

Chapter 2 – Peer System Analysis

2.1 INTRODUCTION

An examination of peer systems in comparable cities offers a constructive evaluation of CTS, and the issues facing it, against transit properties that are comparable in key aspects of their operation, administration and service area characteristics. No two circumstances are identical, but the following peer review provides an analysis of service levels, funding issues, system performance, and marketing programs for a number of small urban areas in the Pacific Northwest, Northern California and the Northern Rocky Mountain states. The following section describes 14 peer properties located throughout Oregon, Washington, California, Idaho, and Montana, and provides a comparative analysis of peer operations, performance, funding and marketing. The City should periodically review CTS services and those provided by the comparable cities and report the findings to the advisory commission (CACOT) and the city council.

Figure 2-1 shows basic data regarding each of the peer systems. More detailed, qualitative information is discussed below. Oregon systems are listed first, as they provide more relevant comparisons to the political and funding climate in the Corvallis urbanized area. California and Washington systems are mingled, reflecting a similarly high level of state support for local transit. Idaho and Montana peers, which receive lower levels of state support, are listed last. Within each of these three groups, features such as total population, population density, the aggregate college student population and key service or geographic similarities determine the order of presentation. The only exceptions are in extreme cases. For example, the student population at Washington State University in Pullman makes Pullman Transit a seemingly excellent peer for Corvallis; however, as noted below, a unique operating environment dominated by student ridership creates abnormally high ridership per unit of service.

Peer populations presented in Figure 2-1 represent the service area populations for each system, which may or may not be the population of the major city served. In many cases, this includes a relatively large area outside of the city. Land use patterns in all peer cities are relatively comparable to the Corvallis area; most have a small- to mid-sized historic downtown at the core of the service area. Economic drivers vary from peer to peer, but many rely on government, a university or college and a mixture of smaller local businesses. Most peers do not have a major Fortune 500 corporate office comparable to Hewlett Packard within the service area. Those cities with large university populations (Pullman, Pocatello, Missoula, Chico, San Luis Obispo, and Davis) offer an especially important comparison.

In addition to the data in Figure 2-1, Section 2.2 focuses on the general design of peer service and marketing efforts. Together, they offer a valuable comparison for Corvallis Transit System and for other public transportation services operating in the Corvallis urbanized area. Section 2.3 summarizes the conclusions drawn from the peer analysis.

Figure 2.1 Peer Systems

City	State	Est. Pop. 1,000s	Univ./ College Pop 1,000s	For Fiscal Year Ending	Base Fare	Estimated Marketing Costs \$1,000s	Annual Revenue Hours 1,000s	Annual Revenue Miles 1,000s	Annual Operating Costs \$1000s	Farebox Revenue 1000s	Annual Ridership 1,000s	Annual Operating Revenue \$1,000s	Annual Public Subsidy \$1,000s	Hours/ Capita	Boardings/ Rev. Hr	Subsidy/ Passenger	Recovery Ratio	Marketing Costs/Capital
Corvallis	OR	58	18	2004	\$0.60	28	22	308	\$1,612	299	502	\$1,524	1225	0.38	22.82	2.44	18.5%	0.48
Klamath Falls	OR	42	3	2003	\$1.00	20	25	357	\$1,302	195	351	\$1,498	1303	0.60	13.94	3.71	15.0%	0.48
Albany	OR	42	5	2003	\$0.60	1	5	74	\$209	16	74	\$302	285	0.11	15.34	3.86	7.8%	0.02
Medford	OR	67	7	2003	\$1.00	55	40	648	\$7,089	487	1145	\$7,365	6878	0.60	28.70	6.00	6.9%	0.83
San Louis Obispo	CA	44	20	2003	\$1.00	35	38	405	\$2,000	475	681	\$2,500	2025	0.86	17.91	2.98	23.8%	0.79
Walla Walla	WA	45	5	2003	\$0.50	7	28	307	\$1,577	184	467	\$2,158	1974	0.61	16.98	4.23	11.7%	0.16
Yakima	WA	80	7	2003	\$0.50	40	47	661	\$4,800	350	1030	\$5,000	4650	0.58	22.10	4.51	7.3%	0.50
Redding	CA	108	13	2003	\$1.00	78	46	726	\$2,308	476	761	\$2,322	1846	0.43	16.38	2.42	20.6%	0.72
Longview-Kelso	WA	47	2	2003	\$0.50	16	17	217	\$1,132	91	326	\$1,579	1488	0.36	19.31	4.57	8.1%	0.34
Chico	CA	102	15	2003	\$0.75	25	45	552	\$1,700	426	867	\$1,792	1366	0.44	19.33	1.58	25.1%	0.25
Davis	CA	66	28	2004	\$1.00	47	69	750	\$2,850	1967	3500	\$3,050	1084	1.05	50.72	0.31	69.0%	0.71
Wenatchee	WA	100	5	2003	\$0.50	35	55	881	\$2,300	129	750	\$2,300	2171	0.55	13.64	2.89	5.6%	0.35
Pullman	WA	26	17	2003	\$0.50	3	16	197	\$1,198	770	921	\$1,198	428	0.61	58.45	0.46	64.3%	0.12
Pocatello	ID	62	14	2003	\$0.60	15	37	260	\$1,500	54	502	\$1,700	1646	0.59	13.57	3.28	3.6%	0.24
Missoula	MT	65	15	2004	\$0.85	68	40	61	\$2,250	289	678	\$2,663	2374	0.61	17.15	3.50	12.8%	1.05
<i>Peer Median</i>		<i>63.75</i>	<i>10.00</i>	<i>2003.00</i>	<i>0.68</i>	<i>30.00</i>	<i>38.78</i>	<i>381.00</i>	<i>\$1,850</i>	<i>319.25</i>	<i>715.25</i>	<i>\$2,229</i>	<i>1745.81</i>	<i>0.60</i>	<i>17.53</i>	<i>3.39</i>	<i>12.2%</i>	<i>0.41</i>

2.2 DESCRIPTION OF PEERS

This section provides detail on the individual peers, their similarities and differences, and the potential relevance of their experience to the Corvallis urbanized area. Like Corvallis, most peers have a central business district that is relatively compact, has a mix of uses, and is conducive to high quality fixed route transit service. Surrounding these are less dense, more recently developed residential neighborhoods and suburban shopping and employment centers. While the non-Oregon peers have more lenient land use controls and, therefore, a less compact urban fabric, most have managed to control low-density exurban development patterns. Systems with high college student populations, as shown in Figure 2-1, experience special circumstances due to higher ridership created by high-density student housing and special fare arrangements. Other differences between systems are mentioned below.

In Oregon, property tax levies are the most popular method of supporting local transit services in small urban areas. Taxes are typically levied either by a city, as is the case in Corvallis, or through the formation of a Transportation District. Tax levies range significantly around the state. Rogue Valley Transportation District in Southern Oregon has a levy of 0.18 per \$1,000 total assessed value (TAV); in Salem the transit district levy is 0.76 per \$1,000 TAV. In Washington State, the 2000 repeal of the Motor Vehicle Excise Tax (license plate registration fee) meant the loss of 40 to 50 percent of operating funds for most of the State's transit systems. Since that time most communities have passed replacement sales taxes and have become much more reliant upon local funding.

