

Up-shifting: Bikes at Work

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Introduction

This report details a quarter-long student project focused on providing transportation options to staff and faculty during their workdays on campus. This report presents an in-depth analysis of the opportunities for diversification of Western Washington University employee means of transport.

In the beginning of the quarter, the project team began to explore the feasibility of a variety of means of employee transportation. However, we found bicycles to be the best alternative employee transportation option in that it was most easily implementable and there were a considerable amount of employees excited about using bikes at work. Thus, we decided to specifically pursue this transportation option throughout the quarter. Yet there remain a variety of other opportunities for increased environmental efficiency through other means of employee transport.

This report details our project team's process of exploring the feasibility of Facilities Management employees using bicycles as a transportation option during the workday. Throughout the quarter the project team met with stakeholders to address their concerns in allowing staff to use bicycles as a means of transport during the workday. Many parties were optimistic about the benefits of staff using bicycles. The health benefits, increased traveling efficiency from different points on campus and the savings were all aspects stakeholders were optimistic about.

However, in speaking with upper-level administrators at Facilities Management, they expressed hesitation about the many details this transition to include bicycles as a transportation option for certain employees would include. This report is only the initial gathering of information to address those concerns. Many of the concerns expressed by Facilities Management administrators cannot be known until a pilot program is implemented. At the conclusion of a quarters-worth of research, the project team recommends Facilities begin a pilot program of three staff members with the ability to use a bicycle during the workday when appropriate over the course of one year. This pilot program will illuminate details such as the amount of trips a bike can be used, the amount of savings that can be gained from reduced trips and effects on employee productivity and efficiency.

The goal of the pilot program is to provide a baseline for employee usage of a bicycle at work and its effect on the work day. A pilot program will allow Facilities Management to document and learn from an initial implementation of this idea. From there Facilities will be able to decide if using a bicycle as a means of employee transport is a viable option for more employees. A portion of this report will function as a proposal to Facilities Management (the Pilot Program Proposal section). It details our plan for implementing the pilot program and what is needed to move forward. At this point in the project, support for Facilities Management administrators is all that is needed to move forward with a pilot program.

The intent of this report is to thoroughly detail our research and process of exploring bikes as an employee transportation option in order that a future student group could pick up where we left off and continue working on this project in future quarters. In this report the reader will find a detailed description of the purpose and intent of the project as a whole, research and analysis including case studies and interviews, the pilot program proposal, recommendations for future works and an appendix of sources, contact information and other valuable resources.

Project Purpose & Goal

Project Goal: Provide transportation options to university staff during their workdays on campus by exploring the feasibility of staff using a bicycle as an option when appropriate.

This report provides an in-depth analysis of opportunities for diversification of employee means of transportation. This report details a quarter-long student project focused on providing transportation options to staff and faculty during their workdays on campus. As university faculty and staff are presented with more options for getting from one place to another during the work day, there is potential for increased work efficiency, increased job satisfaction/enjoyment, decreased carbon emissions and money savings as vehicles would require less maintenance and fuel. Once alternative transportation opportunities are explored and piloted, university employees will discover an improvement in their work experience and the university will save money and operate more efficiently. This project is important for the faculty and staff of Western Washington University because it is part of Western's overall transition toward sustainability and offers notable improvement on current practices.

This project aligns with Western's commitment to achieve carbon neutrality and reduce its overall environmental impact. The Western administration has identified a strategic objective to serve as a model for campus sustainability and sustainable practices (WWU Strategic Plan, 2006). This project actively contributes to Western's sustainable operations. An analysis of how Western employees can transport themselves differently while at work has not been completed before. However, employee transport and the university's campus vehicle fleet contribute to overall carbon emissions and environmental impact. This project identifies opportunities and makes recommendations for sustainable changes in on-campus employee transportation. This project not only responds to commitments the university has made to achieve sustainability; it responds to the interest expressed by certain university employees to change the way they travel around campus for their work.

According to Western's Climate Action Plan, the implementation plan for the President's Climate Commitment, 1% of Western's carbon emissions or 539 metric tons of CO₂ are generated from the campus vehicle fleet (WWU CAP, 2010 pg.6). It is directly recommended in the Climate Action Plan that the university should diversify its campus fleet and consider implementing bicycles as an employee transportation option (WWU CAP, 2010 pg.13). Creating opportunities for faculty and staff to use alternative means of transportation for their work on campus will decrease the amount of fuel burnt and the university's overall carbon emissions. This transition will considerably decrease the environmental impact of the campus vehicle fleet. Western's Climate Action Plan commits the university to a number of goals including: reduce net greenhouse gas emissions to 36 percent below 2005 levels by 2020 and reach zero net greenhouse gas emissions (or "climate neutrality") by 2050. Critically analyzing

the environmental efficiency of the university's campus vehicle fleet is a key component to reaching these university-wide goals.

Program Details: What could alternative means of employee transport look like?

