

WWU employees' transportation to work:
A focus group study of perceptions and needs

By members of Estu 471, Winter 2006

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Executive Summary

The design of campus transportation systems that meet the needs of all users as well as the many other kinds of constraints facing universities requires broad and systematic information. One important kind of information is the perceptions and needs of the populations that work at the institution. This report provides the results of 17 focus groups of Western Washington University (WWU) faculty and staff from all employment categories which were conducted in Winter 2006 by students in the Estu 471 Campus Planning Studio course in order to qualitatively describe the patterns of their transportation practices, perception and needs. Key research questions included determining the views of those using different modes of transportation; identification of obstacles to alternative mode use; identification of actions employees feel would alleviate such barriers; and description of beliefs, emotions and perceptions about transportation to and from work at WWU. After study of transportation issues, students created two question guides that touch on these major topics, but also would allow conversations to emerge. Student members of the class received instruction and practice on conducting and reporting on focus groups, as well as on Human Subjects Rights, as part of approval of the project by BFR.

Employees were recruited by phone contact from randomly drawn lists. The exact response rate is not known, but is estimated at about 14% on average. There was some degree of self-selection by those with keen interest in the topic, although others responded to the earnest effort to gain participation from each individual contacted. The groups were stratified by employment category: faculty (permanent or temporary); staff (classified or exempt non-administrative; and supervisory or not; and for classified, permanent or temporary) and by whether or not the respondent had a parking permit, as well as a small separate set of groups composed of employees of any category who lived at a greater distances from campus. A total of 71 participated in the focus groups. 56% held parking permits, and 61% were women, the average age was 50.2 and the average years at WWU was 10.8. Respondents had used the same mode of transportation as at present for 9 years on average.

Data were analyzed qualitatively, looking for predominant patterns that emerged repetitively in one or another category. The employment categories were not the main divisions in the analysis, but rather revealed important variations on main themes which related most closely to transportation mode choice and other factors. The data reported in an aggregate fashion here.

Findings

1) Four attitudinal categories were detected in terms of respondent's opinion of the status quo regarding their work transportation experiences:

- The "not unsatisfied" included those living close to campus, with seniority and close parking spaces, some alternative transportation mode users.
- The "not angry but could be happier" were in the middle of the pay range, some with and some without permits. Some parked in the neighborhoods and used alternative transportation other

times. Evening and personal safety were issues. This group expressed some degree of frustration.

- The "frustrated" were on the lower end of the pay scales, and had complaints about lack of flexibility and adaptability of the system in several ways.
- The "irate" were like the "frustrated," but to a higher degree. They had needs to access campus at odd hours, or in varying job-related ways, but who cannot afford a permit. They voiced strongly the barriers felt by many others that prevent them from using alternative modes. As with other groups too, distrust towards the university was an obstacle to satisfaction, much less change of modes.

2. The causes of frustration were many and included Parking Services practices as well as unmet needs. Some of the main causes were:

- The great diversity of employee characteristics (in employment status, in skill and education level, in job responsibilities, in pay, in residence, and in life circumstances such as age and family responsibilities) leads to a wide array of transportation needs. The parking system, however, was often characterized as offering "one-size-fits-all" alternatives.
- When alternatives were perceived as infeasible, employees chose to drive. Once the cost of a permit has been paid, there is little incentive to drive less.
- WWU has a parking shortage, and the rationing system is felt to be burdensome, particularly by those living at distance out of economic necessity.
- Those most likely to drive were those living outside Bellingham, those with children, those with more than one job, and those who worked odd hours. Those who drove because it is convenient were more accepting of the permit cost.
- For some employees cost is the critical concern. For others convenience is the key complaint.

3) Opinion about parking and its cost varied widely. Many were frustrated by its cost or by having to pay to park at work at all, whereas others (parkers and alternative users) felt parking should be more expensive. Some alternative users as well as parkers felt parking should be free. There were dissatisfactions about the seniority-based allocation system; those with undesirable locations hate paying for parking.

4) Use of alternative modes of transportation was related to distance of residence to campus, and thus indirectly to housing type and cost. The few respondents living very close to WWU often walk, and have few complaints. Only the minority of employees with regular workday schedules and living close to direct high frequency WTA transit lines have a truly convenient bus service. Most others, found the current level of service inadequate compared to driving. Bicycle use was low in the focus groups, although it had many potential virtues as acknowledged by many. There are several obstacles to bike use, however. Most employees in the "no parking permit" groups use multiple alternative modes, including driving. They were relatively satisfied with transportation at WWU, and benefited in terms of cost, exercise, feeling they are helping the community and the environment, having time for themselves, and alleviating parking shortage. Improvement suggested by this group (particularly those at greater distances) include:

- Improved bicycle infrastructure
- Continuation and expansion of the County Connector
- Improved van pool and ride share programs
- Greater accommodation of motorcycles

- Increased use of flex time and telecommuting across WWU

5) Barriers or obstacles preventing those who currently drive from using alternative modes include: Perceived risks, costs (such as a bus pass) that might be overcome with incentives and information

- Work schedule inflexibility
- Parking system inflexibility
- Limited or inconvenient loading and unloading zones and requirements
- Time constraints and bus frequency, routing, and off-peak scheduling. Frequencies below every 15 minutes were dismissed as offering a viable alternative.
- Desire not to arrive sweaty or smelly at work
- Need for vehicles on the job

6) Several other important themes that emerged included:

- A common theme across many groups was the difficulties faced by not by themselves but by various categories of visitors to campus, including guest speakers, prospective student families, special events audiences, community library users. Concerns included navigation, fines, signage, and community image.
- Public relations practices, broadly conceived, by Parking Services was the topic of several themes:
 - A lack of a "customer service" approach
 - Aggressive approach to ticketing, for example during after hours, a poor appeals process, the ticket price. A concern was the Parking Services is too closely related to the university police
 - Lack of budget transparency was a source of strong negative feelings including distrust
 - An effective "one size fits all" approach in the face of diverse needs
 - Need for more effective communication and marketing, including communicating options, as well as the rationales of policies
 - A poor public relations ideology and a lack of communication between Parking Services and WWU employees
- Issues related to the parking transportation needs of workers at 32nd Street, including disincentives to use the existing parking lot, lack of connection to the Route 90 bus.
- Park and ride is a workable alternative but not for all drivers, due to frequency and hours of service, lighting and surfacing. Some employees did not know about this alternative.
- Employees commuting from further distances who used alternatives lauded the County Connector but desired a quicker commute and more convenient stops (i.e., 32nd Street); these employees especially valued the guaranteed ride home option. Security in remote parking lots was a concern. Distance commuters with permits often resented the "requirement" that they purchase a parking permit from their employer, and felt there were no feasible alternatives.
- Some variations by employment category were noted, though the categories were not a major axis of analysis. Staff tended to be more concerned with price and were skeptical about where parking monies go. Faculty were concerned about flexibility, temporary disabilities, and other issues (see complete results for more detail).
- A number of policy options such as making parking free; charging exorbitantly for parking; paying drivers not to drive; imposing a transportation fee to cover transportation services including those presently covered by parking fees and other revenue sources; or expanding

parking on campus at an expense to other land uses were touched upon, but not systematically enough to detect patterns.

- Safety was a common theme, including issues like lighting (for example at Lincoln Creek and on walking routes), walking surfaces, bike use rules, location of emergency phones, and issues at 32nd Street.

Recommendations

Although the data were qualitative and the sample limited and to some degree self-selected, the overall patterns we detected suggest certain recommendations. With the caveat that more systematic and representative information is needed to implement many recommendations, the following stand out as possible changes, many of which would not be difficult and might buy considerable good will among employees. Overall, these recommendations suggest improvements in communication, flexibility, convenience, equity and addressing cost concerns. This is especially the case if employees are to be more likely to choose alternative modes of commuting. Please refer to section 6, Recommendations, for details on the following list:

"Low-hanging fruit" suggestions include:

- Utilize all communications and contacts more effectively
- Increase budget and policy transparency
- Change the Parking Services culture to one of greater customer service
- Expand the ticket waiver program
- Remove low-cost barriers to alternative modes, including
- Increase schedule flexibility
- Expand occasional car use options
- Increase the number of loading zones
- Expand the commuter pack
- Free off-peak parking
- Quarterly parking permits

Larger-scale recommendations are grouped under:

- Fundamental rethinking on parking
- Improve alternative transportation options
- Address visitors' needs

In summary, a sustainable transportation system should:

- Provide reasonable, equitable access to the workplace for all employees
- Recognize that employees have very diverse needs and create flexible options that address these diverse needs
- Recognize that at this time alternative transportation is not viable for all employees, and that parking, either on-campus or via remote park and rides will continue to be part of the access system

- Continue to encourage alternative transportation, but find ways to do so without putting undue burden on employees for whom alternatives are not viable
- Create a system that encourages employees to take alternative transportation some of the time but also allowing them to park when necessary
- Identify critical barriers to alternative transportation and when appropriate and cost effective, take steps to remove these barriers and make alternative transportation a viable option for a larger portion of WWU employees

1. Introduction

1.1. The need for information on employees transportation needs

Universities, like many other large institutions, rely on the daily comings and goings of thousands of individuals to carry out their missions. As student enrollments and construction budgets have boomed in the last 20 years, many universities have moved from an era of relative space abundance to relative scarcity. This is particularly true of universities that are "landlocked" by a surrounding dense and / or growing urban area. The net result is that patterns of transportation, particularly single-occupancy-vehicle (SOV) commuting, that worked well in the past have gradually become less feasible as a majority transportation mode choice. In response, campus planners and administrators have sought to diversify the transportation choices available, while simultaneously balancing other institutional priorities and working with limited resources (Toor and Havelick, 2004). Arguably, these general patterns also all typify the situation at Western Washington University (WWU) today.

Systems of transportation services are exceptionally complex to manage. A prerequisite for successfully evolving a university transportation system, therefore, is the creation of appropriate, timely, and adequate data. Toor and Havelick (2004), for example, list 15 major types of informational inputs for developing a campus transportation plan. The last few years have seen movement toward WWU seeking better information, and basing its transportation decisions on such data.