Klamath Falls, Oregon

Basin Transit Service (BTS) operates transit services in Klamath Falls. Seven board members, elected at large and serving four-year terms, govern the Basin Transit Service Transportation Service District. Professional staff, employed by the District, are responsible for management and operation of the system. Five fixed routes cover the majority of the BTS service area. Service is based on timed-transfers and uses two transfer centers. All routes run hourly except the half-hourly mainline route serving the South 6th commercial corridor, downtown, the Oregon Institute of Technology (OIT) and the Klamath Falls Hospital. Demand responsive service is available to elderly and disabled residents with no advance reservation required. All routes run Monday through Friday from approximately 6:30 a.m. to 7 p.m. and Saturday from 10 a.m. to 5 p.m. No service is offered on Sundays or holidays. Fares are \$1 for adults and students, \$0.50 for seniors and disabled (those over 80 years of age ride free). Discounted passes are also available. Demand responsive service fares are \$2.00 and carry no advance notice requirements. The population of the entire Klamath Falls area is approximately 42,000 with about half of those people residing within the city itself. The Oregon Institute of Technology and its 2,500 full-time students are located in Klamath Falls. Ridership gains attributable to the OIT campus are small, accounting for roughly five percent of overall ridership, despite the ability of its students, faculty and staff to ride free using a campus ID. The school lacks the larger population and central location that makes OSU a more prominent service market for the City of Corvallis.

BTS budgets approximately \$20,000 a year for marketing. While this is below the peer median of \$30,000, their marketing expenditures per capita of \$0.48 per service area resident is above the peer median of \$0.41. Their marketing is focused on public information and outreach efforts and consists largely of printed materials and newspaper ads. Since, 1997, Basin Transit has ceased its limited television advertising citing high costs and little benefit in terms of ridership gain. Indirect marketing efforts include an interactive map on its web page that includes every stop on the system and links to schedules for each route. Basin Transit also offers \$0.25 fares on Saturdays as a promotional effort to attract new riders.

BTS recovers 15 percent of its total operating cost through farebox revenue, well above the peer median. Its \$1 base fare matches the highest, and is the most common, peer fare. The number of revenue hours operated per capita is consistent with the peer median figure of 0.6. Boardings per revenue hour in Klamath Falls is among the lowest of the peer group, reflecting the low density environment in which it operates.

Funding Sources

Just over 52 percent of BTS's operating revenue in 2003 came from a local property tax, set at \$0.18 per \$1,000 Total Assessed Value. As a transportation district, BTS is eligible for state payroll taxes, known as in-lieu payroll taxes, which provided an additional 15 percent of the system's operating revenues. Another 19 percent came from state operating grants. Federal operating grants and farebox revenues accounted for the majority of the remaining revenue, with less than five percent coming from miscellaneous sources such as advertising and interest income.

Future Directions and Strategies

BTS will continue to seek opportunities to expand services, however the struggle to fund current services often overshadows such ambitions.

Albany, Oregon

Albany Transit System (ATS) is a municipal operation and is administered by the City's Public Works Department. The Albany City Council provides policy direction. All four of ATS' routes are single direction loops operating hourly. Buses run between 7 a.m. and 6 p.m. on weekdays. The service area population is approximately 42,000. Linn-Benton Community College (with over 20,000 full- and part-time students) is located in Albany. Many of the students at LBCC are part-time or evening students and classes are spread out over a long day. Primarily a suburban commuter campus located outside Albany, LBCC is much more difficult than OSU to access by foot or bike and is challenging to reach efficiently with frequent bus service. The Albany Transit System and Linn-Benton Loop both provide regular bus service to the campus.

ATS marketing is almost non-existent. An annual budget of just over \$1,000 goes to promoting and running special events such as "Try Transit Week." The system does have a logo and distributes information on service changes via postings at bus stops.

ATS' 15.3 boardings per revenue hour is only a slight improvement over its 1997 levels, although overall ridership has increased due to a doubling in the number of routes. The service recovers a low rate of operating costs through farebox revenue; in fact, it is the lowest among all peers at just 7.8 percent.

Funding Sources

The City of Albany benefits from a City Council that is very supportive of its small public transit system, contributing nearly two thirds of ATS's annual operating revenue out of the City general fund. ATS operates on a "bare bones" budget, carrying no contingency, and relying upon Council action when additional funds are needed to cover an emergency expenditure. Oregon's Section 5311 funding pool currently accounts for 22 percent of ATS's operating revenue. With two transit agencies dropping out of Oregon's Section 5311 funding pool, ATS expects to realize a significant increase in funds from that source in 2004-05.

Future Direction and Strategies

A significant schedule and route revision took effect in September 2004. Changes include the elimination of some stops and the relocation of others, designed to address issues with on-time performance.

Medford, Oregon

The Rogue Valley Transit District (RVTD) covers the urbanized areas and some outlying rural areas of Jackson County. Eight routes radiate from a simple downtown Medford transit center, running on headways of 30 or 60 minutes. RVTD provides service throughout Medford and also to nearby cities such as White City, Jacksonville, Phoenix, Talent, and Ashland. A local circulator within Ashland provided a net 15-minute local headway between major Ashland destinations. Fares within Ashland are free, an allowance that is provided by financial support from the City of Ashland general fund. Service runs from approximately 5 a.m. to 8 p.m. on weekdays. No weekend service is offered.

RVTD's marketing approach is based on precipitating long-term changes in personal transportation choices. Transportation Demand Management (TDM) oriented marketing efforts are also a part of this strategy, though they are not always specifically tied to bus use. Future strategies will be aimed at identifying specific service improvements and routes.

Marketing techniques employed by RVTD include the trade of advertising with local media. For example, local radio or television stations advertise on buses and in exchange, the transit agency is provided television or radio spots to promote its services. Marketing efforts specifically targeted the business community, seniors, Southern Oregon State University and Rogue Community College students. RVTD is one of the few peer systems that has a marketing specialist on staff to develop new revenue generating business, to promote services and to enhance community awareness about public transportation. As a result, RVTD has twice the level of marketing costs per capita relative to the peer group.

RVTD is the most active among peers in promoting Transportation Demand Management (TDM) beyond the promotion of its own services. Examples include the sponsorship of pedestrian events and walking tours, weekly grade school presentations on auto-related issues and the benefits of transportation alternatives, and participation in and promotion of Oregon's on-line car-pooling service. These strategies are part of RVTD's long-range focus on moving from the mode of last resort to becoming a preferred alternative to driving. These promotions also tap into the community's progressive culture and position the agency as a lobbyist for positive change beyond the limitations of its service.

Medford's 28.7 boardings per revenue hour is the second highest such mark among peers. This efficiency is remarkable considering that it serves one of the broadest geographical areas and operates several intercity routes. Despite a high level of productivity, RVTD's farebox recovery ratio is a low 7 percent. This is due in part to the fact that no fares are captured for trips in Ashland and to the relatively high overall operating costs of \$7 million. The Medford-Ashland area has one of the highest costs of living in Oregon. Cost of living indexes impact transit-operating costs because driver wages and benefits typically drive 75 to 80 percent of overall operating costs.

Funding Sources

Levies on local property taxes accounted for about 35 percent of the system's operating revenues. Contributions from the City of Ashland amounted to just less than 5 percent of the operating budget. State funds were provided in the form of Oregon's in-lieu-of payroll tax and grants for TDM projects. Federal sources provided an additional 45 percent of operating revenue, including STP funding allocations.