The overall goal of decreasing the environmental impact of WWU's campus fleet with diversified employee transportation options led this project to two main options: bicycle and electric cart transportation. Instead of staff transporting themselves around campus in trucks or other gas-powered vehicles, when circumstances permit, they would be able to ride a bicycle or drive an electric cart. This report includes interviews and information gathered from a variety of employees on campus. It was found that many staff and faculty members were very excited to integrate a bicycle into their workday as a transportation option because they felt that it would increase their efficiency and work enjoyment. This finding steered the project to focus specifically on exploring bicycles as a transportation option. However, there are other opportunities for alternative employee transport in electric carts. Research into that area is included in this report's future works section.

Throughout our exploration we found that there are few campus staff positions that have the same transportation needs. This fact prevents this report from laying out a universal campus-wide plan of alternative staff transport. However, insight from individuals as to the transportation needs specific to their position significantly informs the beginnings of a program for alternative means of employee transportation specifically using bikes at work. The implementation of alternative employee transport program will be fine-grained and position-specific in the beginning as departments discover what options and coordination strategies work best in providing transportation options to their employees. *The goal of this report is to provide the tools and insight for departments and employees to begin this process.*

Scope of Project and Deliverables

In beginning our exploration of how to introduce alternative transportation options like the bicycle into WWU staff transport, the project team identified a project scope and an achievable set of deliverables. While WWU campus departments are still in the initial stages of exploring alternative employee transport, the value of this report rests in its comprehensive research and analysis of stakeholder concerns, detailed case studies and interviews from various parties and information on the existing alternative employee transport options on the WWU campus. The scope of the project focused on fact-finding and research into employees' transportation needs and their ideas for how to integrate alternative transport options specifically a bicycle into their work days. The scope of this project was to acquire baseline research, identify ripe opportunities for employees to begin using bicycles at work and propose an implementation strategy for further program development.

Project deliverables that aligned with this scope are as follows:

1. Identify staff members who are excited about using alternative means of transport at work and aid them in beginning to do so by the end of the quarter-long project timeline. Much of the impetus for this project came from the existing staff demand to ride bicycles during their workday. These staff members represent ripe opportunities for the alternative employee transport program to take hold. Much of the insight into program needs and considerations was gained from working with these individuals in exploring their position-specific transportation needs and brainstorming strategies to meet them through alternative transportation. *The project team identified a deliverable to get at least one of these staff members on a bicycle by the end of the three-month project timeline.*
2. In hopes of providing the foundation for a successful alternative employee transport program on Western's campus, the project team identified a deliverable to research and produce a comprehensive assessment of current employee use of alternative transportation on campus. Once the existing practices are detailed a campus-wide program can integrate and learn from the employees who are already using alternative transportation at work. Academic Technology User Services, University Police and Mail Services all use bicycles for employee transport. Their experience acquiring and using bicycles during the workday is detailed in this report.
3. In speaking with Western's Sustainable Transportation program manager, Carol Berry, the project team identified the need to provide WWU departments with a cost comparison of current employee transportation practices and the savings and costs associated with transitioning to alternative means such as bicycle transport. The project deliverable to research and present a breakdown of bicycle acquisition and maintenance costs as compared to vehicle costs and maintenance will allow departments to more readily consider transitioning to alternative means of employee transport. However, due to the complexity of campus vehicle fleet management accounting the project team was unable to include a campus fleet cost analysis in this report. A cost list for bicycles, maintenance supplies and bicycle accessories such as lights, a lock and helmet is included in this report.
4. Finally, the project team has identified Facilities Management as the department with the greatest return on investment and most potential for including bicycles as a employee transport option in their fleet. Facilities Director, John Furman, is a primary stakeholder in the success of this program. Addressing his concerns with the end goal of acquiring a public commitment from him to support a one-year

pilot program for alternative employee transport is the final project deliverable. A portion of this report will function as a pilot program proposal for Facilities Management. Upon their receiving this research and proposal, hopefully they will move forward in piloting bicycles as a transportation option for three employees over the course of a year.

Methodology

As mentioned previously, this student project is a response to employee interest in using alternative means of transportation during the workday particularly bicycles. In defining a project scope and methodology, the project team decided to focus on working with the people who are willing and eager to ride a bike at work. These eager employees could then function as initiators of a alternative staff transport program. In working with those who are eager to use bikes at work, we would have greater receptivity and insight into how an employee could use a bike at work. Once the eager employee's got on bikes at work, a program could grow from there.

This is how the methodology to propose a pilot program came about. If the eager employees were allowed to begin using bikes at work then further insight would be gained into the feasibility of bicycles as a transportation option in the Facilities Management fleet. With a pilot program, changes in work day coordination, employee productivity, work satisfaction and cost and trip savings could be documented. Only when people start riding bikes at work, can we understand the issues or hindrances and find ways to address them. Only when people start riding bikes at work, can we quantify and understand the benefits and savings from doing so. This project focused on gathering as much information and research as possible on the front end of program development. However, implementing a small-scale pilot program is the next stage of research and program development.

Throughout the course of this project, internet research, data collection and personal interviews were the main sources of information.