This paper reports on a project, carried out in winter quarter 2006 by students in WWU's Huxley College Estu 471 Campus Planning Studio, which aimed to provide better information about the transportation needs of WWU employees. While transportation (or at least parking) is a cliché "perennial" topic of contention on campuses, a systematic study of employee's transportation needs is necessary to determine the actual diversity and complexity of those needs. Similarly, hip-pocket impressions of even people who are well informed about campus transportation may not be reliable. For example, in work related to a possible universal student transit pass during the Winter 2005 Estu 471 course, the idea of an employee pass was discussed. But careful reflection showed that there was not the knowledge base to judge how significant a service this would provide for WWU workers. The literature (Miller, 2001; Litman & Lovegrove, 1999; Toor and Havelick 2004), and transportation experts (Will Toor, 2005, personal communication; Dan Burden, 2005, personal communication) all point to the need to *understand in detail the needs of employees* in order to design transportation systems that work within the physically, legally, and financially tight confines of contemporary campuses.

2. Background on WWU transportation

2.1. Demographics and location

WWU is Whatcom County's largest single employer, with roughly between 2000 and 2500 active employees, depending on the specific time. In addition, there are roughly 12,000

students who attend classes on campus daily, and have access needs that resemble employees'. Geographically, WWU is sandwiched between three residential neighborhoods and the steep and preserved Sehome Hill Arboretum. WWU is located neither on a major arterial nor a freeway exit, so all traffic to and from WWU passes directly through populated residential areas. Thus, in addition to needing to develop an access system that meets the needs of both employees and students, the University must also take into consideration its impacts on the surrounding neighborhoods. For example, if WWU were to have too many parking spaces, the traffic that would be generated on neighborhood streets would be unacceptable, yet if WWU were to have too few, employees and students bound for the campus may resort to parking on neighborhood streets, which is also unacceptable to residents.

2.2. Limits on additional on-campus parking

Because of WWU's limited land supply and priority on academic uses of space, it cannot provide close, convenient, on-campus free surface parking for everyone who may want it. WWU's current parking system provides for about 3500 surface parking spaces with no parking structures. This number and spatial distribution is less than the number of people who would prefer to access the campus by way of SOV on a given day if parking were free. Any expansion of the on-campus parking supply would require either parking structures, paving of areas dedicated to higher priority uses, such as academics or green space, which is inconsistent with the Institutional Master Plan. This creates a parking shortage, and thus requires a system of rationing available spaces, via paid permits. Please see Appendix A for an analysis of the financial implications of this system.

2.3. Opportunities for alternative transportation

WWU commuters rely on SOVs at a rate below the citywide average. WWU's location in the heart of three dense and desirable residential neighborhoods, coupled with the relative residential mobility of students and their higher tolerance for dense housing, allows a much larger portion of commuters to live within walking distance than a typical business. In addition, WWU's continuing partnership with the Whatcom Transit Authority, the City of Bellingham, and its own initiatives, have made bus or shuttle commuting more attractive options for students and employees. Finally, despite the university's location uphill from most points of origin, the wet climate, and incomplete bicycle lane provision, bicycling is an option used by some.

2.4. More information is needed

The foregoing background is not intended to be sufficient or comprehensive, but rather to introduce the context of transportation planning at WWU. The reader is encouraged to examine other documents, including:

- Appendix A, by class member Tony Russo, which argues, on an economic basis, for the importance of moving to a Transportation Demand Management system at WWU.
- WWU Vice President for Business and Financial Affairs, George Pierce's (2005) summary the recent history of transportation-related actions and issues at WWU, available at: <https://www.ps.wvu.edu/Publications/TransportationCrossroadsJune2005.pdf>

- The Transportation Planning Initiatives Task Force's (TPITF) 2005-2006 report, available at: http://www.ps.wvu.edu/parking/info/WWU-TPITF_Report-05-31-06.pdf, including responses from interested participants at a transportation fair. The report reflects, in part, recommendations made by two prominent campus transportation experts, Dr. Will Toor, and Mr. Dan Burden, who each consulted for the university on its transportation needs in late 2005. Mr. Burden's presentation is available at: http://www.ps.wvu.edu/parking/info/WWU_Transportation_DanBurden.pdf.
- WWU's Parking and Transportation web pages, at: <http://www.ps.wvu.edu/parking/>
- Previous reports on transportation produced by the Campus Planning Studio, at: <http://www.ac.wvu.edu/%7Eesustwwu/trans/trans.html>

While these sources are helpful, WWU is still moving toward a systematic and objective transportation approach. The new Transportation Subcommittee of the WWU Sustainability Committee is working to enact such a systematic approach. As noted in the TPITF report Toor and Havlick (2004), there are 15 key transportation planning elements; WWU is only part of the way to having these in place. Many of these require empirical data. This report begins to fill one of these data gaps.

3. Research questions

The aim of the research project was to determine the perceptions, needs, and responses to various transportation alternatives, of WWU faculty and staff. This question was conceived as a problem of *detection and characterization* of needs. A high degree of sensitivity of the research methods to the probable high *diversity* of needs was desired. In other words, we were asking an open-ended question. Our approach was also mindful that while some employees may speak up regularly or conspicuously about transportation, many others may have un-voiced needs and perceptions. To our knowledge, there has been no previous systematic attempt to answer this question above, at WWU.

Taking all these aspects of the question into consideration, an answer to it would be a reasonably complete description of the larger patterns and their important nuances. Findings could be expected to include topics such as:

- What views of transportation are held across all mode-user groups?
- What views are particular to specific transportation-mode or other sub-groupings of employees?
- What factors pose obstacles to employees' willing utilization of a wider range of transportation choices?
- What actions do employees feel would help alleviate such obstacles?
- What beliefs, emotions and social categories characterize the campus culture regarding transportation?

Notably, the project did not aim to determine frequency or prevalence of needs or views. Rather, it undertook the prior task of finding out what are the important things to know and ask about employee's transportation needs. We asked, what is the "lay of the land" on transportation issues, in employee's minds?, not how many people hold each particular view. In the case of some

findings, however, it is possible that specific recommendations (beyond the need for quantitative study) might be derived from the answers we obtained.

4. Methods

Given the qualitative pattern-detection goals of this project, the focus group was selected as the methodology of choice. Focus groups are small gatherings of individuals with similar characteristics vis-à-vis the topic of interest. Participants engage in facilitated conversation, and the resulting resonances and dissonances provide important evidence about the group's views, norms, predominant perceptions, emotions, and so forth, on the topics. Facilitators must listen with a sympathetic open-mindedness, and ask further questions to test what is said and what they are understanding. A series of focus groups composed of different sets of individuals can be used to map-out the experiences and social perceptions of the larger group. When successive new groups are found to be repeating the themes already detected, a point of relative "saturation" has been found, and on-going analysis of the group data can reach an end.

4.1. Training for focus groups

Members of the Winter 2006 Estu 471 class received training in the conduct of focus groups in class from Prof. Pat Fabiano, one of the most experienced members of the WWU community in the conduct and teaching of focus group methods. They also read about and practiced the technique, and completed Human Subjects Rights training. Students worked in pairs to conduct the focus groups, playing the roles of facilitator and scribe.

4.2. Focus group questions

The class developed and then winnowed questions and stimuli for the focus groups based on lecture and reading from the campus transportation literature. The final questions (Appendix B) represent a standard set of issues to be covered in the focus groups. The questions were slightly different for parking permit-holders and non-permit holders. The class also generated ground rules for the focus groups and an info-flow chart to show participants where their words would go.

4.3. Sampling and subjects

A multi-level stratified sampling approach was used to ensure representation in the study of groups with probably differing transportation-related needs. Focus groups were composed of individuals with similar employment categories and parking permit purchase behavior. Employment categories included:

- Classified permanent non-supervisory
- Classified temporary non-supervisory
- Exempt non-administrative non-supervisory
- Classified and Exempt permanent supervisory
- Permanent Faculty
- Temporary Faculty

Within each of these categories, focus groups were formed separately for employees with parking permits, and for those without permits. Distance to campus was also factored in. Most groups were composed of those living in Bellingham, whereas 4 special groups were planned to capture employees of any category who lived in Bellingham "inner circle" communities (e.g., Lynden; Sedro Woolley), or "outer circle" communities (e.g., Blaine; Marysville), again with groups for those with, and those without parking permits. Overall, 17 of 19 planned groups were conducted, with numbers of participants varying from 1 to 7. All subjects provided signed informed consent.

Human Resources provided a list of 2275 WWU employees, and this list was subdivided according to the categories discussed above. Samples of 20 were drawn from each subdivisions. Class members telephoned to solicit participation. Additional units were drawn as necessary to fill a group (group target size was 4-8 participants). Classified workers were assured their supervisors would allow participation during work hours, and this was communicated through Human Resources, and / or the VP for Business and Financial Affairs office.

4.4. Response rate

Although data on response rate were incomplete, on the 9 groups for which data are available, the average response rate (agree to come to the group) was 14%. There was variation by employee category, however, from a high of 25% for permanent classified staff, to a low of about 7.5% for Temporary faculty without permits, and for temporary classified staff -- two groups for which the database of names included many not currently working on campus. In all, probably over 100 employees' participation was solicited. Seventy-one employees out of 107 who had said they would participate actually did so. These response rate suggest some degree of self-selection. It is not known how this biased the results. Nonetheless, it is the impression of the focus group facilitators that a substantial proportion of participants attended because of our strong appeals for full participation. It is the facilitator's impression that these did represent a wide range of views and needs, which was our goal. They also included a number of individuals who were highly informed about transportation. Numerous individuals wished to participate but could not due to time conflicts; our apologies to these people. Hopefully they will find their sentiments echoed by someone else here.