Future Direction and Strategies

RVTD is positioning itself as a long-term alternative to private transportation in the Rogue Valley region. Its marketing efforts are directed toward long-term change, rather than immediate ridership gains. It plans to continue its focus on promoting transportation alternatives and TDM strategies such as employer pass programs, car-pooling and biking.

San Luis Obispo, California (SLO)

The City of San Luis Obispo operates nine fixed-bus routes and one fixed-route trolley within its urban area. Routes radiate from a downtown transfer point throughout the city. Routes are mostly two-direction, radiating lines, with a few portions being single-direction loops. The service is a mixture of 30-minute and 60-minute headways. Weekday service runs from 6:30 a.m. to 9:00 p.m. with more limited service on Saturdays and Sundays. Demand-response service is contracted out to a private operator.

Several routes serve the campus of California Polytechnic State University (Cal Poly) at San Luis Obispo, which is on a hilltop a mile from downtown. Fares are \$1.00 for adults and \$0.50 for seniors and ADA eligible riders, with no discount for children. Monthly passes are available at \$30 for the general public and \$10 for seniors and disabled passengers. Cal Poly makes an annual payment to the City, allowing students and faculty board free of charge. Cal Poly has about 20,000 full-time students.

SLO Transit spends approximately \$35,000 on marketing efforts per year, including schedule production. The advertising campaign consists of some advertising on a local cable channel, a number of local papers and the campus paper at Cal Poly. SLO Transit encourages student use through campus participation in Open House and Week of Welcome activities (including the provision of free shuttle services), as well as quarterly classroom presentations. The GOLD PASS program provides a free monthly pass for all downtown employees. The costs of this program are paid out of the City's general parking fund. The City of San Luis Obispo provides a unique marketing tool by allowing city agencies to insert informational materials inside bi-monthly utility bills. This past year SLO Transit used this opportunity to distribute a transit survey and ten free rides to 15,000 utility customers. SLO Transit considered the return of 833 surveys a success. The information collected was useful but not many of the free-ride passes were used. SLO Transit is planning on repeating the survey, with some changes. The next time it will employ a two-tier approach where two passes will be distributed with the survey and those completing the survey would receive an additional six passes.

With a relatively high measure for revenue hours per capita and farebox recovery, SLO Transit maintains a very efficient service, despite a boardings per revenue hour rating just shy of the peer median.

Walla Walla, Washington

Valley Transit (VT) operates a total of seven routes, most of which are single-direction loops. Routes are typically paired, running roughly the same route, but in opposite directions creating the effective of two-way service on most segments. Most operate on 30-minute headways. Six routes provide service on Saturdays from noon to 6 p.m. There is no service on Sundays or holidays for general public. Registered job access program and paratransit riders can use demand responsive services beyond normal operating hours.

A number of service reductions and adjustments have been introduced since the 2000 repeal of MVET funding, which represented a loss of over half of VT's operating revenues. VT is one of the few Washington systems that have not replaced MVET funding with a local source. Fixed routes have been replaced with demand responsive service "connectors" in communities with low ridership. On weekday evenings, service is reduced to two east and west loop routes. These operate on loose schedules to provide request-based deviations of up to three blocks from the normal route. There is an additional, free-floating vehicle at these times, for those living beyond the three-block radius of deviation.

The fare is \$0.50 for riders over five years of age. Dial-a-ride services are available for disabled and passengers 70 years or older. VT's service area population is approximately 45,000. Whitman College, Walla Walla College and Walla Walla Community College are located within VT's service area with a combined student population just under 5,000.

Marketing efforts are largely focused on maintaining a positive agency image in the community. Advertisements placed in college newspapers represent the only significant marketing focused on attracting new riders. Schedule information is provided on a single, multi-colored map, with route maps, individual schedules, an overall system map and general service information. Route maps and schedules are also displayed at selected bus stops and shelters. Colorful signage posting route and schedule information is also placed on polls at bus stops.

VT's rate of 17 boardings per revenue hour is nearly equal to the peer median. Its farebox recovery rate, while not high, was respectably higher than the median. Solid figures in hours per capita and subsidies per rider, as well as a very low fare, further highlight VT's remarkably efficient provision of services. The loss of MVET revenues has forced the agency to maximize service efficiency, focusing on its most important markets.

Yakima, Washington

Yakima Transit (YT) provides fixed-route services within Yakima city limits. Its nine routes fan out in a radial pattern from the central city. There is a transit center where all but one route meet, allowing passengers to make timed transfers between routes. Most routes run every half-hour. Service is provided weekdays and Saturdays, with some limited Sunday service. Demand-response service is contracted out to nonprofit agencies and a local taxi company.

YT spends around \$40,000 annually on marketing. Television and radio spots are key to their marketing strategy of reaching the greatest cross-section of the service area population. YT recently adopted the slogan: "Way to Go!" and awarded an RFP-based contract to begin a Travel Training program. Concerns over vandalism, and the minimalist structural design of system bus shelters prevent YT from using their facilities for promotions or advertising. They do offer free service every Wednesday and Saturday as another strategy to attract new riders to the system.

The Bus Book is their main marketing and information product. It has been used in various updated versions over ten years, and is a well-received and successful part of Yakima's public identity. The latest edition provides 32 pages of bi-lingual information on schedules, maps, YT-accessible destinations, dial-a-ride services as well as use of the system - from how to read a timetable to mounting your bike on YT buses. The books are distributed at 200 popular service destinations along YT bus lines including: senior centers, libraries, drug stores, supermarkets and motels.

YT's productivity of 22.1 passengers per revenue hour is well above the peer median of 17.5. With no college or university to boost ridership, the system did quite well. Significant low-income and farm worker populations are a key factor in the system's relatively high productivity. Yakima continues to offer a very low fare, currently \$.50, which contributes to its low 7.3 percent farebox recovery rate.

Redding, California

The Redding Area Bus Authority (RABA) operates twelve routes in and around Redding. Most routes operate on 60-minute headways. One route, operating between Redding and the town of Shasta Lake operates every 30 minutes. Finally, a bus operating between Redding and the more distant towns of Anderson and Cottonwood operates every 90 minutes. Service is available Monday through Friday from 6:30 a.m. to 7:30 p.m. Saturday service runs from 9:30 a.m. to 7:30 p.m. A single pulse-point downtown allows route transfers. Same day demand-responsive services are available for a base fare of \$1.50 and a \$.75 zone charge for longer trips. The service area population is the largest among peers at just over 108,000. Shasta College, with about 11,000 students and Simpson College, with about 2,000, are both located in Redding.

RABA currently markets transit through TV, radio, brochures, in-house workshops and school presentations. Several years ago, they contracted the development of a jingle, which is used in radio and TV advertising. This contract also produced the slogans “Catch the Ride” and “Ride the Ride”. Formerly, RABA participated in and marketed “Clean Air” and “Rideshare” weeks. These events however, were discontinued by Shasta County Air Quality Management District, in 1999.

RABA is in the process of updating its website to include an interactive mapping feature. Its current website has extensive Travel Training tips, including a graphic of RABA’s bus sign, a list of ticket outlets and a guide to using on-bus bike racks. RABA also uses the sight to distribute information through e-mail requests.

RABA’s productivity of 16.4 boardings per revenue hour is solid for a service based on 60-minute headways covering a broad service area marked by low-density land uses.

