



ENVIRONMENTAL STUDIES

SERVICE LEARNING PROGRAM

Campus Transportation and Sustainability Team Final Report

2005

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1.0 Executive Summary

As the Campus Transportation and Sustainability Team we are pleased to present the results of our 2005 Service Learning Program project promoting sustainability and alternative transportation at the University of Oregon. The following report details two terms of work broken up into three main tasks.

- **Alternative Transportation Campaign**

Centered around Earth Week 2005, the Alternative Transportation Campaign was made up of two main components: a “One Less Car” competition between University departments and a booth located at the heart of campus for the duration of Earth Week. The “One Less Car” competition targeted faculty and staff, 62 percent of whom drive single occupancy vehicles to campus.¹ The competition encouraged faculty and staff to use alternative transportation as a means of commuting to UO. The winning department won onsite chair massages for accumulating the highest average number of alternative transportation miles over the course of Earth Week. The other component to the Alternative Transportation Campaign was an Earth Week booth that distributed information on alternative transportation in the Eugene-Springfield area. The Alternative Transportation Campaign was successful in distributing information to an approximated 500 University of Oregon students, faculty, and staff. To promote the Alternative Transportation Campaign, the group created a website at: <http://darkwing.uoregon.edu/~ecostudy/slp/transportation/>.

- **Carpool Proposal**

The 2005 report, “Frequencies of UO Transportation Modes,” estimates that only seven percent of UO faculty and staff carpool to campus on a regular basis, and that 66 percent of faculty and staff describe their knowledge of the campus carpooling program as “not well informed.” Our group researched successful carpool programs in order to design a proposal to improve upon our current carpooling program with flexibility, facilitation, and promotion in mind. The proposal was presented to the Department of Public Safety in June, 2005.

- **Education and Outreach Campaign**

Various members of the University of Oregon work to implement creative and effective sustainability initiatives throughout campus. The goal of this portion of the project was to highlight and promote many of these initiatives. The group created posters detailing the use of alternative energy on campus, industrial composting of food waste, and multiple sustainability efforts by the grounds crew. The group also took pictures to illustrate the existing University of Oregon Sustainability Database, located on the web at: <http://facilities.uoregon.edu/sustainability/search>. Finally, the group transformed the paper-only sustainability tour of campus into a virtual, Flash tour. One goal of the education and outreach campaign was to inspire UO users and to foster an appreciation of campus sustainability by informing campus community members about the sustainability practices happening all over campus.

¹ Docker, Fumiko. “FREQUENCIES OF UO TRANSPORTATION MODES” 2005: Campus Transportation Study

2.0 Introduction

2.1 Background

The world's motor fleet exceeds 600 million vehicles. Roughly one third of these vehicles are in use within the United States. Scientific research indicates that the extensive use of fossil fuels via motor transport has had a negative impact in an array of domains, including climate change, air quality, water and soil conditions, and land use. One of the most disputed and pressing of these issues is climate change, also known as global warming. The northern section of Larsen-B ice shelf in Antarctica, after existing for thousands of years, collapsed in 2002, shocking scientists the world over. In the United States, the last three five-year periods were the warmest on record. Experts in the field attribute these changes to global warming, and the human role in this phenomenon is becoming increasingly obvious². Global warming is partially the result of prolonged burning of fossil fuels, which increase the level of greenhouse gases in the atmosphere, resulting in an alteration of the radiative balances and an increase in overall climate temperature. Eighty-two percent of greenhouse gases come from carbon dioxide, a direct result of the consumption of fossil fuels. Aside from unnatural temperature increases, climate changes can result in the disruption and intensification of global weather phenomena. Studies predict that at the current rate of fossil fuel consumption, the average global climate will increase by one to three point five degrees Celsius by 2100 and result in a rise in sea level of 15-95 centimeters. In the past 1,000 years, which encompass the most recent ice age, the range of climate variation was only about one degree Celsius.³ Because both ecological and socioeconomic structures, like water resources, food production and human settlements, are responsive to climate change, it is likely that any overall climate change will limit the ability of these systems to provide adequate benefit to humans and other life forms dependent on them. In addition, any effects of climate change are liable to be irreversible.⁴

On a smaller scale, fossil fuel consumption affects the quality of our air, land and water. Over two dozen community health studies have demonstrated a connection between particulate pollution, which is the result of fossil fuel combustion in motor vehicles, to lung malfunctions, increased hospital admissions and premature death.⁵ Recently, two studies by the American Cancer Society and Harvard University concluded that people living in more polluted cities had an increased risk of premature death than those living in cities with cleaner air.⁶ In addition, extensive automotive use has resulted in the creation of ground level ozone that is harmful to crops and trees, and produces waste products that contaminate soil and water supplies.

Urban sprawl is another problem arising from extensive vehicle traffic. The U.S. currently has the highest proportion of vehicle ownership in the world, at 800 cars per 1,000

² Global Warming. 2005. Natural Resources Defense Council. 4 Feb. 2005
<<http://www.nrdc.org/globalWarming/default.asp>>

³ Eddy, John A. "Editorial" Consequences. Vol. 2 No. 1. 1996 <<http://0-www.earthscience.org.janus.uoregon.edu/frames/searchframe.html>>

⁴ Watson, Robert "The Regional Impacts of Climate Change: An Assessment of Vulnerability." Summary for Policy Makers. <<http://0-www.earthscience.org.janus.uoregon.edu/frames/searchframe.html>>

⁵ Particulate Pollution. 2005. Natural Resources Defense Council. 4 Feb. 2005
<<http://www.nrdc.org/air/pollution/qbreath.asp>>

⁶ "Global Warming". 2005. Natural Resources Defense Council. 4 Feb. 2005
<<http://www.nrdc.org/globalWarming/default.asp>>

citizens. In addition, the U.S. also has the highest level of automotive transport activity. Urbanized land area has quadrupled since 1954, and between 1980 and 1997, vehicle miles traveled (VMT) increased by 63 percent. Road development to facilitate this increase in automotive transport has resulted in fragmentation of wildlife habitat and degradation of water supplies due to the high runoff levels on road surfaces. Urban development has made bus and bicycle transportation less feasible due to the installations of large surface parking lots, wide streets and a lack of sidewalks.⁷

2.2 Project Issues

Universities play an important role in the use of sustainable practices and alternative transportation. Large campuses like the University of Oregon have an impact on a myriad of issues within their surrounding area such as land consumption, vehicle emission rates, and pollution, due to the very size of our campus and the number of people that live and work here. That being said, universities also have the opportunity to serve as leaders and role models, not only for the attending students, but also for the community at large.

There has been a significant effort at the UO to promote the use of alternative forms of transportation on campus. Funds from the parking program pay for faculty and staff to use the Lane Transit District (LTD) bus system free of charge and discounted parking rates and desirable spaces are offered to those who purchase carpool permits. The UO has also developed a plan that facilitates bicycle use through the development of covered bike parking and lockers, as well as the improvement of bike paths throughout campus. With 4,000 bike spaces, the UO is one of few universities in the nation to have a higher number of bike spaces than those allotted for cars.⁸ According to a transportation survey done in 1996, 29.4 percent of faculty, staff and students ride their bikes to campus.⁹

Nevertheless, the university continues to see a heavy reliance on private automotive transport. According to the 1996 Choices survey, approximately 40 percent of the 20,000 to 30,000 UO users arrive in private vehicles.¹⁰ There are approximately 3,300 parking spaces on campus, most of which are filled every day. Despite the impressive ratio of seven people to every one parking space, the university has difficulty managing the overall parking demand, particularly when it comes to large events. As a result, the construction of a parking structure is being considered to either provide additional parking or consolidate the existing parking space. The development of additional parking at UO is an expensive undertaking. According to Department of Public Safety director Tom Hicks, roughly \$12,400 of the university annual parking budget goes to the building and replacement of parking spaces. This budget would have to be increased significantly to account for the construction of a new parking garage. The cost of maintenance for the planned parking structure is estimated at \$15,000 per year.¹¹ The construction of the deck itself would be about 12 million dollars.¹²

Through our campaign, we hope to influence the transportation methods of university users and lessen their reliance on private vehicles. Any influence we have upon the

⁷ Grant, Michael, O'Neill, Megan, Petersen, Britt, Schroeer, William. "Our Built and Natural Environments." Environmental Protection Agency. Nov. 2000

⁸ See Appendix N.

⁹ University of Oregon. Choices: Transportation System Analysis. Oregon: 1996

¹⁰ University of Oregon. Choices: Transportation System Analysis. Oregon: 1996

¹¹ See "Interview with Tom Hicks" in the appendix following the report, section N.

¹² Stamm, Rand. Personal interview. 28 Mar. 2005.

transportation habits of the university population will result in a decrease in the negative environmental impacts of driving and help ease a challenging parking situation. On the whole, our efforts inform the university community about the necessity of sustainable transportation and provides encouragement to utilize alternative transportation options.

2.3 Project Implementation

Our project has two main components: the alternative transportation campaign and the campus sustainability campaign. To implement the alternative transportation campaign, we compiled data, created goals, and developed and conducted alternative transportation events. For the campus sustainability campaign, we created informational posters, took pictures to illustrate the online Sustainability Database, and created an online version of the previously paper only Tour of Sustainability Initiatives.

We began the alternative transportation campaign by gathering data and information on alternative transportation, and the effects of transportation, at the University of Oregon. This information came from websites, books, and journal articles, and was compiled into a set of annotated bibliographies. Additionally, we interviewed four members of the university whose work is relevant to our transportation campaign. Interviewees included Rand Stamm and Tom Hicks from the Department of Public Safety, Fred Tepfer from University Planning, and Fumiko Docker, a graduate student researching transportation patterns at the UO. These four interviews provided us with specific data and background information about the UO.¹³

We then conducted case studies of four other universities that provide successful examples of alternative transportation programs. The four universities are University of Colorado in Boulder, University of British Columbia, Humboldt State University, and California State University.¹⁴ These universities have unique programs that differ from those at the University of Oregon, allowing them to become a point of comparison with the UO's programs and an inspiration for our campaign.

Based on the preliminary research conducted in the first few weeks of our campaign, we established what we thought to be realistic goals. With these goals and our background research in mind, we began work to facilitate the use of alternative transportation by University faculty and staff. Our largest tasks were to develop and carry out a "One Less Car" competition between faculty and staff from various departments in spring term and to host a booth encouraging alternative transportation on campus. We set both events to take place during Earth Week, 2005, from April 18th to 22nd. The booth featured free bicycle repair and information on all forms of alternative transportation.

After the Earth Week events, we focused our energy on improving the UO's carpooling program. In our preliminary research, we found that carpooling was an area at the university with room for potential expansion and enhancement. In a 2005 survey, only 7 percent of faculty and staff reported using carpooling as their primary mode of transportation.¹⁵ In May and June, we created a proposal for the Department of Public Safety that presented ideas for improving the campus carpooling program.

We also began the campus sustainability campaign with background research. Our goal was to increase awareness of the university's sustainability efforts. While these efforts are numerous, the Environmental Issues Committee believed that they were inadequately promoted

¹³ See Appendices N,O,P, and Q.

¹⁴ See Appendices J,K,L, and M.

¹⁵ Docker, Fumiko. "FREQUENCIES OF UO TRANSPORTATION MODES" 2005: Campus Transportation Study. Pg 3.

among the general campus population. We created an interactive online version of the sustainability tour by adding photographs of the locations included in the original brochure and designing a Flash site for it, which can be found at <http://darkwing.uoregon.edu/~ecostudy/slp/transportation>. We likewise added to the UO Sustainability Database by taking photographs of the different projects and programs listed and adding them to the existing webpage. The UO Sustainability Database can be accessed at <http://sustainability.uoregon.edu/index.php>. Furthermore, we researched eight of these sustainability efforts, and created posters explaining their significance.

The final products for both the alternative transportation and campus sustainability campaigns were a comprehensive final report, a final group poster, our team website, and a final PowerPoint presentation delivered in June 2005.

2.4 Conclusion

The overarching goal of our project was to promote sustainability and alternative transportation at the UO. We hope that by encouraging a change in transportation habits during Earth Week, faculty and staff will decide to adopt those habits on a regular basis. We intended to facilitate that change through the One Less Car competition, the Earth Week booth, and by raising awareness in the UO's general population. We also hoped to increase awareness of the UO's many sustainability initiatives beyond transportation.

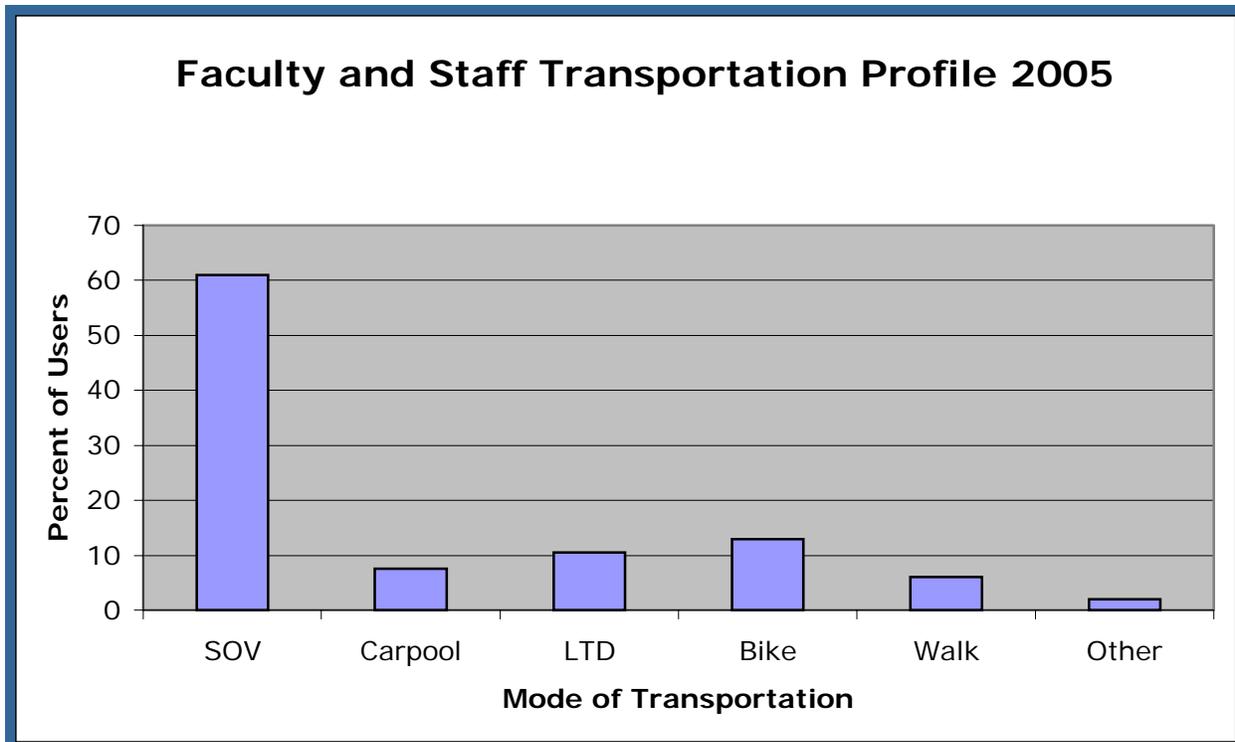
Overall, we feel that our campaign was successful in planting the seed of new ideas. The annual One Less Car competition and the proposed changes to improve upon the existing carpooling program will both continue to benefit the University for years to come.

We hope that by encouraging a change in transportation habits in Earth Week, faculty and staff will decide to adopt those habits on a regular basis.

3.0 Campus Transportation Profile

3.1 Introduction

Everyday, 20,000 to 30,000 students, faculty, staff and visitors come to the University of Oregon. They arrive by car, bus, bicycle, and on foot. The university provides approximately 3,300 parking spaces for cars, but over 4,000 spaces for bikes. With a person to parking space ratio of about seven to one, the University encourages alternative modes of transportation and in some ways, discourages single occupancy vehicles.



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3.2 Methodology

Information for the Transportation Profile was gathered by two methods. To begin, the group conducted a series of interviews in January of 2005 with Rand Stamm (head of Transportation and Parking Services, Department of Public Safety), Fred Tepfer (University of Oregon Planning Office), Tom Hicks (director of Public Safety), and Fumiko Docker (graduate student in the Department of Architecture). These interviews provided the background information necessary to locate documents that included crucial hard data. Transportation statistics came from the University of Oregon *Bicycle Plan* (located online at <http://darkwing.uoregon.edu/~uplan/BikePlan.html>); the 1996 University of Oregon Campus Planning Committee’s Transportation Systems Review *Choices*; the UO Planning Office’s “University of Oregon Facilities Fact Sheet;” and Fumiko Docker’s February 2005 “Frequencies for UO Transportation Modes.”

3.3 Data

3.3.1 Biking

To promote bicycling, the University came up with a Bicycle Plan that “establishes a framework of policies, circulation routes, parking facilities, educational information, and enforcement guidelines to encourage use of bicycles and to make the campus as safe as possible for the whole university community, including pedestrians, cyclists, and motorists.”¹⁷ The plan covers two basic areas: bike paths and bike parking. To make the bike paths more accessible, UO has

¹⁶ Docker, Fumiko. Survey: “Frequencies for UO Transportation Modes.” Feb. 2005.

¹⁷ [University of Oregon Bicycle Plan](http://darkwing.uoregon.edu/~uplan/BikePlan.html). University of Oregon. 2 February 2005.

<<http://darkwing.uoregon.edu/~uplan/BikePlan.html>>

worked with the City of Eugene's already extensive bike path system. Cyclists can connect to the university at 13th Avenue/Kincaid Street on the west side of the university (when coming off of 11th Avenue, 12th Avenue, and Alder Street), Agate Street and 15th Avenue on the east, and north across Franklin Boulevard to the bike paths along the Willamette River. The bike paths



already established and maintained by the City of Eugene feed directly to the UO campus. As part of the Bicycle Plan, the bike paths that the university maintains on campus as well as on-street lanes “should be designed to the standards currently used by the City of Eugene, and should be clearly identifiable, have suitable signage, and provide for personal safety with night lighting and appropriate routing.”¹⁸ Another aspect of the Bicycle Plan includes bike parking. The parking created for bicycles is meant to reinforce the bicycle routes that were carefully constructed by the

first half of the Bicycle Plan. Bike parking includes theft-resistant racks, well lit rack-areas for safety, bicycle lockers, covered parking to prevent rust, and increased parking with each new building. The bike racks are concentrated in order to make campus as visually attractive as possible. The bike parking plan emphasizes safety, theft prevention, and minimal visual impact. Between 1989 and 1993, the UO invested \$400,000 in new bicycle parking and circulation facilities, including bicycle lanes, paths, racks, and covered parking structures.¹⁹

3.3.2 Public Transportation

The University of Oregon was the first organization to participate in Lane Transit District's (LTD) Group Pass Program. Since 1988 when the partnership was formed, transportation on LTD buses has been free to university students, faculty and staff. Student fees of approximately \$12 per student per year cover the student portion of the LTD contract. Free bussing for faculty and staff is subsidized by the Transportation and Parking Services budget. This long-term relationship between UO and LTD has been beneficial to the university in reducing its need for parking spaces, to campus users in providing free, environmentally friendly transportation, and to LTD in securing partnership funds from the university. Public transportation benefits the community at large by reducing congestion and pollution. The university and LTD created a shuttle service called the Breeze after the 1996 Transportation Systems Review indicated that a non-stop shuttle service from the UO to the Eugene Station would reduce congestion in the campus area and make public transportation more convenient for riders. LTD estimated in 1996, before the advent of the Breeze, that approximately 2,000 students, faculty and staff were riding the bus each day.²⁰ Rand Stamm, transportation and parking manager, estimates that today, the number has increased to approximately 3,000 riders each day.

¹⁸ University of Oregon Bicycle Plan. University of Oregon. 2 February 2005. <<http://darkwing.uoregon.edu/~uplan/BikePlan.html>>

¹⁹ Fred Tepfer's Curriculum Vitae. University of Oregon. 4 February 2005. <<http://darkwing.uoregon.edu/~uplan/FTcv.html>>

²⁰ University of Oregon. Choices: Transportation System Analysis. Oregon: 1996

3.3.3 Walking

An estimated 80 percent of the UO student body lives within one mile of the university, making walking a viable mode of transportation. Approximately 30 percent of campus users report that they walk to campus regularly. To encourage walking, the UO has tried to create a safe environment on campus for pedestrians. The university has increased lighting after dark and has diverted bicycle and vehicle traffic away from pedestrian routes as much as possible.²¹

3.3.4 Cars

While biking, walking, and riding the bus are all popular ways to get to campus, many people drive their cars everyday. For the 2004-2005 school year, a parking permit cost \$167 per year for faculty and staff and \$97 per year for students. The Department of Public Safety's Transportation and Parking Services office is responsible for issuing parking permits. Those who don't have a UO parking permit for one of the 3,300 available spaces often park on the surrounding Eugene city streets which are either metered or have a one to two hour time limit for parking.²² Of the thousands of students, faculty, and staff that drive to campus everyday, only 32 cars have a reduced-rate carpool parking pass. A carpool parking pass for the 2004-2005 school year cost \$84 a year for the vehicle. A carpool consists of three or more people, at least two of whom must be affiliated with the university. If carpools arrive on campus before 9:30 in the morning they can visit the 13th Avenue kiosk for a hangtag, which allows them priority parking along 13th Avenue between Agate and Kincaid Streets. Carpool parking permits are available from Transportation and Parking Services. Faculty and staff drive to campus at a rate three times that of students. By and large, they live further away from campus than students and are less likely to take alternative modes of transportation. Of the approximately 18,000 students who arrive on campus each day, only 19 percent of them drive their cars. Of the approximately 4,000 faculty and staff, 60 percent arrive alone in personal automobiles.²³

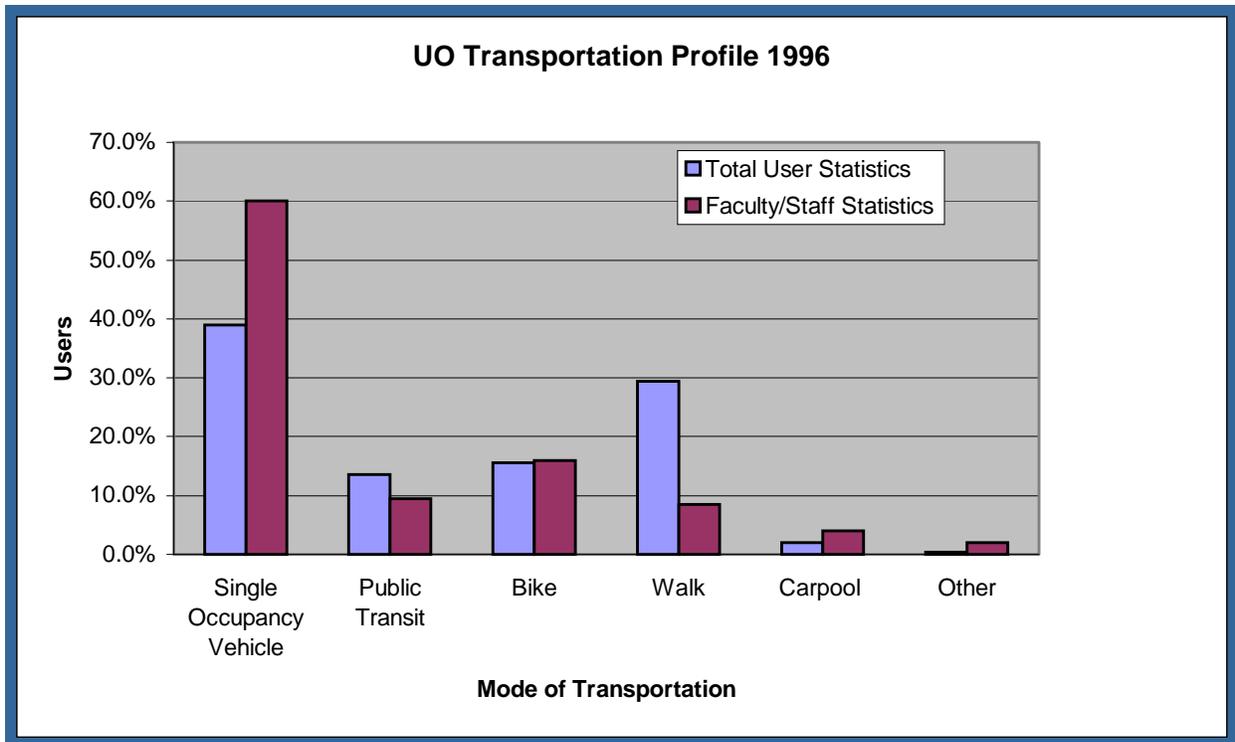
3.4 Discussion

While the number of students driving to campus is greater than that of faculty and staff, percentage-wise, students are more likely to utilize the alternative transportation options made available to them. Targeting faculty and staff for an alternative transportation campaign also makes sense because faculty and staff have a longer-term relationship with the university. In general, the student population turns over every one to five years, depending on the program. Faculty and staff are more likely to stay with the university for a longer period of time and so are a better investment of time and energy when it comes to education about alternative transportation.