4.5. Sample categories

A picture of who participated can be gained by breaking the sample down in various ways. The final distribution of participants by employment category was:

- 14 Classified permanent non-supervisory
- 6 Classified temporary non-supervisory
- 11 Exempt non-administrative non-supervisory
- 5 Classified and Exempt permanent supervisory
- 8 Permanent Faculty
- 9 Temporary Faculty

In addition, 18 employees from any employment category participated in the inner circle and outer circle groups. All groups were composed either of employees holding parking permits, or of employees not holding them.

4.6. Sample characteristics

Across the different employee category groups, 40 of the 71 (56%) held parking permits. Women were 43, or 61% of the sample. Forty-four participants completed a supplemental survey, which showed an average age of 50.2 years and a median of 53, which compares closely to an average age of all WWU employees of 52.4 years (Gayle Shipley, Director of WWU Health and Safety, pers. comm.). The mean years worked at WWU was 10.8 and the median was 9. Respondents reported quite steady patterns of transportation behavior, with the mean years using the respondent's main mode of transportation being 9.1 years, with a median of 6 years. Table 1 shows percentage of respondents using different modes as their principle mode, or first-listed when multiple modes were given (based on the supplemental surveys returned).

Table 1. Reported main mode of transportation of those completing survey.

Mode	Percent
parking permit	40.9
WTA bus	27.3
drive and park on street	11.4
Walk	4.5
Bike	4.5
Carpool	4.5
Lincoln Creek Transp. Center	2.3
get dropped off	2.3
County Connector	2.3

4.7. Analysis and reporting

Analysis was begun immediately after the group session by the pairs of student facilitators, based on their typed notes and augmented by memory. As the groups were conducted and the in-coming results were debriefed in class, it began to be apparent that we had reached "saturation" for some significant and issues. This supports the determination that we succeeded in our aim of detecting and characterizing the important needs and perceptions of the WWU employees regarding transportation. Later analysis identified themes and sub-themes, according to groupings. Final steps involved collapsing results across groups in many cases to highlight themes that held up across the entire sample, and identifying patterns unique to some sub-component.

The final report is an aggregate report with all information that could identify individuals removed. The analysis enabled us to identify strongly held perceptions, as well as quite detailed types of need. The results also contain exact words or close paraphrases, to convey the nature of the themes as expressed by the participants. As we told our group participants,

the intended audience for this report is WWU transportation decision makers, as well as the whole WWU community. It is our hope that the perceptions and the suggested actions contained will provide a firm foundation for creating a well-tailored set of transportation services.

5. Results

The results will be presented in this section. First we will present an overall categorization of the sample's attitudes on campus transportation, not according to the original sub-sample groupings, but according to a classification that emerged from qualitative analysis. As in the following sections, themes relevant to the category of employee will be noted when appropriate (in general employee category was important for only some issues). Next we discuss views of respondents who drive and park, followed by discussion of those using other or "alternative" modes of transportation. Themes expressed across groups will be discussed at the end. Throughout, we indicate the importance or salience of the issue as well as a sense of how many respondents expressed it, although it should be born in mind that the sample was not large nor, despite earnest efforts to recruit a random sample, did it avoid some degree of self-selection.

5.1. Opinion of the status quo

At the beginning of each focus group everyone was asked to describe the nature of their commute and to rate their level of satisfaction with the current system. A full spectrum of opinions emerged ranging from satisfied to irate. In the following we explain who fit where in the spectrum and what reasons typically underlay their attitudes.

5.1.1. Not Unsatisfied

These employees were generally the faculty and staff with high seniority or those who lived close to campus. The high seniority people often had parking spaces close to their building and the income for a parking pass. Those without parking permits living close to campus walked or biked and generally were glad for the opportunity to exercise. Some would ride the bus or utilize other alternative modes when available. They were often satisfied with their choices and glad to do their part in not driving to campus. Their main obstacle was not having access to alternative transportation all of the time.

5.1.2. Not angry but could be happier

These were generally people in the middle of the pay range with regularly scheduled workdays. Some had permits and some not. Some participated in the neighborhood "park and hide" option. The "park and hide" people used alternative transportation some of the time and so did not want to pay for a parking permit. For convenience, some had parking permits, but not as a first choice. Evening parking and personal safety on and off campus were significant issues not only to the "park and hide" people, but also for all.

5.1.3. Frustrated

These were often the WWU employees with a lower pay scale. They felt their transportation needs especially with respect to flexibility are not well met thus forcing them into cars. Examples included needing to leave in the middle of the day to go teach somewhere else, their differing daily on/off campus schedules, and occasional drivers who needed a permit only during the winter or a few times during the quarter when using alternative modes was impossible. The inability of the university to provide flexible parking service policies to meet the customer needs of this employee group caused many to become frustrated. For example, if you do not buy a parking permit in the fall it is almost impossible to get one for winter quarter. Additionally, failure to purchase a fall parking permit, which many did not need, caused them to lose seniority-based purchase access for a parking permit. The parking services seniority policy requirement of buying a permit in the fall, needed or not, placed a frustrating financial burden on them. One typical quote was, “Build an adaptive system that can be adjusted as the situation changes....”

5.1.4. Irate

These were often WWU employees with a lower pay scale, some of whom need employee access to campus at off peak hours, but cannot afford a parking permit. The patterns in this group were the same as the Frustrated group, but to a higher degree. The reasons were several negative experiences with parking services, having gotten tickets, or perceiving equity issues. Additionally, some were confused on the late night parking rules. They also wanted campus access using alternative modes at times when those modes were not available. They felt most acutely that their voices or needs were not "heard" or served by the present system. One quote from this group was, “[I] feel that WWU should apply for state money to help with parking problem. They had been told that there was no state money for it, but when they asked their rep in Olympia, they said that WWU had never even asked if parking money might be possible.”

5.2. Drivers and parkers—underlying causes of frustration

As described above, some degree of frustration with the parking system was the typical pattern rather than the exception. Employees who were drivers and parkers were asked to explain what, in their mind, was the primary cause of their frustrations. Though many expressed concerns over things like customer service and aggressive ticketing (discussed in a later section) the primary underlying cause of frustration was that the combination of price and product offered by the parking system simply did not meet their needs. Though unmet needs were a unifying factor, the commonality stopped there. The focus group participants revealed an enormously diverse spectrum of needs. The general perception was that the system was inflexible and provided only a narrow spectrum of choices. Though these choices are optimal for some, many employees’ needs fell outside the spectrum of what the system had to offer. This often resulted in employees feeling not only that the system was not meeting their needs, but also that they were being

discriminated against by the system because their needs fell outside the “mainstream.” This perception of inequity, that the system benefits some at the expense of others, was often more significant than the unmet needs themselves.

5.2.1. Diverse needs, one-size-fits-all system

WWU’s workforce ranges from part-time, temporary, unskilled workers to full-time tenured faculty and administrative professionals making over \$100,000 per year; from young people just starting their career to people who have worked at WWU for longer than some of the younger employees have been alive. Job responsibilities are almost as varied as present in the larger economy as well, bringing different mobility requirements. WWU’s workforce spans a full spectrum of skill, income, age, life-stage, and permanence. As such the workforce also spans a huge array of housing choices and non-employment obligations that result in an immense diversity of access needs.

5.2.1.1. Listing of examples

Below are only a few examples specifically mentioned in the focus groups:

- Some employees live within walking distance and are more than happy to walk.
- Others live within walking distance, but are unable to walk due to age, physical ability, safety concerns (especially at night) or cargo transport needs.
- Others live in the rural areas of the county, have no access to bus service and live far too far away to walk or bike.
- Some have 9 to 5 schedules and live on high frequency transit lines.
- Others work odd hours, evenings and weekends, making walking uncomfortable due to darkness and transit unavailable.
- Some are expected to use their private vehicles to do their jobs, such as moving equipment or attending meetings off campus.
- Others have a need to come and go at the drop of a hat, making alternative transportation infeasible.
- Many need access to private vehicles immediately after work to run errands or pick up children.
- Some have had to change commuting patterns to care for relatives with health problems.
- Some work more than one job and need to rush from one to another.

5.2.2. Why: Alternatives that are infeasible lead to more driving

Bellingham and Whatcom County have been built up and developed under the assumption that virtually all residents have access to and will choose to travel by way of a private vehicle. As such the alternative transportation network is inadequate and incomplete. (Specific barriers to alternative transportation will be discussed in section 5.5) The economic and cultural assumption of car ownership and use and the built form that has resulted from it make alternative transportation infeasible (either completely impossible or unreasonably onerous) for many employees. Thus, many

employees arrive at campus via the only option that is available to them: driving in a private automobile.

Most employees expressed support in principle for the concept of alternative transportation, but found that in its current state, the alternative network did not meet their needs.

Driving is impossible without parking, but WWU is unusual in the area in having a parking shortage. With the exception of downtown Bellingham, no other place in Whatcom County has positively priced parking, and the parking shortage in downtown Bellingham is less severe than at WWU.

Drivers thus feel caught between a rock and a hard place. They did not choose to build out Bellingham in an auto-dependent manner, yet they are treated like they have chosen to drive. The auto-dependent built form of Whatcom County has made alternatives infeasible, but WWU's parking shortage has now made driving more burdensome. Many feel that they alone are being asked to bear the burden of society's choices about the transportation network.

5.2.3. Who: Demographics most likely to drive

Employees who were most likely to drive were employees who lived outside of Bellingham, employees with children, employees working more than one job, employees who worked odd hours. Many employees drove simply because it was more convenient. These employees were more accepting of positively priced parking because they felt they were making a choice to purchase the luxury of convenience. The employees who felt that they had to drive do to special needs were generally much more frustrated with paying for parking.