Longview-Kelso, Washington

Community Urban Bus Service (CUBS) operates transit services within the cities of Longview and Kelso, Washington. CUBS operates five fixed, single direction loops running on hourly headways. Three are based primarily in Longview. Two of these routes are essentially the same except they operate in opposing directions so that passengers can make two-way trips without being forced to travel out of direction. The other two routes serve Kelso primarily. These routes are also arranged in an opposing loop formation, with only minor variations in the streets they travel. A pulse-point transfer on the hour at the transit center in Longview allows passengers to make quick and simple connections between all five routes. All fixed-route buses are wheelchair equipped and ADA complementary paratransit service is available by reservation with day before notice required.

All routes operate Monday through Friday from 7 a.m. to 7 p.m. Saturday service runs from 8 a.m. to 6 p.m. Due to the 2000 repeal of MVET funding that represented half of CUBS operating revenue, CUBS eliminated one fixed route, two routes on Saturdays and all Sunday services. CUBS has not replaced revenues lost with the repeal of the MVET and a one percent local sales tax is now the only major source of operating funds. Other sources of revenue include FTA grants, farebox revenue, and interest on investments.

Fares were last increased in 1997; the base fare is \$0.50 and senior and disabled residents pay \$0.25. Monthly, quarterly and yearly passes are also available at discount rates. Longview and Kelso have a total service area population of about 47,000. Lower Columbia College (LCC) has approximately 2,400 full-time students. Though it is close to Longview, the relatively low student population at LCC diminishes its impact on system ridership.

Service information is provided on a fourteen-page route brochure with individual route maps, service times and general information. Marketing efforts have been drastically reduced due to the above mentioned budget cuts. CUBS no longer offers free rides during the summer months, nor does it advertise on TV or radio. It has retained the “Cubbie” Teddy bear mascot as well as the “Take me – I’m Yours” slogan developed as part of its discontinued monthly TV and radio ads.

CUBS relatively low farebox recovery ratio of eight percent is not surprising given their low base fare. Its 19.3 boardings per revenue hour is remarkable considering the limitations of its loop system. An innovative set of marketing tools has also helped the system.

Chico, California

The Chico Area Transit System (CATS) operates a total of ten fixed routes, two of which operate only while California State University at Chico (CSUC) is in session. The Downtown Transit Center provides timed

connections between routes. Routes operate as bi-directional lines with the ends of routes linked in pairs, to allow efficient use of vehicles. Buses run from 6:30 a.m. to 9:30 p.m. on weekdays and from 8:30 a.m. to 6:30 p.m. on Saturdays. No routes operate on Sunday. Two routes serve as shuttles for CSUC, operating on weekdays only, and only while classes are in session and during class registration. Fares are \$0.75 for regular passengers, \$0.50 for school students, and \$0.35 for seniors and disabled. Multiple ride passes and monthly passes as well as 20-ride cards are available at a discount. CSUC students, faculty and staff receive free rides through a special arrangement with the University.

CATS spent \$25,000 on marketing in 2003/04. Activities included monthly TV spots broadcast through the local cable provider, ads in the daily-student and free weekly events newspapers. CATS also maintains a spot on the home page of the daily paper, with a hyperlink to the CATS website. One full-time marketing employee from the county MPO is shared by all three county transit systems.

The large collegiate population at CSUC drives Chico's relatively high productivity (19.3) and recovery ratio (25.1%). Like other peer systems with large universities, CATS maintains an agreement with CSUC for free rides for students and staff in return for blanket payments. The equitable agreement helps boost both productivity and cost effectiveness.

Davis, California

Unitrans, in the City of Davis, is operated by the University of California at Davis (UCD). Buses serve most of the significant locations within the City of Davis, radiating out from the UCD campus. Only a few routes include single-direction loops, and those only at the farther ends of routes. Buses operate on weekdays from 6:30 a.m. to midnight. Service is offered on Saturdays and Sundays from 9 a.m. to 6 p.m. Many routes have 30-minute, and even 15-minute, headways during the school year. Unitrans has increased the number of routes operating on 15-minute headways as ridership has increased.

Base fares for Unitrans buses are \$1.00, with disabled riders paying \$0.25. This represents an August 2004 base fare increase from \$0.75. Elderly passengers receive free rides. Passes and multiple ride discounts are available. Undergraduates at UCD also receive free rides, in exchange for fees collected from all students by the University. The service area population for Unitrans is about 66,000, while the student population at UCD is about 27,500.

Unitrans marketing department consists of three part-time student staffers, and carries an annual budget of around \$47,000. Marketing is focused on the production and distribution of printed materials. Specific efforts include an annual city-wide mailing that includes information and schedules. Unitrans displays information at various local community events and run advertisements in local and student papers.

Campus-based ridership has been growing rapidly over the last few years, with most campus-centered routes operating at- or above-capacity. Unitrans has responded by targeting its marketing based on route capacity. They recently received funds from CalTrans, which were used to market one specific route that was identified as under-capacity while serving a series of off-campus destinations such as shopping markets, schools and a senior center. Focus group sessions and presentations were arranged at route-adjacent secondary schools and senior centers. Following these meetings, Unitrans produced signage, brochures and posters promoting the identified route for placement at the schools and senior centers. Word of mouth response to this recent campaign has been overwhelmingly positive, with seniors especially expressing gratitude for the special marketing focus aimed at improving comprehension and making services more relevant to non-university populations.

Unitrans' had by far the highest marks for revenue hours per capita (1.05), boardings per revenue hour (50.7), and farebox recovery (69 percent). High student involvement in actual operations (many employees and the operators

are students) keeps their operating costs low relative to their annual revenue hours. In addition, by focusing on the UCD campus, Unitrans maximizes the effect of the highest student population of any of the peer systems, with campus-based passengers amounting to nearly 95 percent of all ridership. Highly creative and thoughtful marketing efforts have led to a growing response to Unitrans' services off campus.

Wenatchee, Washington

Wenatchee's transit service, Link, operates 18 routes throughout the region. Eight of these operate within the city itself. Each radiates from a central point, running in one-directional loops. Routes are about evenly split between 30 and 60-minute headways. Service runs approximately 6:30 a.m. to 7:30 p.m. on weekdays. Saturday service starts around 8 a.m. and goes to about 7:30 p.m. Link's service area population is approximately 100,000 and includes all of two mostly rural counties. The cities of Wenatchee and East Wenatchee together are only about 28,000.

Link's marketing includes some ad trading with local radio stations. They advertise in the local paper, on a local closed circuit senior cable network, and occasionally over other local media and on their buses. Services are no longer offered free of charge. Link no longer maintains a community relations specialist, though outreach programs to school children and other local groups continue.

Link's most notable successes in recent years have come in the way of service coordination with other regional health and human service providers. Link has been able to effectively manage expensive demand response service trips by encouraging human service providers to provide their own client based transportation. Link provides operating subsidies or low cost loans or sale of vehicles to these providers in exchange for an agreement to provide service to certain client groups that would otherwise utilize Link paratransit services. Since paratransit trips are the most expensive service to provide per unit, this strategy has provided significant cost savings to the agency.

Link managed a respectable 12.5 boardings per revenue hour, though this was short of its goal of 15. Link was able to maintain this number despite extensive rural service and a negligible college population. In many ways Link's operating environment may differ most drastically from Corvallis, having no significant college enrollment, a more decentralized population and a strongly agricultural economic base.

