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Citation Details

Monroe, Jan and Edner, Sheldon, "Ridesharing in Oregon: A Descriptive Analysis" (1987). *Center for Urban Studies Publications and Reports*. 92.

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RIDESHARING IN OREGON:

A Descriptive Analysis

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June 30, 1987

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This research was funded by the Oregon Department of
Transportation and the U.S. Department of Transportation

DISCLAIMER

The contents of this report reflect the views of Jan Monroe and Sheldon Edner who are responsible for the facts and accuracy of the information presented herein. The contents do not necessarily reflect the official views or policies of the Oregon Department of Transportation or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

ABSTRACT

RIDESHARING IN OREGON: A Descriptive Analysis Jan Monroe and Sheldon Edner Portland State University

This report provides an overview of the major rideshare programs in the cities of Portland, Salem, and Eugene. A general description of the setting, a brief history, and the current program is provided for each city.

The cities of Portland, Salem, and Eugene all have existing rideshare programs that include a matching service for prospective participants and a discounted parking cost program for vehicles used for ridesharing. The two hospitals reviewed (Good Samaritan and The Oregon Health Sciences University), in addition to the matching service and parking discounts, also subsidize mass transit as an alternative. Good Samaritan and the Oregon Department of General Services both provide a free shuttle bus service from satellite parking lots. The Rogue Valley Transportation District has received funding to start a carpool program but has not yet achieved its goal of an up and running program (although they have erected signs and purchased a computer).

In general, the major Oregon urban programs have reduced marketing efforts over the last several years due to reduced interest on the part of the public and employers in ridesharing. Program sponsors have concentrated efforts on computerized matching services and permit parking programs that offer incentives to carpools and vanpools which are still popular in areas where parking shortages exist. The cause of public and employer apathy is not clear, but several possible factors were mentioned by the managers of these programs: the recent decline in gasoline prices, the ready availability of gasoline, and the desire for transportation flexibility by the public. The general consensus of the rideshare program managers was that unless there is another gasoline shortage or some other major change in circumstance rideshare programs would not grow much beyond present activity levels.

INTRODUCTION

The Oregon Department of Transportation, Public Transit Division coordinates and promotes rideshare programs in Oregon. Rideshare coordinators for state and local agencies meet to exchange information on program administration and to share information on how to promote carpools and other alternatives to the single passenger automobile commuter trip. These alternatives include carpools, vanpools, satellite parking with shuttle bus service, park and ride parking lots with commercial mass transit service, and subsidized mass transit. One result of the Public Transit Division's experience with various rideshare programs was that this agency saw the need for a document that would provide a succinct description of these activities. The Division contracted with the Center for Urban Studies at Portland State University to provide such a report. This document provides an overview of rideshare, carpool, and vanpool programs in the state of Oregon. The objectives of the report are:

- to provide an overview of major urban ridesharing programs and activities;
- to establish baseline information for future comparison;
- to provide recent rideshare statistical information.

The document briefly describes the various programs utilizing a uniform format and terminology to facilitate comparison and to allow aggregation of data. Because of the different ways ridesharing, carpooling, and vanpooling have been defined by local program administrators these terms have been redefined in this study as follows:

- Rideshare = alternatives to the single passenger auto
- Carpool = three to six persons per vehicle
- Vanpool = seven or more persons per vehicle

Some of the specific elements covered in this report are:

- geographic location or facility description;

- brief program history;
- current program description and institutional structure;
- budget information;
- internal evaluation techniques;
- standardized statistical data;
- future trends and directions.

We have provided the reader with a brief description of these programs. Readers should contact the program managers for detailed information. We are indebted to these individuals for their assistance in providing the information required for the preparation of this report.

State Role in Ridesharing

The Oregon Department of Transportation, Public Transit Division is the official state agency charged with promoting and monitoring local rideshare activities and agencies. Staffed by one full time professional (program coordinator), and assisted by a secretary, the state rideshare program is aimed at promoting the development of local rideshare programs, coordinating the award of federal rideshare funds, marketing ridesharing, providing information regarding existing rideshare programs, and coordinating activities among local rideshare agencies. The Rideshare Program Coordinator also prepares reports on rideshare needs and activities. The state seeks to coordinate and support local rideshare activities through the dissemination of information and the sponsoring of regional meetings. During the 1987-89 biennium the program will be funded in the amount of \$95,586, two-thirds of which is for staff and the remainder for services and supplies. These funds are from the Federal Aid Secondary Program.

The Public Transit Division Rideshare Program Coordinator is also a member of the Capitol Mall Transportation and Parking Committee. (See page 23 for a description of the committee's activities). The Program Coordinator visits local program coordinators to provide technical assistance and maintains contacts with program coordinators in other states. The coordinator also works with private park and ride lot owners to promote additional lot development. The coordinator

maintains contact with the Oregon Transit Association to promote rideshare activities.

General Goal of Programs

The general goal of all Oregon programs is to reduce the number of single occupant automobile commuter trips into congested urban areas or to specific large employers. The expected results of achieving this goal are:

- Reducing traffic congestion;
- Reducing the need for more parking;
- Reducing air pollution;
- Reducing the consumption of gasoline;
- Reducing wear on highways.

Program Elements

The program elements which agencies have adopted to implement the goal vary in terms of the percentage of resources allocated to each, (different emphasis on different elements) but the elements themselves are quite similar and can be generalized as follows:

MARKETING-Informing the public about the program including:

- Presentations to major employers and their employees
- Direct mail (pamphlets, flyers, newsletters etc.)
- Media advertising and stories (radio, television, newspapers)
- Signs and posters
- Other miscellaneous advertising and public contact methods

MATCHING SERVICES-Providing current, accurate information about others interested in ridesharing, carpooling, and vanpooling in a timely manner including:

- Keep contact lists current
- Provide matching lists quickly

- Follow up mailing with a phone call to see if there are any problems with the information and to find out if the applicant found a match.

PARKING-Providing reserved parking and reduced parking fees for carpools.

INFORMATION-Providing information on mass transit where appropriate, including park and ride lots.

RESEARCH-Surveying users periodically to find out marketing information and for program evaluation and retargeting.