²¹ University of Oregon. Choices: Transportation System Analysis. Oregon: 1996

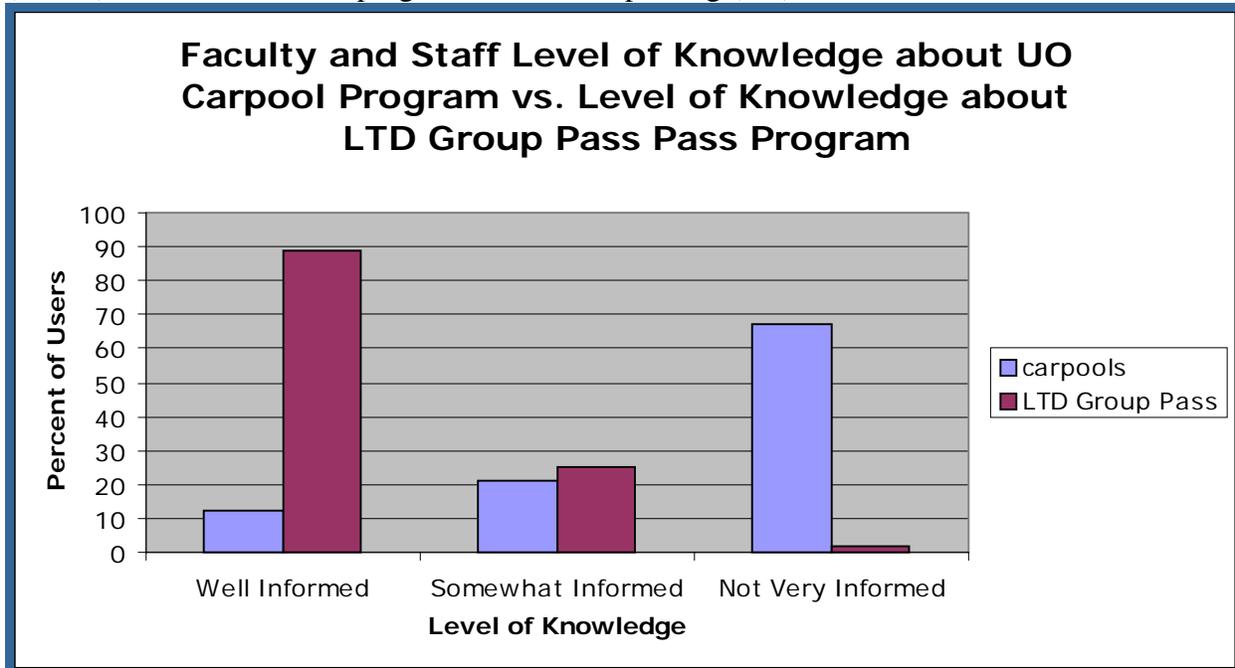
²² Rand Stamm, interview January 19, 2005. Appendix O.

²³ University of Oregon. Choices: Transportation System Analysis. Oregon: 1996



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Well-publicized programs such as the LTD Group Pass Program show a higher rate of use (10.5%) than lesser-known programs such as carpooling (7%)²⁵



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²⁴ CHOICES 1996. UO Planning Department.

²⁵ Docker, Fumiko. Survey: "Frequencies for UO Transportation Modes." Feb. 2005.

²⁶ Docker, Fumiko. Survey: "Frequencies for UO Transportation Modes." Feb. 2005.

With 90 percent of faculty and staff reporting that they are “well informed” about the LTD Group Pass, it is safe to say that the 10.5 percent of UO employees who take the bus is as close to saturation as the community can expect. The program is well publicized and commuters have made their transportation choices with full knowledge of public transit options. However, 66 percent of faculty and staff report that they are “not very informed” about the current carpool program. Faculty and staff who work regular hours on campus (as opposed to students whose schedules are frequently harder to coordinate) and tend to live further away from the University are excellent candidates for carpooling. While 7 percent of faculty and staff say they are carpooling to work on a regular basis, the 32 registered carpools at UO suggest that less than one third of total carpoolers on campus receive any benefits from the carpooling program such as reduced rates and priority parking.²⁷

3.5 Conclusion

The UO does an excellent job of limiting the rate of single occupancy vehicles arriving on campus each day by facilitating alternative transportation programs for bikes, walking, buses, and carpools. While most programs are well publicized and utilized, there is an opportunity to promote and improve the carpooling program on campus.

4.0 Alternative Transportation Campaign

4.1 Goals

At the beginning of our alternative transportation campaign, we set realistic goals for the impact and reach of our campaign. The purpose of the alternative transportation campaign was to influence the transportation habits of faculty and staff at the university. At the onset of our campaign, 60 percent of faculty and staff members were arriving on campus in single occupancy vehicles (SOVs).²⁸ Our goal was to have one quarter of the faculty and staff participating in the One Less Car competition who usually drive alone leave their SOV at home at least once during Earth Week. On a more long-term scale, we hoped to increase the number of carpools on campus by ten to twenty percent. For the 2004-2005 school year, 32 carpool parking permits were issued. We therefore hoped to increase this number by three to six new carpools. Our final goal was to enlist the help of 20 department organizers to distribute information about our campaign to their department, which implies that we hoped to involve at least 20 departments in our campaign.

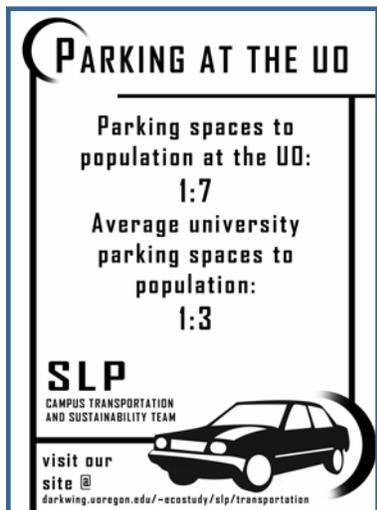
4.2 Implementation

To ensure that our transportation campaign had as widespread of an effect as possible, we adopted a varied approach that included different projects and methods. Because the underlying focus of our campaign was to increase the rate of alternative transportation usage among faculty and staff, a significant amount of time was devoted to organizing the department competition. Our Earth Week booth and bike repair services were instrumental in influencing the campus

²⁷ The 32 registered carpools indicate that approximately 100 people carpool to campus regularly, but the statistic that 7% of the 4000 faculty and staff carpool, indicates that at approximately 300 faculty and staff choose carpooling as a regular means of commuting. Docker, Fumiko. Survey: “Frequencies for UO Transportation Modes.” Feb. 2005.

²⁸ Docker, Fumiko. Survey: “Frequencies for UO Transportation Modes.” Feb. 2005.. Pg 1.

population outside of the departments involved in the competition and provided a way for us to connect directly with the public. A range of printed and online material provided the necessary publicity and education for the entire process.



4.2.1 Education and Outreach

Our publicity efforts were closely linked to our educational efforts; therefore any information we distributed both promoted our campaign and informed people about alternative transportation options. Our outreach protocol had two factors. We attempted to provide both the motivation to use alternative transportation, through compelling health and environmental statistics, and the means to do so, by publicizing the availability and convenience of existing programs. We distributed information in several different ways: via email and our website, by creating posters that highlighted campus transportation programs, by posting lawn signs and distributing flyers, and from our booth, both verbally and with brochures.

The regular emails we sent to our department organizers relied heavily on our web page as an informational supplement. Similarly, all of the hard-copy publicity material we distributed included the URL of our web page. The lawn signs were the most extensive method of outreach we created outside of our web page. We had three different sets of signs. The first two sets contained general information about the benefits of using sustainable transportation, the hazardous impacts of conventional transportation, and the current status of the UO's transportation program. The third set was posted the week before our Earth Week campaign and publicized our booth and events. We also developed several leaflets and flyers that advertised the university carpool program, which were then distributed to faculty and staff mailboxes before and after the competition. The last aspect of the outreach process occurred at our booth during Earth Week. During this time, we were able to interact directly with the public and answer questions while distributing brochures from other transportation oriented organizations in Eugene. Our posters, which we created to publicize university transportation programs, were also on display at the booth and provided a visual addition to our education campaign.

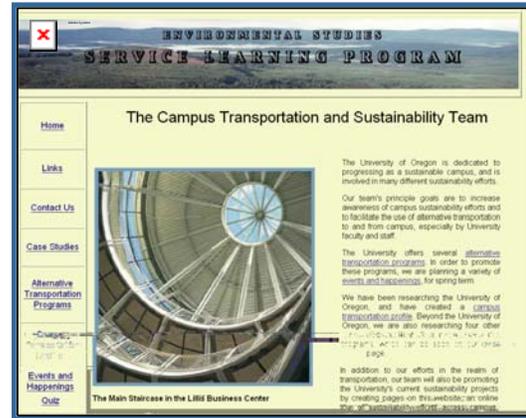
4.2.2 Carpool Database

In order to increase carpooling rates at the UO we explored the possibility of a carpool database to connect those interested in forming a carpool. We were able to contract the development of the database out to a database class on campus, DCS 288, Database Management Systems. An initial pilot version was completed that allowed users to enter their departure and arrival information and then enabled them to contact other carpooling partners in their vicinity via email. Unfortunately, we were unable to use the database due to lack of sophistication of the final product. Because it is unfinished, we have substituted the LTD website, which is similar in its objective, in place of our original database. Nonetheless, a prototype version with considerable potential was created and may serve as a model for a virtual rideshare board in the future.

4.2.3 Website

Our website has proved to be an invaluable tool as our campaign has progressed. It has provided us with a connection to the community through which we can readily distribute information. In turn, those who access it use it as a means of communicating with us.

Initially our site consisted of an introduction page, a links section, information on our case studies and a contact page. As we have added to our site, it has grown in technical complexity and scope. Our more recent updates include a profile of campus transportation, an events and happenings page, and individual informational pages devoted to each university transportation program. The goal of each of these individual pages is to assist both new and experienced users of alternative transportation in their mode of travel by concisely explaining the available programs and how one accesses them while also providing any necessary links to related sites. We have also integrated several newer interactive media elements on our page, including a Flash quiz and a virtual sustainability tour of campus. Finally, this final report and our carpooling proposal can be found on the website.



In its entirety, our website is one of the most inclusive compilations of transportation data for the UO. Moreover, the visual and functional design is of a high degree, allowing for the information contained within the pages to be distributed with greater ease. Through the assembly process, our team gained valuable expertise and experience. The end result of our collaboration is a product that has supported our campaign by providing an information center that is accessible to the general public.

4.2.4 Events

The alternative transportation campaign culminated in April with two main events – the One Less Car competition and the Earth Week booth. The competition was held between faculty and staff from 18 departments during Earth Week. The purpose of the competition was to provide an incentive for faculty and staff to try using alternative transportation and to reward those who already do, with the ultimate goal of long-term change. The Earth Week booth was located at the heart of the UO campus during the same week. The purpose of the booth was to provide an array of information on alternative transportation programs offered by the university and to provide general transportation information for the Eugene community. In addition, practical services like free bike repair were offered.

4.2.4.1 One Less Car Campaign

To encourage faculty and staff to use alternative transportation, the team held the One Less Car competition between university departments. Participating departments competed to see which department could average the highest number of alternative transportation miles per person, per day, during Earth Week. Departments received one point for every mile of alternative transportation commuted to and from campus. Departments also received points added to their raw score for visiting the team's Earth Week booth. The raw score of a department's points was calculated by dividing the total alternative transportation miles by the total number of days commuted to campus that week by all the department's members, whether or not the members

were using alternative transportation. For their efforts, the department with the highest final score was awarded a lunchtime, onsite visit from a professional masseuse.

Recruiting Department Organizers

Each department had a volunteer “department organizer” who collected data on how people commuted to campus each day. To recruit organizers, an invitation was sent out via email to Recycling Director Karyn Kaplan’s “Environmental Concerns” list serve as well as to the Environmental Studies faculty list serve. This email recruited nine of the eighteen department organizers. Other organizers were enlisted through direct calls or in-person visits to specific departments or department members. A list of department organizers appears in Appendix B.

Competition Publicity

Once department organizers were recruited, a thank you email was sent out along with a request that the department organizer allow the team to announce the competition at a department meeting at the beginning of spring term. The goal of the department meetings was to present the competition to department members in a way that would raise awareness and excitement for the competition before Earth Week. While only one department (Academic Learning Services) actually hosted the team at their meeting, a team member met with every department organizer personally in the weeks before Earth Week to explain the One Less Car competition and hand out materials. The department organizers received a flyer advertising the One Less competition (in both paper and electronic form), a plain text email to forward to department members outlining the competition, and a spreadsheet on which to record the necessary information. (See Appendices R for spreadsheet.) Team members visited offices to put flyers in department members’ mailboxes and sent out multiple reminder emails both to organizers and to department members during and in the week preceding the competition.

Competition Results

A wrap-up email was sent out after Earth Week to remind department organizers to send their completed spreadsheets back to the team, who then tabulated the final results. The email also included a thank you and an informational message to be forwarded to department members. Multiple department organizers reported that they were unsuccessful in gathering the data requested and had to be dropped from the competition. Seven departments were able to provide complete spreadsheets with data on all members of the department. A table with the final results for each department able to send in completed spreadsheets appears in Appendix G, and a template for collecting department information is in Appendix R. Several departments sent in department member comments about alternative transportation in lieu of competition data. These comments were taken into consideration by the team as we evaluated the success of the competition and the state of alternative transportation at the UO in general.

ONE LESS CAR COMPETITION

- Use alternative transportation during Earth Week, April 18th-22nd, and **WIN A FREE MASSAGE!**
- Tell your department organizer, _____, how many miles you traveled and how. The department with the highest average alternative transportation miles per day wins a free, on-site, lunchtime chair massage!
- Free carpool passes are also available for all those who participate in the competition during Earth Week. Ask your department organizer for more information, or stop by our booth on 13th and University.

darkwing.uoregon.edu/~ecostudy/slp/transportation



4.2.4.2 Earth Week Booth



about alternative transportation specifically at the UO. Brochures, maps, and other information were provided by the City of Eugene. Our team created the posters in the last weeks of winter term. Starting mid-week, the booth also featured free bike repair and the chance to speak one-on-one with local bike mechanics.

Raffle

The raffle was open only to students who had arrived on campus that day using a form of alternative transportation or who entered themselves into the online carpool database. The majority of the raffle entries came from bicyclists and walkers. People could enter the raffle Monday through Thursday, and our team drew the winning tickets on Thursday afternoon. Prizes were then available for pickup at our booth on Friday, and in the Environmental Studies office thereafter. There were approximately 100 entries in the raffle, and 21 prizes were distributed. The raffle was made possible by donations from these local businesses: Collin's Cycle Shop, WheelWorks, Blue Heron Bicycles, Sundance Natural Foods, Café Yumm!, and the Sub Shop.

Information

The Earth Week booth provided campus users with information about their options regarding alternative transportation. This information was available on large-format posters created by the team, which focused on alternative transportation at the UO in general, bicycling, taking the bus, and carpooling at the UO.²⁹ Posters were positioned to be visible to pedestrians and other passersby. Further information was found in brochures and flyers from the city, which covered traffic safety, proper helmet use, and a map of Eugene bicycling routes. All information was free to the public.

Bike Repair

The Earth Week booth featured free bike repair from 10 am to 4 pm during the UO's Earth Day celebration on Wednesday, April 20th and from 10 am to 2 pm on Thursday, April 21st. The UO Craft Center provided us with the necessary tools and bike stands. Volunteer bicycle mechanics came from various local bike shops, including Revolution Cycles, Paul's Bicycle Way of Life, Hutch's, WheelWorks; there were also a few independent mechanics. Mechanics volunteered for one-hour shifts, with the exception of Shayne Ayrsmann of Revolution Cycles, who volunteered nearly the entire day on Wednesday. The bike repair was a very popular feature, so the team extended its operation to Thursday as well, with Ayrsmann as our sole mechanic.

²⁹ See Appendix H.

4.2.5 Carpool Proposal

The Campus Transportation and Sustainability Team presented a carpool proposal to the UO Department of Public Safety with suggestions for improving the carpool program at the University of Oregon. This proposal addresses the lack of carpoolers on campus, the benefits of carpooling, UO carpooling goals, and provides suggestions for improving the existing carpooling program. This proposal, presented as a written report and as a PowerPoint presentation, provides a guiding tool to increase the carpooling population at the UO.



Suggestions Proposed to DPS

The top priority of the proposal was to increase carpooling and decrease the use of single occupancy vehicles at the university. The following is a list of suggested methods to achieve this goal:

- Offer several carpool “packages” with three, four and five day options
- Increase priority parking in several surrounding UO student and faculty lots
- Reclassify carpool occupancy minimum from three to two people
- Decrease costs of carpool parking passes while increasing the cost of standard parking permits
- Enhance convenience of Guaranteed Ride Home Program
- Create/purchase UO only carpool database, managed by a student work study position, mentioned below
- Create new Carpooling Coordinator position for a student with work study

Benefits

The carpool proposal outlines the most substantial benefits of carpooling. These benefits exist on a wide spectrum from the reduction of stress (for both the users and the Department of Public Safety) to the preservation of the environment. Furthermore, carpooling is economically advantageous in that it reduces automobile and parking structure maintenance and gas costs. These advantages are great incentives on an individual level and invaluable to an institution such as the University of Oregon. A boost in the usage of the carpooling program on a university-wide scale has the potential to reduce the transportation expenses of the university and have a positive environmental impact by decreasing automotive emissions.

Barriers

There are unfortunately many perceived barriers to carpooling. The largest barrier is the lack of convenience that arises when relying on someone else for transportation. Those who work at the UO often have irregular schedules that make carpooling unappealing. Aside from the lack of flexibility, many people at the university are completely unaware that a carpooling program exists at all. The lack of education and publicity surrounding the program is a serious

detriment to its success. Finally, there are inadequate incentives for potential carpoolers. Although a carpool permit costs less than a regular parking pass, the difference is not significant enough to encourage many people to make the transition. In addition, while priority parking spaces are available carpoolers, their number and use is limited, possibly as a result of their location. If priority parking was provided at multiple points on campus, it is probable that it would be more popular. In a recent survey, 38 percent of faculty and staff members stated that they would be willing to carpool if there were increased numbers of desirable parking spaces reserved solely for carpoolers.³⁰

Strategies

To make carpooling as convenient as possible and reduce any initial anxiety over carpooling, we have proposed a range of different carpooling pass packages that cater to various needs. These passes offer decreased rates to a rideshare of two people as well as to groups of three or more. The packages also provide carpoolers with a number of free regular parking day passes for added convenience.

3 person carpool, 5 days a week: \$10 for a year**	
Includes	(1) \$30 parking permit + 1 (bonus) day pass per person, per term, for 3 terms
Total Cost	\$30
Savings in parking	\$200*
3 person carpool, 4 days a week: \$40 for a year**	
Includes	(1) \$30 parking permit + (10) \$1 day passes per person, per term, for 3 terms
Total Cost	\$120
Savings in parking	\$170*
3 person carpool, 3 days a week: \$70 for a year**	
Includes	(1) \$30 parking permit + (20) \$1 day passes per person, per term, for 3 terms
Total Cost	\$210
Savings in parking	\$140*
2 person carpool, 5 days a week: \$30 for a year***	
Includes	(1) \$60 parking permit + 1 (bonus) day pass per person, per term, for 3 terms
Total Cost	\$60
Savings in parking	\$180*
2 person carpool, 4 days a week: \$60 for a year***	
Includes	(1) \$60 parking permit + (10) \$1 day passes per person, per term, for 3 terms
Total Cost	\$120
Savings in parking	\$150*
2 person carpool, 3 days a week: \$90 for a year***	
Includes	(1) \$60 parking permit + (20) \$1 day passes per person, per term, for 3 terms
Total Cost	\$180
Savings in parking	\$120*

³⁰ "FREQUENCIES OF UO TRANSPORTATION MODES" 2005: Campus Transportation Survey. p. 1.

*Based on the price of a 2005-2006 regular parking permit (\$210) if DPS raises the cost of parking by the group's recommended 25%. The cost of a parking permit for 2004-2005 was \$167.

**Cost of the parking permit split two ways.

***Cost of the parking permit split three ways

A carpooling database could provide a secure method of connecting and coordinating people interested in carpooling. We also recommended that DPS expand the number and location of priority parking spaces available to carpoolers and encourage their use through widespread education and publicity. Finally, we proposed the creation of a student position of Carpool Coordinator to be supervised by the Sustainability Office in order to manage these developments beyond the duration of this SLP transportation team.