5.2.4. Cost and convenience - 2 very different complaints

The conventional wisdom is that it is the cost of parking that frustrates employees and that cheaper parking is what is demanded, but the focus groups revealed that in addition to the cost, inconvenient parking was a major source of frustration. We repeatedly heard junior staffers complain that they did not have access to their preferred parking spaces and more than one explicitly indicated that they would be willing to pay more to park in a more desirable space. Though virtually everyone would prefer a space that was both free and close, there were clearly two distinct opinions about the relative importance of these two issues. For some employees -- often temporary, or lower-level classified, or in other ways cost-burdened -- cost is an acute issue. These were often employees who are priced out of housing in the areas near enough the university to be served well by WTA or to use other modes. Thus driving is a necessity. Many of these would sacrifice some degree of convenience in exchange for lower cost, and often feel most strongly that their employer should cover the cost of parking. On the other hand, some employees are not cost constrained, but rather respond negatively to the unavailability of spaces close to their

particular work area, even if they are willing to pay more for such spots. A variation on this theme is the need for close-in short term parking, discussed later.

5.3. Opinion about parking and its cost

Many employees expressed frustration about the cost of parking, but that was not the only opinion about the issue. Another prevalent pattern was the belief that parking should be expensive. Some believe that parking is too cheap. Some were frustrated that they did not have the opportunity to pay more to upgrade to a nicer space even if they were willing to do so. Others felt that the best spaces should be reserved exclusively for visitors with employees pushed farther from the core of campus. Much depended on the points of comparison participants employed, and their understanding of the WWU and Bellingham transportation systems. Just as there is a wide spectrum of opinion about the system in general, there was a full spectrum of opinion about the cost of parking. As the following quotes will illustrate:

- “[those who park close] should pay through the nose.”
- “[a permit for a close lot] is worth the cost for the convenience.”
- “It’s like the company store. Employees are a revenue stream.”
- “It’s all about profit.”
- “It’s absolutely criminal. Somebody is going to jail.”
- “I would be willing to pay up to \$300 more to park in a lot close to my building.”
- “Parking is ridiculously expensive.”

Mostly alternative users feel that parking should be expensive.

Some parkers accept that it should be expensive.

Other parkers are willing to accept expense if it means they get the nice spots.

Many are willing to pay extra for a desired spot.

Some alternative users feel parking should be free.

Many parkers feel that parking should be provided for free.

People with lousy spaces particularly hate paying for parking.

5.4. Alternative modes of transportation

5.4.1. Alternative mode availability

Walking was the most common form of alternative transportation, but it is generally infeasible for employees who live more than a mile from campus. Population growth and the resulting housing demand have made detached single family housing within walking distance of campus unaffordable for many employees. Though some employees are willing to live in multifamily housing, and a few employees explicitly expressed that they made this tradeoff precisely so that they could walk to campus, many employees have determined that multifamily housing does not meet their needs and have thus moved farther away in search of affordable single-family housing.

Historically, Whatcom County's transit network has been primarily built as a service for the transit dependent (elderly, disabled, or very poor residents that cannot afford to own cars). As such, although service coverage exists throughout most of the county, the service quality (in terms of bus frequency, hours of operation, and line-haul time) is low. Although there are 15-minute frequency buses to and from downtown to WWU and along two corridors to the north of downtown, this level of service does not extend to the neighborhoods to the south or east of WWU where many employees reside. It does not extend to any of the smaller cities of Whatcom County, to the suburban fringe, or to the rural areas of the county. Even along the "high-frequency corridors," the 15-minute service is reduced to hourly service after 6:00 p.m., making transit essentially infeasible for employees who work odd hours. Though the wide coverage of the WTA means that transit is a possible option for many employees, the level of service provided is so inconvenient that many employees consider the burden unreasonable. The Viking Xpress Pass program was well regarded, and its affordable price was a factor in attracting some employees to use the bus.

Truly convenient transit service is available to a small number of employees. But among this group some employees have particular needs for using a vehicle either on or immediately after the job, and find the current level of service to be inadequate compared to an automobile.

Bicycle use was rare among non-permit holder group participants, although a handful said they would prefer it for reasons of health, exercise, fresh air, and reducing environmental impacts. One participant said it is her most pleasant way to get to work. But bike use was limited by many factors including safety concerns, time, lack of bike paths or lanes, rainy weather, hills and exertion-induced sweatiness. The bike racks on WTA buses can alleviate some of these problems, but they may be full. Security of bikes left on racks was also a limitation, as items had been stolen off a bike left on a rack. One novel idea was the encouragement of a park and bike system.

5.4.2. Alternative mode users: use patterns, satisfaction and benefits

Seven of the focus groups were selected from lists of employees who did not purchase parking permits. Users of alternative transportation modes include those who at least part of the time walk, bike, take WTA buses, carpool, use a combination of these, or use other modes to get to work. Most non-permit holders utilize multiple modes of transportation to and from campus. (These groups also included some drivers who "park and hide" in the surrounding neighborhoods.) Each person has a preferred alternative, but a walker may also bus, and bike in good weather. Virtually all staff and faculty must use a motor vehicle at some point in time. Non-permit holders had varying, and sometimes negative, experiences with how the university provides short-term motor vehicle access to campus.

Throughout most of the non-permit holder focus groups we found that most alternative mode users are relatively satisfied with the transportation system at WWU. They also suggested many improvements.

The focus group members felt that alternative transportation benefits the environment as well as the community by keeping single occupancy vehicles off the road. Another recognized benefit was reduced cost. Biking, walking, or riding the bus: all of those modes combined do not add up to the cost of one single occupancy vehicle with a WWU parking permit. Thus, alternative modes are much cheaper than parking on campus. Another benefit that people identified was the time for self. Riding the bus is a good time to work or relax, in contrast to the stress of driving. During that time one can read a book or just "chill out" on the ride to or from school. The exercise one gets from bicycling or walking to campus or even to the nearest bus stop were clearly recognized benefits of alternative use. Another benefit was feeling one is helping alleviate the parking shortage.

Some respondents, especially in the longer-commute groups, expressed interest in a van pool program, but only if it were less expensive. The advantage perceived is that the bus takes too long. One person who used a carpool permit expressed satisfaction with that program. This satisfaction was related to working off-campus, however; getting to campus is tricky with the carpool permit. Other problems with ride share systems included the difficulty of combining trips (i.e., errands), and the fact that one has to wait for tardy co-riders sometimes. Some felt the university could do more to encourage ride sharing by matching.

Motorcycle use was discussed in a few groups. One motorcycle commuter questioned why they should pay whereas bicycles do not pay. That person also suggested that the motorcycle lot layouts are chaotic and inefficient. The campus could do more to encourage motorcycle use.

Flex time and telecommuting were not used by many respondents, but were of great interest. One manager in Facilities & Planning was especially lauded for having bent over backwards to flex schedules to accommodate transit use. But a broader flextime and telecommute system at the university was considered lacking; it was believed that WWU does not endorse telecommuting, and it was agreed it would not work for some job categories. It was of especial interest to those with long commutes.

5.5. Obstacles preventing drivers from using alternatives

Many people who currently drive shared the perception that alternative modes had many benefits. They said that if alternatives were improved they might shift their transportation mode. They were adamant that they would use alternative modes "but" or "if" certain barriers to alternatives didn't exist.

5.5.1. Perceived risks, costs and concerns

For the most part permit holders felt that driving their cars to campus, paying for the parking permit, and waiting for their turn at a great spot was easier than tackling the barriers of alternative transportation. Fear and confusion were subtexts for the focus

group members choosing not to explore alternative transportation. It was mentioned that giving faculty and staff free bus passes may give them an incentive to ride the bus without any real burden on them financially. Thus, without substantial incentives to change their behavior they would continue to drive their cars. Not having the information or incentive to start investigating alternative transportation was also a common theme.

5.5.2. Schedule inflexibility

Some permit holders avoid alternatives modes because their supervisors resist offering flexibility in the work schedule. The parking options available for someone without a parking permit do not make it easy to accommodate last minute changes in an employee's schedule. Some participants told about scheduling changes that made current alternative transportation options useless.

5.5.3. Parking system flexibility

Several felt that the commuter pack was too inflexible. What if they need to park eleven days instead of the allowed ten during the quarter? Permit holders would possibly be willing to get rid of permits if parking on campus after hours were more flexible. Faculty needs to come to campus at night to work and meet with students. Many participants thought that 7 pm was too late. Having a permit or not having a permit defines access to campus. Many participants felt this inflexibility was holding them to driving every day.

5.5.4. Loading and unloading

One issue that came up over and over again was temporary parking for loading and unloading. When an employee has to park in a distant parking lot, they are often unable to carry in the supplies they need to do their job, as there are fewer loading zones each year. People without a parking permit do not know where to park their car for the rest of the day when they absolutely need to bring in material for work related reasons.

5.5.5. Time and bus scheduling

Time was a major concern for faculty and staff that were permit holders. They would be interested in taking the bus if the quality of the service was upgraded. This was an extremely powerful theme in most of the groups. Some of the specific reasons were bus routes and/or schedules that were inefficient at getting to the intended destination. If they did take the bus from their home they would have to wait out a layover or negotiate a transfer. The barrier to many against taking the bus was that there was a transfer downtown instead of going straight to WWU. In addition, it would be helpful to many who already have bus service if the frequency of the buses was increased to every ten or fifteen minutes. The bus stop wait time was inconvenient for them, and for this reason they would rather take their car. One respondent said, "If they can't

run every 15 minutes I can't waste my time. The bus line needs to recognize that." Additionally, some of the participants did not have route coverage near their home. If they wanted to take the bus they would have to drive to the nearest bus stop and park. Some participants would like to use Lincoln Creek but the bus to and from it does not coincide with their schedules. Some were adamant they would take the bus from Lincoln Creek if it ran before 7:18 am and after 6:16 pm. The frequency of the buses as well as how late they ran to and from campus was a concern for people who might need to get home in an emergency or had to stay late for their job.

5.5.6. Social norms of personal appearance in certain job roles

One reason cited among many of the participants for not walking or biking was that it causes them to perspire. These people did not want to enter the classroom or office after aerobically walking or biking to work, but to avoid this would require taking time to shower and change into additional clothes. One professor said, "I don't want to be stinky when I am talking to my students."