In acquiring information throughout the quarter, our project team used a variety of research methods. We began by completing internet research and case studies of other universities who have alternative employee transport options. This research included peer institution research and contacting sustainability coordinators and facilities managers responsible for initiating a program for staff to use bikes at work. Our project team made our most meaningful connections and acquired our best case study research through the Green School ListServ initiated by Brown University. The ListServ is an email list of members involved with the environmental responsibility of higher education and is intended to facilitate information exchange between individuals at colleges and universities who are attempting to reduce the adverse impacts of their institution's activities on the environment. Our

project team's correspondence with members of the GreenSchool ListServ and more information about the ListServ is available in the appendix of this report.

After gaining more of an idea of what was possible from hearing what other campuses are doing, we initiated meetings with interested parties and project stakeholders on the WWU campus. We personally interviewed the facilities employees who are eager to use bicycles as a transportation option at work as well as campus sustainability and health employees. Our findings from each of these interviews are detailed in this report.

Near the end of the quarter, our project methodology mostly entailed working closely with Facilities Management employees, supervisors and upper-level administrators to address the details and concerns regarding allowing three employees to ride bikes as a part of the pilot program. Those details and concerns are presented in the Pilot Project Proposal section of this report.

Research and Analysis:

In the following sections we present the development of our understanding as to what would work best for Western.

Case Studies

Case studies were an integral part of our exploration of alternative employee transport. Learning about other universities and department's process for using bicycles as an option for employee transportation was illuminating. The theme we found was that each program we researched began because of an enthusiastic team member who wanted to try something new and was given permission to ride a bike for work when appropriate. Once one people started using a bike, other employees began to see opportunities for their workday to include a bicycle. Because of this grassroots nature of our case studies, we could not track down numbers or metrics for evaluating the program efficiency. It just intuitively struck people as a good idea to use bicycles where appropriate.

Case Study # 1: University of Utah

Jen Colby, Sustainability Coordinator, jcolby@sustainability.utah.edu;
801.581.7505

After reviewing many universities on the Green List Serve we found and reviewed many universities that had instilled various programs that Incorporated bikes into their university operations. One that we found to be especially useful was the University of Utah. The University Of Utah has installed a pilot program on their campus to help progress their campus to be a more biker friendly and sustainable campus. They have had several student projects that were created including bike equipped with large recycling containers to help clean up after the sporting events, bikes with carts to transport vegetables to and from the campus farm, a bike path that currently spans part

of campus to isolate bicycle traffic, and bikes available for various departments for travel to and from meetings. The campus has seen a significant increase in the amount of bikes on campus and still has a large desire to increase the total use of bikes as efficient sustainable transportation methods. This was able to provide us with an opportunity to see what works well and where complications arrive. As far as providing us with information that furthered our research, this case study provided us with knowledge that using bikes as a transportation option on university is a effective method that gained wide scale support and attracted a lot of attention to other departments on campus.

Case Study #2: A-1 Builders

Rick Dubrow, Owner, rdubrow@a1builders.ws, 360.734.5249 x108

A-1 Builders is a local contractor in Bellingham, Washington. Owner, Rick Dubrow, has designed an employee transportation program and a business model that supports and incentivizes the use of bicycles for construction work. In talking with Dubrow about how a construction worker can do his or her job without a truck, we found that organization commitment to alternative transportation was integral to the success of the program. Once the business decided that using bicycles for most of their employee transportation is a priority, the rest of the job coordination and organization followed. A-1 can't use bicycles for employee transportation for every job they do, however they make it a priority to consider that transportation option in the initial logistics meeting of each job. They employ tactics such as storing tools and equipment on site to reduce commuting trips.

A client who was conscious about the environmental impact of her house remodel was the impetus of A-1's employee bicycle program. She worked with the two carpenters assigned to her job to figure out how they could use bikes as a primary means of transport for their work. After seeing how many trips could be saved through new crew coordination strategies, A-1 decided to incentivize and adopt this program company-wide. Dubrow says the benefits of employees riding their bikes supports the organizational culture and goals of his company.

The program took off a lot quicker than he thought it would. When asked if the program alienated the non-biking employees at the company, Dubrow said that even the non-bikers were supportive of the program because the program is framed as a way to empower employees rather than alienate them. Before they knew it, A-1 was receiving awards and recognition for their progressive alternative employee transport program. They were featured in American Bicyclist magazine and received the Governor's award for alternative transportation. An unexpected impact of the program has been on the company's image. It attracts more clients to their work because the business is environmentally conscious in all that they do and appears to be on the cutting edge. Dubrow didn't expect the buzz the program would create.

These are valuable lessons that can be applied to WWU Facilities Management as they can expect to create some buzz and positive press if employees start to commute around campus with bike trailers with “WWU Facilities Management” printed on the side. Additionally, the success of a program like this lies in the organization’s decision and commitment to it as a priority. There is a way for a construction worker to sometimes do his or her job without a truck. However, you must be committed to figuring out how.

A-1 Builders’ alternative employee transportation details are included in the appendix of this report and provide insight into the logistics of implementing a similar program.