Costs

While proposing goals for the amendment of the carpooling program on campus, it is important to keep in mind that the entire University Transportation and Parking Services division subsists on the revenue generated by parking fees. Any significant changes made to the current structure of the parking program therefore have the potential for financial impact. While the aim of our proposal is to decrease the number of regular permits purchased, it is likely that the resulting loss of revenue will be compensated for by the increase of the standard permit price that we suggested. Furthermore, the savings in maintenance and parking space construction that result from reducing vehicle traffic on campus would help to balance the decreased revenue from fewer permits being sold. The Carpool Coordinator position would ideally be filled by a student worker whose employment costs would be minimal.

These goals, along with the entire proposal, were presented to the Department of Public Safety on June 8, 2005. We intended to provide DPS with a realistic methodology to reform the carpool program so that its use becomes on par with other successful alternative transportation programs within the university. See Appendix F for the complete carpool proposal.

4.3 Discussion

We feel we have been reasonably successful in meeting our stated goals. The first was to have one quarter of the faculty and staff in participating departments who normally drive alone leave their SOV at home at least once during the course of the One Less Car competition. Thirty-three of the eighty-five participating faculty and staff were regular solo drivers, but during Earth Week, fifteen of the thirty-three tried alternative transportation at least once. We thus exceeded our goal by 20 percent and the faculty and staff average by 30 percent, thanks to the 45 percent of solo drivers who tried alternative transportation.

71% of participating faculty and staff members used alternative transportation at least once during Earth week, surpassing the average by over 30%.

Our second goal for the alternative transportation campaign was to create three to six new carpools on campus. At the time of writing, there were two new carpools at the UO. This means that we came close to meeting that particular goal.

Finally, we hoped to include 20 departments and department organizers in the One Less Car competition. At the onset of Earth Week, we had 18 department organizers. Of those, 14 participated in the competition and seven gave us usable data on their department's participation.

Though we were short of our intended goal of 20, we feel this is a reasonable level of participation, given that this was the first year that the One Less Car competition took place at the UO.

Despite the strong interest expressed by most department organizers and those who were regular alternative transportation users, many department organizers articulated that they did not feel as though they properly prepared their departments for the competition. Because of this, organizers were either unable to gather the needed data, or unable to communicate with their department members about alternative transportation options. Earlier action on the part of the team might have helped to facilitate department member interest in and knowledge of the competition. The gap of time between department organizers' recruitment and Earth Week was long enough that people seemed to lose some interest and momentum. Immediately after initial organizer recruitment would have been a good time to start promoting the competition in departments. Publicity for the One Less Car competition could have begun as early as the last weeks of winter term and might have inspired a better turn out.

45% of participating, regular solo drivers tried alternative transportation at least once during Earth Week, far exceeding our original goal.

The positive effects of excitement and publicity for the competition were exemplified in the Academic Learning Services (ALS) department; they were the only department that hosted the team for an informational meeting, members of ALS regularly visited the Earth Week booth, and they had an excellent rate of alternative transportation use. Of the twenty-two ALS department members, eighteen used alternative transportation every day of Earth Week. Of the eighteen alternative transportation users, six were regular single occupancy vehicle commuters most of the year. The visibility of the campaign within the department was due in part to the informational

meeting, but mostly to the outstanding leadership of department organizer, Georgeanne Cooper. Her efforts to inspire fellow staff provide a model for future campaigns. Almost all department organizers said that they looked forward to a competition next year that would benefit from the learning process of the initial competition. Based on the enthusiasm of participating departments, the numbers of participating departments can be expected to increase in future years.

Approximately 125 people visited the Earth Week booth and received information about alternative transportation options at the UO. We estimate that hundreds more read the educational posters in passing. We were able to recognize over 100 people for using alternative transportation to campus by entering them in our free raffle; of those, twenty-one were awarded a prize. We estimate that thirty people received free bike repair. The free bike repair appeared to be the most popular element of the Earth Week booth. It both encouraged and facilitated bike commuting to campus. Cyclists received a free tune-up and learned about commuter safety and their personal transportation at the booth. Shayne Ayrsmann, owner of Revolution Cycles, commented that it was also an excellent opportunity for mechanics to interact with the campus community. Not only did students benefit from the free bike repair, local bicycle shops benefited from the additional publicity. Shortly after our event, a student group hosted a "Biker Appreciation Day" based on our booth that offered snacks and free repair to bikers.

One issue with the free bike repair, however, was that many students were too busy to stop and have their bike examined. Many expressed that they were sorry they had to go to class rather than bring their bike in for a tune-up. In the future, it will be beneficial to offer free bike repair during the entire week, rather than just for the Earth Day festivities. This will allow cyclists ample time to visit the booth.

Another element that can be improved upon in future years is publicity for the Earth Week booth. We posted lawn signs a week in advance, advertising the booth and free bike repair. We also advertised with the departments participating in the One Less Car competition through email and flyers the week prior. During Earth Week, the Oregon Daily Emerald ran a story about the booth and free bike repair.³¹ However, had there been further and earlier efforts at advertising, there may have been an even bigger turnout at the booth. It was difficult to advertise in advance, as concrete scheduling for the location of the booth and the times for bike repair was not in place early enough. In the future, we suggest scheduling the volunteer bike mechanics and the location of the booth a full month in advance to allow for sufficient advertising. Another suggestion is to advertise through a wider variety of media, possibly including an announcement in the Oregon Daily Emerald, in-class announcements by the booth's organizers, and posters on billboards around campus.

Overall, the alternative transportation campaign educated over 275 faculty and staff members and hundreds of students about their options for commuting to the UO. Issues concerning space, pollution, and health that apply to the everyday commuting behavior of university users were publicized as part of the Earth Week competition. The competition was a good way to distribute ideas and information about alternative transportation in a fun and friendly manner. Therefore, while the turnout for the competition was not as high as the team hoped, we feel the competition was still fairly successful in raising awareness of the issues surrounding alternative transportation.

4.4 Conclusion

The goals set in the beginning of the alternative transportation campaign guided the creation of two main events. The One Less Car competition and the Earth Week booth laid the foundation for alternative transportation events in the future, which will benefit from insights gained in this year's events. Advertising our events through a variety of media, including lawn signs, stickers, flyers, an article in the Oregon Daily Emerald, and our website, was key in our campaign. However, the success of both the competition and the booth could have been heightened by even larger publicity efforts.

5.0 Campus Sustainability Education and Outreach

5.1 Goals

One major goal of the Campus Transportation and Sustainability Team was to educate members of our campus community and the general public about sustainable practices on campus with the hopes of fostering a campus culture that supports further efforts in this realm. While individual students, faculty and staff at the university have carried out a wide variety of initiatives on the academic and operational level, many of these efforts have not been widely publicized.

³¹ See Appendix E.

5.2 Implementation

Our team's task was to provide quality information about sustainability at the UO. There were several ways in which we educated the public about the UO's current sustainability initiatives, including flyers, online resources, and posters relating to campus sustainability.

5.2.1 Campus Sustainability Database

The online Campus Sustainability Database, maintained by the Environmental Health and Safety, features information regarding over 60 sustainability initiatives in place at the university of Oregon. The database includes information on projects such as biodiesel vehicles, solar energy, animal habitat, green buildings, and sustainability groups on campus. Throughout the terms, our team updated the database with pictures to enhance its aesthetic quality and to illustrate the many sustainability efforts being undertaken at the UO.

5.2.2 Campus Project Posters

In spring term of 2005, the team created posters about eight sustainability initiatives at the UO. These posters presented information on: the solar water heaters atop Gerlinger Annex, the Earth Tub industrial food composter, biodiesel equipment used by Facilities Services, the animal habitat project to create a natural environment for birds and animals, efficient irrigation, the use of wind power for the student union, the bioswale at the Millrace, and solar energy at the Student Recreation Center. The posters will be stationed at various locations around campus or used for promotional events, depending on the content of the poster.

5.2.3 Virtual Sustainability Tour

The team created an interactive version of the Tour of Sustainability Initiatives, a brochure which was formerly available only as hardcopy or downloadable pdf file. Found at: <http://darkwing.uoregon.edu/~ecostudy/slp/transportation/>, this tour uploads a map that allows the user to "visit" certain sustainability projects for more information with the click of a mouse.

5.3 Discussion and Conclusion

Our team has helped the UO by promoting sustainable practices taking place around campus. Although our efforts only make up one small portion of the work the university must do to unite all the initiatives taking place on campus, we hope that greater knowledge of ongoing projects will encourage and future projects and contribute to a culture that supports a sustainable campus.

6.0 Discussion

6.1 Recommendations

Our team completed extensive research on the current alternative transportation programs in place at the UO. Overall, the university is progressive when it comes to alternative transportation. However, we found that the carpooling program could be improved upon, as the current program is under-utilized by the campus community. In order to increase the number of carpools arriving on campus, we suggest that the UO implement the measures put forward in our

proposal to DPS to encourage carpoolers and discourage single occupancy vehicle use. The proposal suggests that DPS lower the annual rate for carpool parking permits while raising the price of standard parking passes; offer more flexible plans for carpooling to campus, including a two person rideshare option; create an online carpooling database for networking; and create a new Carpool Coordinator student position, who will facilitate carpool formation and implement a renewed publicity campaign.

Furthermore, based on the popularity of the Earth Week booth, free bike repair, and One Less Car competition, we recommend that the Earth Week events put on by the team become an annual project for a Carpool Coordinator working under the direction of the Sustainability Office or DPS. Alternative transportation users, especially bikers, expressed enjoyment of the team's informational Earth Week booth and free repair services. In general, we perceived that some people who use alternative transportation methods enjoyed networking and receiving encouragement for their environmentally friendly efforts and behavior. The bike repairs, free bike maps, raffle, and bike pins were particularly popular with the biking community. We believe that if the same sense of community or pride were felt among users of other forms of alternative transportation, such as bus riders, walkers, or carpoolers, more people might be encouraged to use these forms of transportation. The university has the opportunity to facilitate an appreciation for alternative transportation by creating special events, such as the events the team orchestrated. We believe that one of the biggest impediments to using alternative transportation is adequate commuter knowledge about their choices and the impacts of those choices. Therefore, our final recommendation is that the UO intensify its efforts to educate campus commuters on the opportunities available to them, as well as the benefits of alternative transportation to the user, the campus community, and the environment.

6.2 Conclusions

The Alternative Transportation and Sustainability Team has conducted a campaign to encourage the use of alternative transportation in commuting to and from the UO, orchestrated events, and otherwise promoted the sustainable efforts that the UO is undertaking. Universities play an important role in their local and global communities, as they provide an influential example of what powerful institutions can do. This gives initiatives that work towards a sustainable campus meaning beyond the tangible effects on campus. The work done towards sustainability on one campus, as noted when we conducted case studies, is seen by others nationwide as an example of positive behavior. As the UO continues to grow, we hope that the use of alternative modes of transportation continues to be encouraged, especially by faculty and staff who will remain at the university long after students graduate and move on. The University of Oregon has been a leader in alternative transportation use and sustainability issues in the past, and will hopefully continue to be one into the future.

7.0 Appendices

Appendix A. Final Work Plan

Campus Alternative Transportation Campaign 2004-05 Work Plan

Background

The Environmental Studies Service Learning Program (SLP) at the University of Oregon supports local and regional efforts to promote and maintain a healthy environment through a variety of research, monitoring, and educational outreach projects. The program operates as follows: teams of students, consisting of one graduate student, four undergraduates, and overseen by the SLP coordinator, work on small consulting projects for private and governmental organizations. Our clients receive high quality services, and our students gain job skills and receive project management experience.

The University of Oregon wants to increase faculty and staff participation in its existing alternative transportation programs. The Service Learning Program will develop and implement a campaign to increase both awareness and use of alternatives to driving alone to campus. In addition, the SLP will produce educational materials describing several other sustainability efforts taking place on the University of Oregon campus.

II. Proposed Work Program

The Environmental Studies Service Learning Program will be responsible for completing all project related tasks. A team of four juniors and seniors – Jody Trendler, Jessie Oettinger, Savannah Crawford, and Jennifer Jacobs - will work over the course of the academic year to complete the work. Sarah Mazze, a graduate student, will be the project manager and will be responsible for all day-to-day operations. Steve Mital, the Service Learning Program Coordinator, will supervise and work directly with Sarah Mazze.

Description of Tasks

There will be four components to this project:

- I. Orientation
- II. University of Oregon Alternative Transportation Campaign
- III. University of Oregon Sustainability Education and Outreach
- IV. Reporting and Wrap-up

The project work will begin by January of 2005 and conclude by June 15, 2005. The specific tasks are described below.

Component I. Orientation

Task 1 – Review Existing Background Material

The SLP team members will read all pertinent background material including an overview of sustainability and alternative transportation initiatives on US campuses.

Schedule: December 2004 – January 2005

Products: Annotated Bibliography, PowerPoint Presentation

Task 2 – Design and launch project website

The SLP team will create a website describing their goals and planned activities. The website will contain information about the links between transportation, energy consumption, and the environment. The website will provide comprehensive information on alternative transportation options available to faculty and staff. It will be updated periodically over the 6-month project duration. The website will contain a profile of current campus transportation patterns. Goals of the project as well as details of the outreach campaign will be posted on the website.

Schedule: January 2005 – June 2005

Product: Website

Task 3 - Compile research on University of Oregon transportation

The SLP team will gather and compile information on current campus transportation patterns, energy use, and emissions. They will do this through meetings with campus facilities staff and other research.

Schedule: January 2005

Product: Document

Component II: University of Oregon Alternative Transportation Campaign

Task 4 – Establish specific goals for alternative transportation campaign

The SLP team will set goals for increased faculty and staff participation in alternative transportation modes. These goals will later be used to measure the success of the campaign

Schedule: January 2005

Product: Report

Task 5 – Develop Events

The SLP team will develop events designed to encourage faculty and staff to use alternative transportation to get to and from campus during the Spring Quarter. The team will create a brochure - to be distributed electronically and by paper – that describes the events. If possible, the team will solicit prizes from local vendors to give away as incentives to try alternative modes of transportation.

Schedule: January - February 2005

Product: Brochure

Task 6 – Identify Department Organizers

The SLP team and project manager will recruit a staff or faculty member from approximately 20 departments to act as a department transportation coordinator. Department coordinators will receive assistance in coordinating and encouraging alternative transportation efforts within their departments.

Schedule: January - February 2005

Product: List of organizers

Task 7 – Collect pre-campaign data

The SLP team will work with the department organizers to collect information regarding current transportation patterns in each of the departments. The SLP team will compare this data with post-campaign data to assess the effectiveness of the campaign.

Schedule: February - March 2005
Product: Excel spreadsheet

Task 8 – Carry out events

The team will carry out planned events such as “Bike Fridays with Dave,” a friendly interdepartmental competition, and /or a week-long “bus buddy” program. The SLP team will also plan a year-end party to recognize department organizers.

Schedule: April – May 2005
Product: Various Events

Task 9 – Assist with carpool organization

The SLP team may work with Grant Castner’s database design class to create a carpool database to facilitate faculty and staff carpooling to and from campus. If unable to create a campus database, the team may use the existing city of Eugene GIS database. The project manager will work with Rand Stamm to issue free trial membership carpool passes.

Schedule: Jan – March 2005
Product: Carpool database

Task 10 – Facilitate bus riding

The SLP team may assist interested faculty and staff in determining when and where to catch the bus for service to and from campus. They will promote the service through the department organizers and then either create a database or serve as assistants to interested parties. The SLP team may also create a “bus buddy” program in which seasoned bus riders will be encouraged to ride with a first timer.

Schedule: March – May 2005

Task 11 – Produce proposal for a campus bike repair service

The SLP team will develop a proposal to create an on-campus bike repair service. The proposal will be presented to the ASUO Senate for funding consideration.

Schedule: April 2005
Product: Written proposal and accompanying PowerPoint

Task 12 – Conduct case studies

The SLP team will research what 4 other universities are doing to increase participation in alternative modes of transportation. Possible case studies include University of Washington and University of California at San Diego.

Schedule: January – May 2005
Product: Report

Task 13 – Collect post campaign data

The SLP team will work with the department organizers to collect information regarding current transportation patterns in each of the departments. The SLP team will compare this data with pre-event data to assess the effectiveness of the campaign.

Schedule: May 2005
Product: Excel spreadsheet

Component III: University of Oregon Sustainability Education and Outreach

Task 14 – Update campus sustainability database

The SLP team will take photos of sustainability projects for the sustainability database. (Picture dimensions for website need to be 256x150 or 512x300)

Schedule: January – March 2005
Product: Photos loaded on sustainability database

Task 15 – Research eight campus projects

The SLP team will select eight campus sustainability projects to research and promote through posters and pages on the website.

Schedule: March – April 2005
Product: Posters, Web pages

Task 16 – Develop virtual sustainability tour

The SLP team will create a virtual sustainability tour housed on the campus sustainability website. The tour will be based on the students' research and the existing campus sustainability tour brochure.

Schedule: March – April 2005
Product: Virtual tour

Component IV: Reporting and wrap-up

Task 17 – Report on success of transportation campaign

The SLP team will collect and compile meaningful data on the success of their transportation campaign to the University of Oregon faculty and staff regarding alternative transportation.

Schedule: March – May 2005
Product: Document

Task 18 – Prepare final presentation

The SLP team will prepare and deliver a PowerPoint presentation that explains the project results.

Schedule: June 2005
Product: PowerPoint presentation

Task 19 – Prepare final report

The SLP team will prepare a comprehensive final report that describes all project work, analysis, and recommendations where appropriate.

Schedule: June 2005
Product: Report

Appendix B. Department Organizers List

Academic Learning Services	Georgeanne Cooper
American English Institute	Andrea Sparks
Career Center	Pat Ferris
CIS	Cheri Smith
DPS	Rand Stamm
Environmental Health/Safety	Kay Coots
Environmental Studies	Galen Martin
First Year Prgms, Oregon Hall	Gretchen Lieberman
Health Center	Jolene Siemsen
Journalism	Erik Talbert
Landscape Architecture	Chad Bush
Political Science	Irene Diamond
PPPM	Marc Schlossberg
Planning	Fred Tepfer
Psychology	Zac Hurt
Solar Energy Lab	Frank Vignola
Student Financial Aid/Scholarships	Paul Carlile
Women/Gender Studies	Sabena Stark

Appendix C. One Less Car Competition Brochure

ONE LESS CAR COMPETITION



REDUCE POLLUTION AND FEEL GREAT

April 18 - 22

Celebrate Earth Day by leaving your car at home this week!

You and your co-workers could win a FREE MASSAGE, simply by taking alternative transportation to campus!

Earn a point for every mile traveled to campus by:

- Walking
- Carpooling
- Bicycling
- Riding the Bus
- Or by visiting our Earth Week booth on 13th

We'll determine the greenest department based on the highest average miles traveled per day using alternative transportation.

Plus! Departments with the highest % participation get bonus points!

For more information, visit our website:
darkwing.uoregon.edu/~ecostudy/slp/transportation

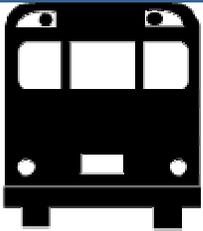
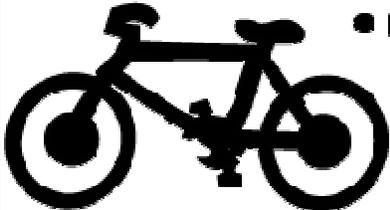
THE POWER IS YOURS



Appendix D. One Less Car Competition Reminder Leaflet

ONE LESS CAR COMPETITION

- Use alternative transportation during Earth Week, April 18th-22nd, and **WIN A FREE MASSAGE!**
- Tell your department organizer, _____ how many miles you traveled and how. The department with the highest average alternative transportation miles per day wins a free, on site, lunchtime chair massage!
- Free carpool passes are also available for all those who participate in the competition during Earth Week. Ask your department organizer for more information, or stop by our booth on 13th and University.



darkwing.uoregon.edu/~ecostudy/slp/transportation

Appendix E. Oregon Daily Emerald article

Earth Week event fosters University eco-awareness

The Service Learning Program runs events that promote biking and other means of alternative transportation

Sheldon Traver
News Reporter

April 20, 2005

Faculty and students are encouraged to use alternative transportation this week as one student group offers free basic bike repair, massages and carpool passes in an attempt to take more cars off the roads in honor of Earth Week.

The Service Learning Program, part of the University's Environmental Studies Program, has a booth set up at the corner of East 13th Avenue and University Street to give interested students and faculty a variety of options for getting to work or school. Visitors can ask questions about alternative transportation, sign up for a carpool and enter a raffle for prizes.

Graduate student Sarah Mazze, project coordinator for the Service Learning Program, said she wants to raise awareness among students and faculty about viable alternatives to driving to campus.

"We're hoping to motivate people to try something new this week," Mazze said. Mazze said part of this week's events include free bike repairs and lessons on how to fix bikes.

Senior Jody Trendler said bike technicians from several local bike shops will bring racks and tools today from 10 a.m. to 4 p.m. to help students with minor issues.

"We aren't going to have replacement parts or anything fancy," Trendler said. "Basically just minor tune-ups and greasing chains."

She said the group plans to have three racks to accommodate as many bikes as possible. It will offer additional lessons Thursday from noon to 1 p.m.

Senior Jessie Oettinger, a member of the Service Learning Program, said the Department of Public Safety has 32 registered carpools on campus representing only 90 carpoolers out of the 20,000 to 24,000 students and faculty who come to campus daily.

Rand Stamm, parking and transportation manager for DPS, said the department has offered students and faculty interested in carpooling a free carpool pass this week. The pass will last for the remainder of the term and will enable cars to park in designated spaces on East 13th Avenue between Agate and University streets.

Oettinger said the only criteria are that one person already has a parking pass, that three people are involved, and that at least two people are affiliated with the University. Mazze said the University is lagging behind other schools in its efforts to create a carpooling program.

"Compared to other universities, we don't have a well-established carpool program," Mazze said. She said the relatively low cost of parking passes doesn't discourage solo drivers and that her group is planning to present a possible course of action to DPS to encourage greater use of the carpool program.

People who stop by the group's booth can also be placed in a carpool registry sponsored by Lane Transit District. This database will match potential carpoolers with others interested in commuting together.

Additionally, the group is holding a contest among 17 University departments and centers. Each faculty member using alternative transportation to get to work can log the miles they travel.

"We're giving away free chair massages to the greenest department," Mazze said. Mazze said her goal is to get more information out to University staff and students. She hopes to see more people using transportation alternatives.