Methodology

This report was prepared utilizing reports and other data provided by the local program administrators and the Public Transit Division. In addition, both telephone and personal interviews were conducted with these program administrators to clarify and supplement the data provided. The chronological periods vary for the data but in general it is the most recent data for which both budget expenditure data and survey data for program impacts was available. (In some cases more recent budgetary data was available but was not used because of the lack of program impact data at the time this study was underway.) Because of time constraints, certain data may have been generated by some of the programs during the later stages of this study which we, unfortunately, are unable to review in this report. We are not, however aware of any such data that would affect the general conclusions of this report and we have provided an opportunity to comment and offer corrections to those who have provided the information utilized in this report.

The general descriptions of programs are believed to accurately reflect the actual operation of the carpool and vanpool related functions that these agencies perform. It should be noted however that in several cases these agencies perform other functions as well and that this document does not attempt to describe those other functions.

Because of the methodology used (review of written documents voluntarily provided and oral interviews) we cannot vouch for the accuracy of the information reviewed. In some cases certain statistical data was extrapolated from other data provided. Therefore, the statistical data should be viewed more as an adjunct to the description of each program for approximating magnitude than as absolute values.

Assuming that the data provided was accurate and that the extrapolations are fairly close approximations to reality the standardized statistics could be utilized to estimate annual data concerning vehicle miles not traveled, gasoline saved, and reductions in air pollution for participants in the local programs. Unfortunately, though, we do not know the total number of vehicles carpooling but only the number participating in the programs in question. Therefore this document is more useful in measuring the impact of the programs on carpooling than measuring the impact of carpooling on the local area.

CHAPTER II

PORTLAND METROPOLITAN AREA

Description of Area

The Portland Standard Metropolitan Statistical Area (SMSA) is contained within three counties in Oregon; (Washington, Clackamas, and Multnomah) and Clark County in Washington. In November of 1986, there were 595,400¹ persons employed within this area. The Portland SMSA had a total population estimated to be 1,144,800² as of July 1, 1986. The local mass transportation agency, the Tri County Metropolitan Transit Authority (TRI-MET), is the major mass transportation agency in the area, although Clark County, Washington has a local mass transportation agency, C-TRAN.

History and Description of Current Program

The Arab Oil Embargo, higher gasoline prices, and a shortage of parking spaces in the City Center Core area provided impetus for rideshare programs in the Portland SMSA as elsewhere. The shortage of parking spaces has caused high parking prices (estimated to be between \$66 and \$95 per month in the core area) thus further exacerbating the situation. During the 1970's local public agencies agreed to provide funding to support a regional rideshare program to be administered by TRI-MET. TRI-MET is now the largest provider of rideshare program services in the Portland area and serves the three Oregon metropolitan counties in the Portland SMSA.

Each year a rideshare program budget is submitted to a committee composed of the following agencies: City of Portland, State of Oregon Department of Transportation, TRI-

¹ Center For Population Research and Census, Portland State University, Population Estimates of Oregon Cities and Counties, July, 1986.

² Employment Division, State of Oregon, Labor Force Trends, November 1986.

MET, and the three Oregon metropolitan counties (Multnomah, Clackamas, and Washington). Most recently, these agencies have been working on the adoption of a new Transportation Improvement Plan (TIP) for the region which may have an impact on future budgets for the TRI-MET rideshare program. These agencies have provided funding for this program by passing through Federal Highway Administration (FHWA) funds to TRI-MET. TRI-MET has provided the Local Matching Funds (15%). The source of these funds was a reallocation of money originally intended for federal interstate highway projects but which were never built. These funds were then shifted to the TRI-MET rideshare program (with local government and FHWA approval). Approximately \$300,000 of these funds remain. In addition, Federal Aid Urban funds have been allocated for this program. The annual TRI-MET budget for the rideshare program is approximately \$150,000. Therefore, new funding will be needed to continue this program after 1990-91, assuming current levels of spending.

TRI-MET
RIDESHARE PROGRAM BUDGET
EXPENDITURES 1986-87 YEAR
(Carpool parking and matching services only)

| | | |
|------------------------|----------|-----|
| PERSONNEL SERVICES | \$39,947 | 59% |
| MATERIALS AND SERVICES | \$27,460 | 41% |
| Telephone | 2,300 | |
| Printing | | |
| (Marketing Brochures) | 10,760 | |
| (Parking permits) | 2,000 | |
| Contractual Services | | |
| (Answering & Delivery) | 7,800 | |
| Advertising | 0 | |
| Market Research | 0 | |
| Postage | 3,600 | |
| Misc. | 1,000 | |

CAPITAL OUTLAY

| | |
|------------------|---|
| Furniture | 0 |
| Equipment N.E.C. | 0 |
| Computer | 0 |
| Highway Signs | 0 |

TOTAL BUDGET \$67,407 100%

The two TRI-MET rideshare program components reviewed in this study include a computerized matching service and a reduced parking fee incentive program. The computerized matching service is quite comprehensive with a 24-hour telephone answering service (dial CARPOOL, 227-7665) that will take data and fill out applications around the clock. This information is entered into the computer on a daily basis by TRI-MET staff. The applications are geographically coded on a one square mile grid basis. A letter is then sent to the applicant with names of geographically matching applicants. A follow-up phone call is then made to see if a carpool was actually created and/or if any of the names should be deleted from the data base. The data base is purged at least every three months and sometimes more frequently to remove those who have moved, changed jobs, and formed carpools.

The parking permit program reduces parking fees for carpool/vanpool program participants (at least three persons per vehicle to qualify). This program is quite large and encompasses 3 areas within the City for on-street parking at long-term (6 hr.) meters. There are also two parking structures (publicly owned), and one surface parking lot (privately owned) with no meters.

The downtown on-street parking meter/permit program for carpools/vanpools works as follows: The City of Portland owns the meters and normally collects the meter revenue, however, TRI-MET sells the carpool permits for the City. The permits are sold for \$25 per month and are on a first come, first serve basis with a two to four month waiting list. There are 1800 long-term meters in the City and TRI-MET is allowed to sell a maximum of 600 permits for carpools/vanpools. The normal rate is 50 cents per hour or

\$4.50 per day for an eight hour work day with a one hour lunch break. Assuming 22 working days per month, this is equivalent to \$99 per month compared to the \$25 per month the carpool/vanpool permits cost. The TRI-MET program staff says this is their most popular program. In two areas, further from downtown, there are on-street parking spaces reserved for carpools from 6:00 a.m. to 9:00 a.m.. If these spaces are unoccupied by carpool vehicles, after 9:00 a.m. they become available to anyone for parking. There are no parking meters in these two outlying areas.