Pullman, Washington

Pullman Transit (PT) operates seven fixed bus routes in the city of Pullman, Washington, with a service area population just shy of 26,000. They also provide services for the Pullman School District. Pullman is home to Washington State University (WSU), and its 17,000 full-time students. Students and staff from WSU account for almost 90 percent of PT's annual ridership. Unique geography and land use decisions have contributed to this high level of university ridership. WSU is located at the top of a steep hill, making walking and cycling, usually very popular mode choices at universities, much less attractive. This is especially true in the winter when roads in Pullman are often icy. Much of the WSU ridership comes from an extremely large and dense, but isolated, student housing development located about 1 mile from the campus. PT operates high frequency service from this complex to the campus, including a number of headers in the AM peak hour. Queues for the bus to campus can line up as much as 250 students deep on winter mornings.

Pullman Transit service level is dependent on the time of year. During the WSU school year they provide seven routes, Monday to Friday from 7 a.m. to 6 p.m. serving the campus and the rest of the community. Two routes operate Saturdays from 9:00 a.m. to midnight. Additional service is also provided for home football games. From May to August, and during school breaks, only two routes are available, operating from 7 a.m. to 6 p.m., Monday through Friday only.

When Initiative-695 forced the repeal of the MVET in 2000, PT lost over \$600,000 in operating funds. Immediate and dramatic service cuts followed. PT began using reserves to restore services, while waiting for the State to bail them out. This lasted until the Fall of 2002 when services were cut once again. Out of frustration with the cuts, and concern with the future of transit in Pullman, WSU Students responded by setting up a “Transit Fee”. The fee, charging \$15 for full-time students and \$8 for part-time students, goes directly to PT, and was responsible for funding the restoration of services in the Fall of 2003.

The base fare for fixed-route service is \$0.50 for adults, and \$0.30 for seniors, youth and disabled. Discounted passes are available. Demand-responsive services are offered to elderly and disabled riders at \$0.40 per ride. Same day reservations are allowed with service hours matching those of fixed route services. All WSU students ride PT fare free with a valid student ID. The WSU Parking Department makes a yearly payment to PT's operating budget to secure this benefit for its students to reduce parking pressure. The majority of the systems' overall fare income results from this agreement and the newly instituted transit fee.

Interestingly, unlike many other systems in Washington State, PT does not rely on a local sales tax increment for any operating funds. Moscow, Idaho, just across the border provides much of the shopping for the Pullman area, so a sales tax would not result in adequate funding, and could hinder what retail activity in Pullman, where sales taxes are already higher. PT instead uses a tax on utilities to provide local funding. PT's innovative method of financing shows that alternative sources may be available for systems, if they are pursued. PT's productivity also illustrates the power of efficient service on costs.

PT spends less than \$35,000 a year on marketing, including publishing schedules. Most marketing is aimed at maintaining popular agency support among the non-riding community. Due to high ridership rates, marketing to new riders has not been a top priority for limited operating revenues. Recent expansions in services, however, are one reason that this outlook is at present being revisited.

On the surface, the size of WSU, its proximity to the center of Pullman, and the fare agreement regarding students would seem to make Pullman an especially good comparison for Corvallis. However, student ridership (college, primary, and secondary) is so prevalent in Pullman, including special event trips for the school district, that its extremely high ridership and low subsidy rates would be almost impossible to reach in most normal operating environments. For example, in Corvallis a flat grade and moderate weather make biking and walking much more attractive alternatives for students. Additionally, student housing is generally located in close proximity to campus with attractive pedestrian access.

Pocatello, Idaho

Pocatello Regional Transit (PRT) serves the city of Pocatello with 13 routes operating Monday through Saturday, with reduced services and coverage on Saturdays. Routes typically follow loop patterns. One line typically follows the same route as another with occasional deviations, running in the opposite direction, reducing the need to travel more than half a loop to reach most stops. One line runs on half hour headways during midday and afternoons on weekdays. All other service runs on roughly 60-minute headways. Service runs from approximately 6:30 a.m. to 7 p.m. Fares for adults are \$0.60 on weekdays. Seniors and disabled pay half price between 9 a.m. and 3 p.m. Students pay \$0.30 on weekdays. All fares on Saturday are \$0.30. Discounted ticket books and monthly passes, as well as semester passes for students are available.

Idaho State University (ISU) is located near downtown. Its approximately 14,000 students, as well as faculty and staff, make up about 65 percent of PRT's ridership. With a similar, though somewhat smaller, student population and a location near downtown, Idaho State has a role analogous to OSU's in Corvallis.

Idaho is one of a handful of states that do not provide any funding for transit. State legislation also prevents transit district from collecting local tax revenues, making it difficult to fund local transit services. Pocatello, along with the other Small Urban Areas in Idaho, are unable to utilize all of its FTA Section 5307 allocation due to a lack of local matching funds. Still, Pocatello is widely viewed as one of Idaho's more progressive communities and does receive substantial financial commitment and support from a transit-supportive city government and from the University. ISU provides \$40,000 toward the operating expenses and recently provided a \$22,000 local match in support for CMAQ (Congestion Mitigation Air Quality) grant funding toward a vehicle purchase. The ISU contribution provides for a no-fare zone associated with the campus. PRT staff indicated that the college's annual contribution accounts for only 40 percent of what is actually needed to provide campus related services. The presence of a major university and the transit demand created by this institution is seen as having a major impact on overall public support for transit in Pocatello.

PRT is looking to expand service to six of the seven counties in the regional highway district as part of a Federal coordination project. In conjunction, the agency is adding GPS-based vehicle location and computer aided dispatch (CAD) technologies to its operations. PRT is also looking to obtain approval to cross Utah border.

PRT spends about \$15,000 annually on marketing. This pays for newspaper advertising and some limited radio ads. PRT holds an annual in-classroom competition throughout the area for the creation of transit ads and slogans. PRT has two Chance Replica Streetcars, an open trolley that runs a special route only in summer months, and a closed trolley that runs year round. It also participated in the creation of a citywide map with an emphasis on transit.

PRT had the lowest boardings per revenue hour of the peers, as well as the lowest, by far, recovery rate (3.6 percent), in part due to the unfavorable agreement with ISU. Higher ridership on in-city routes is moderated by the extent of its rural service.

Missoula, Montana

The Missoula Urban Transportation District (MUTD) operates transit services under the name Mountain Line. The District's eleven routes provide coverage throughout the city and surrounding area, serving a population of around 65,000. Service design is based on linear routes, with a few single-direction loops at the end of selected routes. A common downtown pulse point allows transfers between routes.

MUTD provides 30-minute service during peak periods for most routes, with hourly service during midday and on Saturdays. Weekday service runs between 6 a.m. and 7 p.m. with Saturday service offered between 10 a.m. and 6 p.m. There is no Sunday service. The base fare is \$0.85. Seniors and disabled pay \$0.35. Paratransit services are available for a \$1 fare. Multiple discount pass and bulk fare packages are available. The service area population is about 61,000 with 11,000 students at the University of Montana in Missoula.

Marketing efforts include a citywide employer-based pass program. The Mountain Line "EZ Pass Program" offers an annual bus pass for purchase by employers for employees working within Missoula Urban Transportation District boundaries. The pass provides unlimited rides on all Mountain Line transit services including paratransit services, at all times. Price is based on the number of participating employees. The program has been quite successful as over 25,000 Missoula residents currently own a bus pass.

This summer Mountain Line introduced two new free shuttle services. On Saturdays free service is provided to downtown Farmers' Markets. The "Out to Lunch" shuttle operates on Wednesdays between 10:45 a.m. and 1:20 p.m., providing free service to popular lunchtime locations downtown. Free rides will also be offered to anyone under 18 throughout the summer.

