seem dependent upon it. They often do not have viable options to taking the bus. Most people use the bus from 3-5 days per week, meaning that it is an important constant in the routines of their lives. The majority of people travel no more than 3 blocks to the bus system and then approximately the same distance from the bus to their final destination. This strongly suggests that convenience has a lot to do with using the bus system. Yet other data suggests that having a lower annual income encourages use of the bus system. Passengers are clamoring for weekend bus service and service into evening hours during the week.”

Population size and locations:

The largest metropolitan area in the Rogue Valley is the City of Medford, considered to be the center for commercial and economic activities. To this end, RVTD sees Medford as a natural place for all routes to begin and end their service days. Although additional transit centers may be built throughout the District, Medford is considered the best location for the regional transfer station.

RVTD seeks to serve the primary commercial and residential centers of the valley and the heart of each urban area. As with sewer, water and other types of municipal owned and operated infrastructure, the cost of transit service also grows as each route lengthens, especially if it travels through areas that are under-populated



CNGNewFlyerBusatFrontSt.Station

New Service Locations:

Three new areas outside of the District boundaries have expressed interest in receiving service: Grants Pass, Gold Hill and Eagle Point. A route to Grants Pass would likely use Hwy 99 and provide an opportunity for Gold Hill and Rogue River to also receive service. Eagle Point service would likely occur via Crater Lake Hwy. These jurisdictions, and the areas in between, would need to pass a levy for becoming part of RVTD's Transportation District. This would enable the district's current taxing instruments to be leveraged in these areas and for the Board to exercise the district's limited authority. Although it is unlikely that the existing property taxing base alone would fully fund new routes, RVTD could either match the service to the available tax revenue (which could be less than needed for attracting high ridership) or be partially subsidized to provide adequate service. Either direction would need the support of jurisdictions that are currently in the District. There is no doubt that areas outside the district are experiencing high levels of growth and significant numbers of commuters travel to and from Medford each day. For more information on the transit needs of each community, please refer to chapter III.

Characteristics of Current Riders

“Dependent” Riders

RVTD's primary transit ridership demographics are based on what is known as a 'dependent' rider, someone who either has limited or no access to an automobile and relies on public transportation for long-distance trips. Although we cannot generalize who would be a dependent rider based on income or age, we can assume who will be less likely to have access to an automobile. These are people who do not have a driver's license, are of lower incomes, and have not attended secondary education. From the community profile above, a few key statistics should be considered to establish the value of

transit for the greater Rogue Valley area. In addition, this information provides suggestions for ways to improve service.

Age:

26% of the passengers in 2005 were children or seniors. Senior citizens with decreasing abilities to drive and children are often dependent on family and friends for their mobility needs. Some can also walk or bike but it is difficult to rely solely on these forms of transportation as they are primarily for short distances. RVTD is the region's lead provider for long-distance, non-auto trips.

Senior Citizens

The Census projects that by the year **2015**, the state of Oregon will have 741,000 people who are 65 and over. Jackson County currently makes up approximately 5.3% of Oregon's total population and is expected to continue experiencing higher population growth than the state on average. Oregon's Office of Economic Analysis projects Jackson County will have 40,987 people who are 65 and over by 2015. This was based on 2000 data and could be higher with recent growth trends.



If only half of the expected 65 and over population in 2015 uses the bus 3 days per week (6 trips), RVTD could expect 6,393,972 rides from this population that year alone. $(20,495 \times 52 \text{ weeks} \times 6 \text{ trips} = 6,393,972)$

Those who are functionally able will most likely rely on public transportation and we should ensure that the facilities are adequate for them to do so. A major obstacle to someone who relies on public transportation is the walking surface, accessibility and surrounding environment. RVTD's staff feels that a portion of Valley Lift clients would be able to use the bus system if they had

sidewalk connectivity. This subject has been brought up to all jurisdictions, who are responsible for the built environment RVTD serves, as one way to alleviate the demand on the Valley Lift Program. For instance, if 20% of the total 92,335 Valley Lift trips made between July 2005 and June 2006 were diverted to the bus system due to sidewalk connectivity, RVTD could have saved an estimated \$369,420 (using an approximate trip cost of \$20.00). Please note that only certain disabilities allow an individual to qualify for Valley Lift service. A lack of sidewalk connection to a bus stop partially determines if someone qualifies for Valley Lift. However due to the high percentage of the Jackson County population 65 and over with a disability, currently 41%, we can assume that many will continue to rely on Valley Lift.