She said her bike ride to school is more than just an eco-friendly lifestyle: "It's a chance to be outside and get fresh air before I lock myself in my office all day."
sheldontraver@dailymerald.com

Appendix F. Carpool Proposal

Service Learning
Program
Carpool Proposal
University of Oregon
2005



Jessie Oettinger
Jody Trendler
Savannah Crawford
Jennifer Jacobs
Sarah Mazze

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Introduction

The University of Oregon's alternative transportation programs are considered successful by many comparable institutions throughout the nation.³² Our impressive ratio of seven people to every one parking space is evidence of this success; most universities operate with a ratio of three or even two people to every one parking space.³³ Even so, some elements of the UO alternative transportation program are underused. This proposal focuses on the carpooling program, which we feel has the potential for increased participation.

The university population is expanding. Parking accommodations are difficult now, and face further challenges in the future. According to Department of Public Safety (DPS) staff, violations, complaints and aggressive behavior are responses occurring on a regular basis by drivers who come into conflict with the parking limitations. Many campus drivers park in the surrounding neighborhoods, to the chagrin of residents and the loss of revenue for DPS. With the growth of the campus population arises a need for land, not only for parking, but also for other forms of infrastructure. There are many environmental, health and societal costs involved with driving, which can be lessened by increasing the use of alternative transportation. In order to lessen the costs of parking expansion and improve the existing situation, changes are necessary.

One response lies in the university's proposed construction of a new parking deck. This structure and any future additions will be costly to the University in a variety of ways, particularly financially. The structure has the possibility to either consolidate or add to existing parking space. If the university chooses the latter option, the decreased stress and hassle associated with finding parking may encourage some university members to drive. Being a large institution, any changes made within the UO have significant repercussions on the surrounding community. If a large parking structure is constructed and the rate of driving increases at the university, then the City of Eugene as a whole will be affected. While our suggestions may not create the space of a new parking deck, we would like to propose the enhancement and publicity of alternative transportation options as a means of "creating" new parking spaces.

During winter and spring terms of 2005, the Campus Alternative Transportation and Sustainability team, under the direction of the Environmental Studies Program's Service Learning Program, has been involved in a campaign to promote all forms of alternative transportation on campus. The research and experience we have garnered during this time has provided us with insight into the mechanics of university transportation and possible innovations. This proposal is the culmination of our work and provides a strategy for enhancing the existing carpool program with the goal of increasing its use by the campus community.

Current Program

Currently, the carpooling program at the University of Oregon has a limited scope. Few people purchase carpool permits, which are made available to all faculty, staff and students at a discounted price. For the 2004-5 academic year, the price of a carpooling permit was \$84, as compared to the price of a standard faculty and staff permit at \$167 or a student permit at \$97. In the same year, the university had 32 registered carpools. Carpools are only available to groups of

³² Stamm, Rand. Transportation Manager, University of Oregon. Personal interview. 28 Mar. 2005.

³³ Hicks, Tom. Director, Public Safety. University of Oregon. Personal interview. 18 Jan. 2005.

three people, two of whom must be university affiliated. Priority parking exists on 13th Avenue for carpools that arrive on campus before 9:30; however this opportunity remains underused and unknown to most of the campus population. In fact, it seems that the policy remains unclear even to staff who manage the parking kiosk. Student carpool permits are only valid in student lots, limiting the appeal of carpooling to students. Moreover, as seen above, the difference between the student standard permit and carpool permit price provides little incentive for carpooling. The Guaranteed Ride Home program exists to encourage the use of alternative transportation by providing a backup ride in emergency situations to those who carpool. However, the program is available solely to faculty and staff and is also under-publicized. According to a 2005 survey of faculty and staff transportation habits, 66 percent of those surveyed feel that they are not very informed about the carpooling program.³⁴ While the carpooling program has the potential to reduce vehicle traffic on campus, the proposed changes might allow for a better fit between the program and the needs of the campus community.

Goals and Strategies

With this proposal, our goal is to set in motion the transformation of the existing carpool program into a highly utilized and popular form of alternative transportation, comparable to the current university bike and bus programs.

Our basic objective is to increase the use of the carpooling program through improved publicity, incentives, convenience and flexibility. Specifically, we propose the facilitation of carpooling through the installation of a UO-only, online database that allows people to connect with carpooling partners. Additional flexibility could be attained through the implementation of parking pass packages with a range of options for those who wish to carpool. We suggest complementing these packages with a reduction in the rate of carpooling passes in conjunction with an increase in regular permit prices. Other incentives include Guaranteed Ride Home vouchers offered in advance to registered carpools as well as more desirable priority parking offered to carpools before 10 am. Finally, we propose the creation of a permanent student position to facilitate and publicize the program.

The proposed strategies for achieving our goals are based on research conducted over the past six months. We modeled the objectives and strategies on successful and innovative carpooling programs at other institutions, including Georgetown, University of Southern Maine, Duke and various businesses. Further background information was gleaned from online and library print sources, as well as personal interviews. The variety of sources cited reflects an attempt to incorporate the full spectrum of opinions and expertise on the subject of carpooling.

We believe that we are at an opportune point in time to enact the above mentioned changes. Aside from the challenges associated with parking at the university, the proposed construction of the parking deck, if carried out, will result in a drastic parking pass fee increase. This preliminary change in price would create a key chance to promote an improved, more appealing carpool program.

³⁴ Docker, Fumiko. CHOICES 2005: University of Oregon Campus Transportation Survey. February – May 2005. 14.

Benefits of Carpooling

By carpooling, a person is benefiting the university, themselves, their carpool partners, and the environment. University, individual and environmental benefits are listed below.

Benefits to the University

As described above, traffic congestion and parking are two of the most problematic transportation issues at the UO. Increased carpooling would lessen the impact of these issues by reducing the number of cars arriving on campus and saving the UO money and space dedicated to maintaining and creating new parking spaces. According to Department of Public Safety director Tom Hicks, out of the roughly one million dollars budgeted for parking maintenance; \$12,400 goes to the construction and replacement of parking lots. This expense will inevitably increase if a parking structure is constructed to facilitate the need for additional parking spaces. A parking structure of 800 spaces would cost \$15,000 per year for maintenance alone.³⁵ Any reductions in vehicle traffic would therefore have tangible financial benefits for the university.

Benefits to the Individual

Carpooling offers a range of benefits to the individual, from relieving stress to saving money. By carpooling, the stresses of driving can be alleviated by sharing the responsibilities and hassles of road congestion, car maintenance, parking or other problems that may arise while driving. Carpooling also minimizes the gas and maintenance costs a single driver will encounter over the course of a year, as shown in the table below. However, for any of these benefits to serve as effective incentives, they must be made known to individual drivers.

Table 1. Monetary Savings from Carpooling³⁶

Money Spent	Vehicles Miles Reduced Per Year	Calculation	Amount Saved
On Gas	5,200	at \$2.00 a gallon	\$520 / year
On Car Maintenance	5,200	at 50 cents a mile	\$2,600 / year
Total			\$3, 120 / year

Figures based on a two person carpool driving 20 miles round trip, five days a week.

Benefits to the Environment

By carpooling, a person makes a lesser contribution to the emission of greenhouse gases, the main anthropogenic cause of global warming, than they would as a solo driver. These substances enter and continually build up in our atmosphere, causing damage to the ozone and increasing the greenhouse effect. Gas emissions and fluid leaks from vehicles are also hazardous to surrounding environments; they contaminate water systems, threaten wildlife, and degrade soil conditions. The following table calculates reduced pollution rates as a result of increased carpooling. The estimates are based on 100 people participating in carpools, each of which drives

³⁵ Hicks, Tom. Personal interview. 18 Jan. 2005.

³⁶ "Benefits of Carpooling." Sacramento TMA. <<http://www.sacramento-tma.org/Carpooling%20Benefits.html>> Accessed 17 May 2005.

20 miles per day. By participating, only 50 vehicles are on the road, saving the amounts described below.

Table 2. Environmental Benefits of Carpooling³⁷

Vehicle Miles Reduced Per Day	Pollutant	Amount Saved	Pollution or Fuel Consumption Saved Per Day	Pollution or Fuel Consumption Saved Per Year
1,000	Hydrocarbons (Urban Ozone [smog] and Air Toxics)	3.5 grams/mile	7 lbs of HC	1,820 lbs of HC
1,000	Carbon Monoxide (Poisonous gas)	25 grams/mile	55 lbs of CO	14,300 lbs of CO
1,000	Nitrogen Oxides (Urban ozone [smog] and Acid Rain)	1.5 grams/mile	3 lbs of NOx	780 lbs of NOx
1,000	Carbon Dioxide (Global warming)	1.0 pound/mile	1,000 lbs of CO2	260,000 lbs of CO2
1,000	Gasoline	0.05 gallon/mile	50 gallons gasoline	13,000 gallons gasoline

Figures based off of fifty carpools made up of two people, driving 20 miles round trip, five days a week

Barriers to Carpooling at the University of Oregon

In a 2005 survey of UO faculty and staff transportation use, only 7% reported carpooling as their primary means of transportation.³⁸ This section of the proposal seeks to clarify the possible explanations for the low number of carpools at the UO. There are several general factors, not unique to the UO, that present barriers to carpooling. Likewise, aspects of the UO's carpooling program may impede its use. For both the general and structural barriers, there are several solutions that could increase the popularity of carpooling at the UO.

General Barriers

Many of the arguments for driving alone to work are the same, regardless of city, workplace, or type of employment. The top five reasons cited by UO faculty and staff for driving alone to campus are (in order of most to least often cited): convenience, distance, the need to transport others, requiring the car for work, and flexibility.³⁹ To place these factors into context, one participant in the One Less Car competition, held in April 2005, explained that irregular hours and a changing daily schedule make regular carpooling a "challenging task."⁴⁰ Though

³⁷ "Benefits of Carpooling." Sacramento TMA. <<http://www.sacramento-tma.org/Carpooling%20Benefits.html>> Accessed 17 May 2005.

³⁸ Docker, Fumiko. CHOICES 2005: University of Oregon Campus Transportation Survey. February – May 2005. 1.

³⁹ Docker, Fumiko. CHOICES 2005: University of Oregon Campus Transportation Survey. February – May 2005. 8.

⁴⁰ K.C. Email correspondence to Erik Talbert. 24 April 2005.

carpooling has many benefits to the user, the transaction costs of finding and organizing a carpool are often daunting enough to discourage a potential carpooler.⁴¹

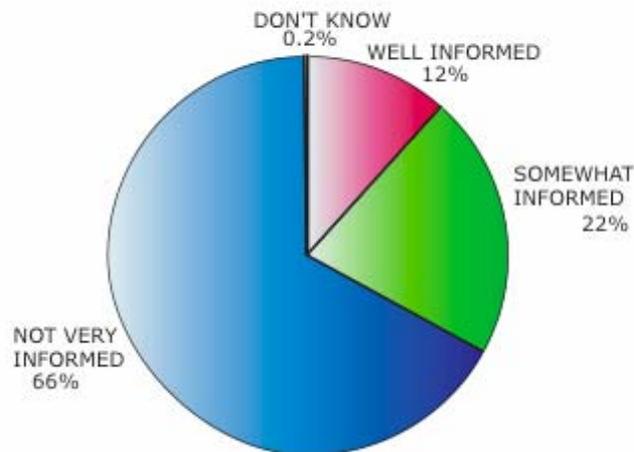
Structural Barriers

Knowledge of Existing Program

In the 2005 CHOICES survey, it was found that the majority of UO faculty and staff are not very informed about incentives to carpoolers, which include priority parking in Lot 13 and cheaper parking permit rates. When asked about their knowledge of the existing DPS carpooling program, 66% of respondents said they were “not very informed,” 22% said they were “somewhat informed,” and only 12% said they were “well informed.”

The response of faculty and staff about their knowledge of the existing carpooling program is illustrated in the pie chart below:⁴²

Knowledge of Carpool Program Incentives



Lack of Incentives and Disincentives

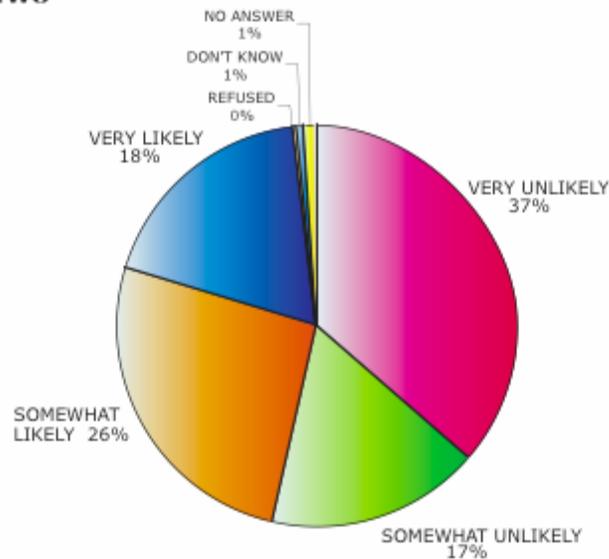
While incentives such as priority parking spaces and discounted parking permit rates are available to carpoolers at the UO, the possibility that these incentives are inadequate for encouraging carpooling should be considered. The analysis of the previously mentioned 2005 survey compared the UO with the City of Eugene. One program offered by the City of Eugene is the Rideshare option, a discounted parking rate for carpools of two people. Below is a chart illustrating the responses of UO faculty and staff, when questioned as to the likelihood they would participate in a Rideshare program:⁴³

⁴¹ Ingram, Gregory K. Urban Planning Policy Analysis and Administration: Reductions in Auto Use from Carpools and Improved Transit. Department of City and Regional Planning, Harvard University; Cambridge, Massachusetts, 1976.

⁴² Docker, Fumiko. CHOICES 2005: University of Oregon Campus Transportation Survey. February – May 2005. 12.

⁴³ Docker, Fumiko. CHOICES 2005: University of Oregon Campus Transportation Survey. February – May 2005. 14.

Discount “Rideshare” Parking Permit for Two



This graph shows that 44% of faculty and staff are either very or somewhat likely to try a Rideshare, indicating that a Rideshare discounted parking pass would be fairly popular among UO faculty and staff.

The UO pricing on parking permits is likely not prohibitive enough to discourage solo driving, nor the discount for carpooling significant enough to woo potential carpoolers. The City of Eugene, for example, charges a single driver \$30-\$55 per month, depending on the parking lot, half that cost for a rideshare of two people and offers carpools of three or more people free parking. Parking is significantly cheaper for single drivers at the UO and carpools of three or more people receive a discounted rate.⁴⁴ Although state regulations prohibit the UO from giving away free parking, the UO has the opportunity to increase the disparity between carpool and standard parking permit rates.

Finally, priority parking for carpoolers is only available in one section of campus. For those who work or have classes on the other side of campus, the current priority parking may not serve as a timesaver.

Strategies

Our research has shown that institutions with successful carpools implement a program that facilitates carpool groups, is flexible, provides incentives, and is well publicized.⁴⁵

⁴⁴ Docker, Fumiko. CHOICES 2005: University of Oregon Campus Transportation Survey. February – May 2005. 2.

⁴⁵ Mobility Management. www.mobilitymanagement.be/English
Arlington Transportation Partners. www.commuterpage.com
Mid America Regional Council. www.marc.org/transportation
Best Work Places for Commuters. www.bwc.gov

Facilitation

While it is not possible for the UO to simplify the complicated lifestyles of the 21st century, we can facilitate the coordination of carpools between the schedules of faculty and staff members. It is not surprising that institutions that facilitate ride matching are said to be more successful in recruiting carpools.⁴⁶ Our research also shows that “commuters who carpool prefer riding with co-workers - even co-workers they do not know – to riding with total strangers.”⁴⁷ We therefore propose the creation of a campus-only online carpool database, which would allow carpoolers to link up with carpooling buddies quickly and to search for the most appropriate carpool. An in-house carpooling database will increase the level of comfort campus users feel about carpooling by allowing them to connect with other campus users.

Currently, Lane Transit District (LTD) provides free carpool ride matching on their website (www.ltd.org). The LTD carpooling database serves all of Springfield and Eugene; it is not UO-specific. It may also carry the stigma sometimes associated with public transit (although bus riding is more popular at the university than carpooling). We believe a UO-specific database will be much more successful in creating carpools in the university community than the LTD site.

Our UO carpooling database could include all registered cars with parking permits at the UO, but only those commuters who specifically check a box indicating that they wish to be contacted will be notified of potential carpool options and partners in their area. It will be the job of the new Carpool Coordinator (see Appendix A) to input permit holders’ information into the database, contact interested UO commuters with potential carpool connections, and to publicize the database.

There are several carpool database software programs to choose from that are capable of serving the University of Oregon. Some are only offered through the internet, such as rideshare.com and alternetrides.com. Both of these databases are free to any individual signing on; however, AlterNetRides offers a university specific database, whereas rideshare.com does not. AlterNetRides has a one time set-up fee of \$100 and a \$200 annual fee. The program is used by over 30 universities, including University of Montana, Brown University and University of Washington. This package includes a database that is created for the purchasing university as well as maintenance of the site. The purchasing university need only promote the site and potentially enter data. This is a cost efficient solution to temporarily, or permanently, creating a carpool database for the campus community. If these programs seem inadequate, they would at least allow people to join a database until the UO purchases a more sophisticated program.

A locally popular and highly efficient software program is called Ridepro3. This program offers GPS enhanced databases for carpooling, vanpooling, public transit, bike routes, bike

⁴⁶ Environmental Protection Agency. Office of Air and Radiation. Carpool Incentive Programs: Implementing Commuter Benefits as One of the Nation’s Best Workplaces for Commuters. March 2005 p. 5.

⁴⁷ York, Byron and Pamela Bloomfield. Rideshare Marketing: The Portland Experience. Urban Planning Policy Analysis and Administration. Ed. Ingram, Gregory K. Department of City and Regional Planning. Harvard University: Cambridge, Massachusetts, 1976. Pg. 48.

partners and park-n-ride. Companies in Eugene, Albany, Portland, and Bend currently use this software program, including LTD. The cost of Ridepro3 varies, depending size of the organization, public use, and program capacity. This program can be purchased through Trapeze as a contract-only sale and cannot be purchased in a store. More information can be found at: ridepro.net/.

By offering a UO-only carpooling database, the UO will provide more opportunities for those who want to carpool and need to be connected with other potential carpoolers. We suggest that DPS purchase a database program over the summer so that it may be used during the next academic year.

Flexibility and Convenience

Our suggested carpooling program offers more flexibility than is currently available. We propose that DPS offer carpool packages to allow for varied schedules that prohibit carpooling every day. Carpool packages could be made available for three, four, or five days a week for carpools with either two or three-plus members.

This new approach would provide members with a carpool hangtag (which can be transferred from vehicle to vehicle) as well as a designated number of single-day, reduced-rate parking passes. For example, a carpool of three people that plans on riding together three days a week would receive a hangtag as well as sixty day passes a term (two day passes per person, per week in a ten week term). The package will be priced to include the cost of the hangtag (we suggest \$30 per year for a three or more person carpool or \$60 a year for a two person carpool) plus the cost of reduced rate day passes (\$1 a day), but will be packaged as one convenient entity. A portion of any leftover day passes can be returned at the end of every term to the Department of Public Safety (we suggest up to 10 per person per term) for a full refund (at the reduced rate of \$1 per day-pass), with the goal of motivating carpoolers to use their carpool more often than they originally intended. The cost breakdown is as follows:

3 person carpool, 5 days a week: \$10 for a year**	
Includes	(1) \$30 parking permit + 1 (bonus) day pass per person, per term, for 3 terms
Total Cost	\$30
Savings in parking	\$200*
3 person carpool, 4 days a week: \$40 for a year**	
Includes	(1) \$30 parking permit + (10) \$1 day passes per person, per term, for 3 terms
Total Cost	\$120
Savings in parking	\$170*
3 person carpool, 3 days a week: \$70 for a year**	
Includes	(1) \$30 parking permit + (20) \$1 day passes per person, per term, for 3 terms
Total Cost	\$210
Savings in parking	\$140*
2 person carpool, 5 days a week: \$30 for a year***	
Includes	(1) \$60 parking permit + 1 (bonus) day pass per person, per term, for 3 terms
Total Cost	\$60

Savings in parking	\$180*
2 person carpool, 4 days a week: \$60 for a year***	
Includes	(1) \$60 parking permit + (10) \$1 day passes per person, per term, for 3 terms
Total Cost	\$120
Savings in parking	\$150*
2 person carpool, 3 days a week: \$90 for a year***	
Includes	(1) \$60 parking permit + (20) \$1 day passes per person, per term, for 3 terms
Total Cost	\$180
Savings in parking	\$120*

* Savings are based off the price of the 2004-2005 regular parking permit (\$167) with our recommended 25% increase (\$210) for the 2005-2006 school year.

** The cost of the parking permit split amongst 3 members

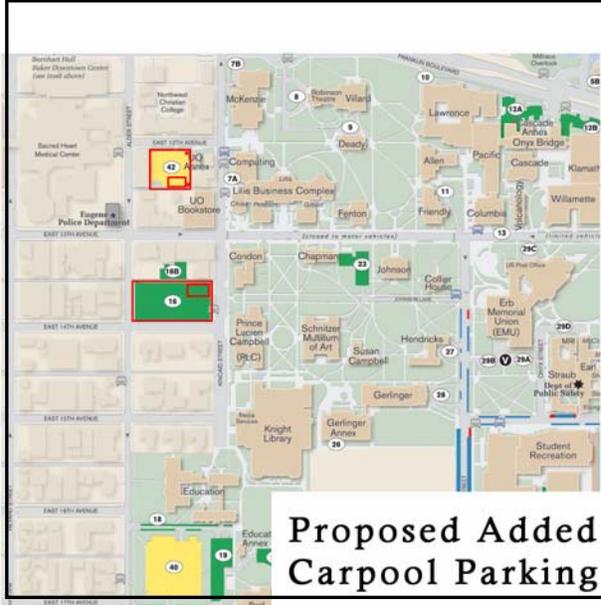
*** The cost of a parking permit split between 2 members

Incentives

One of the most important incentives for carpooling is the reduced cost to the user in gas and parking fees. Offering cheap parking to carpools is the best way to convince people to change their commuting behavior.⁴⁸ The cost breakdown above shows savings of up to \$200 a year per carpooler in parking fees alone if accompanied by a 25% increase in the rate of regular parking permits. We propose a rate increase of 200%, to be applied to the regular parking permit rate incrementally over the next ten years. This change would increase the disparity between the price of carpool and regular parking permits, making carpooling the more appealing option for some users.

Another crucial incentive for carpoolers is priority parking. To address the issue of the many people who work or study far from the current priority parking spots, we propose that DPS create additional spaces across campus for carpoolers. We have highlighted suggested spaces in various campus lots on the map below. We recommend that these spaces be reserved for carpools until 10am, Monday through Friday. After that time, the spaces can be made available for any car with a UO parking permit. In addition, we suggest that these spaces be clearly marked for carpoolers. This will not only clarify the policy around priority parking, but will also serve as publicity for the program, particularly if the signs direct people to a phone number or website for more information on carpooling. See below for possibilities for additional carpool parking spaces and for a carpool sign.