Considering the success of the bus pass program and the extent of its marketing, Mountain Line's near median boardings per revenue hour ratio of 17.2 is most likely attributable to the systems 60-minute headways.

2.3 SUMMARY AND CONCLUSIONS

No single system or community can provide an environment analogous to Corvallis and the services operated by CTS. However, a peer system analysis, used commonly throughout the industry, can provide an important point of comparison for planners and local policy makers. It is valuable to understand how the City's investment in public transportation services stacks up against other communities faced with similar service needs and funding constraints. The following sections provide a more detailed discussion of key service design elements, investment measures, and measures of service performance.

City Characteristics

Student Population

Since university students have a traditionally high propensity for using transit services, a city's college population is a crucial point of comparison when measuring service performance against that of CTS. Figure 2-2 shows productivity compared to the population of college students in each peer system's service area. Those peer systems with high student populations achieved the highest levels of productivity. Systems with the five highest student populations averaged 34 boardings per revenue hour, while the systems with the lowest averaged 13. Operating agreements between transit systems and the local university where students, faculty and staff ride for reduced or free fares provide a significant boost to productivity.

Thus, the college population is should remain a crucial focus of system resources, through service design, special funding arrangements with the university and through targeted marketing efforts. This is especially true given OSU's proximity to the center of Corvallis.

Figure 2-3 shows productivity compared to service area population for each peer. Among the peer group, service area population had little to no effect on either productivity or cost-effectiveness, measured by public subsidy per passenger and recovery ratio. The graph does suggest that, discounting Pullman and Davis which have extremely high student populations, communities with more constrained boundaries and less suburban development are more likely to have higher levels of productivity. This is logical since buses have access to more potential passengers within a smaller geographic area. Other factors, such as the overall amount of service, service design and marketing also appear to have an impact on productivity.

Figure 2-2 Productivity vs. College Population

Pullman 58.45

Davis 50.72

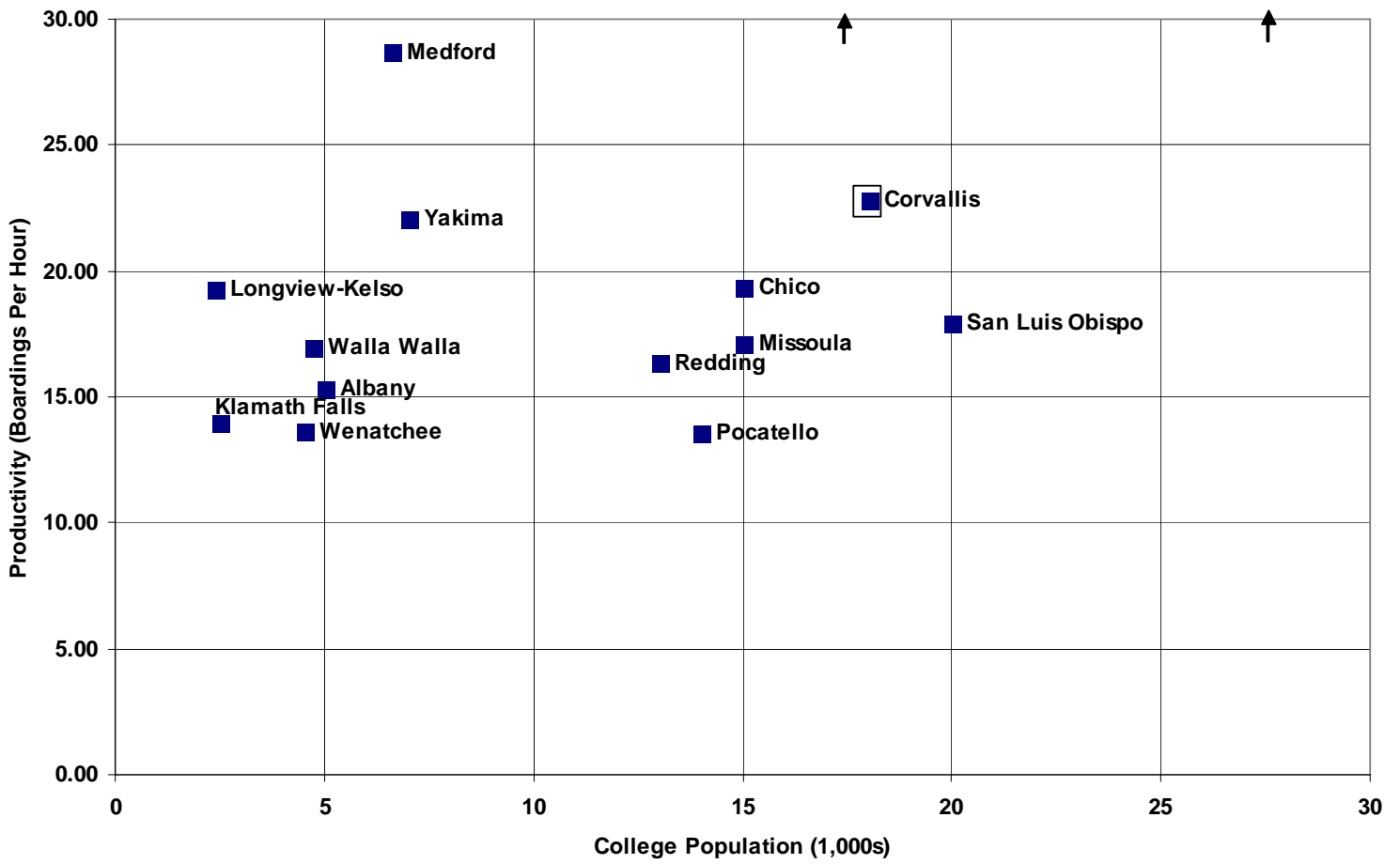
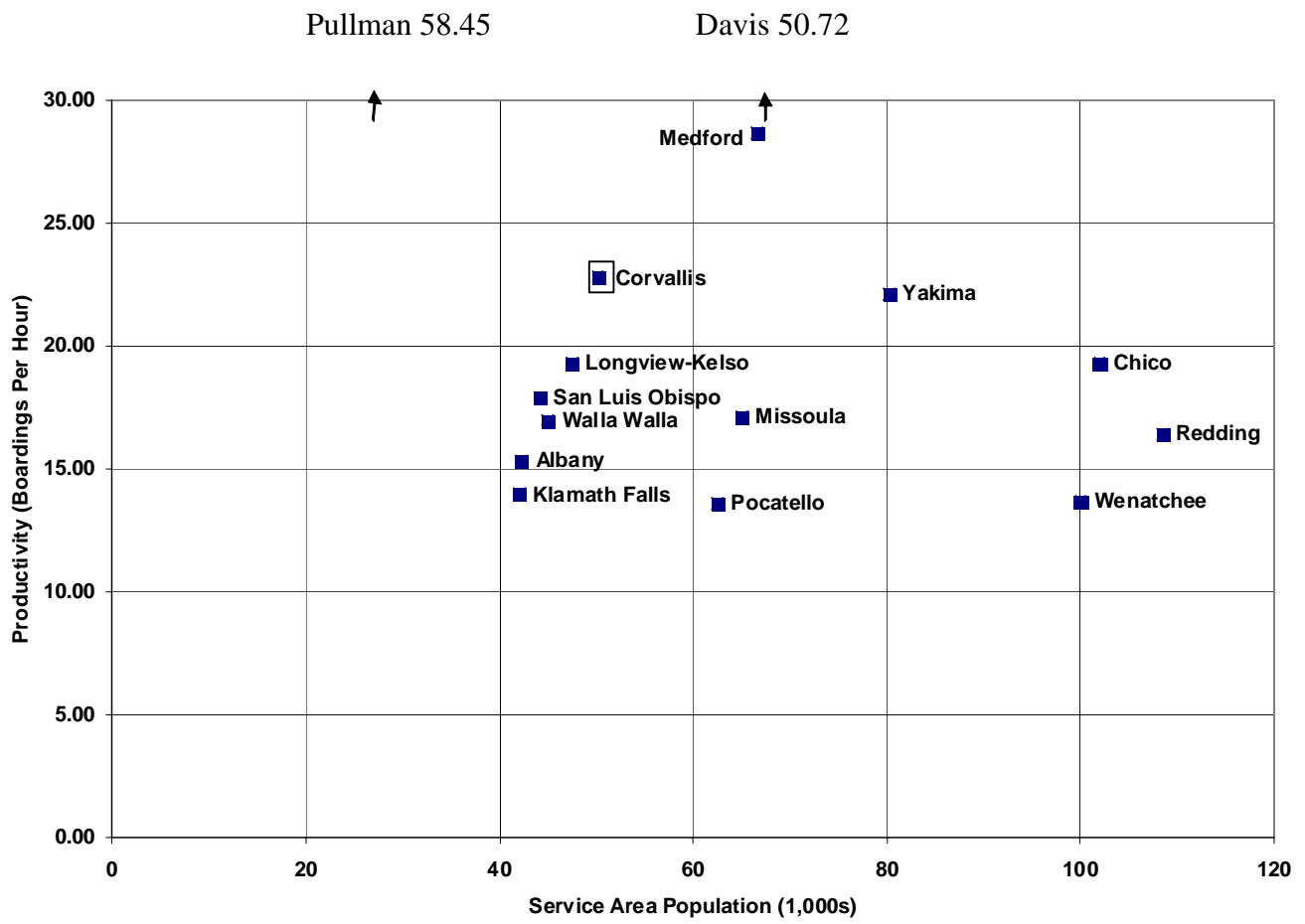