Case Study #3, Concordia Physical Plant, 503-493-6470

I read an article in an online paper about Concordia University in Portland and that they use a pedal-powered utility bike for its maintenance and landscaping tasks around campus. In talking on the phone with them we found out that it is a special bike that has a large basket on the front. This bike is not geared for hills so may not be a good fit for Western. However they shared that during the summer people almost always prefer using the bikes to cars and electric carts.

Case Study #5: Eastern Mennonite University

Jonathan Lantz-Trissel, jonathan.lantz-trissel@emu.edu, 540.432.4700

The Recycle Center at EMU has been using bicycles with "Bikes at Work" trailers for year round pick up of Recycling and Compost. The Recycling team of paid full time staff and work study students are able to collect the recycling and compost in 300 pound loads and ride downhill to their Recycle center. They purchased used bicycles and upgraded the breaks to disk breaks for the extra loads. After a few years the coordinator, Johnathan, was able to convince the grounds crew to give bikes a try. They use their bikes all the time in the summer and love having a larger fleet when they need it. A few physical plant employees use bikes with a box on the rack to do jobs that don't require large tools and supplies. The fleet manager is pleased with having less vehicle maintenance and Johnathan said that by having a volunteer system there are rarely complaints from the employees using the bikes.

Data Collection with the WWU Gardeners

In order to get better understanding of how the Facilities crew, specifically the Gardeners, transported themselves around campus our project team created a survey to get a baseline of the amount of trips gardeners take on a daily basis. Our intent was to gather insight on the number of trips, what types of trips and if there is opportunity to use alternative means of transport for those trips. Our survey asked them to record the amount of trips that

they were driving from the physical plant to campus, trips on campus, and trips off campus and what they think would be the best transportation option for those trips: truck, bike or bike with a trailer, or a cart.

We hoped to have a trip analysis over a two week period that would give us a glimpse of what the daily transportation schedules looked like for the staff. We hoped that the staff would record the trips and what transportation method would work best for them. Unfortunately, the survey we made was not clear and the staff didn't understand how to record their trips. This left us with data that really didn't give us any strong data or insight into alternative transportation opportunities for the gardeners. If there was any insight gained from the survey, we noticed that about half of the trips that gardeners take could be done with a bike or a cart. We also found that bicycles as a transportation option is not feasible for gardeners right now because of the way they organize their workdays. However, there is opportunity for gardeners to have increased transportation efficiency if they can use a bike for their travel around campus rather than for the long, heavy commute to campus. Our survey needs to be further developed if we are to gather any more data on the trips staff are taking. Our original survey is available in the appendix of this document.

Current WWU Departmental Bikes

In order to complete a comprehensive study of the departmental bike usage on campus, our project team researched three WWU departments with established employee bike programs. Learning from their insight and experience of integrated bike into their work on campus was illuminating as to opportunities for Facilities Management employees.

WWU Mail Services: Judi Magnuson, Judi.Magnuson@wwu.edu 360.650.3770

WWU Mail Services purchased a bicycle in 2010 with the intention of using it for for small parcel delivery. In discussing the process of acquiring and implementing use of the bicycle, Judi Magnuson, manager of WWU Mail Services, says that she purchased the bike because of budget cuts she had to cut back on the number of mail delivery vehicles in her fleet. A bicycle with saddle bags or panniers intuitively struck her as an option that would allow for increased delivery efficiency and speed lending to better mail service on campus. Student clerks primarily use the mail bike March through October. Sometimes Magnuson uses the departmental bike to ride to meetings on campus. She ultimately has the vision to start a courier service on campus with the bike. "Speedy Spokes" could provide on-demand mail delivery. Magnuson is currently trying to figure out how to have clients pay for the service and other program logistics.

University Police: Srgt. Bianca Smith, Bianca.Smith@wwu.edu, 360.650.4105

Our team's original intention in contacting university police was to inquire about using a few of the impounded campus bikes for our pilot program. However, Srgt. Smith directs those bike to other community organizations. In speaking with her about how

University Police started their bike officer program, she said that they've had bicycle officers as long as she can remember. Smith has been an officer for the University Police for a little under 10 years. Bicycle officers are a key part of University Police operations. Having officers on bicycles serves as an effective way for them to do their job. There are certain niches that bike officers can fill that officers in patrol cars can't fill. Sometimes officers on bikes can respond more quickly than patrol cars to incidents. However, a bike officer and a patrol car officer are both usually dispatched to major incidents. Sgt. Smith said that it was hard to quantify when bike officers were more efficient than patrol cars, mostly they both are equally efficient in appropriate situations. University Police values the versatility and flexibility having officers on alternative means of transportation. Bicycle officers are scheduled into most of University Police's work. In order to be able to ride a bike at work, officers must complete an extensive weeklong training.

After speaking with her about our project, Sgt. Smith offered to let Facilities Management use three bikes that were donated to University Police. Currently, WWU police doesn't use these bikes and they're sitting in their basement. Pictured below, these bikes are brand-new and in prime condition. An agreement needs to be crafted between University Police and Facilities Management for the lending of these bikes to Facilities over the course of the pilot program.