⁴⁸ Environmental Protection Agency. Office of Air and Radiation. Carpool Incentive Programs: Implementing Commuter Benefits as One of the Nation's Best Workplaces for Commuters. March 2005. pg. 5.



Publicity and Education

Publicity and education are by far the most labor intensive, yet crucial, elements of successful carpooling programs. For that reason we suggest that publicity and education be managed by a student Carpool Coordinator who would work for the Sustainability Office. The Carpool Coordinator would be responsible for promoting carpooling as well other forms of alternative transportation at the UO. Publicity would include outlining the carpooling program and its benefits to the user through various brochures, posters, flyers, and emails. Fall term, the carpool coordinator would be responsible for entering all registered carpools into the carpool database and finding matches for interested users. The Earth Week, “One Less Car Campaign,” including an inter-departmental competition and an alternative transportation booth, initiated by the Environmental Studies Service Learning Program, would be taken over by the Carpool Coordinator as a winter and spring term project. Time permitting, the carpool coordinator could publish a carpooling newsletter each term that includes helpful carpooling tips, information on various City of Eugene construction projects/street closures, and highlights a “Carpool of the Month/Term.” A detailed work plan for the Carpool Coordinator appears in Appendix A. A job description for the coordinator appears in Appendix B.

Fostering a Carpooling Community

This task is considerably more complicated than the above mentioned strategies. There is no straightforward way to improve the general attitude towards alternative transportation. Crucial elements of fostering a carpool community are facilitating and publicly rewarding carpools. Beyond that, commuters who make positive transportation choices, such as carpooling, should be recognized in the university community. A “Carpool of the Month/Term” published in the carpooling newsletter, The Oregon Daily Emerald or Inside Oregon is one way of recognizing carpoolers. Other carpooling-positive efforts would be bumper stickers that promote

carpooling, thank you notes sent to participating carpools, “zip code lunches” for people to meet potential partners, and a free breakfast at the end of the year for registered carpools.

Conclusion

Due to environmental and financial concerns and a lack of space for parking, it is in the best interest of the UO to increase the use of alternative transportation to and from the university. Carpooling is one way to reduce single occupancy vehicles that benefits the UO, the user, and the environment. While there are several societal factors that make carpooling undesirable, these barriers can be overcome for some people with the implementation of adequate incentives and a flexible carpooling program that supports the needs of the user. In summation, the strategies that we suggest to make carpooling more desirable and convenient are:

- **Facilitation:** Install an online database for carpool matching.
- **Flexibility and Convenience:** Create “parking packages,” with carpool hangtags and day passes according to number of people and days commuted to the UO.
- **Incentives:**
 - Offer more priority parking in desirable lots before 10 am.
 - Increase the rate of regular parking permits by 200% over the course of the decade while decreasing the cost of carpooling.
- **Publicity and Education:** Hire a Carpool Coordinator to facilitate and publicize carpooling and alternative transportation at the UO.
- **Fostering a carpooling culture:** Publicly recognize and congratulate carpoolers.

As the UO continues to grow, we hope that the use of alternative modes of transportation continues to be encouraged, especially among faculty and staff who remain at the University long after students graduate and move on. Creating considerable new incentives for carpoolers at the UO while simultaneously renewing the effort to educate campus users about the carpooling program will likely increase the number of carpool on campus. We propose that DPS implement the above suggestions as soon as possible in order to increase the viability of carpooling and alternative transportation on campus. The UO has been a leader in alternative transportation use in the past, and we hope will continue to be one into the future.

Carpool Proposal Appendix A: Carpool Coordinator Work Plan

Carpool Coordinator 2005-06 Work Plan

Background

Due to parking and environmental concerns, the University of Oregon would like to decrease the number of single occupancy vehicles arriving on campus daily by increasing the number of carpools. A 2005 survey showed that only 7% of faculty and staff use carpooling as their primary means of transportation to campus, while more than 60% drive alone.⁴⁹ The Department of Public Safety (DPS) at the UO has many programs in place to encourage the use of alternative transportation to campus, including a carpooling program. However, the staff of DPS does not have the time or resources in-house to conduct a broad reaching publicity campaign. In the 2005 survey, 66% of faculty and staff reported that they were “not very informed” about the existing carpooling program incentives.⁵⁰ A new Carpool Coordinator will provide the publicity and support needed to enhance the use of the carpooling program at the UO.

Proposed Work Program

The Carpool Coordinator will be responsible for organizing and promoting carpooling at the UO throughout the academic year, with the opportunity to extend the position for the next academic year. They will work within the Department of Public Safety, and under the supervision of the UO Director of Sustainability. The work will begin in September of 2005, and conclude in June 2006. The specific tasks are described below; more will be added as needed.

Description of Tasks

There will be four components of work for the Carpool Coordinator:

- I. Coordinating carpools
- II. Publicity
- III. One Less Car competition
- IV. Earth Week booth

Component I. Carpool Coordination

Task 1 – Database entry

The coordinator will enter the contact and commuting information into the online carpooling database of persons who purchase a parking permit.

Schedule: September-October, ongoing

Product: Updated database

Task 2 – Matching

⁴⁹ Docker, Fumiko. CHOICES 2005: University of Oregon Campus Transportation Survey. February – May 2005. 1.

⁵⁰ Docker, Fumiko. CHOICES 2005: University of Oregon Campus Transportation Survey. February – May 2005. 12.

Using the online database, the coordinator will match individuals to create potential carpools. When appropriate, potential carpoolers will be notified of people with similar schedules and arrival/departure points.

Schedule: September-October, ongoing

Product: New carpools spreadsheet, increased number of registered carpools

Task 3 – Incentives

Explore ideas for further rewards and incentives for carpoolers. These can possibly offered as an “earth week special” to help carpoolers during the One Less Car competition.

Schedule: Fall through winter

Product: Increased incentives.

Component II. Publicity

Task 1 – Flyers

A brochure describing UO transportation options as well as the carpooling program and its incentives was updated in winter 2005. The Carpooling Coordinator make any updates needed and will attach this brochure to the application for a parking permit.

Schedule: August - September

Product: Brochure on permits

Task 2 – Checkbox

The coordinator will work with DPS to add a new checkbox to the parking permit application. Applicants can check the box if they want to be contacted about carpooling. It will be the coordinator’s job to get information about the program to these persons and provide assistance in forming or joining a carpool.

Schedule: August - September

Product: Updated application

Task 3 – Parking Tickets

The coordinator will explore the possibility of printing a short advertisement for carpooling and/or alternative transportation on the back of DPS parking tickets.

Schedule: Ongoing

Product: Updated parking tickets

Task 4 – Newsletter

Employee will write a fall, winter, and spring newsletter to faculty and staff. In fall and winter, focus might be on finding carpool buddies, the benefits of carpooling, and the benefits of other alternative means of transportation. In spring, the newsletter will include information about the One Less Car competition.

Schedule: September, January, March (time permitting)

Product: Three short newsletters

Task 5 – Prepare for the following year

At the end of the academic year, the coordinator will prepare flyers and other promotional materials to be distributed in fall, particularly to new members of the UO community.

Schedule: May - June

Product: New materials, compiled

Component III. One Less Car competition

Task 1 – Identify department organizers

Enlist the cooperation of a faculty or staff member from 20 or more departments to act as a department transportation coordinator. Recruit them by utilizing the list of organizers from the 2005 competition, as well as through invitational emails, word of mouth, and personal connections.

Schedule: January - February

Product: List of organizers and contact information

Task 2 – Publicize

The most important element in creating a successful competition is getting the word out to participants. Publicity for the competition will be in a variety of formats: emails, flyers, and posters. Announcing the competition at department meetings or lunches is also very effective. These announcements should be scheduled by the end of winter term.

Department organizers should be reminded the week before and the week of the competition to make spreadsheets available to their co-workers. Participating departments should also be reminded of the competition and of their transportation options the week of the competition, by a flyer in their mailbox or short email message. Flyers, leaflets, and emails can be adapted from the 2005 competition.

Schedule: January - April

Product: Department presentation schedule, flyers, posters, email text, leaflets

Task 3 – Obtain prize

Coordinator will recruit a masseuse for the winning department, or obtain a new incentive. Once obtained, advertising the prize can begin.

Schedule: January

Product: Incentive or informal contract with masseuse

Task 4 – Thank You

Coordinator will send out thank you cards for department organizers and donors/masseuse.

Possibly hold a brunch or breakfast.

Schedule: April, after Earth Week

Product: Thank you cards or email text

Component IV. Earth Week Booth

The Earth Week booth is an informational booth encouraging all forms of alternative transportation at the UO. In 2005, the booth featured free bike repair, a free raffle for alternative transportation users, posters, flyers, brochures, and maps of Eugene bikeways.

Task 1 – Reserve space on 13th

Coordinator will contact the Scheduling department in the EMU to reserve space for the booth. They should also coordinate with ASUO if there will be other Earth Day festivities during the same days/week.

Schedule: January - February

Product: Reservation

Task 2 – Obtain information

To fill the booth, the coordinator should obtain brochures, maps, posters, and other information relevant to alternative transportation at the UO. Cindy Clarke, City of Eugene Transportation Options Coordinator, provided lots of useful information in 2005.

Schedule: March - April

Product: Brochures, etc

Task 3 – Recruit Mechanics

Free bike repair requires volunteer bicycle mechanics. Coordinator should begin contacting mechanics in winter term by visiting local bike shops with flyers, sign-up sheets, and a master contact list. Speaking with store managers is effective for recruiting volunteers who would otherwise have to work at the shop. Some managers allowed their employees to volunteer at the UO during their paid work hours. Flyers and face-to-face visits are effective for recruiting volunteers during their spare time. Freelance mechanics can also be recruited through word of mouth and flyers; faculty, staff, students, and bike class teachers on campus may be interested in the opportunity. If mechanics cannot decide on a shift right away, put their contact information on a master contact list, and try recruiting them closer to the event. Volunteers should be reminded the week before and the week of the booth of their shifts.

Schedule: March – April.

Product: Full sign-up sheet and contact list.

Task 4 – Recruit booth volunteers

One to two volunteers will be needed to manage the booth for one to two hour shifts at a time. The coordinator, or another well-informed volunteer, should also be present at all times, to answer questions accurately. Extra volunteers are necessary in assisting with booth set-up and takedown each day. Volunteers should be recruited in the months prior to Earth Week, and reminded of their shifts the week before and during Earth Week. A good source of volunteers is the Environmental Studies Program's Service Learning Program.

Schedule: March - April

Product: Full sign-up sheet and contact list.

Task 5 – Obtain raffle prizes

Coordinator can visit local businesses to gather donations for the alternative transportation raffle. Donors should be thanked via poster or other display of recognition at the booth.

Schedule: February – April

Product: Prizes

Task 6 – Publicity

Publicity in a variety of methods will help the booth's recognition and popularity.

Advertisements can be run in the Oregon Daily Emerald and Eugene Weekly; announcements can be made in classes; flyers can be posted on campus; lawn signs, stickers, and web materials are also recommended. Coordinator should be creative in their outreach.

Schedule: March – April

Product: Ads, flyers/posters, stickers, lawn signs, web updates, etc.

Task 7 – Implementation and Data Gathering

During Earth Week, coordinator will keep track of booth visitors and comments about the positive and negative aspects of the event. This data should be made available for future Carpool Coordinators.

Schedule: Earth Week in April

Product: Notes

Task 8 – Thank Yous

Coordinator should thank all booth volunteers and bike mechanics by phone, email, card, or other preferred method.

Schedule: End of April

Product: Thank you card/message

Carpool Proposal Appendix B: Carpool Coordinator Job Description

Carpool Coordinator Job Description

Student employee or paid intern will be responsible for coordinating and promoting the UO carpooling and alternative transportation program. Tasks include:

- Updating and entering data into the online carpooling database
- Assisting with carpool match-ups
- Contacting potential carpoolers
- Distributing information
- Coordinating and implementing the “One Less Car” competition
- Coordinating the Earth Week alternative transportation booth
- Publicizing the UO carpooling and alternative transportation program.

Job requirements:

- Highly organized worker
- Computer experience
- Customer service oriented
- Self-motivated worker
- Attentive to detail

Preferred Skills:

- Spreadsheet, Excel experience
- Volunteer coordinating and/or event planning experience

Compensation:

Wage is \$8/ hour. At least 7 hours per week. Academic year, September 2005 to June 2006.

Appendix G. Competition Results

	Department	Alternative Transportation Miles	Total Days Commuted in	Raw Score	Booth Visits	Total Score
1	AEI	195	24	8.1	0	8.1
2	ALS	699.5	101	6.9	10	16.9
3	CIS	316	69	4.6	0	4.6
4	ENV HS	355	46	7.7	0	7.7
5	ENV ST	75	22	3.4	2	5.4
6	Financial Aid	741.3	110	6.7	0	6.7
7	Planning	314.5	37	8.5	0	8.5

Appendix H. Campus Alternative Transportation Posters

BICYCLING AT THE UO

Oregon Loves Bikes!
The UO is one of the few campuses in the nation where bike parking spaces outnumber car parking. This encourages alternative transportation while discouraging the use of private vehicles. There are currently over 4,000 spots to park your bike on campus!

Its Easy!
Every day, 15% of campus commuters ride their bike. You can connect to the UO on a bike from almost anywhere in Eugene or Springfield. See if you can find your house on the map below:



Got a Flat?
Fill up your tire at the air pump at Carson hall!
The EMU Craft Center has classes on bike repair for one day or the whole term. Their tools and bike stand are also available for \$3 a day.
Not the do-it-yourself type?
There are many local bike shops that will fix your flat tire or tune up your entire bike.

Finding Your Path
The UO, in collaboration with the City of Eugene, works hard to ensure that paths and routes are well marked and safe for riders. UO Planners created the bicycle plan in 1991, which has resulted in more than \$40,000 being spent on new bike facilities, including secure and covered parking for bikes, better lighting on bike paths, and bicycle lockers on campus. For example, the bike parking structure below has been outfitted with a solar panel which powers LED lights for safer night-time bike parking.



Riverbank Trail
Need some exercise? Try riding one of the routes on the Ruth Bascom Riverbank Trail System. The paths are well-marked, easy to ride, and beautiful!



Good For You, and the Planet
Bicycling is a healthy habit, whether you are an occasional rider, or a diehard bike commuter.
Cyclists enjoy:
* Fresh Air * Increased Lung Capacity *
* Stronger Muscles * Self-Sufficiency *
* Foreign Oil-Free Transportation *
* Convenient Parking *



TRANSPORTATION AT THE UO

WHAT YOU NEED TO KNOW

CAMPUS TRANSPORTATION FACTS

Walking is great for your health!
Studies show that daily walking helps with weight loss, builds a stronger immune system, improves circulation and lowers blood pressure.

80% of the campus population lives within one mile of the university. In order to encourage pedestrians, the UO has improved walking routes, increased lighting on paths and diverted bicycle traffic from pedestrian routes.

Out of a campus population of 20,000-30,000 people, 3,300 parking spaces are available. That's a ratio of 7 people to every one parking space! Most universities have a ratio of 3 to 1 or 4 to 1. Because the UO is committed to alternative transportation we make this high ratio work.

TRANSPORTATION MODES AMONG FACULTY, STAFF AND STUDENTS 1990

Public Transit Data: CARPOOL 2%, WALK 93%, BIKE 2%, PUBLIC TRANSIT 3%

Global Warming is real, and driving your car contributes to the problem.
In the last 19 years, an area of Arctic ice the size of Texas has disappeared. Scientists estimate that the average global climate will increase by 1 to 3.5°C by the year 2100. In the last 1000 years, including the most recent ice age, the earth's climate has only fluctuated by 1°C!

Foreign oil importation is the single largest element of our trade deficit. The U.S. imports 55-60% of its oil at a cost of \$50 billion+ per year. Less dependence on gasoline could result in greater international political stability.

Urbanized land area has quadrupled since 1954. This increase has resulted in fragmentation of wildlife habitat and degradation of water supplies due to the high levels of runoff on road surfaces. Some urban development has made bus and bicycle transportation less feasible due to the installations of large surface parking lots, wide streets and fewer sidewalks.

CARPOOLING AT THE UO

We encourage, support, and facilitate carpoolers at the University of Oregon. Carpooling is:

Fast: **Priority parking** saves time! Vehicles with carpool permits are given priority parking along 13th Avenue between Agate and University Streets. Just visit the 13th Avenue kiosk for a carpool hang tag and access to priority parking!

Cheap: A carpooling parking permit split 3-ways costs **1/6 of a regular permit!** Carpools of 3 or more people are eligible for a carpool parking pass that can be transferred from vehicle to vehicle. Permits are available from the Department of Public Safety.

Easy: Register with the LTD **carpooling database** to locate partners. Visit their website to connect with potential carpool buddies at www.ltd.org.

Fun: Ride to work with **friends and neighbors!** A carpool must consist of at least 3 people coming to the university neighborhood, only 2 of whom have to be university-affiliated.

For more information on permits, priority parking and the carpooling database, visit the Department of Public Safety website at: <http://safetyweb.uoregon.edu>.

Appendix I. Sustainability Posters

SUSTAINABILITY AT THE UNIVERSITY OF OREGON

SOLAR WATER HEATER GERLINGER ANNEX

BACKGROUND:

On campus, most hot water is heated by steam. The steam is generated by burning natural gas at our power plant, then transported to various buildings. Pipes carrying the steam create an undesirable by-product in Gerlinger Annex, which uses hot water for showers; heat escaping from the pipes warms the building, even during hot summer months.



To make the building more energy efficient and comfortable, the UO Facilities Department installed two flat plate solar panels on the roof of Gerlinger Annex during the summer of 2003.

POSTER CREATED BY JODY TRANDLER - SPRING 2005

ENERGY SAVINGS:

These earth friendly solar panels reduce the energy footprint at Gerlinger Annex by:

- Reducing the need for steam in the summer. Creating energy more efficiently.
- Decreasing the need for cooling during summer, as heat escaping from the steam pipes no longer warms the building.



COST SAVINGS:

Not only does the solar water heater conserve energy, it saves money as well! The panels run on the "free" energy of the sun, which reduces energy costs at the University. Although solar energy systems are costly to purchase, the financial savings will last for the next 20 to 30 years. It is estimated that these solar panels will pay for themselves by 2007, only four years after they were installed!

HOW IT WORKS:

To maximize efficiency, the panels are placed on the roof at an angle towards the sun. This angle corresponds with the latitude of the location; at the UO this is 43 degrees.



Metal pipes carry water to be warmed by the sun inside the flat plate collector.

If the water does not reach the desired temperature from sunlight, it is heated further by a backup electrical system.



During summer months, the steam for the building is turned off and the solar panels provide the building's hot water.

In winter, when the sun shines less frequently, the building returns to the system of steam and natural gas to meet its hot water needs.

Thanks! The UO's Facilities Department was responsible for purchasing and installing the solar hot water heater: Art Corliss, Jeff Gerst, Greg Haider, Danny Harrington, Don Neet, Del Smith, and Larry Stromberg.

Sustainability at the University of Oregon Yard Waste Composting:

UO campus area generates an average of 175 tons annually in organic waste from plants and turf.



The finished composted material is utilized as a pre-planting soil amendment for trees, shrubs, annuals, perennials, and bulbs, as well as top dressing around fibrous rooted plants such as ferns, rhododendrons, and azaleas. Plants have visibly responded more favorably to our compost than they have to previously used commercial amendments. It is estimated that our compost will reduce the need for commercial fertilizers, improve soil structure and drainage, enhance root development, reduce fertilizer leaching, and increase summer drought tolerance.

The UO composting yard is a nearly 15,000 sq. ft. paved surface located in north campus. Material is brought in daily by the groundskeepers and is separated by source in staging areas. Processed yard waste is placed in windrows and turned every two to three months. It is continually monitored for moisture, heat, and appearance and generally requires 6 months for decomposition.

Biodiesel: All seven diesel powered mowers at UO run on B100 diesel, 100% pure biodiesel when they fuel up at the grounds compound behind the ROTC. If they need to fuel up at Facilities Services, they use B20 which is 20% biodiesel and 80% petrodiesel. Biodiesel is better for the environment because it is made from renewable resources and has lower emissions compared to petroleum diesel. In its life cycle, biodiesel releases 78% less carbon dioxide than petrodiesel. It is less toxic than table salt and biodegrades as fast as sugar.



Irrigation Practices:

On the 230-acre UO campus, 156 acres of landscaping require irrigation

The University of Oregon, together with Eugene Water and Electric Board (EWEB) now uses an irrigation program that conserves water and keeps the grounds healthier. The program, called Maxicom, has shown water savings of between 30-70%. The program involves a weather station which is located between Franklin Blvd. and Streisinger Hall that measures wind, rain, temperature, and humidity. The internal computer then calculates the evapo-transpiration level and sends corresponding irrigation information to all the irrigation control clusters. In addition to the water saving irrigation program, the University saves even more water by not irrigating some areas at all.



SUSTAINABILITY AT THE UO

What is the Earth Tub?

The Earth Tub is designed for efficient, large scale on-site composting. It can accommodate 200 pounds of food waste daily, and is ideal for composting in urban areas.



Why Compost?

Yard and food waste make up about 30% of the waste stream in the U.S. Composting reduces the amount of waste that is sent to the landfill while creating a product that is useful in the garden! Compost provides plants with essential nutrients and enhances the quality of the soil.



The Earth Tub composts UO food waste easily and efficiently without odor or mess

THE EARTH TUB

How it Works:

1. **Loading** - Food waste is gathered in five gallon buckets from various campus food vendors and the dining halls. Food is taken to the Earth Tub where it is weighed and added to the tub.



In just a few weeks, the Earth Tub can turn these food scraps into fertilizer for garden beds

2. **Mixing** - The electric auger in the center of the tub stirs the compost daily, efficiently mixing the materials and bringing oxygen to the system. Oxygen aerates the mixture, which allows the compost to heat up, speeding up the composting process and eliminating odor. A bulking agent, such as sawdust, is mixed with the waste to balance the nutrient ratio and the moisture in the system.

3. **Baking** - Finally, the tub must sit for 2-3 weeks to "cook" the compost at approximately 130 degrees. The auger continues to stir the compost daily, but no additional food waste is added. The finished compost can then be removed for use on the Urban Farm's gardens.

History:

May 2003: Environmental Studies Service Learning students conducted a waste audit of the EMU. They found that a significant fraction of the waste stream is compostable and recommended that the UO acquire a composting machine to reduce the amount of food waste sent to the landfill.

January 2004: The University started actively searching for an Earth Tub composting machine. Eugene's 4J school district agreed to donate one of its tubs to the University.