Figure 2-3 Productivity vs. Service Area Population



Service Design

It is difficult to compare the impact of route design from community to community; however, service frequency is known to have a major impact on ridership. The optimal combination of route design and headways among peers is that of radial or linear routes running at 30-minute headways. Systems with this combination averaged 26 boardings per revenue hour, eight above the median of 17. While neither loop routes or 60-minute headways alone seem preclude a system from attaining decent boardings per revenue hour (Pullman Transit's loop system average almost 60 boardings per hour), Longview-Kelso was the only peer with both to score above the median.

Scheduling

Of the six systems with the highest college populations, only Corvallis and Missoula do not provide evening service on weekdays. The other four are, in fact, the *only* peers that provide evening service until at least 9 p.m. Pullman and San Luis Obispo both run selected service until about 11 p.m. while their university is in session. Davis and Chico both operate on all weekday evenings.

Of the 15 peers only two, Medford and Albany, do not offer any weekend service. Productivity of the systems offering Saturday service varied, with neither the highest nor the lowest productivity system offering Saturday service. While many of the peers recognized that Sunday service is highly desired and would likely be nearly as productive as Saturday service, none of the peer systems have the funding to implement Sunday service.

Marketing

One of the most important marketing assets for these agencies is their ability to connect directly with the communities they serve. Tight advertising budgets often necessitate a creative and innovative approach to marketing. This liability can translate into an asset when community involvement becomes a central marketing strategy.

Connecting with the Community

Most of the peer agencies promote, participate in, and sometimes sponsor, community events. Albany Transit, with the smallest budget among peers, sponsors and promotes "Try Transit Week" as its only major marketing activity. Many agencies also provide free service to special community and sporting events as another way of getting involved. Corvallis provides free (or subsidized by sponsors) rides during a number of community events, but not for OSU sporting events due to inability to negotiate a mutually satisfactory arrangement for funding with OSU Athletic Department; also, many of the OSU sporting events occur outside the normal CTS operating hours. Providing free rides for special and sporting events is a great way for transit agencies to identify themselves with the most popular aspects of community life and to get people on board who would not otherwise ride.

Another example of a marketing technique with a small town feel to it is San Luis Obispo's use of city utility bill inserts. The city allows various city agencies rotating opportunities to place informational inserts into municipal utility bills. Last year, SLO Transit used its turn to distribute transit surveys and free passes to 15,000 homes and is likely to conduct a second survey as the first ascertained useful information from the public.

Another common marketing technique is the use of "Identity Buses" as a branding tool. Use of double-decked, or trolley-style buses, which tap into nostalgia for transit history, can be an effective tool for creating a positive service image. Branding strategies also apply to standard bus services, where a specific marketing campaign and identifying factors are attached to a route that has serves a specific market or provides a particularly high level of service (see Chapter 7 for more detail). Community participation driven route branding and public information efforts in Davis (described above) provide an excellent example of how listening to current and potential users can pay off in terms of attracting new riders.

School-based contests in which children design ads and/ or create slogans are also common. This “homespun” style of marketing not only gains the favor of student participants, but the displayed artwork casts a flattering light upon the agency by providing a stage for the talents of the community’s youngsters.

Marketing Community Assets

Another common and effective form of marketing among peers is marketing that enhances community awareness. Unitrans’ outreach to seniors and secondary school students raised awareness of community amenities as well as the accessibility offered by their service. Such marketing can actually increase trip generation within the community by indirectly marketing community assets.

In Missoula, Mountain Line’s “Out to Lunch” shuttle is another example of boosting service and community awareness at the same time. By extending the distance that can be covered during a lunch hour, this free service expands its customers’ dining options and supports downtown eateries, while putting the agency’s services on display to many who might not otherwise use them.

Free rides continue to be a popular marketing tool. Although some services have discontinued such programs, summers, Saturdays and special events continue to be popular bases for free ride programs. This has been an especially effective marketing tool for agencies attempting to reach new markets.

Maintaining Public Support

Since only a small percentage of residents use transit in all peer service areas, maintaining a positive agency image among the non-riding segments of the community is a common marketing objective. Marketing to increase mode share in service areas with little to no congestion or parking issues is commonly seen as an ineffective use of resources. Courting the good will of the non-riding, levy-approving public has become increasingly important as state funding levels have proven to be volatile and there is often stiff competition for local funds.

Medford’s RVTD takes a unique approach to developing support among the non-riding public. Much of RVTD’s efforts to promote alternatives to auto transportation go well beyond marketing its own services. They sponsor pedestrian events such as a walking tour of downtown co-sponsored by local businesses. They also promote and facilitate an on-line car-pooling service. These activities promote the agency as a force for positive change within the community and show a direct relationship between transit and congestion management.

As the experience of Pullman Transit (PT) illustrates, maintaining a good image among the riding public can come in handy as well. Like RVTD, PT markets mainly to bolster public support. Its ridership consists mainly of Washington State University and public school students, and growth beyond this base is seen as unlikely. When PT was forced to cut services after Washington State Initiative-695 cut MVET funds, WSU students voted to tax themselves in order to restore services. This was due partly to the students’ interest retaining services, but equally important was the fact that they saw Pullman Transit as an integral part of the community.