The City of Portland provides for reduced rates (\$45.00 per month) at the Autoport, a City owned parking structure with 75 parking spaces set aside for carpools/vanpools. Normal monthly rates are \$65.00 per month in this structure. TRI-MET also sells these permits for the City.

The State of Oregon provides 115 parking spaces for carpools and vanpools at the downtown State Parking Garage. TRI-MET sells these permits also, for \$45.00 per month (see section on the State of Oregon Department of General Services).

Finally, a privately owned lot between SW 3rd and SW 4th, along SW Morrison St. provides 15 carpool/vanpool spaces at a reduced rate of \$45.00 per month. The regular monthly rate at this privately owned parking lot is \$81.00. The City of Portland accomplished this by attaching a requirement to a conditional use permit for the commercial parking lot.

Marketing Techniques

TRI-MET has tried a variety of marketing techniques, including mass mailings, advertising, discounts for retail goods, a drawing for a trip to Hawaii, a carpool newsletter, (CARPOOL CLASSIFIEDS), highway signs, and others. TRI-MET also puts out a ridesharing coordinator Newsletter that goes to involved persons at businesses who work on ridesharing in their institutions. However, after performing extensive marketing surveys and evaluations, TRI-MET staff has concluded that highway signs are the most cost-effective marketing technique in conjunction with the computerized matching service. TRI-MET also provides employer requested marketing.

TRI-MET

STANDARDIZED STATISTICS

(Last three quarters of 1986 and first quarter of 1987)

| | | |
|----|-------------------------------------------------------------------------|-------------|
| a) | Number of matching applications received | 758 |
| b) | Number of matches made | 456 |
| c) | Match rate | 60% |
| d) | Number of persons in parking permit and matching programs | 3,528 |
| e) | Number of carpool vehicles | 1,038 |
| f) | Average number of person per carpool(d/e) | 3.4 |
| g) | Cost of matching & parking programs (FY 86-87) | \$67,407 |
| h) | Cost of program per participant (g/d) | \$19.11 |
| i) | Average miles driven one way by participants | unknown |
| j) | Average number of days participants commute/week | unknown |
| k) | Number of parking spaces saved by carpools over single occupant mode | (d-e) 2,490 |

CHAPTER III

GOOD SAMARITAN HOSPITAL AND MEDICAL CENTER

Description of Facility

The Good Samaritan Hospital and Medical Center is located in North West Portland and is surrounded by an older, well established residential area. Good Samaritan Hospital is over 110 years old and, in 1986, had 2,250 part time and full time employees (including over 350 physicians and a house staff of 50 residents and fellows), 16,390 admissions and 95,000 outpatient visits. Although there has been a decline in total employees and inpatient care, outpatient care has increased 60 percent since 1983 thus causing an overall increase in traffic and demand for parking. The last new parking structure was completed in 1987 at a cost of \$3.2 million or \$6,400 per parking space. There are 1,700 parking spaces in three parking structures and several ground level surface parking lots as well as three leased satellite parking lots located approximately 7 city blocks from the periphery of the hospital site. The major constraints on expansion of parking and additional buildings at the hospital site are objections from the neighborhood and the city.

History and Description of Current Program

The fact that it is in a residential area has created secondary parking impacts on the neighborhood as the hospital has grown. As a consequence, during the approval of the hospital master plan in 1985 the City of Portland required that Good Samaritan initiate a program to reduce parking and traffic problems in the area. This requirement was attached by the city to a conditional use permit for new construction on the site.

In 1985, Good Samaritan staff worked with TRI-MET to set up the hospital's carpool program. All hospital employees' addresses were put into TRI-MET's computerized carpool data base. A computer printout was then made by grid number showing all hospital employees in each one square mile grid. A grid map was then placed in the hospital Parking Services Office. As employees come in to apply for a rideshare

arrangement, they locate their residence on the grid map, determine the grid number, and look up names and addresses of other hospital employees in that grid and surrounding grids as necessary.

Good Samaritan presently promotes carpooling, subsidizes bus service, provides satellite parking lots, and encourages bicycling. Both the subsidized TRI-MET bus passes and the satellite parking lots with shuttle service have been popular. These program elements are described in a document entitled Transportation Briefs, by K.T. Analytics, as follows:

- Carpooling

Carpooling is encouraged in two ways. A hospital parking manager in cooperation with the regional transit and ridesharing agency, TRI-MET, conducts periodic promotions at the hospital. The manager distributes carpooling literature, holds meetings and matches up people interested in pooling depending on their home location and work schedule. The hospital also allocates parking spaces in the parking structure to carpoolers. Stalls are not designated or marked for carpoolers only, but of the approximately 300 parking permits allocated to day shift employees for the garage, 60 are allocated to carpoolers and the balance to long time employees hired before 1976. Carpools must be made up of at least two employees riding together five days a week. A carpool permit is issued to each group of carpoolers and is valid on any vehicle driven by any member of the group. However, carpool vehicles must enter the structure with two or more carpoolers in the vehicle. And, only one vehicle approved for a carpool group may park in the structure at a time. When carpoolers drive alone, they may not park in the structure.

- Shuttle Bus

The hospital owns and operates two (authors note: now three) shuttle buses between the

hospital and three leased, satellite lots. The buses are 20-passenger minibuses and operate between 5:50 a.m. and 7:00 p.m. During the morning peak, the buses run continuously between the hospital and the lots. Service is about every 5 minutes. At 10 a.m., the buses operate on demand to and from the lots. From 11 a.m. to 2 p.m., employees may take one bus to any destination in Portland for business purposes. The park and ride lots are guarded by contract security officers.

- Transit

The hospital promotes transit in two ways. One, the hospital sells transit passes at a 50% discount. The transit authority sells passes for unlimited rides at \$40.00 per month. The hospital sells the passes at \$20.00 per month. Passes are available to any employee or physician showing a valid identification card. The passes are sold at the hospital gift shop. The shop is open seven days a week, including evenings. The sales have been going on for six years. Two, the parking manager periodically provides each day shift employee with a bus route plan, showing routes, connections, and schedules from their home to the hospital.