April 2005: The Earth Tub was installed at the Urban Farm. Urban Farm will manage the UO compost system beginning in 2006.



The resulting compost is used to enhance the gardens at the Urban Farm

Poster created by Jody Trendler. Text by Wayne Polansky and Trendler.

Sustainability at the University of Oregon

Wildlife Habitat:

This project was designed to increase and enhance the variety and population of bird species in our campus core.



While there are numerous large trees to accommodate treetop-feeding species, there were not enough lower food producing shrubs to entice other species to the area in significant numbers.

The grounds crew has intentionally planted native species that will attract certain birds to create a bird-friendly corridor from the Millrace to Pioneer Cemetery. While native plantings will continue in scattered locations in the future, three mass plantings have taken place already. One is a dead Sugar Maple trunk pictured to the left.



Integrated Pest Management:

Chemical responses to pests and other problems are a last resort and used only after the problem has exceeded a certain threshold.

Rather than using Round-up or other harmful chemicals, facilities keep the lawn healthy so that it can fight off weeds on its own. This includes:

- ✔ leaving clippings on the lawn
- ✔ letting the lawn grow a little higher
- ✔ watering adequately
- ✔ picking up the leaves quickly

The grounds crew doesn't need to bother with the few broad-leaf weeds that appear from time to time because the grass is healthy enough to compete with weeds on its own.

Some other tactics the grounds crew implements are intensive weeding at the right time of year and non chemical weed control products like lady bugs and corn-gluten, which stop weeds from germinating.



Instead of regularly spraying the campus elm trees with insecticide to kill elm beetles, the grounds crew opts not to use chemicals at all. In the absence of the insecticide that kills elm beetles, elm beetle predator species are able to live and naturally keep the population under control.



SOLAR POWER AT THE UO RECREATION CENTER

1 Sunlight is made up of bits of energy called photons

2 The individual cell is designed with a positive and negative layer, to produce an electrical field

3 As the photons are absorbed into the cell, their energy causes electrons to become free

4 The electrons move towards the bottom of the cell and exit through the connecting wire. This flow of electrons is also known as electricity

HOW DOES SOLAR POWER WORK?

Solar panels are made up of many small silicon cells called photovoltaic cells. Constructed from silicon, photovoltaic cells are made up of semiconductors, which conduct electricity between conductors and nonconductors. When sunlight comes down and hits the cells the photons from the sunlight are absorbed and the energy is transferred to the electrons in the semi conductor. Once released, the electrons flow freely, resulting in electricity

Facts about solar power:

- The earth receives more energy from the sun in just one hour than the world uses in a whole year.
- More than 10,000 homes in the United States are powered entirely by solar energy.
- Silicon from just one ton of sand, used in photovoltaic cells, could produce as much electricity as burning 500,000 tons of coal.
- According to the Department of Energy, the costs of solar photovoltaics (PV) have dropped 200 percent over the last three decades. Costs today range from 10 to 40 cents per kilowatt-hour
- Present photovoltaic cells are 10% efficient. If solar panels were placed on 1% of the area with recoverable sunlight exposure, the energy gathered would fulfill current world energy needs.

SOLAR POWER AT THE UO RECREATION CENTER

The University of Oregon Recreation Center has re-initiated its solar energy program with the construction of 84 new solar modules

The new 12 kilowatt array sets a new standard in the UO's commitment to ecological sustainability

Power Up:

The panels, located above the basketball courts, will provide the Rec. Center with an average of 40 kilowatt hours of electricity each day or about 14,500 kilowatt hours each year. A kilowatt hour is the electrical energy consumed in one hour at the constant rate of one kilowatt. The average household in the United States uses about 8,900 kilowatt-hours of electricity each year. The Rec. Center already has a high level of energy conservation, greater than the 20% reduction required for state owned buildings. The addition of the Solar panels will further facilitate the eco friendly nature of the building and diminish the cost of the annual power bill.

Students Get Involved:

The solar panels are the second phase of a 3 part project initiated by the Ecological Design Center. This project was made possible by a 100,000 dollar grant awarded by the student government to install a photovoltaic system on various university rooftops. The project was made possible by an effort between many different departments.

The ASUD outlined the main three goals of the project as follows:

- To produce clean, renewable energy
- To increase the university's credentials as a green campus
- To generate energy that would be cost effective for the student body.

One of the most impressive factors of the project, according to Vince McClellan, a solar contractor and LEC solar instructor, is the fact that it is entirely student funded.

"They [the students] could have chosen to spend the money on a black party instead of solar. People say that university students have lost their voice and no longer care about making the world a better place. What I see is that students have become more practical in their activism than they were in the sixties and seventies. Funding a project like this is one of the strongest statements that can be made toward a peaceful and sustainable world." - Vince McClellan, Solar contractor/ LEC solar instructor

Appendix J. Case Study: University of California, San Diego

Parking Facilities

The University of California is located in San Diego and constitutes an area of 1,200 acres. Currently, 23,045 students are enrolled at UCSD and the university employs a total of

22,000 faculty and staff. As is the case with all California universities, new student enrollment is at peak levels and the limits of the university facilities are being tested⁵¹. Currently, UCSD has a total of 17,985 parking spaces on campus. Out of these spaces, 1,780 are designated for faculty, 5,123 are designated for staff and 7,038 are designated for student use. The university houses 668 metered spaces, 305 reserved spaces and 1,679 allocated spaces. The remaining numbers of spaces are designated as loading and service spots. In total UCSD has a .45 ratio of spaces to population. This is relatively high compared to other universities in the area. Berkeley, for example, has a .34 ratio. Nevertheless, parking demand is elevated at UCSD due to its size. As a result, parking fees are fairly high and the university has had to develop a number of alternatives to private vehicle transport to campus⁵².

Transportation Program Structure

Greg Snee, the manager of Transportation and Parking Services at UCSD acknowledges that parking on campus is a difficult task. He emphasizes, however, that parking lot construction is limited due to the University Master Plan adopted in 1960. According to the plan, all transportation services at the university must be self-supporting. As a result, parking fees must cover all costs of maintaining the parking program and any debt incurred through the construction of additional parking assemblies. A newly constructed parking lot at UCSD would cost an estimated \$2,000 to \$3,000 for each 8-foot by 18 foot space. A new parking structure would be even more extravagant and cost \$20,000 to \$30,000 a space. In addition, the debt acquired while building a parking structure would more than double the initial cost. Because of the high expense of parking space construction, parking fees at UCSD are fairly expensive and are continuing to increase⁵³. The parking permit pricing structure is divided as follows:

Faculty:

Annual Permit Price: \$83 per month

Short Term Permit (available for up to 90 consecutive days): \$41.50 per week

Occasional Use Permit (available for up to 10 consecutive days): \$51 each

Staff:

Annual Permit Price: \$71 per month

Short Term Permit (available for up to 90 consecutive days): \$35.50 per week

Occasional Use Permit (available for up to 10 consecutive days): \$42 each

Student:

Annual Permit Price: \$636 per year

Short Term Permit (available for up to 90 consecutive days): \$26.50 per week

Occasional Use Permit (available for up to 10 consecutive days): \$36 each

⁵¹ "Special Program Requirements."2002 <http://fdc.ucsd.edu/documentation/designguidelines/FDG-VOL1.html>. Accessed Feb. 15, 2005

⁵² "USCD Planning and Transportation Report 2001-2006."2001 <http://planning.ucsd.edu/tpc/index.html>. Accessed Feb. 16, 2005

⁵³ "Q&A With Greg Snee."2004 http://www-chancellor.ucsd.edu/qa_snee.htm Accessed Feb. 16, 2005

Specialty permits:

Night and Weekend Permit: \$36 per quarter

Alternate Schedule Permits (parking for 3 days a week): \$98 per quarter

Single Day Permit: \$6

Single Night Permit: \$3

The complex system of parking permits at UCSD is designed to provide a wide array of options to people with varying schedules. For those who drive every day the annual permit is provided at a flat monthly rate for faculty and staff and a yearly price for students. A short-term permit that can be purchased for up to 90 consecutive days is available at a reduced price, however only three of these permits can be purchased each year. An occasional use permit is also provided which allows for parking for up to 10 consecutive days. An unlimited number of these permits can be purchased, however after a point it no longer becomes cost effective and the purchase of an annual permit becomes more desirable. Finally, for those who only travel to campus on alternate days, alternate schedule permits can be purchased for a Monday, Wednesday, Friday or Tuesday, Thursday, Friday schedule. These permits are priced at a reduced rate amounting to \$144 per year. All pricing rates for parking at UCSD are determined by the Transportation Policy Committee⁵⁴. In order to re-asses the parking situation, parking space occupancy and a parking space inventory survey are conducted every quarter. The last survey conducted in winter 2004 concluded that out of the 13,987 permit spaces on campus, the average user rate was 90 percent at peak usage. Because none of permit lots ever reach 100 percent usage, there are always literally thousands of available parking spaces throughout campus. But, due to the size of the University, these available spaces are often undesirable due to their lack of convenience. Overall, 58 percent of the 46,000 people who arrive on campus daily do so through single occupancy vehicles. On the other hand, 42 percent utilize one of the alternative programs offered by UCSD. These alternative programs are what allow the University to effectively manage their tenuous parking situation⁵⁵.

Rideshare Program

The Rideshare program at UCSD develops and manages all of the alternative transportation opportunities offered by the University. The programs offered by Rideshare include: the Transit and Coaster Club, the Pedal Club and The Carpool and Vanpool program. All of these programs, save carpooling, are only available to faculty, staff and students who do not hold an annual parking permit.

The Transit and Coaster Club is open to any University member who commits to using public transportation at least three days a week through the purchase of a transit monthly pass or coaster tickets. The cost of a transit pass is roughly \$50 per month, but there is a student discount of \$67 per quarter for club members. In addition to the purchase of the pass, those who

⁵⁴ "UCSD Transportation and Parking Services."2005

<http://blink.ucsd.edu/Blink/External/Topics/Policy/0,1162,15352,00.html>. Accessed Feb. 16, 2005

⁵⁵ "Parking Surveys and Statistics."2004

<http://blink.ucsd.edu/Blink/External/Topics/Policy/0,1162,11894,00.html>. Accessed Feb 16, 2005

participate in the Transit/Coaster Club must register with the transportation department within the first six weeks of every quarter. Members of the program then receive an occasional use permit that provides 10 days of complimentary parking on campus per quarter. Also, members receive three courtesy rides home per year in cases of emergencies. UCSD also encourages members of the Transit/Coaster Club to utilize the San Diego Association of Governments Guaranteed Ride Home program for additional courtesy ride back up. This program provides similar courtesy rides in cases of emergency. Furthermore, UCSD subsidizes free unlimited San Diego Transit bus rides near campus. In order to take advantage of this, Faculty, staff and students can receive a UCSD/ SDT bus sticker that affixes to their I.D. and allows for free bus use. In fall 2004, there were 274 Transit/Coaster Club participants.

The Pedal Club provides similar benefits to the Transit/Coaster Club, but is geared towards the bicycle community at UCSD. Members must commit to bicycling three days a week and register their bicycles with the state of California, as well as register for the pedal club within the first six weeks of every quarter. The cost of bicycle registration is \$6. In return, Pedal Club users receive the same 10 complimentary parking permits and use of the guaranteed ride home program as those in the Transit/ Coaster Club. Also, members may attend bike safety classes for free and receive invitations to annual Bike to Work/Campus events. Members also get an exclusive 10 percent discount on parts, accessories and labor at the UCSD Bike Shop. The Pedal Club enjoys a high level of success with a recorded 1,562 members last fall.

The carpool and vanpool programs at UCSD are available to all faculty, staff and students who live off campus. Each carpool must consist of two to four members who carpool at least 3 days a week. All of the members of the carpool must purchase and share one annual carpool permit and appoint a primary driver, although members may share driving duties. Each carpool member receives the same benefits as the previous two clubs of 10 complimentary parking permits and the Guaranteed Ride Home program. Also, any carpool with three members or more receives access to the reserved carpool spaces located in central areas of campus. There are roughly 80 reserved carpool spaces. For those interested in carpooling, the San Diego Ridelink provides a matchlist application form to assist in finding other carpool members. The vanpool program is similar, with members paying a monthly fee of roughly \$75 depending on their distance from the University. The driver of the van is exempt from paying the fee. Those interested in the vanpool program can try it free for five days before deciding to join⁵⁶. In total in fall 2004 there were 1,835 carpool riders and 304 vanpool riders.

Future Developments

UCSD has several developments planned to account for the anticipated growth in campus population. The Transporting Policy Committee and the Campus Community Planning Committee have approved the construction of two new parking structures. The first of these structures will be completed in 2006 at a cost of \$29 million dollars and will add an additional 1,400 spaces. In cohesion with these new parking structures, the University also plans to expand their existing alternative transportation programs. They are specifically focusing on the bike

⁵⁶ "UCSD Transportation and Parking Services." 2005
<http://blink.ucsd.edu/Blink/External/Topics/Policy/0,1162,15352,00.html>. Accessed Feb. 16, 2005

program and plan to develop bike facilities by adding bike lanes on several key streets and increasing the number of bike racks. Finally, in order to ensure that these new changes are having the desired affect, the University will continue to regularly monitor transportation mode and parking demand on campus⁵⁷.

Conclusion

For a university of its size, UCSD has attempted to create a wide degree of flexibility in its transportation choices. The carpool and bike programs of UCSD are most applicable to the University of Oregon. Specifically, the flexibility offered by the complimentary parking passes offers a great incentive to those hesitant about a carpool or biking schedule. In addition, these programs are made even more accessible by the extensive and detailed UCSD transportation webpage. Certain elements of the UCSD program should be considered as possible additions to the UO transportation system. In the University of Oregon's carpool program, where lack of use is attributed to the convenience factor, any addition of flexibility has the potential to increase usage.

Appendix K. Case Study: University of British Colombia

Introduction

The University of British Columbia's Trip Reduction Research Education Knowledge (TREK) Program promotes all forms of alternative transportation to and around their Vancouver campus. TREK provides shuttle buses, free or reduced price public transportation to students and faculty/staff, biking workshops, carpool incentives, and carpool coordinating. All of TREK's services are facilitated by the Transportation Planning Department. TREK was created to reduce the number of single occupancy vehicles (SOVs) arriving on campus by 20 percent. They have achieved this goal and boast a 38 percent SOV arrival on campus. Alternative transportation accounts for the other 62 percent of arrivals with 39 percent of users taking public transportation, 18 percent carpooling, 2.5 percent walking, and 1.3 percent riding their bike.⁵⁸



⁵⁷ "Parking Surveys and Statistics."2004

<http://blink.ucsd.edu/Blink/External/Topics/Policy/0,1162,11894,00.html>. Accessed Feb 16, 2005

⁵⁸ TREK. 14 March 2005. <<http://www.trek.ubc.ca>>

What is most unique about UBC's approach to alternative transportation is their comprehensive TREK website. On the TREK website UBC users can access information about all types of alternative transportation. They can register for carpools or search the carpool database for carpool partners, find bus schedules, or rent natural gas vans for vanpooling.

Public Transportation and the U-Pass

Public transportation is the most popular way to arrive at the UBC Campus. This is most likely due to the Universal Transportation Pass (U-Pass) that is required for all students. The U-Pass is paid for out of mandatory student fees. Every student pays \$20 a month (for the 8 month school year) in exchange for alternative transportation benefits. With a U-Pass, not only are students eligible for the campus shuttles that ferry students from one end of campus to another, but they also receive free rides on Vancouver's Translink bus system, SkyTrain rapid transit, and the Seabus ferry. Students receive reduced rates on the West Coast Express commuter rail service from the Vancouver suburbs into the city. By showing their U-Pass students also get discounts from local participating merchants. The Employer Pass Program card (EPP) is the faculty/staff equivalent of a U-Pass. An EPP has a one-time cost of \$15 and gives faculty and staff discounted (not free) rides on the above forms of public transportation. The on-campus shuttle services run on a 30 min loop 24 hours a day and provides safe, free rides from one end of the extensive campus to another.⁵⁹

Carpooling

To constitute a carpool at UBC a vehicle must arrive on campus with 3 or more persons, at least 3 times a week. Participants can choose to form their own carpool, find partners through Canada's national program "Commuter Connections" or look on the UBC "Rideboard." The Commuter Connections and Rideboard websites are linked to the TREK website. Once a carpool is found, all members register by logging onto the TREK website and filling out a carpool registration form. Parking anywhere on the UBC campus requires all cars to have the same parking permit, regardless of carpool status. These permits are available through UBC Parking Services. However, carpools receive a special carpool decal to place on the windshield, granting them priority parking before 9:30 a.m. After one month of carpooling the members receive a special rewards package. The Jack Bell Ride Share is a Vancouver non-profit program that discourages the ownership of personal vehicles in the city. To encourage people to not own cars, Jack Bell leases cars and mini-vans to designated carpools for a low monthly cost that covers vehicle operation, maintenance, and insurance. The Jack Bell program is also linked to the TREK website.⁶⁰

Bicycles

UBC has tried to encourage biking to campus by increasing bike lanes and general bike safety around the UBC campus and by promoting end of trip facilities such as showers and bike racks. Because the city of Vancouver can be a daunting place to be a bicycle commuter, UBC facilitates a supportive biking community. Bike Right provides free workshops in bicycle safety that outline good bicycle routes to campus and cover general safety concerns pertaining to cyclists. As well as looking after safety, Bike Right arranges social rides to stimulate interest in biking around the Vancouver area and to create a supportive atmosphere on campus for those

⁵⁹ TREK. 14 March 2005. <<http://www.trek.ubc.ca>>

⁶⁰ TREK. 14 March 2005. <<http://www.trek.ubc.ca>>

who bike. UBC also has a Bicycle User Group. BUG is a biking advisory committee that provides insight for the TREK planners on how to make UBC as bike-friendly as possible. Because commuters often have lots of things they want to bring with them to campus, biking can seem like an unattractive alternative. Cancarts are sturdy bike trailers that make hauling large volumes of stuff to campus easy and comfortable. Cancarts are available on loan for free from Parking Services.⁶¹

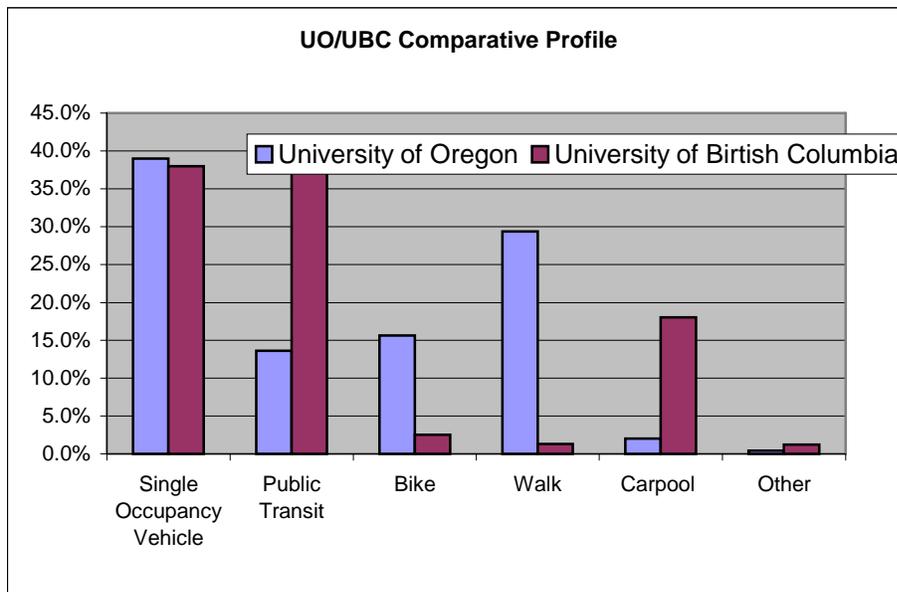
Emergency Ride Home

Emergency Ride Home (ERH) provides all UBC (faculty, staff, and student) commuters who regularly vanpool, carpool, bike, walk, or take transit with a reliable ride home via cab when an emergency arises. TREK will reimburse you for 90 percent of the cost of the trip, not including the tip. The service can be used up to 4 times a year and is only for personal or family emergencies. People who wish to utilize ERH arrange for a taxi to pick them up from campus, get a receipt for the full amount of the fare and then submit the receipt and an application for re-imbursement to TREK. The form and directions are available online.⁶²

TREK Website

Located at www.trek.ubc.ca interested users can access information about UBC's extensive efforts to promote alternative forms of transportation in the Vancouver area. The site has information regarding all of the above programs as well as news updates on TREK's various projects.

Conclusion



UO numbers come from *Choices*. University of Oregon Planning Committee. 1996. UBC numbers come from the TREK website <<http://www.trek.ubc.ca>>.

The University of Oregon and the University of British Columbia have comparable rates of SOV arrival on campus. While Vancouver has a much more comprehensive public transportation

⁶¹ [TREK](http://www.trek.ubc.ca). 14 March 2005. <<http://www.trek.ubc.ca>>

⁶² [TREK](http://www.trek.ubc.ca). 14 March 2005. <<http://www.trek.ubc.ca>>

service than the City of Eugene (making public transportation their number one form of transportation), Eugene's bike routes and more temperate weather make biking and walking a more popular and promote-able form of alternative transportation. The most remarkable thing about the UBC TREK program is its website that brings together all aspects of transportation choices and provides easy access to interested parties. The TREK program at UBC serves to promote and facilitate their existing programs. UBC created TREK with the explicit goal of reducing SOVs on campus by 20 percent. With concentrated effort, UBC has since completed that task and continues to promote alternative transportation on campus.⁶³ Learning from UBC, the University of Oregon could do more to promote, publicize and facilitate the programs it has already created. In particular, UO could improve their carpooling numbers by publicizing the existing program and facilitating carpool groups through an online database.

Appendix L. Case Study: Humboldt State University

Statistics

Student Population: 7,611

Faculty and Staff Population: 1,455

Location: Arcata, California

Transportation Statistics

Transportation Statistics

In 2003, Humboldt University assembled a parking report for transportation statistics. The report indicated a total of 2,317 parking spaces for use. Out of this 2,317, a total of 1,633 were used by students, equaling 70 percent of total parking use. Faculty and staff used 20 percent of these parking spaces, with the remainder being used by the general public or for reserved uses (police, maintenance, etc.). The following permits were sold:

General Permits – 1,922

Resident Permits – 583

Avg. Daily Permits – 125

Staff Permits – 973

Evening Permits – 115

Motorcycle – 56

Permit prices are \$67.00 per semester for students or \$2.00 a day. The meters on campus run for \$0.75 an hour and there are special parking spaces (17) and permits for motorcycle use, to encourage fuel-efficient vehicles. Semester parking permits for a motorcycle are only \$17.00.

Alternative Transportation Programs

Humboldt University has quite an extensive alternative transportation campaign for a university of its size. Some of the following programs are some incentives they offer for students, faculty and staff to find alternative transportation to campus.