To prepare the senior population for using the transit system, RVTD offers a free class to show them how to use the bus. Students learn to read a bus schedule and the class includes a bus ride. Additionally, RVTD has preferential seating for seniors at the front of the bus. When a senior boards the bus, the driver will respectfully make a general request for others occupying the front seats to move to another. In addition, all RVTD's drivers are trained for emergency response and have dispatch capabilities to the area's emergency response system. Valley Lift is also available for qualified people who cannot use the regular bus system due to physical limitations.

Children and Transit

Children ages 0-9 can ride RVTD for free with an accompanying adult. Although a rare occurrence, children are allowed to ride the bus without an adult but they would need to pay the reduced fare of \$1.00. For several years RVTD provided the School District with transportation and had several "tripper routes" established for this purpose. As RVTD's costs for providing the service to the school increased, the School District decided to contract with Laidlaw for their transportation obligations. RVTD was then able to focus more on

commuters rather than school aged riders who have very different transportation needs.

Today, RVTD reaches over 7,000 Rogue Valley students through the Interactive Programs called Gus Rides the Bus and Mike and his Interactive Bike. These programs teach traffic rules of the road and the benefits of using alternative transportation. The Gus Bus class also has a bus ride.

Although RVTD is not the primary transportation provider for the region's school districts, 31 of 72 schools (both public & private) are located within ¼ mile of the current routes. Or, approximately 14,938 K-12 students out of 31,000 total students have convenient access to public transportation.

Special Needs Riders

Special needs populations may require services such as: wheelchair accessible demand-response van service, shared-ride taxis, vanpools, carpools, etc. Many federal programs authorize use of funds to provide transportation for transportation-disadvantaged people so they can access government programs. Programs that provide incidental transportation include health and medical programs, job-training programs, and programs for the aged. The coordination of these transportation services through pooling resources, consolidating trips provided by various agencies under a single agency, scheduling service according to client residential location, or sharing information between programs, has been found to improve the quality and cost-effectiveness of service.

Clients of social and medical service agencies are fortunate to have numerous providers of specialized transportation in the Rogue Valley. RVTD's adopted *Coordinated Public Transit/Human Services Transportation Plan* includes comprehensive inventories of specialized transportation providers and human service agencies with clienteles dependent on specialized transportation.

Income:

According to the 2005 Passenger Survey, 69% of RVTD's passengers (household) have an annual income of less than \$25,000. Households with less than \$25,000 incomes comprise 33.2% of Jackson County's total households.

Additionally, 16% of households in Jackson County have one or no vehicles available. As the cost of vehicle ownership increases, the percentage of one or no vehicle households is also expected to increase. Often this population makes a conscious effort to live and work in areas where public transportation is available, however affordable housing is increasingly difficult to find.

Transit Fare:

RVTD can ensure an affordable alternative to car ownership by keeping fares at their current level of \$2.00. RVTD has the highest fare in the state of Oregon [outside of zone fares] as a result of a fare increase established in July 2006. The 2006 fare increase was abrupt, doubling fares overnight. Typically transit agencies make small adjustments to the fare, often no more than 25% per year. The effect on RVTD's ridership was lower than expected which provides an insight into the ability for passengers to use an alternate means. The fare increase caused ridership to decrease but is recovering. It is expected that other transit agencies in the state will continue to experience internal pressure to increase fares to keep up with the growing costs of transit service. However, the fare is very reasonable when compared to vehicle registration, insurance, maintenance, fuel, depreciation, and other car ownership costs. At the sunset of this plan in 2017, many of these agencies may have increased fares putting RVTD's fare in a more competitive light.

If a fare increase is considered again it should not be in more than 25% increments. The Board should also consider whether the current

demographics of passengers, who may be choice riders as described below, will decide to drive their cars again faced with a fare increase.

‘Dependent’ Riders:

Even transit systems offering the lowest levels of service can expect regular ridership from passengers who have few other transportation options. These “dependent” riders may include students, the aged, people who cannot afford private transportation, and non-drivers. This is a very diverse group, with diverse needs. These riders are less likely to benefit from a park-and-ride, and more likely to benefit from bike racks and connections to pedestrian-oriented activity centers, such as schools, health centers, and social services. Amenities useful to this group include covered bus shelters to provide a safe, dry, and lighted waiting area, secure bike racks for cyclists who use transit, and route information. While regular riders of a bus system may be familiar with routes, information is often still desired for reassurance purposes, or when a regular rider is taking a trip at a new time or to a new location. Bus stop information tends to inspire confidence in transit passengers.