- Bicycling

The hospital has designated 50 spaces in the parking structure for bicycles...and...another 30 spaces for motorcycles and mopeds (with showers in the hospital available to bicyclists).

The K.T. Analytics article also describes the staffing of this program as follows:

The Transportation Program is managed by a parking manager within the Human Resources Division. The manager is responsible for all parking facilities, the shuttle, transit pass sales, carpool

program, and bicycle parking. The manager employs 13 people: 2 parking attendants, 5 guards, 4 bus drivers, 1 enforcer (for parking permits and the boundary program) and 1 clerk. The annual budget for the entire program (including employees, lot leases, and bus operations) is \$420,000.(FY 86)

Current Program Objectives and Goals

The first goal of the program is to meet the conditions imposed by the City of Portland, (25 percent of employees using "non-single occupant vehicles"... methods of transportation by 1995) and thereby reduce traffic and parking impacts on the surrounding neighborhood. The second goal is to have 30 percent of employees use other than single occupant vehicle transportation according to the hospital master plan. These goals measured by traffic counts at intersections in the surrounding area and by surveys of employee vehicles parked outside of the hospital boundaries on the surrounding neighborhood streets.

Marketing Techniques

The marketing of this program by the employer is rather straight forward. By assigning preferred parking spaces in parking garages for carpools, subsidizing bus passes (a 50 percent reduction in cost to the employee), and assigning parking in the satellite parking lots, the employer can exercise a great deal of control over the employee. The three shuttle vans used to transport employees from the satellite parking lots are very convenient for the employees and receive extensive use. In addition, the hospital can discipline employees who park outside the hospital boundaries. This enforcement policy is described in the 1987 Annual Master Plan Report as follows:

...in early 1985... the hospital adopted a personnel policy which officially prohibits employees from parking outside the (hospital property) boundary during working hours;... Under this policy, employees are issued two warnings followed by three violations with increasingly severe consequences. By the third violation, a violator is

subject to formal disciplinary action up to and including termination...

... an employee patrols parking outside the boundary two to four hours daily. This includes a radius of no less than two blocks outside the (hospital property) boundary ...

To facilitate enforcement activities, ... a data base (has been compiled) which includes detailed information about vehicle registration, parking assignments, carpool formation,...(to aid in the detection of violators)...When the caller identifies a car that he/she believes belongs to a hospital employee, enforcement personnel personally check the vehicle's license against information in the hospital's parking data system... license plates may also be traced through the Oregon Department of Motor Vehicles (DMV) to ascertain... (whether or not a vehicle belongs to an employee who has failed to register.)

GOOD SAMARITAN STANDARDIZED STATISTICS

| | | |
|----|-----------------------------------------------------------------------------|---------------|
| a) | Number of applications received | unknown |
| b) | Number of matches made | unknown |
| c) | Match rate | (a/b) unknown |
| d) | Number of persons in carpool program | 80 |
| e) | Number of carpool vehicles (see page 14) | 40 |
| f) | Average number of person per carpool (d/e) | 2.0 |
| g) | Cost of program (includes parking structures and shuttle bus service) FY 87 | \$500,000 |
| h) | Cost of program per active participant (g/d) | unknown |
| i) | Average miles driven one way by participants | unknown |

- | | | |
|----|----------------------------------------------------------------------|---------|
| j) | Average number of days participants commute/week | unknown |
| k) | Number of parking spaces saved by carpools over single occupant mode | (d-e) 4 |

Internal Evaluation

Good Samaritan Hospital compiles a variety of data about it's parking program. Included in the data are details concerning the number of parking spaces by type (whether surface lot, parking structure, or satellite lot), and by type of use (long-term employees, newer employees, students, patients, etc..). Numerous surveys are taken and employees are required to affix a sticker to their cars which aids in gathering this data. The hospital conducts traffic counts at intersections and checks surrounding neighborhood areas for employees cars, as well as responding to complaint calls from neighbors about possible hospital employee parking policy violators (compare this with the City of Salem's residential parking permit program around the state capital). The hospital appears to have a good data base for evaluating it's program.

CHAPTER IV

OREGON HEALTH SCIENCES UNIVERSITY

General Description

The Oregon Health Sciences University is located in the southwest hills of Portland. The institution had 5,400 employees, 1,300 medical students, and 300 doctors serving their residency in 1986. There are presently 2,698 parking spaces for employees and 617 parking spaces for visitors and patients, which is inadequate to meet the present demand. The University has continued to expand, but it is physically constrained by steep slopes and severe topographic features as well as pre-existing structural problems which makes it difficult and expensive to add more parking. The last new parking structure was built in 1983 and contained 450 parking spaces at a cost of approximately \$9,000 per space. The Health Sciences University is presently planning an additional new parking structure for employees containing 320 spaces, at a cost of 3.4 million dollars (\$10,625/space). It also is planning to construct a new parking structure for patients containing 420 spaces, at a cost of 6 million dollars (\$14,285/space) in 1987. The University presently charges employees \$16 to \$35 per month for parking permits depending upon the desirability of those spaces.

Current Program Description

A formal ridesharing program was started at the Oregon Health Sciences University in 1983. In 1984 the University began to keep records on carpooling (which they defined as a driver and two passengers). An incentive program was started in 1984 for carpools. This program provided for a reserved parking space in the parking lot or structure of the driver's choice. Posters were used in the spring and fall promotions of the program. In 1985 the University began to keep records on ridesharing (defined as driver and one passenger) in addition to the data on carpools. In 1986 two additional incentive programs were started to encourage carpools and mass transit: parking for carpool vehicles (three or more persons who are full time staff members) and free TRI-MET bus passes for people who would relinquish their

parking permit. These two new incentives are temporary and are planned to be discontinued as soon as the new parking structures are opened.

CHAPTER V

ROGUE VALLEY TRANSPORTATION AUTHORITY

General Description

The Rogue Valley Transportation District has received funding to start a carpool program, erected signs, and purchased a computer but has not yet achieved its goal of an up and running program.