ATUS Classroom Services: Gary Malick, Gary.Malick@wwu.edu, 360.650.4934

About 5 years ago, ATUS Classroom Services acquired three bikes from University Police's impounded bike collection to use in responding to the calls they receive when someone in a classroom on campus is experiencing a technical difficulty. The use of bikes for their work has considerably increased their response time and service to campus. They have been able to provide better classroom support because of their ability to hop on bike and get across campus in less than 5 minutes. Malick notes that they use the bikes at least three times a week. They maintain the bikes themselves. However over the course of five years, they have only had to fix two or three flat tires. Their initial cost of acquiring bike maintenance supplies, helmets, locks and baskets for the bikes was only about \$100. One of the ATUS bikes is pictured below.



Interviews

Carol Berry, WWU Sustainable Transportation Manager, Carol.Berry@wwu.edu, 360.650.7979

During our meeting with Carol Berry, Western's Sustainable Transportation manager, we discussed many aspects of our project including cost comparisons between the current facilities motor fleet and the addition of a bicycle alternative. A cost comparison would include the cost of acquiring, using and maintaining a bike for on-campus employee transport compared to the cost of maintaining and using the current motor fleet. Topics important in comparing the costs for these options are the savings and reduced costs of using a bike as opposed to a truck. These savings come from reduced maintenance, fuel and insurance costs for the trucks and the low costs of using a bike.

Another important topic Berry altered us to was to identify barriers that could arise while implementing a this program. These barriers included adding more physical work to an already demanding job, having the ability to transport big tools when they are needed, finding secure parking for the bikes and trailers while on campus, the lack of a connected bike network on campus and the difficulty of climbing the hills on campus on a bike. We concluded our meeting with Berry by identifying our next steps and who to contact next.

The cost detail included in the report appendix is the result of our research into the costs of acquiring and maintaining a departmental bicycle. Our hope is that this information with aid departments with realistic information about the costs of using a bicycle for worker transport. This information should make it easier to budget funds for department bicycles and allow comparison to the costs of current transportation practices. We were unable acquire cost details for campus fleet management during this project. In the future, we hope to find out the characteristics of the typical truck in the campus fleet, how much gas is uses, how many miles are driven weekly, how much does it cost to maintain and fix up the truck yearly, how many fender benders happen yearly and how does that affect insurance costs for the campus fleet. Additionally, we would hope to quantify the reduction of environmental impact and employee health benefits to bolster the implementation of an alternative employee transport program.

Randy Godfrey, Lead Gardener, Randy.Godfrey@wwu.edu, 360.650.2278

Insight into the transportation needs of the campus gardening crew. Workday coordination.

Early in our project, we met with Randy Godfrey to gain more insight into the work gardeners do on campus and whether or not there are opportunities for them to use bicycles. Godfrey told us that gardeners already have a lot of equipment and tools to haul around campus and that space for that equipment is already a concern. The trucks not only allow gardeners to have all their tools with them at all times but having a truck reduces the trips they need to take back and forth from campus to the physical plant. There are ten gardeners and each has a truck. Currently gardeners each manage their own area of campus and crew coordination is very individualized.

Godfrey invited us to speak with the gardening crew at their morning meeting. In presenting the idea of using bicycles for some of their work, the crew reiterated that trucks serve their work well because their work always either includes hauling large loads of organic debris off campus or hauling heavy gas-powered tools to use during their work day. Trucks allow them to have a variety of tools with them to address a variety of situations throughout the day. Additionally, weather is a major determinant in the gardeners' work. Their trucks serve as their only place to escape the weather and get warm during the winter months. With weather variability, the gardeners need the ability to respond to changes in weather which changes their plans for the work they were to complete that day. Having access to all of their tools allows them to be flexible and adaptable in their work ultimately bolstering their efficiency.

However, the gardeners mentioned that bicycles could be feasible for their work if they could store some of their heavy tools on campus, if they had access to a bike on campus to survey their area or if they didn't have to travel to far away locations like the compost facility regularly. They admit that the trips back and forth from campus to the physical plant are consuming. Their current solution to maintaining work efficiency in light of that fact is for each gardener to have a truck to keep whatever they might need with them in order to decrease the likelihood that they would have to take a time-consuming trip back to the physical plant. However, the coordination and space required to have a centralized tool storage is daunting. Campus space is already tight and implementing new coordination strategies for a central tool storage space means more work.

This is the crux of our findings with the gardeners: their current model of crew and work coordination is not compatible with the use of bikes for the work. Using bicycles as a part of their work day would require them to coordinate their work days differently: sharing a truck between two gardeners with areas close to each other or planning to do all the work that requires light equipment one day in order to use the bike. Some staff said that they would be

willing to plan their week's work load around using a bicycle for one day of the week. However, as a student project, we did not feel comfortable suggesting that the crew should coordinate their workdays differently in order to factor in the use of a bike. Yet there could be opportunity if there was willingness to reevaluate the way they coordinate gardening work. At this point, the gardening crew doesn't seem to be the best facilities team to pilot the use of bicycles during the work day.