‘Choice’ Riders:

In larger metropolitan areas, public transportation is also used regularly by what is known as a ‘choice’ rider, someone who has access to an automobile but chooses to use public transportation for a variety of reasons, such as parking fees, congestion, conservation of fuel or environmental benefits. The rising cost of fuel is a large factor, although volatile, in shifting what would be a choice rider to become a dependent rider. The choice rider has historically been considered a stable population, often falling within the middle and upper classes. Recently, the middle class has also felt the impacts that fuel costs have on household budgets. Fuel costs are only expected to increase pushing more households to become dependent on public and non-auto transportation.

The viability of transit service could also shift someone from using an automobile to public transit. Reliability, convenience, cleanliness, safety and user knowledge are a few of the primary reasons people view transit as viable. RVTD seeks to increase the ‘choice’ ridership because this population has the largest impact on per capita Vehicle Miles Traveled (VMT), congestion and air quality. If commercial and housing developments in the Rogue Valley become more accessible to transit and if using an automobile continues to be less convenient, we can expect to see both dependent and choice ridership grow.

Major Destinations and ‘Campus’ Transportation

It is very typical to have transit serve major origins and destinations that generate high volumes of trips. Locations that have higher than 2,000 occupants on a typical day are hospitals, lower and higher education institutions, employment centers and manufacturing plants to name a few. A campus is a term that describes a piece of property that has several buildings conjoined together but having different uses. The typical campus is thought to be a school however it could also be a hospital or production plant.



Below is a description of the types of campuses that have higher trips than the average destination and then a fairly comprehensive list of all the major destinations served by RVTD.

Southern Oregon University – The SOU campus in Ashland has approximately 5,000 students enrolled and approximately 700 faculty and staff. The City of Ashland has nearly 20,000 residents and SOU can be considered to generate approximately 1/3 of Ashland’ daily trips. RVTD has

dedicated a considerable amount of time and resources toward automobile trip reduction at SOU with several unsuccessful years, more so recently.

SOU's Student Senate and the Business Administration decided to discontinue participation in a long-standing bus pass program in 2004. In 2004, the fare in Ashland was free, which could have been the main drive behind dropping the program as students could take advantage of the free fare without a pass. However when the free fare program was established, the City, RVTD and SOU had an understanding that the University would provide a portion of the cost to provide the free service due to the high trip generation of the campus. Unfortunately, this agreement was not binding and with a rotating Student Senate and unsupportive Administration, SOU quickly dropped the program due to what is likely a misunderstanding and miscommunication.

Although SOU is currently not participating in a bus pass program, RVTD has continued to advocate for automobile trip reduction through its TDM Department. In 2004-2005 several presentations were given to the Student Senate and the Business Administration to support trip reduction programs, including adoption of the bus pass program but to no avail. Then, in the 2005-2006 academic year, RVTD mentored a group of five students, three of whom were Ecology Capstone students. This group coordinated a year long project that not only regenerated a fledgling bicycle lending program but also established transportation kiosks in two campus locations, conducted a campus-wide survey and participated in Senate discussions regarding transportation. The survey found that 37% of students and 29% of faculty/staff would ride the bus more if a bus pass program were implemented. Additionally, 65% of students and 73% of faculty/staff would support a \$10.00 parking fee increase to fund the program. The Student Senate reviewed the work of this group and decided to not take any action to the disappointment of all involved. The Capstone group helped to establish a greater awareness of auto trip reduction on campus and planted a seed for what would become

today a Commuter Services Office in the Non-Traditional Student Affairs Department where students can receive transit information learn about the bike lending program, and find carpool partners.

In addition to the present day student and faculty trip needs, SOU and RCC are building a joint campus in downtown Medford to be completed and open for enrollment by Fall of 2008. SOU expects an enrollment of 1,500 students that will need inter-campus transportation. Although each campus will have choices for closed degree completion programs (the ability for a student to only attend one campus) the majority of students may need to attend both campuses at some point in their school career. Classes will be offered in the evening with the last class ending at around 10:00pm. RVTD is currently considering extending hours until 10:00pm as part of its service expansion.