CHAPTER VI

CITY OF SALEM

General Description

The City of Salem is the state capital of Oregon. As such, most of the state employees work in offices in downtown Salem. Congestion around the state office buildings is severe, especially biennially when the state legislature is in session. According to one estimate by the City of Salem staff, there is a shortfall of approximately 1800 parking spaces around the state capital, primarily due to a lack of parking provided by state offices. In addition, there are many other businesses located in Salem's core areas contributing to traffic and parking problems. The total SMSA population estimate for Salem as of July 1, 1986 was 254,800¹ persons and the number of employees in the Salem SMSA was 121,800² in November of 1986.

History and Description of Current Program

As a result of the national gasoline shortages in 1973-75 and concerns about parking, traffic, and air pollution, several of the Salem area governmental agencies began a carpool program in 1975. In 1979, the City of Salem assumed responsibility for the program. The City coordinates with other governmental agencies including the State Department of Transportation, TRI-MET, TAKE-PART rideshare program in Eugene, and the Salem Area Mass Transit District (Cherriots) to further program objectives and to share information. The target area for the Salem rideshare program is a 60 mile radius from the city, which encompasses the cities of Portland and Eugene. This infers that the Salem program needs to be able to coordinate with the programs in Portland and Eugene in providing match lists for long-distance commuters.

¹ Center For Population Research and Census, Portland State University, Population Estimates of Oregon Cities and Counties, July 1986.

² Employment Division, State of Oregon, Labor Force Trends, November 1986.

The City of Salem currently operates an Alternative Modes of Transportation Program aimed at reducing the number of one passenger commuter cars driven to and from Salem each day. The major elements of this program are: 1) a carpool and vanpool computerized matching and referral service and, 2) marketing and promotion of carpools and vanpools. These program elements are supported by City General Funds, Federal Aid Urban (FAU) funds, and by other agency expenditures, most notably signs and in-kind services by the City of Salem and the Oregon Department of Transportation. Federal aid funds 100 percent of these costs.

SALEM

RIDESHARE PROGRAM BUDGET

(FY July 1, 1984 - June 30, 1985)

| | | |
|--------------------------|-----------------|------|
| PERSONNEL SERVICES | 26,909.22 | 86% |
| MATERIALS AND SERVICES | | |
| Telephone | 997.36 | |
| Printing | 531.32 | |
| Advertising (Radio) | 300.00 | |
| Postage | 692.19 | |
| Other Supplies and Misc. | 101.88 | |
| Contractual Services | <u>558.10</u> | |
| | 3,180.85 | 9% |
| CAPITAL OUTLAY | | |
| Furniture | 0 | |
| Computer (UPDATE R BASE) | 374.00 | |
| Signs | <u>1,400.00</u> | |
| | 1,774.00 | 5% |
| TOTAL BUDGET | \$34,864.07 | 100% |

The carpool program operates as follows:

- 1) An applicant calls 371-P00L to sign-up or fills out an application and mails it (postage prepaid) to the City of Salem Rideshare Program
- 2) City of Salem Transportation Division reviews application for completeness
- 3) Origin and destination are coded based on one square mile grids
- 4) Data is then entered into an IBM PC (using Rbase 5000 software)
- 5) The computer then prints out a match list based upon same geographic grids of origin and departure (if any)
- 6) A cover letter explaining how to contact those on the list, along with the list, is then mailed to the applicant. A call is made two or three weeks later to the applicant offering help if necessary and to check whether the applicant found a match

Incentives for the program include reduced rates for parking in one City owned parking structure (Pringle Creek) and in specially designated onstreet carpool parking spaces. In the Pringle Creek structure the rates are: \$25.00 for two persons, \$20.00 for three persons, \$15.00 for four or more persons (per month). There are approximately 130 onstreet carpool designated parking spots. On- street parking permits are available for \$15.00 for two persons, \$10.00 for three persons, \$5.00 for four or more persons (per month) versus 25 cents per hour at standard parking meter rates.

The City also works with the Salem Area Mass Transit District in designating "park and ride" lots where the commuter can park the automobile in an outlying area and finish the commute on one of the Salem Area Transit District buses (Cherriots). The program can also provide bus schedule information to carpool applicants if appropriate.

Current Program Objectives and Goals

The goal for the rideshare program had recently been revised from the more abstract concepts, such as improving the environment and saving energy, to more specific goals. The "Year 2005 Areawide Transportation Plan For The Salem-Keiser Urban Area" adopted by the Salem City Council provides for the following goal: To increase the use of alternative modes of transportation by commuters from the 20 percent in 1984, to 25 percent in 1990, and 30 percent in the year 2005 (alternative modes includes mass transit, bicycle, and walking, as well as carpools and vanpools).

The target population of commuters (single occupant vehicles commuting to work in Salem each day) was 75 percent of the vehicles entering Salem in 1970 and 65 percent in 1980, according to surveys taken in those years. In 1980, there were 73,660 people employed in the Salem-Keiser urban area.

Marketing Techniques

The City of Salem Marketing Program is aimed principally at major employers in Salem. In a survey of current carpools, Salem found that most had heard about the program from the following sources:

| | |
|------------------------------|-----|
| Carpool signs and literature | 37% |
| Co-worker | 20% |
| Employer | 17% |
| City of Salem | 12% |
| Other | 9% |
| TV/Radio | 3% |
| Newspaper | 2% |

The top four could be construed as being the result of a combination of employer supported informational programs and highways signs. Salem's experience has led it to expand its efforts with presentations to major employers, and in the case of the State of Oregon, major agencies. Salem also participated with the City of Eugene and ODOT Public Transit Division in purchasing a public advertising spot and highway signs.

SALEM
STANDARDIZED STATISTICS

| | | |
|----|----------------------------------------------------------------------------|----------|
| a) | Number of applications received | 752 |
| b) | Number of matches made | 466 |
| c) | Match rate (a/b) | 62% |
| d) | Number of persons in carpool program | 410 |
| e) | Number of carpool vehicles | 105 |
| f) | Average number of person per vehicle(d/e) | 3.90 |
| g) | Cost of program | \$34,864 |
| h) | Cost of program per active participant(g/d) | \$85 |
| i) | Average miles driven one way by participants | 34.3 |
| j) | Average number of days participants commute/week | 4.64 |
| k) | Number of parking spaces saved by carpools over single occupant mode (f-e) | 305 |

Internal Evaluation

The City of Salem conducts an annual survey of program users to get feedback on the program, the needs of the users, and for statistical purposes. In evaluating their program, the City of Salem staff say that it is important to keep the lists current by deleting those already matched, or no longer interested, and to update addresses, phone numbers, etc. Salem has done this with a mail survey and telephone calls. Their goal is that no information should be more than six months old.