Paul Mueller, Environmental Health and Safety Risk Manager and Bruce Boyer, Claims Manager Environmental Health and Safety

During our meeting with Paul and Bruce we discussed the concerns of our projects liability and risk. Specifically we wanted to know: what is the added liability of riding a bike, Does the University take on additional financial risk, what happens when someone gets hurt, and is used/personal gear assessed any differently than new or university owned gear?

- If someone gets injured riding a bike as part of their work they are covered by state insurance (State workers liability program) if assigned task or a part of their job.
- But if they're hurt commuting to work, that's their own liability
- To increase worker safety and insure claim eligibility, all Bikes at work participants must wear a Helmet, reflective vest, use bike lights, and follow all city and campus bike rules.
- Risk to institutional resources: bikes aren't insured bc of low cost. Repair and replacement cost needs to be budgeted departmentally.
- Customs: let participants know that if you're in a rush you still have to follow bike rules.
- If they knowingly break a rule they are not covered, regardless of Bike or Truck

- Heart attacks are typically not covered by workers comp but is treated the same of in a truck or on a bike.
- Increase in normal work related injuries. People will less likely to get injured because they'll be in better shape.
- Supervisors enforce rules
- Voluntary program reduces liability
- Liability on bikes is treated the same as on trucks.

Pilot Program Participants: Hub McCully and Pat Schuette, FM Carpenters and Shirley Ebinger, Maintenance Mechanic

Hub McCully, Pat Schuette and Shirley Ebinger are the facilities employees who approached the Office of Sustainability inquiring about using a bicycle as a transportation option during their workday. They are the eager employees who are excited to integrated a

bicycle into their workdays. Therefore, we are planning on working with Hub, Pat and Shirley as the participants of our pilot program.

Upon first connecting with Pat and Hub, they noted that they would make a good bicycle-truck team. One of them could use a truck to haul larger materials when needed and the other could use a bike to transport the basic supplies he needs for the day. Pat said that he could use a bike for 90% of his work trips. Pat and Hub are key pilot program participants in that they can try new crew coordination strategies that could foster greater bicycle usage at Facilities. As carpenters, they have consistent daily schedules and have minimal equipment needs for their daily work. They are rarely called off of their work for emergency response. However, in the event of an emergency, if they were called to another location, as a truck-bike combo, they would instantly be in communication about the equipment needed to respond to the emergency. Pat could quickly ride to the scene on the bike and Hub could gather the appropriate tools from the physical plant and bring them in the truck.

Pat and Hub are excited to affect a culture shift at Facilities, as well. They recognize that not all Facilities employees will be excited about using bikes as a transportation option during the workday. They noted that a lot of employees are older and don't think they can bike to campus. However, as the older work force begins to retire and are replaced with younger employees, Pat and Hub said, "It will be good to have old guys like us as an example those young bucks can follow. If the old guys can do it, the young one's should be able to."



Shirely Ebinger is an avid bicycle rider that works on campus to inspect fire extinguishers as a main component of her job. For this work she doesn't have a lot of equipment needs for her daily work. Her daily supplies could easily fit in bike saddle bags or panniers. In speaking with her about using a bike as a part of her job she said that she could use a bike 3 to 4 days a week on average. Shirley's supervisor, Scott Stilts, is also optimistic about this staff using bicycles as an option during the workday. He said that for every dollar we

save in reducing trips taken by truck that could translate into saving a job in these tight budgetary times.



Kaylee Nightingale, WWU Employee Health and Wellness Programs

Kaylee is in charge of westerns Employee Health and wellness programs. She runs lunchtime fitness programs and helps connect WWU employees with the health resources they need. We were recommended to talk to her by Paul Mueller and Bruce Boyer as a resource for how to quantify the benefits of regular exercise. She expressed that including this regular exercise in the work day will have great benefits to worker health, work productivity, and morale. **She also?????** .

Doug Adelstein, WWU Labor Relations, Doug.Adelstein@wwu.edu; 360.650.2513

We discussed with Doug the implications of a change to the workday such as this. He expressed the importance of the volunteer aspect of the program and that to get the support of the labor unions we need to address some main points. Making sure that the employees will not be negatively evaluated based on the results of this project, making sure that they are still as protected against liability, and being able to decide what days they bike and what days they drive. Doug expressed his personal feeling that any trip that can be done by a bike instead of a truck is a huge success for the university, laborers, and the environment.

John Furman, Director of Facilities Management

As our main stakeholder and the one who ultimately makes the decision to implement this pilot program, we corresponded with John Furman regarding his concerns about allowing Facilities staff to use bikes as a transportation option where appropriate. Our email correspondence with him is included in the appendix of this report.