5.5.7. Need for vehicles on the job

Most of the faculty and staff permit holders needed their automobile in order to leave campus during the day. Some of the major reasons for leaving included work-related meetings off campus, meeting necessities for children, off campus lunch, travel to the recreation center during lunch (if employed at physical plant or 32nd street), and appointments such as visits to the doctor. Several of the participants said that they would be interested in using an alternative mode of transportation if flex cars were available for faculty and staff to check out in order to leave campus for emergencies etc. Some employees were especially frustrated that they were required to use their own vehicles for work-related business such as moving equipment or going around town, but are still required to have a permit. One person in such circumstances needed a load/unload permit, but Parking Services would not issue it to him because it was his own vehicle. One person said he would consider a number of commuting alternatives if the university would provide him a vehicle while on the job.

5.6. Other important themes

5.6.1. Visitors

As a common theme, most of the faculty and staff were equally if not more concerned about visitor access than about their own access. Faculty and staff worried about the image of access to WWU in the eyes of the public. Visitors were defined as guest lecturers, viewers of events such as basketball or theater, library visitors, new faculty, alumni, donors, people with permanent and temporary disabilities, and prospective students and their parents. Some faculty and staff felt that visitors are discouraged from coming to campus for reasons relating to parking and transportation. One participant expressed frustration that every time there is a visitor, the faculty have to go through a "song and dance" to get a temporary parking permit for the visitor.

Another perception was that there are few parking spaces were available for guests. Some faculty participants felt that poor experiences with parking services discouraged visitors from coming back to WWU. Others strongly felt that the library is public, but that the public is not given easy access to use the services provided by the library. Others were concerned that visitors could not tell where the parking services station was to get information. Many of those expressing this view were temporary employees, whose limited time at WWU may be more typical of visitors than that of long-term employees. Others felt that access in the evenings posed problems, such as a lack of signs indicating where to park around campus, or confusing procedures. A majority of the groups expressed concern over visitor's experiences with parking services because it is difficult to get temporary parking passes. One person commented, "Parking is like a moat between campus and the rest of the community." Another declared, "Parking slaps fines on visitors who visit for plays etc.; that's bad. People won't come to campus anymore because there is nowhere to park. People won't come to campus events."

5.6.2. Public relations and customer service approach

WWU's current system provides for about 3500 parking spaces--fewer than would be demanded if the price of a permit were zero-- thus creating a parking shortage. The revenue generated from permit sales and tickets covers the cost of administering and enforcing the WWU system of parking space rationing. But several focus group members strongly stated that paying to park at work is wrong. It was clear in nearly every focus group that a rationing-based parking system, coupled with a perception that this system is irrational and inequitable, has led to a lack of respect between the campus community and parking services. This situation has been exacerbated by particular practices such as ticketing and poor communications, marketing and public relations.

5.6.2.1. Ticketing

A less aggressive approach to ticketing was desired by many participants who were understanding of ticketing during peak hours, but were dissatisfied with the way they and others were ticketed during non-peak hours. More discretion should be allowed for those issuing tickets. Focus group participants felt that parking services is overzealous in their ticketing methods by ticketing if a permit is not showing properly, ticketing late in the evening, etc. One person said, "We are not trying to rip off the system." A faculty focus group member stated, "The parking staff is more focused on collecting fees than on aiding the public." A "negative ticketing encounter" theme emerged from the focus groups that included these elements (1) being ticketed by one's employer, (2) a poor appeals process, (3) that WWU tickets cost twice that of Bellingham and (4) that ticketing is over-aggressive and reflects a perverse incentive because the money goes to parking services. One respondent thought it ironic that Parking Services tickets maintenance vehicles. Some employees asserted that Parking Services has become too closely interrelated with the university police, and thus they may have

taken on more of an enforcement mentality or culture. It was suggest that parking services should be separate from the university police if it is to become more service oriented.

5.6.2.2. Budget transparency

The most frequent and powerfully-stated recommendation was for parking services to have more budget transparency. Participants wanted to know where their money was going when they paid for parking permits, parking meters or parking tickets. There is already an available budget, but the desire was to have a more detailed budget. Employees wanted to see the specifics about how the money was allocated across the board. Frustration was expressed over a lack of knowledge concerning where revenue generated from parking services was used. Several participants stated that they would be less angry over paying for parking if they simply knew where their money was being used. Some participants have a perception that this money is being “pocketed” by parking services. The was confusion about whether money was being saved up for a parking garage. Participants without parking permits strongly voiced that they want to know what Parking Services does with the money it collects from permits and tickets. Many expressed frustration, believing that the money they were paying for permits and tickets was being wasted. Some, perceiving a high price with no commensurate benefits, even imagine that the money is being pocketed by parking services as a form of “profit.” One had filed an FOIA request for information, which was later denied. The collective experiences of these respondents is expressed in suspicion and anger directed toward the personnel (especially higher level) responsible for the system. Many employees' perception of the parking system is characterized by a significant level of distrust.

5.6.2.3. Diversity of needs

A common perception was that Parking and Transportation Services is attempting to impose a one-size-fits-all access system on a workforce that has very diverse needs. The call for flexibility was central. “When did we decide that everyone who wants to access this campus has the same needs?” asked one employee. “[If I could tell the administration one thing it would be] give us options,” said another. The participants generally characterized parking at WWU as (1) being in short supply, (2) having infeasible alternatives, (3) being all or nothing (having a parking permit or not having one), and a (4) “one-size fit all” approach. It was pointed out that a diversity of needs is not compatible with a “one size fits all” approach.

5.6.2.4. Communication and marketing of services

Participants felt they did not know about all services available. On the other hand, some participants were frustrated with long-winded emails and flyers. They would prefer short notices in the FAST and personalized contact. This is not necessarily a different subset than those wanting full budgetary transparency--that

need seems to be a more pervasive desire and related to trust and understanding of the mission of parking and transportation. The idea of individualized contact or marketing (similar to a program piloted recently by Bellingham) received mixed reviews, with some feeling the money would be better spent other ways. One useful idea, however, was to make such face-to-face informative contact with all new employees.

Neither the total present system, nor whatever rationale(s) underlie it were apparent to most participants. Most participants expressed that they do not want incentives to not drive. Non-permit holders want more and better services. They already do not drive. They just want the current system to become even better and easier to use. When the system happens to fit the needs of a particular individual, that individual is generally satisfied with the system, but for a sizable portion of our respondents none of the access options with which they are presented appear reasonable. Many non-permit holders wanted to see a higher level of quality service offered by parking services to make it easier to use alternatives. Some employees value convenience, others value money. They perceive the system as providing only one option.

In reality parking services does offer programs including the evening only permit and the commuter pack of ten parking days. Though many employees were unaware of these options, most felt they were inadequate when they were told about them. Many who were already aware of these options echoed this feeling. "What if I need to park eleven days instead of ten"? One group never heard of the smart commuter program but liked the benefits that it provided. Non-permit participants expressed interest in an expanded commuter pack: 10, 15, or 20 passes per quarter. Non-permit participants felt they did not know about all services available. One faculty participant said that the parking staff is not very helpful or flexible. There was confusion among temporary employees about after hours parking. It was clear that communicating the complexities and options and justifications of any parking system is a critical and difficult function.

5.6.2.5. Parking Service's public relations

There was a strong consensus among all focus groups that Parking Services has a poor public relations ideology and that a lack of communication exists between Parking Services and WWU employees. Faculty and staff felt strongly that parking services is not set up correctly for customer service. Many were concerned that parking services should focus more resources on improved services as opposed to enforcement. There was a feeling from faculty and staff that they were treated as being on the offensive side of their fellow employees at parking services. "Aren't they employees just like us"? and "God help you if you make them mad" were not the most extreme of the comments. Yet many sympathized that the front-line parking services employees had become "numb" from getting yelled at so frequently that it affected their attitudes and customer service skills. Many of the non-permit participants had one or two negative

experiences that had made them feel very hostile toward Parking Services. They feel Parking Services needs to be more helpful and accommodating. Improvement of communication was highly desired by many of the focus group participants.

5.6.3. Issues related to 32nd Street workers' parking needs

5.6.3.1. Parking Lot Utilization

The 32nd Street employees (classified with and without parking permits) in the focus groups said the 32nd Street parking lot varied between one half and two thirds full because so many employees parked off site. Employees do this because they are unwilling to pay the G-lot price when they can park in the lots of nearby businesses for free. They felt if the lot is not full, and people are still parking off site, then the parking permit price is too high. By reducing the price of 32nd Street parking permits the lot will be used to capacity.

5.6.3.2. Commute Methods

The Lincoln Creek bus route 90 does not go to the 32nd Street offices. The 32nd Street employees said they would be happy to park in Lincoln Creek if the 90 would take them to where they work. They said if route 90 were to stop at 32nd Street then most of the employees currently parking in the lots of the local businesses would instead park at Lincoln Creek. They felt that changing route 90 so that it stops at the 32nd Street offices would meet an important transportation need for them. They also pointed out that if route 90 connected to 32nd Street then the campus shuttle would not need to go all of the way out to 32nd Street. On the other hand, some 32nd Street employees felt that both the county connector and the campus shuttle should go directly from WWU to their 32nd Street offices.

5.6.4. Park and ride

The Lincoln Creek Park and Ride, and the former Civic field lot, were workable alternatives for many, but not all, of the drivers. The frequency of the service after hours was a concern, as well as the lighting, surfacing, and other issues already mentioned. There were also employees, among them temporary workers, who did not know about this alternative. Employees with work- or life-related daytime mobility needs, tight schedules, needs to move materials, and other needs were less enthusiastic about the park and ride than others.

5.6.5. Longer-distance commuters

Employees in the "inner" and "outer" circle categories, living at a greater distance from Bellingham, did not differ in terms of many of the views already discussed. A few variations are worth noting, however. Among those without parking passes, some drove, and others took alternatives. The infrequent WTA service to other Whatcom County cities made it an option for only a very few. The alternative users "absolutely love" the County Connector, though one said it takes too long,

and some said its stop locations are inconvenient (including no stop at 32nd Street). These employees put high value on the guaranteed ride home option too. Distance users expressed concern about security at remote park and ride lots.