Outreach to Students

The success and relevance of many peer systems relies largely on university or college student populations. As is true for CTS, most peers target some marketing efforts directly at this population, such as ads on campus or in student newspapers.

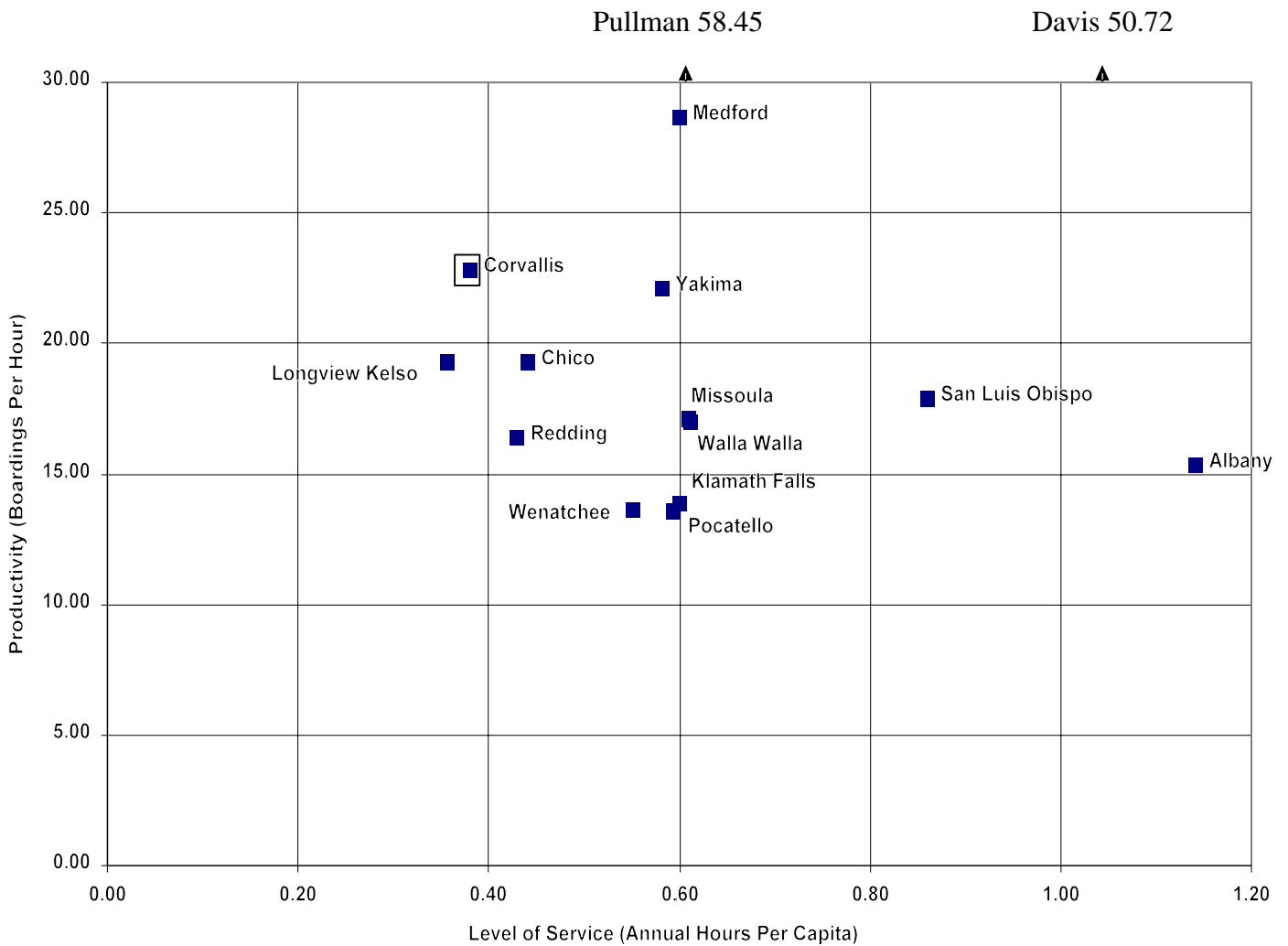
System Performance

Figure 2-4 shows a scatter diagram comparing the amount of service provided (in annual revenue hours per capita) with the resulting productivity (in terms of passenger boardings per revenue hour).

Cities in the upper left corner of the diagram are getting the best return for the least investment. Corvallis has the second lowest level of investment per capita, yet it is able to achieve the 4th highest productivity. This shows that the City is getting a solid return on investment given the total market size. Chico, Missoula and San Luis Obispo all provide more service per capita, but achieve a lower level of productivity. This shows that to a degree, intense student demand virtually guarantees high ridership even where overall investment in service is comparably low. However, cities like Corvallis, Chico and Missoula, where pedestrian and bicycle travel are highly convenient and student housing is proximate to the university, should not expect to achieve productivity levels over 30 boardings per hour as in Pullman and Davis. Peers positioned at the bottom of the chart and toward the right are cities that get relatively poor returns in ridership for their investments.

Roughly half of the peer systems offer 0.6 revenue hours of service per capita, which is over 30 percent higher than the 0.4 offered by CTS. Three peers with significant university populations, Chico, Missoula and San Luis Obispo, offer more service per capita and have lower productivity than Corvallis. Others, such as Pullman and Davis, are able to achieve significantly higher productivity with their higher per capita investments.

Figure 2-4 Productivity vs. Level of Service



Fares and Recovery Ratio

Generally, peers charging higher fares enjoyed higher recovery ratios. Two exceptions being Medford, whose \$1 fare netted a low 7 percent recovery rate, and Pullman who recovered 64 percent of its operating costs with a \$0.50 base fare. While logically, fare levels should have an impact on ridership, all things being equal, no clear pattern is discernable from our peer data. The five systems charging \$1 for one-way rides averaged 25.5 boardings, while the five charging \$0.50 averaged 26.

Arrangements with local universities can greatly impact the recovery ratios. The negotiated agreements can provide significant revenues and/or increase the numbers of passengers using free or heavily discounted passes. As is evident from our review of funding in Pullman, Missoula, Pocatello and in Corvallis, university provided lump sum payments from student fees or parking revenues rarely cover the full cost of transporting students, faculty and staff.

Conclusion

In terms of cost effectiveness and productivity, Corvallis is doing remarkably well, especially considering its limited level of service (service hours per capita). Its measures for subsidy per passenger and boardings per revenue hour are both quite favorable relative to the peer median. Its farebox recovery rate is almost double the peer median level.

Again, when compared to the five peers with comparably large university populations (Davis, SLO, Pullman, Chico and Missoula have university populations of 15,000 or greater), Corvallis Transit shows respectable performance. Among this group, CTS' 23 boardings per revenue hour is above the subgroup median of 19, and its farebox recovery ratio is just below the five-peer median of 25%. However, this group includes Pullman and Davis, two systems with extremely high productivity created by local conditions that will never be matched in Corvallis. CTS outperforms Chico, Missoula, Walla Walla and San Luis Obispo, its best peers, in productivity and farebox recovery.

While these numbers put Corvallis Transit in a positive light when compared with the peer group, they also indicate that CTS may be trading low service levels for high performance numbers. This means that Corvallis residents are not receiving a level of service, in terms of service frequency and service area, which other comparable communities have come to expect.