Rogue Community College – The RCC campus in downtown Medford has approximately 2,000 students enrolled and the Table Rock campus in White City has approximately 1,000 students enrolled. RCC also has a campus in Grants Pass that has approximately 2,000 students enrolled. Similar to SOU, RCC has several students and staff that need inter-campus transportation. The only campus that is currently served within 1/4 mile of a route however is the downtown Medford campus, which has incredible access to all of RVTD's routes due to the campus being two blocks from the Front St. Transfer Station. RVTD plans to extend service out to the Table Rock campus area as part of the service expansion scenarios which will allow inter-campus transportation and general commuting transit.

The students at RCC have had access to a bus pass program for over a decade. Up until the 2004-2005 the program was offered for free and it allowed any student to show their student ID to the driver to board the bus for free. Currently, RCC charges students interested in receiving bus pass privileges \$15.00 per term for a sticker that is placed on the front of their pass. Although

this is an added disincentive for a student to use transit, it is considerably less expensive than the \$210.00 the student would otherwise pay for a term's worth of Full Fare passes. So far, this program still seems to have high participation.

Rogue Valley Medical Center – RVMC is part of Asante Health Systems and is located in east Medford. Together with the Three Rivers campus in Grants Pass, Asante has over 3,200 employees and several hundred patients. RVMC was served directly by Route 4 but as part of the 2006-2007 service adjustments Route 4 was discontinued. Before 2006, RVTD offered a bus pass program several times to RVMC and met with the Human Services Director but they felt that with the limited hours of service and virtually 24-hour shifts at the hospital, a bus pass program would not be worth the cost.

Re-instating Route 4 to the east Medford area is in the first tier as part of the service expansion scenarios. With service to the campus again and an extension of hours, RVMC is likely to adopt a bus pass program for their employees.

Providence Hospital – Providence Hospital is part of Providence Health and Services. Their campus in Medford is located along Crater Lake Ave. and has over 1,100 employees and several hundred patients. Providence is served by Route 60 which has 30-minute service. RVTD has offered a bus pass program several times to Providence and met with the Human Services Assistant but they too felt that with the limited hours of service and virtually 24-hour shifts at the hospital, a bus pass program would not be worth the cost. With an extension of service hours, Providence is likely to adopt a bus pass program for their employees.

Rogue Valley Mall – Rogue Valley Mall is the region's shopping mall with over 200 stores and 7 Million visitors per year. RVTD has provided service to the mall since it's opening with door front service to its main entrance along

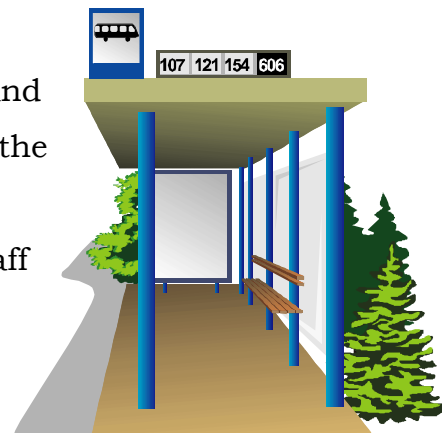
Riverside Ave. until 2005. Parking lot navigation, insufficient surface materials and time constraints within the RV Mall route led the district to discontinue door front service and limit stops to Riverside Ave. Each year RVTD partners with RV Mall's J.C. Penny, Red Robin and Central Point Rotary to treat disadvantaged students of Central Point Elementary School District to a Christmas Shopping spree that includes a bus trip, meal, haircut and new clothes.

Veterans Affairs Southern Oregon Rehabilitation Center & Clinics-

The VA-DOM campus is located in White City and has over 500 employees and approximately 800 patients. The VA-DOM is served by Route 60 and enters the campus to turn around before heading back to Medford. The population living at the VA-DOM is considered at-risk with very few residents owning an automobile. Residents rely on RVTD to provide them with long and short distance transportation.

Major Destinations served by Transit:

RVTD provides service to the majority of visitors and commercial destinations in the District. Also see the Population and Job Density maps in Appendix E. Often when encouraging citizens to try transit, staff highlights the several destinations they can reach by bus. A list is provided in Appendix F.



Plan for quality of life, not just quality of travel

Successful transit system design begins not with operational plans, but with consideration of the overall goals of the communities the system serves and the needs of the citizens, workers, and business interests. This section examined the role of transit in helping communities achieve their goals and meet the needs of their members.