Bicycle Services – Humboldt offers a maintenance program called The Bicycle Learning Center that is free to all University students, and faculty. This volunteer based service provides tools for cyclists to maintain their personal bicycles. This program is available to those who want to

⁶³ Parking Services at UBC “RE: TREK Website” Email to Jessie Oettinger. 4 February 2005.

learn more about comfortable bicycle riding, and also provides information about other forms of sustainable transportation. There is also a bicycle loan program called the Bicycle Library that is associated with Humboldt University. This program is for people who want to ride a bike, but do not own one. People can rent a bike with a \$20 refundable deposit for up to six months.

Public Transit – Humboldt is operated by two bus systems, Redwood Transit and A&MRT Transit. The A&MRT Transit system is free to all students and faculty who show their current school ID. Redwood Transit offers discounted tickets for students and faculty as well as park and ride service. These bus discounts are Humboldt University’s largest alternative transportation expense, averaging approximately \$100,000 a year.

Carpooling – “Alternetrider” is a carpooling database that can be accessed for those who want to carpool. Availability and destination can be entered and viewed for those who may want to travel at those particular times. This system can be accessed through email, and urges individuals to meet their carpool companion in a public place. There are also incentives offered by Humboldt for those who carpool. If there are three or more people in the vehicle (2 if that is the maximum capacity of the vehicle) the driver can pull up to the drive-up window (kiosk), show their parking permit, and then receive a preferential parking pass to get a better parking space. Additionally, Humboldt has been known to hold special events, such as car washes for carpoolers, to get more people to try carpooling.

Walking – Humboldt also promotes walking. The downtown campus area is full of restaurants, shopping and campus surroundings, making walking a feasible way to get around the downtown area.

Motorcycle/Mopeds – Humboldt decreased the costs of the motorcycle parking permit by 75% to promote motorcycle use throughout campus. Motorcycles/mopeds do not use as much fuel as a regular vehicle, so Humboldt promotes this environmentally friendly form of transportation by decreasing costs.

For additional information please contact:

Parking & Commuter Services
82 Harpst Street
Arcata, California 95521
Phone: (707) 826-3773
Fax: (707) 826-3843

Appendix M. Case Study: University of Colorado, Boulder

Introduction

The University of Colorado at Boulder has many initiatives to green their campus, including the promotion of alternative modes of transportation. Although 29 percent of the campus community still drives alone to campus, there are a variety of programs in place to

encourage other modes.⁶⁴ These include extensive transportation planning, structured parking permit costs, an extensive and unique bicycle program, free unlimited bus access, carpooling permits, shuttle busses, and a pedestrian friendly campus.

Transportation Planning and Management

Two groups at the University are responsible for transportation demand management, the Environmental Center and Parking and Transportation Services. The Environmental Center has 5 full-time staff working on a variety of projects, including transportation, and PTS has 1.5 full-time staff working on transportation.⁶⁵ Though each department has its own specific role in planning and funding alternative transportation, they often work together to promote alternatives. For example, the Environmental Center is in charge of student bus passes, while PTS manages the faculty/staff Eco Pass program, which includes free bus access.

The Environmental Center is more focused on alternatives than PTS, promoting bicycling, bussing, driving alternatively fueled vehicles, and walking to campus. In regards to alternatives, the main project being handled by PTS is the faculty/staff Eco Pass, which started in 1998.⁶⁶ The Eco Pass gives unlimited access to local and regional busses, free buff bike rental, eligibility for guaranteed ride home service, and discounts around Boulder.⁶⁷

There is currently no transportation demand management (TDM) plan for CU Boulder, however, there is an on-going report and a plan that both address many issues similar to those that would be found in a TDM plan. The Campus Micro-Master Transportation Plan was created for PTS by an outside agency, and examines current transportation practices as well as suggests plans for the future.⁶⁸ In addition, there is the “Blueprint for a Green Campus” report, which is updated yearly. The blueprint includes a segment on “Growing without Increasing Traffic,” which addresses transportation issues.⁶⁹

Cars

As of fall 2004, the CU Boulder enrolled 29,756 students, and 7,100 faculty and staff, not including student employees.⁷⁰ For a total population of close to 37,000, they provide only 11,989 parking spaces for automobiles.⁷¹ Of these spaces, 30 percent are available to faculty and staff, and 40 percent are available to students only. The remaining 30 percent of parking spaces is made up of motorcycle spaces, metered spots, and restricted parking areas. Therefore, the ratio of parking spaces per student is .18, while the ratio of spaces to faculty and staff is .48. Overall,

⁶⁴ Nelson and Nygaard, Consulting Associates. “Existing Conditions.” University of Colorado and Boulder Micro-Master Transportation Plan. 1 Dec. 2003. <<http://ucbparking.colorado.edu/transportationmasterplan/>> page 5-2

⁶⁵ Ibid. Page 6-1

⁶⁶ Ibid. Page 6-2

⁶⁷ “Eco Pass Frequently Asked Questions” Parking and Transportation Services
<<http://ucbparking.colorado.edu/AlternativeTransportation/Default.asp?Action=ViewAnyPage&ID=57>>
Accessed 15 Feb 2005.

⁶⁸ Nelson and Nygaard, Consulting Associates. “Existing Conditions.” University of Colorado and Boulder Micro-Master Transportation Plan. 1 Dec. 2003. <<http://ucbparking.colorado.edu/transportationmasterplan/>>

⁶⁹ “Blueprint for a Green Campus – 2001 Update.” Environmental Center. University of Colorado Student Union. 2001. <http://www.colorado.edu/center/greening_cu/2001/page3.html> Accessed 15 Feb 2005.

⁷⁰ “Number of Students by Age Bracket.” Office of Planning, Budget, and Analysis. 2001.
<<http://www.colorado.edu/pba/records/misctopics/agebins04.htm>> Accessed 16 Feb 2005.

⁷¹ Nelson and Nygaard, Consulting Associates. “Existing Conditions.” University of Colorado and Boulder Micro-Master Transportation Plan. 1 Dec. 2003. <<http://ucbparking.colorado.edu/transportationmasterplan/>>. pg 4-6

the ratio is .35 parking spaces to any member of the campus population,⁷² which is a fairly low average when compared to other Universities such as UC Davis or Colorado State.⁷³

For faculty and staff parking permits, CU Boulder has implemented a pricing structure that is based on the proximity of the parking lot to the department. The three price levels for regular parking permits are \$39.50, \$33, and \$26 monthly.⁷⁴ The closer a faculty or staff member parks to their building, the more they pay to park. This means that it is possible for faculty members to pay different prices for spaces right next to each other. The cheaper alternative to parking in the proximate lots is the remote lot. Faculty and staff members can park in remote lots for only \$10 per month, and ride the STAMPEDE shuttle bus to campus with their Eco Pass.⁷⁵ The STAMPEDE shuttle runs every 10 to 15 minutes.

Other alternatives to the monthly pass system are temporary weekly permits, which are available for \$9.25, and one-day parking permits, available for \$5.50.⁷⁶ There are also a variety of metered parking spots and “pay-on-foot” stations, which can be paid in advance up to 10 hours with a credit card.⁷⁷

CU Boulder has an incentive for drivers who decide to give up their parking spaces mid-way through the year. For commuters who have had their parking permit for a full year, the Changed Habits in Parking (CHIP) Permit is available.⁷⁸ This gives commuters a discount on day use parking permits, from \$5.50 to \$3.75. CHIP holders can only use this discount four times per month. Since its inception in 2002, the CHIP permit has been used 160 times.⁷⁹ Overall, CU Boulder has relatively cheap car parking when compared to other universities. Inexpensive parking means that drivers have little incentive to leave their cars at home. This perhaps explains the large percentage of single occupancy drivers to Boulder as well as the little use of the CHIP permit.

Bicycles

Boulder is a bicycle friendly city, boasting of 362 miles of bicycle routes in the area. In a 1999 survey, it was found that 13 percent of all faculty and staff ride their bikes to work at least once a week.⁸⁰ The ratios of population to bicycle parking are much lower than the car parking space ratios. As of 2003, there were 7,327 bicycle parking spots on campus, and a plan to add 1000 additional spots by the end of the school year.⁸¹ This is a ratio of approximately 1 spot per faculty or staff member and 1 spot per 4 students.

⁷² Ibid. 11-2

⁷³ Ibid. pg 4-16

⁷⁴ “Faculty and Staff Permit Prices.” Rates, Fees, and Fines. Parking and Transportation Services.
< <http://ucbparking.colorado.edu/RatesFeesFines/Default.asp>>

⁷⁵ “Remote Parking/Shuttle Permit.” Parking and Transportation Services.
<<http://ucbparking.colorado.edu/Default.asp?Action=ViewAnyPage&ID=128>> 17 Feb 2005.

⁷⁶ “Rates, Fees, and Fines.” Parking and Transportation Services.
< <http://ucbparking.colorado.edu/RatesFeesFines/Default.asp>> 17 Feb 2005.

⁷⁷ Ibid.

⁷⁸ “Eco Pass Holder Parking Options.” Parking and Transportation Services.
<<http://ucbparking.colorado.edu/AlternativeTransportation/Default.asp?Action=ViewAnyPage&ID=64>> 17 Feb 2005.

⁷⁹ Nelson and Nygaard, Consulting Associates. “Existing Conditions.” University of Colorado and Boulder Micro-Master Transportation Plan. 1 Dec. 2003. <<http://ucbparking.colorado.edu/transportationmasterplan/>>

⁸⁰ Ibid. 5-8.

⁸¹ Ibid. 5-31.

CU Boulder's bicycling program is a joint partnership between the Environmental Center and PTS.⁸² The Environmental Center is responsible for research, promotion, development, administration, and funding for the CU Bicycle Program, and PTS does some additional promotion.⁸³ The bicycle program has many unique features that make it stand out from other universities. One such creation of the program is the Bicycle Station, available during non-winter months. The station serves as a campus resource for cyclists, providing maps, tools, and other helpful information about cycling in Boulder.⁸⁴ Campus cyclists can also register their bicycles for a one-time fee of ten dollars. Registration provides better chances of recovering a stolen bike. Another unique service offered by the Bicycle Program is the free rental of Buff Bikes. These are University owned bikes that are available for rent to students, faculty, and staff. Bikes are available for up to two days at a time, and come equipped with locks, lights, and a helmet. Students can check out a one-speed cruiser, while faculty and staff with an Eco Pass can ride a three-speed cruiser.⁸⁵

Finally, for students who wish to purchase their own bicycle, the Bicycle Program offers interest free loans of up to \$500. The loans must be used to purchase their own bicycle, and are allotted through a local credit union.⁸⁶

Public Transit

Public transportation is free to all students, faculty, and staff with proper identification. The student bus pass program began in 1991.⁸⁷ In 2004, students paid \$31.76 in student fees for their bus pass, which is a valid sticker on their Buff Card. Faculty and staff use the Eco Pass to ride the bus, and do not pay extra for this service. Service provided includes local and regional routes, the SkyRide to Denver International Airport, and a ski bus.⁸⁸

Carpooling/Rideshare

UC Boulder offers a special parking permit for vehicles that carry three or more passengers. Carpool permits are available to students, faculty, and staff. Each carpool gets a hanging permit, which can be transferred among vehicles and members of the carpool, and only one car can be parked on campus at a time using that permit.⁸⁹ Unfortunately, carpoolers do not get preferential parking, nor is the permit rate discounted from the regular rates. However, as the entire carpool shares the cost for one space, the cost is divided among the riders, making it a discount to each individual. This carpooling program, while flexible among users, does not provide as much incentive as programs that offer preferential parking and other perks.

⁸² "CU Bicycle Program." University of Colorado at Boulder. <<http://www.colorado.edu/bicycleprogram/>> Accessed 17 Feb 2005.

⁸³ Ibid.

⁸⁴ "CU Bicycle Station." University of Colorado at Boulder. <<http://www.colorado.edu/bicycleprogram/bikestation.html>> Accessed 15 Feb 2005.

⁸⁵ "Buff Bike Rental Program." University of Colorado at Boulder. <<http://www.colorado.edu/bicycleprogram/buffbikes.html>> Accessed 17 Feb 2005.

⁸⁶ "Interest Free Loan." University of Colorado at Boulder. <<http://www.colorado.edu/bicycleprogram/loan.html>> Accessed 17 Feb 2005.

⁸⁷ Nelson and Nygaard, Consulting Associates. "Existing Conditions." University of Colorado and Boulder Micro-Master Transportation Plan. 1 Dec. 2003. <<http://ucbparking.colorado.edu/transportationmasterplan/>> pg 6-6

⁸⁸ Ibid.

⁸⁹ "Carpooling." Parking and Transportation Services. <<http://ucbparking.colorado.edu/AlternativeTransportation>> Accessed 17 Feb 2005.

In addition to the carpool permits, there is an online database called RideArrangers that can instantly provide matches for carpooling. Rides can be arranged both online and by phone.⁹⁰

Conclusion

Though it is a larger campus, CU Boulder is similar to the University of Oregon when it comes to alternative transportation planning and programs. Both campuses offer free public transportation services, and some incentives to carpool to campus. Boulder's carpooling permit system provides a good example of a flexible program, allowing members to drive different vehicles or with different passengers. However, the pricing structure of Boulder's car parking still provides an incentive to drive, as it is relatively cheap.

Both CU Boulder and the UO have also been thoughtfully planned to be friendly to pedestrians and cyclists. Boulder's Bicycle Program goes the extra mile to provide as many incentives as possible to potential cyclists, including free rentals and interest-free loans. Overall, CU Boulder has a well-organized and successful alternative transportation program that should be an inspiration to many campuses in the future.

Appendix N. Interview: Tom Hicks

Interviewee: Tom Hicks
Department of Public Safety Interim Director
(541) 346-2912
thicks2dpsnet.uoregon.edu

Interviewer: Jennifer Jacobs
1/18/05 3:00 PM

Overview:

As the interim director of the Department of Public Safety Tom Hicks has a great deal of experience and knowledge when it comes to the transportation situation at the University of Oregon. He estimated that he spends at least 30 percent of his time dealing with transportation related issues. As a result, he is familiar with both the current status of the UO transportation programs, the existing plans and changes being applied, and he has insight into possible developments that may improve the parking situation on campus.

When discussing transportation, the most striking point Hicks noted, was the ratio of parking spaces to campus community members, which he estimates to be 1 to 7. The majority of universities throughout the country have ratios of 1 to 4, or 1 to 2. Despite this lack of parking availability, people are not deterred from driving to campus. Citing a study done in 1990, Hicks said that 40 percent of all university goers, including faculty and staff, drive to campus. There is not a great deal of publicity around the various alternative forms of transportation supported by the University, but in the past, informational services regarding such programs have gone largely unused.

A good deal of the interview focused on the carpool program, which Hicks acknowledges is insufficient. Very few carpool parking permits are sold per year, despite the large price reduction compared to a regular day pass and the fact that carpool spaces are located in desirable

⁹⁰ Ibid.

areas of campus. Hicks attributed the low use of the carpool program to people's reluctance to depend on someone else's schedule when arriving and departing from campus. Alternatives like biking and bussing are often unattractive, he said, due to the additional time they add to one's commute. In order for people to utilize carpooling, Hicks said, they need to have assurance that they will be able to get home when they want.

Finally Hicks had several insights into future developments in University transportation. The University is contemplating developing a shuttle service to accent the proposed BRT system being initiated by the LTD bus company in Eugene. Also, he speculates that the pricing structure of the parking permits could be used to drive demand through price increases. This method has proved effective in the past, however eventually becomes irrelevant as inflation catches up. Overall, Hicks emphasized the tendency of campus commuters to remain set in their ways, withstanding any current or future developments. The problem, he noted is that people do not use current programs like busing and carpooling in conjunction, but rather to facilitate driving to campus. In addition, the existing campus parking shortages are causing high levels of complaints both from University faculty and staff and residents surrounding campus. As a result, Hicks would prefer an increase in the number of spots available, and looks towards the planned construction of a new University parking structure to facilitate this.

Individual Questions:

1. *What is the ratio of parking lot spaces to staff/ students/ everyone else?*
 - 3200 spaces for faculty and staff
 - 1400 spaces for students
 - 450 metered spaces- used mostly by students
 - University sells 3300 permits a year to faculty and staff
 - University sells 4000 permits a year to students
 - Ratio of spaces to community member is 1:7
 - Most campuses are 1:4 or lower
 - (University is renowned for having so few parking spaces which results in a large margin of complaints)

2. *What is the ratio of bike spots to staff/ students/ everyone else?*
 - 3900 bicycle spots on campus- available to everyone
 - Not sure of the number of people who use them

3. *What is the basic cost structure of the parking permit programs?*
 - \$164 per year for day use permit for faculty and staff valid 5am to 12pm
 - \$93 per year for student day use permit
 - \$270 per year for overnight permit for students in the residence halls
 - Total of \$363 per year for students parking 24 hours on campus
 - University only sells 400 overnight permits a year through lottery system
 - Limited number of people buy reserve spaces (2 different types)
 - Sell 25 type 1 reserve spaces at 70 dollars a month
 - Sell 200 type 2 reserve spots at \$400 a year for faculty and staff whose job requires them to come and go during the day

4. *How is transportation demand managed on the campus?*

- Primarily managed by limiting number of available parking spaces
- Altogether have around 3500 parking spaces not including Autzen stadium for a campus community upwards of 25000 people
- Lack of parking spaces discourages many from bringing their cars to campus, but does not necessarily change their mode of transportation
- Many people still drive, but park off campus
- Last study (done in 90's) indicated that 39 percent of University students and faculty drive to campus and 13 percent take the bus, 50 percent ride their bike some of the time what about staff?
- Study being done by Fumiko Docker to re-assess these statistics

5. *What subsidies exist for the bus and carpool programs?*

- Parking program pays for faculty and staff group pass permits for the bus
- Incidental fees provide bus use for students
- Encourage carpooling by offering a reduced rate parking pass

6. *What is the cost of building and maintaining one parking space?*

- See budget sheet- roughly out of one million dollars budgeted, \$12400 goes to building and replacement of parking lots
- New parking structure of 800 spaces estimated to cost \$15000 per year for maintenance.

7. *How much land does one spot take up?*

- Typical space is 8.5 feet x 18 feet, but more than 49 spaces requires additional land for lighting etc.

8. *Is anything being done to improve the safety of bikers on campus?*

- Have been attempts to have city of Eugene install better lighting and patrol the Alton Baker Park area more regularly, but no action has been taken
- At Leo Harris parkway, land becomes University property
- Idea of providing a park and ride shuttle service at Autzen which would result in the necessity of addressing the security issue there

9. *Are there any initiatives to fight bike theft? Lock boxes?*

- Installed 40 additional bicycle lockers in the past year
- Fee for use is \$30 per year- currently leasing half of the available lockers
- Bike lockers don't meet the typical bicyclist's needs because they only provide protection from theft in one stationary location
- Majority of bike theft occurs in residence hall areas- so it is not usually directly influencing the campus commuter
- University is looking into installing close-circuit TV cameras in areas which experience heavy theft rate

10. *What opportunities exist currently for faculty interested in carpooling on campus?*

- Lower permit rate (\$87 per year)

- Carpool spaces are offered in premiere or desirable spots- specifically on 13th Avenue in front of Willamette Hall
11. *How many car pool passes are purchased on average per year?*
- University only sells 30-40 carpool permits per year
12. *What percent of the University budget depends on parking pass income?*
- None- the fees are only used to support the parking program or pay officers in DPS who are enforcing the parking lots
 - Any surplus is usually used to fund beautification projects- i.e. the heart of the campus project
13. *How does the fee for a car pool pass work? What is the largest number of people who can use it? Number of cars? If someone from the group leaves what happens?*
- Carpool must be a group of 3 or more, at least 2 of which are University affiliated
 - No limit on how many people are in a carpool, but it is limited to only one car
 - If a member of the group leaves, it is necessary to find a replacement
 - With regular passes it is possible to buy a second one for a separate vehicle for a third of the cost of the original- however this is most likely not the case with carpooling passes
 - Pass costs \$90 per year- \$30 per person
14. *How do you regulate carpooling?*
- Mainly regulate through enforcement or informants
 - Have received complaints in the past about the misuse of carpool passes and have revoked the passes
15. *Is there any way to use a partial carpool pass- car pool some days a week and drive another?*
- No- the University does not offer any partial permits
 - Also does not offer a discount for a 2 person carpool
16. *Are there any new initiatives planned or current efforts in the carpool program?*
- No
17. *Is there anything you have tried in the past when it comes to carpooling that has been ineffective?*
- No, however current program is not very effective given the low sales of carpool permits
18. *Why hasn't there been more emphasis on carpooling up to this point?*
- Not sure why- speculates that it just doesn't seem to be "the American way"
 - Acknowledges that he himself could carpool with several neighbors but does not due to the fact that his job often requires late evenings
 - Feels that there should be a way to ensure that one can get home at the time they want, even if other members of the carpool need to leave at other times
 - Current solutions for this issue, like the bus, are unfeasible because they require too much extra time for most

19. *What are the details of the taxi plan? How does it work, who can use it, what is the availability of it?*

- Called “the guaranteed ride home”
- Available for those carpooling, biking or busing with a legitimate emergency for which they need to get home
- The taxi company sends the University the bill
- Taxi voucher program is not widely used

20. *How are biking, carpooling, and bus pass opportunities publicized to staff/ students?*

- Initial publicity (for the taxi plan about a year and a half ago)
- Information about programs on website, but they are not actively advertised
- New faculty receives parking brochure with information about the programs
- Sporadically post updates and email faculty on bus service availability
- Former transportation resource center in the EMU was moved to a less central location because of lack of use by students and staff

21. *How does the LTD bus pass work for faculty and staff?*

- Anyone with a UO I.D. can use the bus service
- Problems arise when people who no longer attend or work at the University continue to use their I.D.s to ride the bus

22. *Are there any other planned or current initiatives involving university transportation that have not been discussed?*

- Currently looking at the option of providing a shuttle service around campus to compliment the LTD addition of the BRT service
- Shuttle would also take advantage of parking at Autzen
- As University expands, real estate utilized by parking lots will have to be converted to building space
- Hence, parking lots will get farther away, necessitating a shuttle service
- Not convinced that a shuttle service would necessarily reduce automotive use, as people would still use their cars to access shuttle parking sites
- Talk to Rand Stamm for additional ideas
- University is in the midst of planning to build a parking structure for campus at either the intersection of Franklin and 11th avenue or on the east side of campus, depending on the structure of the new arena
- Already have the bonding authority to build the structure however it will not necessarily add parking space to the campus because former parking would be consumed by additional university building
- He would prefer if it actually increased the available supply of parking due to the fact that we are 500-1000 spaces below the minimum level of parking.
- University has no way of accommodating large events due to parking demands because of the heavy reliance on driving to these events
- This results in complaints against the University
- University also does not provide parking accommodation for people who leave during the day and then return

- A shuttled lot could solve this problem
- Complaints do not come from students usually and it may be beneficial for students who live on campus to be denied having a vehicle

23. *What do you think could be done to influence the routines of the campus commuter?*

- In the short term, fee system drives demand
- (In 1989 parking fees were increased 3 fold which from \$39 to \$94 which resulted in a 25 percent drop in demand)
- The increase in price did not necessarily result in lower car use, rather people were finding other places around campus to park
- Parking permit prices increase regularly with rate of inflation (3 percent per year), so any jump in price is eventually ineffectual
- University parking rates are half the cost of downtown parking permits in Eugene
- Permit structure is currently there to generate revenue to operate program
- Possibly could be used as a policy to drive demand
- Biggest problem with parking situation lies in the size of Eugene and the fact that people are willing to put up with up to a 20 minute drive.