Some of those with regular parking permits living at a greater distance felt most strongly that the necessity of their purchasing a permit to work was an unreasonable requirement by the employer. They were cynical about the university's commitment to dealing with their complaints. They felt that no alternative transportation of any kind was feasible for them. Some in this group strongly supported expanded telecommuting options.

5.6.6. Summary on variations by employment category

Although many themes according to employment status have already been discussed, a brief recap may be helpful. In considering these patterns, it should be remembered that many patterns held across these categories, and that small sample size and a degree of self-selection limit generalizability of these group patterns.

Faculty were concerned about schedule flexibility (for example, their schedules limit use of ride sharing), lack of late bus runs, social norms about appearance before students, accessibility for guests and for load/unload, information for new faculty and how temporary disabilities would be accommodated. Faculty were divided on issues of pricing of parking. The idea of free bus passes was well received. Flexcars or a campus fleet, and guaranteed ride home were well liked, though there were questions about how well they actually work or would work.

In general staff were more focused on the price of parking. Bus operation hours were an acute limitation on use of alternatives when employees' work hours were not treated flexibly by supervisors. Supervisors were sometimes perceived as not trusting the employees to use alternatives if granted flex time. They felt the bus system should not just turn off when the students leave. There was a feeling that while the university is trying to promote the use of alternatives, it is not providing a workable system that allows employees to actually use them (notably, many of these respondents had explored the options available). Many staff were skeptical about where their parking monies were going, and suspicion on this matter seemed related to unwillingness to consider alternatives. However, concrete obstacles, such as those discussed already, were the most important factors limiting alternative use.

5.6.7. Opinions on policy options

Several policy options were discussed, though not consistently, in the groups. In general, there were widely varying opinions on options such as: making parking free; charging exorbitantly for parking; paying drivers not to drive; imposing a transportation fee to cover transportation services including those presently covered by parking fees and other revenue sources; or expanding parking on campus at an expense to other land uses. There was little if any support voiced for building parking

structures. Opinion on these questions should be determined by further more quantitative research if such opinion is of relevance for decisions. Random representative samples for such research would be essential.

5.6.8. Safety

Perhaps the most common theme for alternative transportation users was safety. These concerns are associated with several issues already discussed in this report but are group here together because overall they constitute a significant concern.

Among non-permit holders and permit holders the lighting around campus was cited as a barrier to walking, due to fear of burglaries and assaults. Lighting is a concern for walkers; especially women who don't want to walk home alone in the dark. Several participants were afraid of walking on the uneven red bricks and sidewalks surrounding the campus because they had already tripped, a concern at day but exacerbated by darkness. A faculty participant stated that lighting is bad around campus, so if it is dark when coming or leaving school that poses a danger when walking or biking home--which is what you have to do if you use alternative transportation because the buses don't run that late, or else you have to have someone come pick you up.

Most of the bikers in the focus groups would like to ride their bikes through campus during peak times. But focus group pedestrians were opposed to that, as some of them had been "clipped" by a bike, or feared being hit. Some faculty focus group members wanted to park their bikes inside. In general, walking and biking were seen as less desirable after dark when most of the bus system shuts down. Many employees were uncomfortable using Lincoln Creek after dark, as they perceived the inadequate sidewalks and parking lot lighting as a safety issue. One pregnant woman noted that the emergency phone was not located close enough to the center of Lincoln Creek for her to actually get to it. The focus group of employees who live more than five miles from campus said there was a lack of security at the park and ride locations. A faculty member noted that the new WTA bus stops let the rain in and it is hard for the bus drivers to see the people when they are in them because of the bar. So when the bus comes you have to step out from under the cover so the bus driver will see you and stop. The 32nd Street staff participants felt unsafe in the parking lot due to high transient traffic behind Haggens. Improved lighting on paths, at crosswalks, and in the parking lot is needed. The staff members who work at 32nd Street said the nearby business parking lots are unsafe (one participant had their car stolen at gunpoint last year), but the perceived risk for others is not so much that they are willing to pay to park in the WWU lot. They pointed out that employees working late at 32nd Street have no safe way home without a personal vehicle.

6. Recommendations

Readers of this report are invited to draw their own conclusions and recommendations from the results reported above. In this section, we will attempt to go beyond the findings and suggest some ideas that stand out as worthy of consideration. Most of these ideas respond to fairly

specific issues within WWU's current transportation system which our respondents raised. In the final section, however, more far-reaching possible changes will be suggested, albeit in skeletal form. It goes without saying, but should be stressed, that those responsible for meeting WWU's transportation needs will consider broader range of factors --hopefully a systematic range, as suggested by Toor and Havelick (2004) -- in any decisions. Quite clearly, from the experience of doing these focus groups, the employees' varied needs will be an important one of these factors.

In considering the recommendations that follow, it might help to review the choice faced by any given employee as they decide whether or not to drive to campus. What disincentives and obstacles do they face? If a person's preferred mode is to drive and park, and the university makes parking so miserable that a person people no longer do it, where do they go? What is their next best alternative? Some might switch to alternative transport, but many will park-and-hide on neighborhood streets; others will get picked up and dropped off. Though these modes are alternatives to parking, they are not alternatives to driving. From a traffic, environmental, or community-relations perspective, many of these alternatives are actually worse than parking on campus. This must be remembered as the university seeks to move toward sustainable transportation. If viable alternatives do not exist, pushing people out of their cars only pushes them against the wall.

6.1. Big themes

Five overall themes emerged which sum up WWU employees' concerns about transportation to and from work, and under which could be grouped many improvements (including ways to increase use of alternative modes of transportation). These themes are:

- Communication
- Flexibility
- Convenience
- Equity
- Cost

The sections that follow are not organized by these themes, but rather according to main findings and their ease of implementation ("low-hanging fruit" to removing barriers to more far-flung, expensive or systems-level change). It should be easy for the reader to see these large themes refracted (often several at a time) in these sections.

6.2. "Low-hanging fruit"

6.2.1. Utilize all communications and contacts more effectively

Much of the campus community's frustration with parking services could be alleviated through improved communication. Clear and easy-to-understand signage, policies that are consistent and intuitive, friendly supportive personnel who welcome questions and go out of their way to help people avoid the pitfalls of the system, would all go a long way.

6.2.2. Budget and policy transparency

On a more fundamental level, budget transparency was repeatedly brought up in the focus groups. People want to know where their money is going. Simply posting this information on the website is not enough. A detailed budget should be given out with each permit sold. The availability of the budget online should be promoted, and the budget should be much more detailed and written in a way that is understandable to mere mortals, not just accountants. Each line item should have a plain-English explanation and justification. Large amorphous budget groups like “personnel expenses” should be broken down. Exactly how many employees are there in Parking Services? What do they do? It must be understood that simply posting the Excel spreadsheet used by the accountants is not adequate. The budget posted is not an accounting tool, but a PR tool. It must be reformatted and augmented to reflect this purpose. Parking Services is trying to show people that they are not wasting their money, and if the budget is loaded with technical shorthand and hard-to-follow jargon, people are going to think Parking Services is hiding something from them. Finally, people should have the ability to call or e-mail Parking Services if they have questions about the budget and expect a timely response. All of this will go a long way toward making people feel like customers that are being served rather than victims of some exploitive conspiracy.

In addition to budget transparency, policy transparency is vital. People need to be made aware not only what the policies are, but what their rationales are. Customers should be provided not only with a list of rules, but each rule should be accompanied by an explanation, history and justification. Customers should also be made aware of who sets these policies and what the process is by which they can be reviewed and changed.

6.2.3. Customer service

Repeatedly in focus groups the concept of customer service came up. For many this was just about the person behind the counter showing some empathy, validating the customers’ feelings, and listening to their concerns. The current attitude is perceived to be one of, “That’s the policy, deal with it.” If Parking Services employees went out of their way to listen to customers concerns and to seek and find solutions to customers’ problems, this would change the nature of the relationship in a positive way. The key from a policy perspective is not only to direct the employees to improve their empathy for customers, but to actually empower the employees to respond to customers’ needs. In the current system, employees have very little flexibility. Even if Parking Services employees wanted to go the extra mile for a customer, the policies prevent them from doing so.

6.2.4. Expand ticket waiver program

Parking services has a policy of waiving the first ticket that any customer gets. This policy has likely averted a great deal of frustration on the part of customers that got a

ticket due to misunderstanding a policy. Parking Services should consider expanding this program in two ways:

6.2.4.1. Increase number of waivers allowed

Expand the waiver from 1 free ticket in a lifetime to either 1 per year or one per quarter. There are so many different rules and policies, that it is not inconceivable that a person would misunderstand more than one policy. A more generous waiver system would reduce frustration without a substantial impact on the effectiveness of tickets as a deterrent. In addition to misunderstandings, on rare occasion, people park where they know that they are not allowed to because of the exigency of a particular situation.

- “I was late to a meeting and I didn’t have time to buy a visitor permit.”
- “I didn’t have any quarters on me to fill the meter.”
- “I misjudged the time it would take and ran the meter (or pay station) over.”
- "Someone was in the 20 minute loading zone and I needed to load something right away.”

These are just a few examples. Many of these issues could be resolved by increasing the number of loading zones, expanding pay station access to all lots, or using smart technology that allows people to pay when they leave for however much time they parked rather than having to estimate beforehand, but in the absence of these solutions being more generous with waivers (and not forcing people to go through the cumbersome and time consuming appeals process) would be a low cost way of substantially improving customer relations.