Finally, the reasons for becoming involved in carpools include:

| | |
|------------------------|-----|
| Expected cost savings | 51% |
| Other | 17% |
| Conserving energy | 15% |
| Improving air quality | 12% |
| Improving traffic flow | 5% |

In attempting to analyze the "Other", the hand written comments on returned survey questionnaires were reviewed, and 15 of 35 comments indicated companionship as a reason for carpooling.

CHAPTER VII

State of Oregon Department of General Services

Description of Current Program

The Department of General Services of the State of Oregon encourages carpooling by state employees and others utilizing state parking facilities. This is accomplished by providing reduced parking rates in state owned parking structures and parking lots and priority parking assignments to the lots. The State also provides a free shuttle service from a "satellite" Park and Ride lot located approximately 2.5 miles from the state capital mall area. This satellite lot is located on state owned property near the Salem airport and adjacent to the State Motor Pool. During rush hours (6:45 a.m. to 8:45 a.m. and 4:00 p.m. to 5:45 p.m.) the bus departs every 15 minutes. In between these times, the bus departs every 30 minutes.

In downtown Salem, the parking availability for state employees is extremely limited (see City of Salem section of this report) with an estimated shortfall of approximately 1800 parking spaces for state employees and those doing business in state offices. Permanent parking is "essentially unavailable", according to a brochure prepared by the Oregon Department of Transportation, Public Transit Division. Personal communication with the Director of this program within the Department of General Services indicates that unreserved parking permits are oversold by approximately 20 percent; that at any given time, 700 to 900 names are on the waiting list for a parking permit, and that the waiting period is from 6 months to two years depending upon the location of the parking lots. One result of these conditions is that a Capitol Mall Transportation and Parking Committee was formed in 1984 consisting of City of Salem and State agencies (including the Department of General Services and the Public Transit Division). The objectives of this committee are to plan for future Capitol Mall development parking and transit needs and to address existing problem areas. Activities the committee have been involved in include the creation of on-street carpool parking spaces, the creation of a satellite

parking lot and free shuttle bus service, and promotion of local bus service.

The "free" shuttle service is paid for by the Department of General Services at a cost of \$6,245 per month or \$74,940 each year. The shuttle service is contracted out to a private business that operates two shuttle buses during rush hours and one bus during non-peak hours.

Parking Rates

The Department of General Services charges different rates for the Salem and Portland parking facilities. In Salem, the standard parking rates for state owned parking facilities are \$16 per month for unreserved spaces and \$21 per month for reserved parking spaces, while in Portland these rates are \$36 and \$46 respectively. Rideshare (2 persons) vehicles receive a \$2 discount from these rates, carpools of three persons receive a \$5 discount and carpools/vanpools of 4 persons or more receive an \$8 discount (these same discounts apply to the Portland parking facility for state employees). These carpools must operate at least two thirds of the working days each month with the required number of persons, and persons holding such a permit are not allowed any other permit for parking. This can be contrasted with the City of Salem on-street meter rates of 25 cents per hour, or assuming a nine hour day (8 working and one hour for lunch) and a 22 working day month, a monthly on-street parking rate of \$49.50. The City of Salem has set low rates for parking structures of \$25 per month to encourage retail trade in the Salem commercial core areas.

The two Portland parking structures were originally built for state employees and visitors to state offices. However, the newest state parking structure had a surplus of spaces for state employee needs for a time and, therefore the state sold parking permits to the general public (\$50 per month). In 1986, however, these surplus spaces were converted to carpool spaces for the general public with TRI-MET acting as the leasing agent. There is a waiting list for the 115 spaces in this program with a waiting time of approximately one year. The price per space for the public was decreased from the \$50 per month to \$45 per month for the carpool vehicles.

State employee rates, on the other hand, are \$36 per month with the previously mentioned state discounts of \$2, \$5, and \$8 for carpools. These rates are substantially below the market rates in Portland, which run between \$75 and \$90 per month.

CHAPTER VIII

EUGENE / SPRINGFIELD

General Description

The cities of Eugene and Springfield are located in Lane County, the second largest Standard Metropolitan Statistical Area (SMSA) in Oregon. This SMSA had a population of 261,650¹ as of July 1, 1986, most of it being located in Eugene and Springfield respectively. These two cities are adjacent to one another.

History And Description of Current Program

In 1979 a carpool program was started involving five sponsoring agencies (the cities of Eugene and Springfield, Lane County, the State of Oregon Department of Transportation, and the U.S. Department of Transportation) This program currently operates under the direction of the City of Eugene Public Works Department, Transportation Division, and the title of the program is TAKEPART.

The TAKEPART rideshare program includes four major functions:

- MATCHING SERVICES-matching new applicants with already existing carpools or with others to create new carpools;
- PARKING PERMITS-issuing on-street and public parking lot carpool permits;
- INFORMATIONAL ASSISTANCE-providing information about the Lane County Transit District and the mass transit agencies park and ride lots;
- MARKETING-promotion of the rideshare program.

¹ Center For Population Research and Census, Portland State University, Population Estimates of Oregon Cities and Counties, July 1986.

The TAKEPART program is totally funded by Federal Aid Urban (FAU) funds with "inkind" support from local governments and the donation of public service advertising by the private sector. Major emphasis for the FY84-85 fiscal year was on broad public contact via advertising and appearances by staff at large public gatherings (fairs, etc.).