24. *Are there any useful documents/ resources I could access to find out more about university transportation programs and statistics?*

- Transportations Systems Review (Choices)- University of Oregon Planning Committee, 1996
- Parking Structure Citing Study (1998)
- Talk to Fred Tepfer for possible copies of these reports
- Also need to look at the Campus Long Range Development Plan- talks about transportation policies for the University

Appendix O. Interview: Rand Stamm

Interviewee: Rand Stamm
 Head of Transportation and Parking Services, University of Oregon
 541-346-5447
rstamm@dpsnet.uoregon.edu

Interviewer: Jessie Oettinger
 Jan. 19, 2005, 10 a.m.

Overview:

Between 20,000 and 33,000 people come to the University of Oregon campus everyday. The UO owns approximately 3,300 parking spaces to provide parking for everyone. Because of the limited parking available, the UO encourages people to take alternative forms of transportation such as walking, biking, taking the bus, or carpooling. The University of Oregon Transportation and Parking Services is a self-sufficient auxiliary of the Department of Public Safety. TPS enforces parking regulations, looks after the Bicycle program, handles the LTD contract, and tries to promote alternative means of transportation as much as possible.

TPS is busy taking care of parking citations, bicycle registrations and all their other tasks. They often do not have the time or resources to publicize the advantages and importance of carpooling. TPS has some ability to raise the price of parking passes, which Rand Stamm thinks must be prohibitively expensive to get people to break habits like single occupancy driving to campus. There are many opportunities for our SLP team and the UO Administration to work with TPS to encourage alternative forms of transportation.

Individual Questions:

1) *Before we get our campaign started we're looking to collect data on how people get to the UO everyday. Do you have numbers or do you know where I can find them?*

- No idea where those numbers would be, what they are.
- There are approximately 3,300 parking spaces and most of them are filled everyday.
- Of those parking spaces, 1,500 are designated for students, and over 3,000 are available to faculty and staff. 18 are for carpools only.
- There are countless Eugene city parking places as well.
- A significant number of people walk *.
- LTD thinks approximately 3,000 people ride the bus to campus everyday. Where is this info from? Jessie! You included my note to you.
- Fred Tepfer would know more about bicycles.

2) *How much do parking passes cost?*

- A year-long pass costs \$167 for faculty/staff, \$97 for student, \$84 for a carpool. A day pass costs \$2.

3) *How does the carpool work?*

- A carpool consists of 3 or more people, 2 of whom have to be coming to campus each day. The third member can work somewhere in the University neighborhood.
- The users must fill out a form with their address and sign that they only intend to carpool to campus.
- Carpools are advertised by department mass emails, the ASUO, and flyers.
- The carpool is enforced by the campus community. DPS officers as well as other faculty and staff notice when a singly* occupied vehicle is using a carpool pass.
- DPS frequently sends out emails reminding faculty and staff of the environmental and monetary advantages to carpooling.

4) *What actions have the Transportation and Parking Services taken to discourage single occupancy vehicles?*

- In the early 90s TPS offered everyone who turned in their parking pass after fall term a full refund. The 20-30 people who participated all bought parking passes again the next year.
- TPS had hoped to re-educate, but just convinced people to get free passes.

5) *How is the response to the emails?*

- 20-30 carpools a year.
- It's not that the info isn't out there, it's that people don't want to carpool.

- People have errands to run and kids to pick up, and they use it as justification for not carpooling or riding the bus.
- There isn't a real cost incentive to change.

6) *Do the fees reflect accurately the cost to the UO?*

- Parking is self-supporting, but TPS survives off citations, special events parking and permits.
- Ideally, TPS be "easily charging twice as much for permits."
- Ideally, TPS would not include citation in its budget.
- Citations are used to educate and not to raise money.

7) *How do you think we could increase the number of carpools at UO?*

- Start educating people much, much younger. Bad habits are learned young, like depending on personal automotive transportation.
- The University could do more to educate. TPS does not have the budget. It has no PR staff to educate people about all the options out there
- TPS consists of Rand Stamm, his assistant, two halves of two DPS employees, a kiosk attendant, and 4 parking patrol officers.
- TPS has an operating budget of 1.5-1.7 million dollars.
- The University of Virginia operates on a 12 million dollar budget, Penn State on an 8 million dollar budget.
- These universities provide a lot more transit, but they also have a support staff of 20-30 to help educate the community.
- UO has accomplished a lot and received international recognition. We have a 7:1 people to parking spaces. Nobody else makes this work. Other universities have problems when the ratio is 3:1.
- UO is already famous "for doing what we do with our transportation programs. We do far better than most places with far less
- We should increase the cost of parking passes. UO is very cheap compared to other institutions and even the city of Eugene. It costs \$40 a month to park in downtown Eugene.
- "It's going to have to change; we can't keep going this way."

8) *How do LTD bus passes get paid for?*

- Student bus passes are paid for out of incidental fees.
- Students pay approximately \$12 a year for their bus pass.
- Faculty and Staff bus passes are paid for out of TPS budget.
- Rand Stamm is the contract manager for the University of the LTD contract.

9) *What is the Transportation Management Demand Plan for the UO?*

- In the long-range plan single occupancy vehicles are not considered the emphasis.
- The long-range plan emphasizes alternative modes of transportation.
- TPS worked with LTD to create the Breeze, a shuttle that runs directly from UO to the Eugene Station and to the Valley River Center.
- Biking is encouraged with safe, secure short and long-term bike parking.
- New lockers and better racks for bikes. Better lighting to encourage walking.

- 80 percent of students live within mile of campus—encouraging them use alternative modes of transportation.
- Single occupancy vehicles are discouraged whenever possible.
- Now parking around Oregon Hall is only for carpools, “If you want prime parking here’s how you can do it”
- Trying to find prime-parking places all over the campus lots and reserve it for carpools to emphasize the advantages to carpooling.
- There is consideration being given to Pay-on-Foot stations in parking lots as opposed to permit or meter parking. This mode of parking payment is convenient for those who don’t have loose change and who only drive occasionally. If parking for an entire day sans* permit is made easier maybe people will be less interested in buying parking passes and driving every day.

10) *Can you tell me more about guaranteed ride home?*

- LTD is now the contractor for guaranteed ride home.
- Everyone who contracts with LTD is guaranteed a ride home in the case of an emergency.
- It’s to offer a sense of security for people who worry about not having their cars in an emergency.
- Taxi voucher for multiple stops.
- Sacred heart* has guaranteed ride home and utilized it only 2-3 times last year.

11) *Has TPS launched any campaigns in the last few years to increase alternative transportation?*

- Severely limited staff.
- Limitations in what we can accomplish.
- TPS must be self-supporting.
- “How much more can we actually expect to do? We get 20-30,000 people to this campus on a given day with 3300* parking spaces. That’s astonishing. That’s incredible. Could you realistically expect to make much bigger impact?”
- There is talk of rapid transit that may make a big difference. It would be like a tram or the MAX (light rail service) in Portland.
- “Americans tend to balk a bit at the buses. Quite frequently people tend to look at them as if they were a lower class of transportation which is really unfortunate.”
- “In the Netherlands everyone takes the bus. It’s too expensive to drive. Here, unless you’re in a major metropolitan area the buses aren’t that great. Tri-met does a good job, LTD does well with what they have.”
- UC Davis provides the whole transit system for the area. Universities often have to take the lead on that.
- There was talk of creating a park and ride at Autzen. A 20 min shuttle system is not possible with Ferry Street Bridge, and people, Americans will not wait more than 20 minutes for a shuttle.

12) *Can you tell me about the Bicycle Plan?*

- Under the jurisdiction of TPS.

- What has been successful is the increase in number of covered bike parking, cages and lockers.
- What hasn't worked is that the weather refuses to cooperate and it rains a lot. People are less willing to bike in the rain.

13) *What has been done to make the bike paths safer?*

- Alton Baker Park and its paths belong to the city of Eugene.
- Increased lighting makes paths safer but also disturbs nocturnal wildlife. There is a group of Eugene citizens who advocate for them.
- To make the paths safe, you'd ultimately also cut away all the brush, but in a park setting that's unrealistic.
- TPS encourages people to be safe, to not ride or walk alone, to call people and tell them when they're leaving and when they should arrive.
- The city of Eugene is astonishingly safe.

14) *What do you do to publicize the bike program?*

- Every fall TPS sets up tables and registers all bikes for free.
- They distribute pamphlets on bike safety and theft.
- TPS works with the city of Eugene to publicize bike paths.

15) *How many bikes are registered at UO?*

- Probably around 50,000-80,000 bicycles are in the TPS database, but it has also never been purged.

16) *What happened to the Bicycle Coordinator?*

- He quit to do other things and when he left the position was evaluated and it was determined that it never served purposes intended, which was to work with TPS to make UO more bike friendly.
- The bike coordinator was torn between advocating for bikes and the wider program.
- Often the needs of cyclists came into conflict with whole program
- "Our job [at TPS] is to manage and balance and juggle so that it works well for everyone and that position tended to advocate things for bicycles that would have caused problems for pedestrians and vehicles for transit."
- Problems for bikes include stop signs, raised sidewalks, and little white speed bumps.

17) *Who sets the fees for parking passes?*

- TPS recommends and proposes the fees, but there is a state fee making process.
- The new fee is publicized, there is a hearing where people speak, the administration of the UO has to approve it and then it's passed along to the Secretary of State.
- TPS has suggested radically large increases in the past that have been met with opposition.
- UO is wary of making radical changes.
- TPS tries to maintain 3-4 percent increase every year to keep up with inflation.
- Every year Rand proposes radical increase 50-100 percent just to have it out there.

- UO is looking at building a parking garage, which would require 500-700,000 dollar a year loan payments. TPS does not have that kind of budget so that would raise fees significantly.

Appendix P. Interview: Fred Tepfer

Interviewee: Fred Tepfer
Planning Associate
(541) 346 – 5564
ftepfer@oregon.uoregon.edu
<http://darkwing.uoregon.edu/~tepfer/>

Interviewer: Jody Trendler
Jan. 19, 2004. 3:00 pm.

Overview:

Fred Tepfer is a planning associate in the University of Oregon's Planning Department. Over the years, Tepfer has worked on numerous projects involving alternative transportation at the University, including the Bike Plan and the Sustainable Development Plan. Key points discussed during our interview included faculty and staff transportation use, the transportation demand management plan at the UO, the bike plan, and tactics for promoting alternative transportation. Two areas for growth that Tepfer stressed are carpooling and the park and ride system. Each of these areas could be improved to attract commuters who otherwise drive. Tepfer also explained many unimplemented plans and ideas for the future, including connecting Autzen stadium to main campus via shuttle, and new incentives for carpooling. Finally, we brainstormed a few ideas for this campaign, and Tepfer provided the team with copies of many useful resources.

Tepfer introduced me to a number of programs that promote alternative modes of transportation to campus that often go unnoticed. These include the carpool permit program, the guaranteed ride home taxi voucher, and priority parking before 9 am on 13th avenue for carpoolers. Tepfer explained that these programs could be more effective if they were made more visible. The guaranteed ride home program is an important example of a program which influences a commuter's decision whether or not to drive, provided it is in their mind as an option. Without knowledge of the program, a commuter is more likely to choose to drive. Tepfer contributes the lack of attention to these programs to the fact that they have no overarching program or administrator to promote them.

Tepfer, a bike commuter himself, had many insights into the behavior of faculty and staff, as well as the rationale behind their decision of how to get to work. These insights are helpful for the team as we try to influence the behavior of faculty and staff. He suggested talking with small groups of faculty and staff at their meetings as a more effective way of reaching someone than a flyer or a brochure. Another idea is to talk about alternative transportation as a solution to the frustration that comes from trying to park on campus. Overall, the mindset of a commuter must be understood, and incentives must be in place to help them get over any hurdles to using an alternative mode of transportation.

Individual Questions:

1. *How do most faculty and staff get to campus? Has there been a campus survey?*
 - The majority of faculty and staff are driving, most likely alone.
 - Last comprehensive survey on transportation was in the 1990s.
 - Survey was somewhat flawed, but the underlying data is good.
 - Fumiko Docker should have a copy of the report.

2. *Does the University have a TDM Plan? (Transportation Demand Management)*
 - Yes, there are many individual projects that contribute to a campus TDM however, there is no one umbrella plan that encompasses everything.
 - The plan is not visible to users because of the lack of an overarching plan.
 - Programs include bicycle programs, carpool program, parking supply management, and the promotion of telecommuting.
 - TDM agreement with the city reduces amount of parking the University is required to provide by 50 percent.
 - University of Washington's U-Pass system is an example of a highly visible TDM Plan.
 - No one is responsible administratively. Rand Stamm and Fred are the only two people working on it, and only part time.
 - In the 1970s, the U.O. had a radical Long Range Development Plan, which essentially included a TDM, before the phrase was coined.

3. *What is the Planning Department's role in promoting alternative transportation?*
 - Mostly creating plans, not implementing them.
 - Many people in the department "wear other hats" and work for other groups such as the Environmental Issues Committee, etc.
 - Sustainable Development Plan and Long Range Campus Development Plan both address alternative transportation.
 - In the process of updating the Long Range plan, eventually will update the transportation element.
 - These plans have helped the University become a leader in alternative modes of transportation.
 - Long Range Development Plan in the 1970s was considered radical. Now that the world has caught up with us, we need to work to be at the leading edge again.

4. *What have been the successes of the 1991 Bike Plan?*
 - The core aim of the plan has been achieved.
 - Before the plan, pedestrians used to feel the way cyclists feel riding in heavy traffic. The plan created a place for bikes and a place for pedestrians to move through campus without conflict.
 - Also moved bike parking to areas that are most frequented, to provide greater safety from theft.

5. *What are you working on now to update the Bike Plan?*
 - Bike theft and secure bike parking are the main issues.
 - Covered bike parking, weather related issues.
 - His goal would be to make secure parking very affordable.

- Security is a problem in the Residence Halls, because bikes are parked overnight. Enclosure of courtyards would help. The new buildings will have increased security.
6. *How many bike parking spaces are there on campus? For faculty/staff? Students?*
 - Refer to UO Facilities Fact Sheet, September 2003. (See Appendix)
 - More bike parking spaces than car parking spaces. Our campus is unique in that respect.
 7. *How many car parking spaces are available on campus? For faculty/staff? Students?*
 - The goal is to have just enough parking, as opposed to too much, in order to regulate demand. For the UO, this is the most affordable way to have parking.
 - Most people want both convenient, close parking and a campus that is not filled with cars, so they are willing to park further away in order to keep campus nice.
 - Rand Stamm will have figures on number of parking spaces.
 8. *Does everyone who wants a parking permit receive one? What kinds are there?*
 - Two types of student permit: regular and overnight.
 - Overnight permits are limited in number, sold by lottery. Most demand is met.
 - Two types of permits for faculty/staff: regular and reserve
 - Reserve spaces require a written justification.
 - Rand Stamm could provide figures on number of parking permits sold.
 9. *How does the carpooling program work?*
 - A specific carpool gets a reserved space for a cheaper price than a regular reserved space.
 - With restructuring and promotion, this is an area for potential growth. It might attract other alternative transport users, but mostly will attract single occupant commuters.
 - Informal carpools (I.e. Neighbors, Spouses, Kiss-n-Ride) exist that do not take advantage of the benefits. Might not be aware of the carpool program.
 - Until 9 am, carpoolers get priority parking on 13th from Oregon hall to the turn-around. Receive a hangtag from the kiosk. Very little awareness of this program.
 - Rand Stamm will have further details about carpooling.
 10. *Guaranteed Ride Home*
 - Recommendation from 1995 survey to establish and publicize the program.
 - Needs to be in the mindset of commuters.
 - No framework of a larger program to create visibility for this program, it is not widely heard of.
 - UW and UCLA were required to have taxi voucher program, both have demonstrated that the program works.
 11. *Has the University considered giving a parking credit to faculty who choose not to drive?*
 - Legal hitches make it difficult to give incentives to faculty, especially money.
 - Could provide non-financial incentives.

- Cornell example: they pay you to park in certain lots.

12. *Are there any plans on the back burner?*

- Shuttle from Autzen and Duck's Village main campus and Sacred Heart.
- Problem would be access through Alton Baker Park, City Council issue.
- Bike escorts along the path from Autzen to campus.
- Park and Pedal. Drive to Autzen, ride from there. Bike locker at Autzen.
- Pedal and Ride. Bike to a bus stop.
- A T.D.M. agreement for Autzen stadium similar to the plan for main campus.
- Planners have suggested vamping up the carpool program. Need the support of DPS to implement it.
- Designated Parking lots. Instead of a reserve space, users get a sticker for a reserved lot. Could sell more stickers next year. Space is used more efficiently.
- A program to buy a secure bike parking space instead of an annual car parking pass, but with a dozen day parking permits thrown in to keep the commuters' options open. Make it cost competitive to have these day passes instead of a yearly pass.

13. *What would you do or what events would you hold if you were trying (like us) to encourage alternative transportation on campus?*

- Faculty attention is difficult to get, habits are hard to change.
- David Niles, DPS, worked on bike promotion as the UO Bike Coordinator. Created tandem taxi, etc. No apparent effect on behavior.
- Call it a "parking event" to attract the right audience, "biking event" attracts bikers, "walking event" attracts walkers. Parking is a major contention that draws people in.
- Promote fitness aspect
- For cycling and walking, assist with clothing and gear
- Promote as a small group. Deal with small groups of people, have dialog at staff meetings about the costs and benefits of different transportation modes. Make the argument on a one-to-one level.
- Events, brochures, and flyers by themselves are not enough, real interactions are necessary
- Environmental Issues Committee brochure on alternative modes is an example. It provides information but is rarely promoted. (see Appendix)

14. *If you were implementing this campaign, what would you focus your energy on?*

- Carpooling has a lot of potential for growth
- Give carpoolers preferred location. With this comes the ability to arrive later at the parking lot, because demand is usually high in the morning.
- Idea: put reserved carpool space at the most convenient end of every parking lot.
- Park and Ride is another area for potential growth.
- Make park and ride competitive time-wise with walking from the parking lot.
- LTD park and ride spaces are free parking.

15. *Are there any good sources for further information that we should have?*

- Parking Structure Siting Study, 1998
- Bicycle Plan, 1991
- Sustainable Development Plan, 2000
- Long Range Campus Development Plan, 2001
- Transportation Systems Review: CHOICES, 1996
- Fumiko Docker will have many more resources and documents.

Appendix Q. Interview: Fumiko Docker

Interviewee: Fumiko Docker
 Graduate Student, Campus Transportation Analyst
Fdocker@darkwing.uoregon.edu

Interviewer: Savannah Crawford
 January 20, 2005, 3 p.m.

Fumiko Docker, a Graduate student at the University of Oregon's School of Architecture and Allied Arts, is a Campus Transportation Analyst who is currently working on an alternative transportation study. I proceeded with a 30-minute interview with Fumiko to gain some insight on how she is conducting her alternative transportation survey.

The Oregon Research Lab, located at the University of Oregon, will contact faculty members and proceed with a five-minute telephone interview. The purpose of this study is to get a better perspective on the methods of transportation used by faculty and their knowledge of alternative transportation programs offered at the University of Oregon.

This study will be completed by the end of February, which we hope to use as guidance for our Campus Transportation Sustainability team. The following are questions asked to Fumiko regarding her alternative transportation survey process. These questions may also assist in providing tips for anyone who may want to complete a study in the future.

Individual Questions:

- 1) *You are working with Steve Mital on a transportation survey. Can you tell me more about this, such as what you are attempting to find and what you hope the results will be?*
 - A five minute phone survey about forms of transportation faculty use to get to work.
 - Survey includes current form of transportation, knowledge of certain programs (carpooling, public transit, etc.), would be incentives for faculty members to use alternative forms of transportation.
 - Oregon Research Lab at the University of Oregon will complete phone survey and tally data, hopefully by end of February 2005.
- 2) *What are the most helpful documents you have come across in this survey process?*
 - Transportation Systems Review "Choices" 1996. A study completed for faculty and students about forms of transportation.

- A study completed by LTD in 2001 for just University of Oregon faculty. This survey was to demonstrate how faculty members arrived to work. The results can be found in the University of Oregon’s Planning Department.
 - University of Oregon’s Planning Department carries a lot of information about alternative transportation methods and studies.
 - Contact Planning Department and Steve Mital (Environmental Studies).
- 3) *Are there particular methods you recommend for transportation surveys?*
- Random samples.
 - Telephone Surveys, which tend to have the highest response rate.
- 4) *What are important factors you like to remember when doing a survey or going to the public for opinion?*
- Be specific when asking questions to limit confusion or incorrect responses.
 - No “if” or “and” questions. Only one specific question at a time.
- 5) *If you were actually trying to promote alternative transportation on campus, how would you encourage faculty and staff?*
- Go to different departments and do workshops with the faculty. Present a short survey as an icebreaker.
 - Explain other forms of transportation and programs offered on campus.
 - Calculate relative cost of driving compared to alternative transportation (i.e. gas costs vs. riding the bus for free).
- 6) *Can you recommend other sources where I can gather information?*
- University Planning Department
 - Department of Public Safety
- 7) *Is it okay if I contact you again?*
- Yes, results of the survey should be completed by the end of February.

Appendix R. Department Information Spreadsheet Template

NAME		Mon.	Tues.	Wed.	Thurs.	Fri.
	commute distance (mi)					
	alt trans miles					
	mode of alt trans					
	usual mode					
	commute distance (mi)					

	alt trans miles					
	mode of alt trans					
	usual mode					
	commute distance (mi)					
	alt trans miles					
	mode of alt trans					
	usual mode					
	commute distance (mi)					
	alt trans miles					
	mode of alt trans					
	usual mode					
	commute distance (mi)					
	alt trans miles					
	mode of alt trans	carpool	carpool	carpool	carpool	n/a
	usual mode	carpool	carpool	carpool	carpool	n/a