6.2.4.2. Change how people are notified of waived violations

Use smart technology to look up the license plate of an improperly parked car to see if the owner is eligible for an automatic waiver before writing the ticket. If the owner is eligible, instead of writing a ticket, place a friendly letter on their windshield explaining that they have been parked illegally and that they would normally be written a ticket, but that since this is a first offense, the ticket has been waived. A generic letter could be written and parking enforcement officers could carry a stack with them making it no extra work to give someone a warning letter rather than a ticket. This will allow people to avoid the initial anger and resentment that all human beings feel when they see a ticket on their windshield and could make people feel like parking services is looking out for them, cutting them a break, etc. This will make people feel better about paying tickets in the future. The key to this system is that the letter must be written in a polite, kind, sympathetic and cordial way. It should be assumed in the language that the parker made a mistake, and there should be no implication that they are a “bad person.” Implementing these two policies would significantly reduce the frustration many people feel toward Parking Services, and would help redefine the relationship making Parking Services a good neighbor rather than “the man.” Additionally,

issuing a warning letter rather than a ticket would reduce the staff time dedicated to waiving tickets that exists under the current system.

6.3. Remove low cost barriers to alternative modes

Most employees we heard from supported the idea of alternative transportation, but did not use it themselves because of one or more barriers that existed in the current system. Some of these barriers are expensive to remove and will require substantial investment, but others are relatively cheap. The university should seek first to remove as many of the low cost barriers as it can before committing the big bucks for big projects.

6.3.1. Schedule flexibility

Several classified staff expressed that the most significant obstacle for alternative transportation for them was that the bus schedule did not line up correctly with their work schedule. Often a shifting of start or end time by as little as 30 minutes could mean the difference between the bus being a desired option and the bus being unavailable. Unfortunately, many classified staff have strict schedules that allow little or no flexibility. The university and individual departments should re-evaluate policies regarding schedule flexibility with classified staff. Often flexing someone's schedule to accommodate transit is a very low cost way of making that mode possible. Some departments have already implemented flexible schedules with great success. If the university is serious about encouraging alternative transportation, it must be willing to meet folks half way by providing some extra flexibility. Related issues include forgiving tardiness if it was the result of an unexpected transit delay. Some employees fear that they will be reprimanded if they are late to work even if the cause was a late bus and thus out of their control. Thus they choose to drive because they feel they can count on their car. Transit delays are very rare, but when being late can result in a very serious reprimand, the fear of a transit delay is often enough to deter potential users. If the university or departments were to establish a general policy of forgiving tardiness caused by transit delay (possibly with a note from the bus driver) this be just the extra reassurance some employees need to step out of their comfort zone and try alternative transit. The university and departments should also consider offering the possibility of extended lunch hours (with the time made up by either coming in early or staying late) to accommodate the increased travel time that transit requires if the employee desires to have lunch off campus (or visit the recreation center or run and errand etc.)

6.3.2. Expand occasional car use options

A substantial number of employees were frustrated by the "all or nothing" approach taken by Parking Services. Many employees would like to use alternatives some of the time, but drive and park other times. Employees who take alternatives most of the time, but need to drive occasionally feel punished for not purchasing a permit. They feel they are doing good for the university and the community by making a sacrifice to use alternatives, but they are then treated as free-riders when they need to access

campus by car on occasion. This makes them feel frustrated and unappreciated. Once an employee has chosen to sink the cost of a purchasing a permit, there is little incentive for them to do anything but drive. Employees who need to drive most of the time and purchase a permit tend then to drive all of time, whereas if they could be rewarded in some way for using alternatives, they might be willing to reduce their auto use by a small, but noticeable percentage. The fact that the permit is an all or nothing deal often means that employees fall into one of two categories: drivers or alternative users. Given the current state of the alternative network and the build out patterns of Whatcom county, it is very unlikely that a substantial number of employees would be willing to make the jump to 100% alternatives, but there could be very significant gains made from getting a large number of employees to reduce their auto use some of the time.

The single most powerful and effective way to capture the potential benefits of occasional use would be to move away from an upfront permit system and toward a pay-per-day or pay-per-hour system. Employees could be assigned permits for each lot based on seniority as they are now, but instead of paying for the permit up front, they would pay each day (or hour) that they chose to park. This system would give the consumer maximum flexibility and provide maximum incentive to use alternatives. Unfortunately, such a system would be very difficult to administer. The transaction costs of collecting payment every day would be prohibitive under the current system structure. To implement such a system would require significant changes in technology and procedure in order to reduce these transaction costs. Another significant problem would be unpredictability. Since the up-front cost of a permit will fall dramatically under such a scenario, virtually everyone will want to purchase one of these “option” permits, which opens the door to the possibility that everyone might want to drive and park on the same day (say if it’s raining), causing a capacity overflow. On the other hand, if the number of option permits is limited to prevent this possibility, the lots will be underutilized since people will have a new incentive to not drive. If Parking Services cannot then reallocate that space to someone else, revenue will fall short. Many employees recognized these drawbacks and because of them, reaction to the idea of pay-per-day was mixed. Such a system would likely involve significant restructuring and investment, but there are several low-cost things that can be done to encourage occasional use:

6.3.3. Increase the number of loading zones

The burden of taking alternative transportation is substantially increased when one needs to transport, load and unload cargo. Fortunately for most employees (with some notable exceptions), cargo loading is not a regular part of their job, but it is something that virtually everyone has to do once in a while. Many permit holders identified the need to load and unload as a major factor in their decision to purchase a permit, and then once the cost of the permit was sunk, they had no incentive not to drive. In more than one focus group, at least one permit holder said unequivocally that if they knew they could always count on a loading zone when needed, they would be more than happy to forgo the purchase of a permit or at least settle for a permit in a more remote lot.

The call for more loading zones came from alternative users. Again, these employees felt unappreciated and discriminated against for choosing alternatives. The attitude was “I only need to load every once in a while, but I can’t even do that.”

6.3.4. Expand the commuter pack

Most employees liked the commuter pack, but were frustrated by the fact that it was limited to ten days. “What if I need to park 11 days?” said one employee who regularly rode the bus to work. Allowing employees (and students) to purchase up to 20 days in 5 day increments would address much of this concern.

6.3.5. Free off-peak parking

Off-peak refers to evenings (after 5:00 p.m.) and weekends. Off-peak times are fundamentally different from peak times in two ways. First, alternative transportation options are virtually non-existent. Transit shuts down for most of the city and the entire county during off-peak times and the skeletal transit that remains runs so infrequently as to make it untenable for most employees. Walking and biking become much less desirable after dark due to safety concerns. Second, there is very little demand for parking during off peak times. The only lots that are full are lots near the library and lots that may be serving events. People find it very frustrating to pay for parking when there is no demand and when alternatives are unavailable. They are also much more resentful of tickets.

Under current policy, permit holders can park after hours for free, but non-permit holders (i.e., alternative users) must either purchase a bus pass or evening parking permit and they are not allowed to use these options until 7:00 p.m. Given the low cost of an evening permit, the frustration is more likely due to the time and energy it takes to buy and display it rather than with the price, as well as to the inequity of the time discrepancy (5:00pm vs 7:00pm). Many alternative users feel the current policy is just one more example of the university punishing people for using alternatives. A policy of free off-peak parking would eliminate this problem while having no significant impact on revenues or capacity problems during the day. Some lots might become in high demand during the evening to a point of causing congestion. The university should reevaluate if these concerns are sufficient to warrant the current restrictive policy. One possible compromise would be to provide free off peak parking for employees but not for students or to allow free off-peak parking except in lots that are reserved for events (which then could be paid for at the pay-boxes.) Attempting to match the hours when parking is restricted more closely with the hours it is restricted downtown would make the policy seem more justified and easier to remember.

6.3.6. Quarterly parking permits

Some employees would be happy to walk or bike in fall and spring quarters but drive during winter due to less desirable weather and earlier nightfall. Unfortunately, under the current system if an employee chooses not to purchase a permit in fall quarter,

they “lose their spot” when it comes to winter. This has led some employees to purchase annual permits rather than winter quarter only, which would be their preferred option. Again, once the cost of the permit has been sunk, it provides a substantial incentive to “get one’s money’s worth” by driving and parking every day. A policy by which employees could “save their spot” in the permit allocation hierarchy either by purchasing winter quarter permits in advance or selling all permits on a quarterly basis would help solve this problem.

6.4. Fundamental rethinking on parking

In this section and the next two we will simply list a number of wider parking-related system-level reform ideas that flow from the discussions in the employee focus groups. Any of these ideas would require a broader and more solid research base than these groups provided in order to enact them effectively.

- 6.4.1. Match disincentives with availability of options
- 6.4.2. Allocation system alternatives for parking
- 6.4.3. Adjust the prices of parking permits to reflect demand and employee needs
- 6.4.4. Reconsider all visitor parking policies
- 6.4.5. Reconsider the place of Parking Services within the university bureaucracy and decision-making processes
- 6.4.6. Establish base level of access to campus with increased costs for increased convenience
- 6.4.7. Consider increasing parking supply, including more effective use of remote parking

6.5. Improve alternative transportation options

6.5.1. Improve pedestrian and bicycle safety

This should be done through infrastructure enhancement such as pathways, mode separation, lighting, surface improvements, dismount policy revision, and other ways

6.5.2. Improve WTA Service.

- 6.5.2.1. Expand evening service
- 6.5.2.2. Expand the high frequency network (if it doesn’t come every 15 minutes, it doesn’t count)
- 6.5.2.3. Direct routes that avoid layover or transfers downtown and out-of-way travel

- 6.5.3. Provide free bus pass
- 6.5.4. Provide showers and lockers
- 6.5.5. Flex car and guaranteed ride home
- 6.5.6. Creative improvements for intra-campus mobility

6.6. Visitors

- 6.6.1. Simplify rules
- 6.6.2. Improve signage
- 6.6.3. Decrease cost of parking for visitors

6.7. Summary

In summary, a sustainable transportation system should:

- Provide reasonable, equitable access to the workplace for all employees
- Recognize that employees have very diverse needs and create flexible options that address these diverse needs
- Recognize that at this time alternative transportation is not viable for all employees, and that parking, either on-campus or via remote park and rides will continue to be part of the access system
- Continue to encourage alternative transportation, but find ways to do so without putting undue burden on employees for whom alternatives are not viable
- Create a system that encourages employees to take alternative transportation some of the time but also allowing them to park when necessary
- Identify critical barriers to alternative transportation and when appropriate and cost effective, take steps to remove these barriers and make alternative transportation a viable option for a larger portion of WWU employees

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Appendix A: Financial implications of WWU's present parking system
by Tony Russo, Estu 471

Challenges and opportunities

1. Though WWU's demographics and location present challenges, they also present unique opportunities for alternative transportation.