Furman's concerns centered on the metrics and indicators for how much employee productivity and efficiency would change if they were to ride bikes instead of drive to their jobs on campus. Furman emphasized that Facilities Management (FM) employees provide a services to campus and their time is billed in fifteen minute increments. He will not support any change that could create more cost or hinder FM's ability to deliver the level of service they have been delivering. In response to Furman's interest in seeing metrics and indicators of change in employee productivity, our project team is proposing a pilot project to identify and track the appropriate indicators. This information won't be understood until we can develop a baseline understanding of how a Facilities employee can integrate a bicycle into their work when appropriate.

This report will also define the process for pilot program evaluation and analysis in the Pilot Program Proposal section below. In order to support a pilot program, Furman needs a plan for the evaluation of the success of the pilot program and a plan for gathering the data for that evaluation. We hope not only to gather information on the employee cyclists but also on the reduction of trips, fuel, and vehicle maintenance. These metrics will allow us to realistically compare current employee transportation practices with the use of bicycles for certain work trips. We hope to gain a working understanding of current practices and opportunities for greater efficiency throughout the pilot project so we can plan on how to increase transportation efficiency by supplementing the use of trucks with the use of bicycles when appropriate. Many of Furman's concerns as seen in our email correspondence with him, can not be addressed before we gain a baseline understand through the pilot program. For example, through the pilot program we will understand fleet cost savings and that will illuminate future truck fleet management concerns. As employees are given the chance to experiment with bikes as a work transportation option, they can find the optimum crew coordination and equipment transport strategies, another of Furman's concerns.

Scott Slagle, Assistant Director of Work Control Center and Renovations Services

Scott Slagle was another upper-level administrator at Facilities Management that has concerns about Facilities employees using bicycles as a means of transportation. Our team's email correspondence with him is included in the appendix of this report.

Slagle's concerns centered on the types of workers who would be using bikes, their compromised ability to respond to emergencies or different job requiring different tools if they're on a bike and how to track the costs of decreased worker efficiency when bicycles are

used as a transportation option. Our team agrees with Slagle that all Facilities employees' jobs are not compatible with using a bike as a transportation option, service workers in particular. Certain employees must have a variety of tools and equipment with them at all times to maintain their ability to get called to different jobs or emergencies during the work day. It would not be appropriate for these employees to use a bicycle as a work transportation option. It is not the intent of this program to get employees on bicycles when it would inhibit them from doing their job. This program's intention is to integrate bicycles as an option where appropriate and allow for its use to supplement current practices where higher efficiency could be gained from using a bicycle.

Slagle brings up valid concerns such as the cost Facilities Management would incur in spending time to evaluate worker transportation efficiency and the pilot program and questioning where the employees securely store a bike loaded down with expensive equipment. These are concerns that bring up complex organization issues that a student project has trouble addressing. Our hope is to foster positive change and work health at Facilities Management. However, any change comes with a cost. We hope that the potential benefits of this program would out-weigh any investment or cost incurred by Facilities in evaluating or changing certain practices. However, that evaluation and organizational change is integral to the longevity of this alternative employee transportation program, campus sustainability and the increased worker health and satisfaction this program can provide.

Pilot Program Proposal

We aim to achieve various sustainable transportation methods for the staff, faculty, and students on Western Washington University's campus. Not only will achieving bikes as an efficient sustainable transportation method for the faculty be cost efficient in the long run compared to the current methods (personal trucks), but it will also help lower Westerns environmental impact, optimize campus flow, increase employee satisfaction, and provide another option to the employees. We have seen throughout the country that bikes are a reasonable option for staff, faculty, and students as both a viable transportation method and a simple way to lower the environmental impact of the campus. We hope to provide this option for anyone that displays interest in this method in hopes of creating a more efficient and sustainable workplace. We have found that other universities with bicycling programs haven't studied how effective their programs have been performing. We suggest that facilities and the WWU transportation department take on the following pilot program action plan.

Pilot Project Introduction:

The pilot project this project team proposes would involve three participants (Hub McCully, Pat Schuette and Shirely Ebinger) and the program will be evaluated quarterly for one calendar year.

Stakeholders and participants

Shirley Ebinger will be using a bike to supplement her work in the electric shop inspecting and replacing fire extinguishers.

Hub McCully and Pat Schuette will use a team approach with one of them driving and one biking. This way they can still have individual transportation options but one member can drive larger materials up the hill at the beginning of the day.

Carol Berry, WWU sustainable transportation manager, Will arrange the quarterly meetings for evaluation throughout the pilot project.

Scott Stilts, Electrical Shop Supervisor, is Shirley's boss.

Craig Evans, Carpentry Shop Supervisor, Pat and Hub's Boss

Logistics

Memorandum of understanding between supervisor and staff member to on paper agreeing to the terms of the pilot project including but not limited to:

No negative job evaluation due to the results of this study.

Agreement worked out with EHS documenting all of the rules that the cyclist must follow including but not limited to:

- Wearing a helmet and reflective vest
- Following all Bellingham Bicycling codes as well as Western's campus bicycling policy POL-U5620.05.
- Acknowledging that L&I is only covering trips once on the clock so if a participant commutes from home on bike they are not covered under L&I but commuting from the physical plant to campus is on the clock and covered under L&I.