TAKEPART
RIDESHARE PROGRAM BUDGET
(FY84-85)

| | | |
|------------------------|-----------------|-----|
| PERSONNEL SERVICES | \$19,560.69 | 51% |
| MATERIALS AND SERVICES | | |
| Printing | 1,486.48 | |
| Advertising | 4,747.81 | |
| Postage | 529.77 | |
| Supplies | 215.13 | |
| Other misc. | 1,161.14 | |
| Contractual services | 8,491.84 | |
| Travel | <u>2,260.15</u> | |
| | 18,892.32 | 49% |
| CAPITAL OUTLAY | | |
| Furniture | 0 | |
| Computer | 0 | |
| Signs | 0 | |

The carpool matching program operates as follows. An applicant fills out an application or calls TAKEPART and provides the information to the TAKEPART staff who then codes the application by home location and destination coordinates. The new application is then matched against existing match lists either by hand or by using the county-wide Regional Information (computer) System. The list is then sent to the applicant so that the applicant can contact others who have previously filed applications. The staff also contacts other rideshare programs in other cities in the case of long distance commuters.

The updating of applicants' information or deletion is performed upon request of the applicants or through deletion of persons to whom a newsletter (Rideline Newsletter) has been sent and then returned as undeliverable because the applicant has moved without leaving a forwarding address. Updating also occurs at the end of each project year.

Incentives for this program are provided by discounting the cost of parking in city parking lots in Eugene by 20 percent for autos with two person occupancy and by providing free parking for carpool autos (three or more persons). Parking on the street for two or more persons is free, if one of the 18 on-street carpool parking spaces is available. The average cost of parking in the Eugene-Springfield area is \$24 per month according to a survey prepared by the TAKEPART staff. Therefore, a two passenger auto parking permit would be \$19.20 per month. These permits are issued on a monthly basis and in FY 84-85 there were an average of 39.4 permits per month issued for carpool vehicles and an average of 19.7 permits issued per month for the two passenger vehicles or an average participation by 59 carpools in the parking permit program. There are 18 such on-street designated carpool parking spaces and the remainder are permits without assigned spaces for use in one of the public parking lots.

Goals and Objectives of Program

The goal of this program is: "To increase carpool ridership to at least 15% of all commute trips county wide."

In the TAKEPART annual report² the stated goal for this program is that 15 percent of all commuter trips be in carpools by the year 2000, yet this same table indicates that the 1980 U.S. Census data showed 18,000 persons commuting to work via carpool or about 15 percent of the commuting work force. If this is correct, it would appear that the goal has already been met and the task is to prevent significant erosion of the existing number of persons using carpools.

² Kronholm, Kay and Marshall Landman, TAKEPART Carpool Program Phase 6 Evaluation, 1985.

Marketing Techniques

The TAKEPART staff has tried a number of different marketing methods. Some of the more notable methods included using the GOODYEAR blimp, billboards, helium balloons and a booth at the county fair.

The "One is the loneliest number" campaign theme (a phrase from a popular song) is notable in that it addresses psychologically one of the major reasons for carpooling, companionship (especially for commuters traveling over 30 miles each way).

The TAKEPART staff concluded that they had directly contacted 127,274 individuals about the carpool program or just slightly less than half of all individuals in Lane County (261,650 persons). Some of these individuals were undoubtedly contacted more than once due to the variety of methods used and therefore it can be assumed that the 127,274 contacts overrepresents the actual number of individuals contacted. If we assume that this number is in the correct order of magnitude (i.e. 100,000 individuals) there would be few individuals who had not been exposed to advertising about the program and very few commuters who had not heard about the carpool program at least once in a three year period.

Internal Evaluation Techniques

The TAKEPART staff has compiled an extremely detailed statistical record of the program achievements and impacts. Especially interesting is the methodology for determining total vehicle miles saved as a result of carpools in the program. In part this is credited by the TAKEPART staff to the use of "Guidelines for the Use of Vanpools and Carpools as a Transportation System Management Technique"³ as a guide to processing commuting statistics. It is also due to a survey that this reviewer found quite useful with regard to the types of data collected and format.

TAKEPART
STANDARDIZED STATISTICS
FY 84-85

| | | |
|----|-----------------------------------------------------------|----------------|
| a) | Number of applications received | 101 |
| b) | Number of matches made | 43 |
| c) | Match rate | (b/a) 42.6% |
| d) | Number of persons in parking permit and matching programs | 305 |
| e) | Number of carpool vehicles | 115 |
| f) | Average number of persons per carpool | (d/e) 2.66 |
| g) | Cost of program (FY 84-85) | \$38,453.01 |
| h) | Cost of program per participant | (g/d) \$103.36 |
| i) | Average miles driven one way by participants | 19.73 |
| j) | Average number of days per week commuting | 4.75 |
| k) | Number of parking spaces saved over single occupant mode | 190 |

CHAPTER IX

Conclusions and Future Trends

No major changes are being proposed for the programs reviewed. It appears that the various rideshare programs have realistically responded to changing conditions (lower fuel prices, lessening of demand) by reducing the scope and scale of certain activities (primarily marketing and research) related to ridesharing. The price and availability of fuel or the time it takes to travel (because of traffic congestion) will be the major determinants of the need for a larger carpool programs.

Parking permit programs and computerized matching services are still heavily utilized and will continue to be in demand where factors such as congestion, a shortage of parking and high parking costs exist, and where incentives such as choice parking locations and discounted rates are provided to carpools. Externalities such as the impact on the surrounding area will continue to cause employers (such as Good Samaritan Hospital) to pursue ridesharing alternatives to the single passenger auto.

The carpool programs in areas of the state where there is a ready availability of parking, and parking costs are low, are not having the same success and, therefore, it will probably be major national trends (i.e., gasoline prices and availability, and the national economy) that influence the acceptance of carpools in these areas more than the discounted parking cost incentives that local programs are able to offer. The major importance of these less successful programs may be that the basic program framework is in place and should be capable of expansion if circumstances (such as another fuel shortage) warrant.

Park and Ride

Because of lack of adequate data, park and ride systems are not included as part of this report. However, park and ride systems seem to have greater popularity than carpools (the assumption is that this is due to flexibility and lack of need to depend on other persons, or to meet their needs). Major

expansion of park and ride facilities by TRI-MET is occurring and the Department of General Services is considering constructing at least one additional park and ride lot in Salem indicating the popularity of these facilities in areas where parking is a problem.

One observation about park and ride systems seems appropriate, however. To the extent that people still drive as a single passenger to the park and ride lot, there is not as great a saving of vehicle miles travelled and there is no savings in land required for automobile parking. Furthermore, the general mass transit user subsidizes the cost of the park and ride facility (where the mass transit agency must pay to provide the parking) or the parking cost is borne by the owner of the property (churches, grocery stores, etc.). The actual cost of parking is avoided by the automobile driver in the park and ride "free" parking lots.