1.1 Parking shortage at price of zero

WWU is completely landlocked, surrounded on all sides by either fully built out, densely developed residential neighborhoods, or very steep unbuildable slopes and city-owned natural preserves. WWU is by far the densest public campus in the state of Washington (enrolled students per acre of campus). Nearly every acre on WWU's campus is used in some way (though not every acre is used at maximum potential intensity, the fact that every acre is used for something puts WWU in a unique place). Because of WWU's pattern of build-out, and limited land supply, WWU does not have enough land to provide close, convenient, free surface parking for everyone who may want it. Any expansion of parking supply would require either parking structures or paving of limited green space. WWU's current system provides for about 3500 surface parking spaces with zero structures. This number is far less than the number of people who would prefer to access the campus by way of single occupancy vehicle on a given day if parking were free. This creates a parking shortage, and thus requires a system of rationing available spaces.

1.2 Opportunities for alternative transportation

WWU's location in the heart of three dense and desirable residential neighborhoods, coupled with the relative residential mobility of students, their higher tolerance for dense housing, and the relative significance of the university as a destination (compared to say the significance of living next to a supermarket) allows a much larger portion of commuters to live within walking distance than a typical business. The relative inelasticity of demand for commute trips coupled with students' relatively low income makes transit much more competitive as an access mode than it would be elsewhere. Finally, the relative youth and vigor of students, coupled with their high tolerance for risk, makes bicycling an attractive option.

Thus, WWU is a perfect place to encourage a mode shift in transportation away from the Single Occupancy Vehicle and toward alternatives. In fact, if one looks at the statistics, WWU commuters rely on SOV's at a rate so far below the citywide average as to place WWU in a fundamentally distinct category, incomparable to anything else in Bellingham or Whatcom County.

1.3 Financial implications

Any rationing system requires expenses to administer and enforce. WWU has chosen to cover these costs by charging for parking permits. The revenue generated from permit sales and parking tickets helps cover the cost of administering and enforcing the parking system.

1.3.1 Costs of rationing

The explicit costs of rationing include the labor and materials necessary to manufacture and sell permits, monitor lots, write tickets and collect fines. The collection and handling of money requires that resources be spent on accounting and budgeting. Management also plays a critical role in setting and evaluating policies and handling appeals. All of these costs would be eliminated if there was no parking shortage and thus no need for rationing. In WWU's system, the direct costs of rationing actually constitute a majority of the accounted costs of the system. This is primarily because the university has thus far provided the land necessary for parking rent-free to the parking system. The parking system currently uses about 28 acres. If this land were valued at the same rate as the 7-acre Lincoln creek site (\$500,000 per acre), this would amount to a \$14,000,000 subsidy or \$840,000 per year using an interest rate of six percent. This estimate is biased downward because, in reality, land in the core of campus is likely much more valuable than the land at Lincoln Creek and the market interest rate higher than six percent.

1.3.2 Other costs

Though the parking system receives 28 acres rent free, the university does not provide subsidy for lot construction and maintenance. These costs include the posting of signs, filling of potholes, resurfacing of lots as necessary. These costs would be incurred even if parking did not need to be rationed and they amount to hundreds of thousands of dollars per year.

In addition to maintaining current lots, any land acquired for parking expansion is funded from the parking system revenues unless external grants are found. This includes the costs of purchasing and building out the property. The university is continuing to seek external grants to purchase and build out this property.

The parking system also covers a portion of the costs of providing bus service to and from Lincoln creek, although this contribution accounts for less than half the full cost of the service provided. The taxpayers of Whatcom County pay for the other half through the WTA.

Parking revenue also funds motorist-assist services such as jump-starts and safe rides home. The system has also been asked to fund a campus shuttle program.

1.3.3 Positively priced parking as a revenue source

Americans have come to expect that parking be provided at a cost of zero to the end user. Whenever parking is provided for free to the end user, it is being subsidized from some other revenue source. The university has decided to limit its subsidy of the parking

system to the 28 acres of free land it provides. Since this subsidy is not enough to cover the full costs of the system, particularly in light of the rationing and enforcement expenses, the university has set up parking as an auxiliary which is expected to generate revenue by charging the end users. Positively priced parking (either permits or meters) and ticket revenue are the primary sources of revenue for the parking system. Much of the decisions about how much parking should cost have been based on revenue needs and politics. The system has sought to maximize revenue.

1.3.4 Positively priced parking as a rationing mechanism

Though historically the primary purpose of charging for parking permits has been to generate revenue to cover expenses, positively priced parking also serves as a rationing mechanism in and of itself. Seeking to avoid the expense of a permit, many members of the WWU community have voluntarily removed themselves from the market for spaces. This has resulted in less need to deny access based on some involuntary criteria such as class (faculty, staff, student) or seniority. The current price of parking is not high enough to clear the markets for all lots, as such many lots, especially the closest most desirable lots, must still be rationed by class and seniority.

WWU maintains a policy by which any employee is guaranteed the right to purchase a permit if they are willing to pay the posted price. This guarantee does not extend to students, and many students are turned away even if they are willing to pay the permit price. Employee spaces are allocated based on a seniority system, while student spaces are rationed through a combination of seniority and first come first serve.

1.3.5 The next best alternative

Many of the students and employees that are either turned away or remove themselves from the parking permit market due to price arrive at campus through alternative means (walking, biking, bus, carpool), but not all. For those who using alternatives, the savings on a parking permit serves as a reward or compensation for choosing a less preferred mode. Many non-permit holders, however, still drive to campus. Before the establishment of the Lincoln Creek park-and-ride, most of these non-permit holding drivers would park on neighborhood streets near campus or in the parking lots of nearby businesses. They would then either walk or ride the bus into campus from there. This phenomenon is known as park-and-hide, since the practice is at least insensitive and often actually illegal. The park-and-hide phenomenon is the primary reason that most municipalities have established parking requirements for businesses and residences. WWU is in fact required by the city to maintain a minimum of 3500 parking spaces as a result of this situation.

Though the park-and-hide phenomenon is often overlooked and ignored, it can be a very serious problem. If WWU fails to provide access options that are more desirable than the park-and-hide alternative, the city may choose to involve itself and force WWU to implement solutions that would be very costly to the campus.

Appendix B - Focus group guides
Permit holder question guide used in focus groups

1. We are interested in what constraints you face that affect your choice of transportation to work. How would you describe your working experience:
 - a. How do you get to work?; Where do you work?
 - b. What is your schedule, and do you need to come and go?
 - c. How long is your commute?
2. Is driving your ideal way to get to work? If so, what aspects of driving do you find attractive?
3. If driving is not your ideal way, what factors make you end up driving?
4. Can you give me an example of another mode besides driving you have used, and what were the drawbacks?
5. Strictly hypothetically, if all SOV parking at Western were eliminated, what would you do then? What would be your next choices, and why? [*Show list of "How people get to WWU"*] What would need to be done for any of these options to make them more workable, for you?
6. [*Show list of "Some WWU Alternative Transportation services & CTR Programs," and ask:*] Are there any of these services at WWU that you might like to use but have not? If you haven't used one of these, can you tell me what stopped you?
7. In Bellingham, a successful pilot project used an individualized approach to using transportation alternatives. A trained worker visited interested households with these pamphlets and other materials [*show individualized marketing materials, pass around*], and helped the residents learn to use local transportation services. Would you use this service if it were offered for WWU employees? Why or why not?
8. The Western community and administration, through the Comprehensive Master Plan, has a stated goal of reducing the number of single occupancy vehicles parking on campus. [*Pass out copies of list of "Transportation Policy Options," and ask:*] If the University were to adopt new policies or services to decrease use of single occupancy vehicles, which of these approaches would you *most* like to see, and which would you *least* like to see, if any?
9. [*Important to include this question, as it should help analysis:*] If you had one minute to tell the transportation people at Western what was most important for you, what would you tell them?
10. [*Facilitator provide an oral summary (2-3 minutes) of the discussion evoked by main questions, then ask:*] How well does that capture what was said here?
11. [*Facilitator provide review of purpose of the focus group, then ask:*] Is there anything that we should have talked about but didn't?

Distribute demographics sheet & double-check that all consent forms were turned in

Non permit holder question guide used in focus groups

1. How do you currently get to work at Western?
2. What characteristics of this mode are most important to you?
If this isn't your ideal way what would be?
3. Can each of you tell me about a time you considered getting to Western by your ideal way (or another alternative), did not use it? We would like to know what stopped you. OR, If you DID use your ideal way, what obstacles did you have to overcome?
4. What would be the biggest help WWU could provide for you to continue not driving alone to work?
5. [*Show list of "Some WWU Alternative Transportation services & CTR Programs," and ask:*] Are there any of these services at WWU that you might like to use but have not? If you haven't used one of these, can you tell me why?
6. The Western community and administration, through the Comprehensive Master Plan, has a stated goal of reducing the number of single occupancy vehicles parking on campus. [*Pass out copies of list of "Transportation Policy Options," and ask:*] If the University were to adopt new policies or services to decrease use of single occupancy vehicles, which of these approaches would you *most* like to see, and which would you *least* like to see, if any?
7. [*Important to **include this question**, as it should help analysis:*] If you had one minute to tell the transportation people at Western what was most important for you, what would you tell them?
8. [*Facilitator provide an oral summary (2-3 minutes) of the discussion evoked by main questions, then ask:*] How well does that capture what was said here?
9. [*Facilitator provide review of purpose of the focus group, then ask:*] Is there anything that we should have talked about but didn't?

Distribute demographics sheet & double-check that all consent forms were turned in