In this sense, the direct subsidies of mass transit come closer to achieving the goals of ridesharing than do park and ride facilities. It may be that park and ride facilities should be "metered" so that users at least pay for the capital construction and maintenance costs. Such costs should be substantially less than in the urban core areas.

The Mass Transportation Option

People, at least in the institutions reviewed, seem to prefer the mass transit option over carpooling, presumably because of the greater flexibility mass transit provides. Financial incentives for mass transit, such as free parking and free bus passes, seem to be especially popular and have been used to entice employees into giving up an existing parking permit. A secretary participating in such a program at a Portland hospital calculated that she was saving \$90 per month in take home pay, a significant amount to someone in her income bracket.

The State Role

The State of Oregon will continue to have an impact on ridesharing programs around the State both as a major employer and in a coordination role. The Public Transit

Division of the State Department of Transportation supports ridesharing activities that occur at the local level of government through coordination while the State Department of General Services takes the lead in providing parking and carpooling services to state workers. A major issue for the State of Oregon is the establishment of parking rates for State owned parking in a variety of institutional settings.

ORS 276.591 provides the framework for each state agency to set parking fees. This section unfortunately contains internal contradictions. As written in 1971, Section 276.590 provided for the state to set charges and rates sufficient to recover costs but no more. In 1977, this section was amended to allow discounts for carpools. In 1981, this section was revised as Section 276.591 to provide for the utilization of market rates in setting pricing policy and to recognize differences in the quality and desirability of parking, among other things. However, this section also contains a clause stating that:

...However, the charges imposed shall not produce revenues in excess of amounts required to operate, maintain and improve the grounds and facilities, to cover required depreciation and debt service expenditures, to offset any revenues lost through the provision of car or vanpool incentive rates under ORS 276.601, and to provide reasonable funds for capital development.

This would seem to be in direct contradiction to the following clause which states that:

...Pricing policy should also discourage the use of single occupant vehicles and recognize the desirability and degree of quality of the parking.

and a proceeding clause which states that:

... charges for use of grounds and facilities used for parking be established in a manner which recognizes the agency's cost to provide such facilities, local market

conditions for commercial or other paid parking and community standards; and does not cause community hardship or eliminate the demand for state provided parking.

A reading of this section would seem to indicate a desire by the legislature for the following results:

- That the state not lose money providing parking;
- That parking fees be appropriate for the quality of parking provided;
- That the subsidized discount rates for carpools be recovered through higher rates for other users;
- That state parking rates be slightly lower and yet be comparable to commercial rates, so that the state parking facilities will still be in demand.

Clearly, managers of state institutions are going to be tempted to use the leeway given in the statute to keep rates for their employees (and themselves) as low as possible. In the three state institutions examined all state employee parking rates are less than half of the local market parking rate. This does the opposite of "...discourage the use of single occupant vehicles..." and is counter to the state policy of supporting carpools, ridesharing, and mass transit. In the classical economic sense, the low rates (both in the City of Salem and State of Oregon parking facilities) have pushed up the demand curve while inhibiting the private sector from making up the short fall in parking spaces through commercial for pay lots.

An additional problem with rate setting for state owned parking is that apparently the collective bargaining agreement for some state workers includes parking rates as a matter for negotiation.

Policy Issues

Some of the critical questions for our policy makers in reviewing these programs are: a) "Could these societal goals be met by some other method?" b) "Are other societal goals

more important (in terms of program expenditures)?" and c) "Given the decision to proceed with carpool programs, what is the most cost efficient method?" These questions are outside the scope of this document and can only be answered in the national and local budgetary processes. This study has not attempted a cost effectiveness evaluation of the programs in question although the cost factors have been presented for comparison. The reasons that cost effectiveness is not directly comparable is because of the differences in scale of programs, differences in parking costs, and differences in the availability of parking and land for parking. Furthermore, the length of time each program has been in existence and the program goals further complicate direct comparison. However, in spite of this, a comparison of applications received per dollar spent would appear to be appropriate as well as a comparison of number of participants per dollar spent. Given the present period of fiscal austerity at the federal level such an evaluation is only a matter of time. However there are other factors which also presently cause local scrutiny of these programs.

Present funding for these programs comes out of federal highway funding to local jurisdictions which can be used for a variety of different purposes not just ridesharing activities. As such local government engineering departments are covetous of these funds and compete for these funds during the budgetary process. The problem for ridesharing is that the public interest in carpools (and mass transit in general) is in the environmental and resource implications, not in saving money for the carpool participants. Therefore, the public measure of success is the reduction of air pollution, the gasoline "saved", reduction in traffic congestion, reduced land needed for parking, reduced wear on highways, etc. These things are difficult to quantify and do not have the same visual impact as paving a street for example. In order to safeguard these programs one solution would be to seek a separate dedicated fund category for ridesharing programs at the federal level within the Federal Department of Transportation funding program to stem the conflict at the local level.

For further information about these programs contact:

| <u>Institution</u> <u>Telephone</u> | | <u>Program Manager</u> |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Public Transit Division | Sandy Coslow Transportation Bldg. Salem, Oregon 97310 | (503) 378-8201 |
| TRI-MET | Nancy Marshall, 4012 S.E. 17th Ave. Portland, OR 97202 | (503) 239-6434 |
| Good 7711 Samaritan Hospital | Don McDowell, Manager Parking Services 1015 NW 22nd Ave. Portland, OR 97210 | (503) 229- |
| Oregon Health Sciences University Jackson Park Road | Frank Hillman Director, OHSU Campus Parking PP220A Portland, Oregon 97201 | (503) 225-8283 3181 S.W. Sam |
| City of Salem | David J. Pratt Senior Transportation Planner Public Works Dept. 555 Liberty St. Salem, OR 97301 | (503) 588-6082 |
| Department of 7755 General Services | Pat Portlock Real Property Division 1225 Ferry St. S.E. Salem, Oregon 97310 | (503) 373- |
| TAKEPART | Kay Kronholm Rideshare Program Manager 858 Pearl St. Eugene, Oregon 97401 | (503) 687-5297. |

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