An official agreement between university police and facilities management will be necessary to document the terms of borrowing their bicycles.

A meeting with the participants and Sustainable transportation will be able to decide what equipment needs to be purchased and what the budget can cover.

Evaluation

Weekly documentation of trips done by bike and car:

- Mileage and time logs from the bike and car odometers.
- How many return trips to Physical plant due to forgetting materials
- The time moving function on the bikes trip computer should be a good estimate of the time spent during an average day, however the mileage may vary because of shorter trips on bikes rather than driving around.
- Evaluation from scheduler if they are scheduling people differently because of their use of a bike
- All immediate problems worked out with supervisor but quarterly meetings with Carol Berry, Supervisor, participant, and John or Scott to look over the quarters bicycling and look for ways to improve or tweak the system.

Other Considerations

What is done with university purchased gear after the program?

“At this point in our research, we recommend Facilities begin a pilot program with three staff members with the ability to use a bicycle during the workday over the course of one year. This pilot program will illuminate details such as the amount of trips a bike can be used, the amount of savings that can be gained from reduced trips and effects on employee productivity and efficiency. There are certain things that you won’t know until you try.

The goal of the pilot program is to provide a baseline for employee usage of a bicycle at work and its effect on the work day. A pilot program will allow us to document and learn from an initial implementation of this idea. From there Facilities will be able to decide if using a bicycle as a means of employee transport is a viable option for more employees.”

Future Works

1. Questions that Facilities still has.
 - a. We want to know that mileage the
2. What needs to be achieved with a pilot project.
3. Safety concerns

4. Documentation
5. Skewed population for the pilot
6. Starting place/Next steps for the next student group.
7. Work on the survey and data gathering
8. Costs for campus fleet management

Thank You

Thank you to all of our stakeholders and future students who will embark on this project. We appreciate all the work that you're putting in to make this program a success.

Works Cited

Western Washington University Strategic Plan, 2006:

http://www.wwu.edu/president/documents/Strategic%20Plan_web.pdf

Western Washington University's Climate Action Plan (WWU CAP), 2010:

<http://www.wwu.edu/sustain/climateutralwestern/files/Copy%20of%20WWU%20Climate%20Action%20Plan%20FINAL.pdf>

Appendix

Team contact information

Neil Baungard: neilbauns@hotmail.com or clarkforkphoto@gmail.com; 425.765.2602

Carson Yach: carsonyach2@gmail.com; 504.863.8733

Lauren Squires: lau.squires@gmail.com; 360.431.9665

Stakeholder Contact Information

Pilot Program Participants: Hub McCully and Pat Schuette, FM Carpenters and Shirley Ebinger, Maintenance Mechanic

Carpenter Shop: x3213 or x3218

Carpenter Supervisor, Craig Evans craig.evans@wwu.edu 360.296.1053

Shirley Ebinger: x3218 or x3420

Electric Shop Supervisor, Scott Stilts: scott.stilts@wwu.edu x3208

Paul Mueller, Environmental Health and Safety Risk Manager and Bruce Boyer, Claims Manager Environmental Health and Safety

Paul Mueller: Paul.Mueller@wwu.edu, 360.650.3065

Bruce Boyer: Bruce.Boyer@wwu.edu; 360.650.2947

John Furman, Director of Facilities Management

John.Furman@wwu.edu; 360.650.3496

Furman's Assistant and Scheduler: Chris.Vallejo@wwu.edu 360.650.3499

Kaylee Nightingale, WWU Employee Health and Wellness Programs

Kaylee.Nightingale@wwu.edu; 360.650.3386

Scott Slagle, Assistant Director of Work Control Center and Renovations Services

Scott.Slagle@wwu.edu; 360.650.2788

Email Correspondence from GreenSchool ListServ

-----Original Message-----

From: Green School List [mailto:GRNSCH-L@listserv.brown.edu] On Behalf Of Jonathan Lantz-Trissel

Sent: Friday, September 30, 2011 4:53 AM

To: GRNSCH-L@listserv.brown.edu

Subject: Re: Bicycles for on Campus Landscaping

Neil,

The Grounds crew uses bikes and trailers at Eastern Mennonite University, particularly in the summer when we have lots of student help, lots of weeds and only a few vehicles/electric carts. We have four university purchased bicycles in the Physical Plant and three 8-foot Bikes At Work trailers (www.bikesatwork.com). For the last 6 years, Recycling has two of the trailer/bike set-ups it uses year round for all the recycling and compost collection on campus, then two years ago the carpenters got a bike with a custo bike trailers/boxes. There are also a half dozen bikes that have been abandoned on campus that Physical-built box (of wood of course) that fastens to a rear rack for small jobs like locks, and at the same time Grounds got a hand-me-down bike trailer that got bent hauling compost and so the end was cut off making it a 6 footer.

Staff are the ones who have asked for the Plant folks use for getting around, but the three trailer bikes are much nicer and are all modified with superior braking (for the 300lb plus loads going downhill) and higher spoke-count wheels than are typical on bikes.

In total there are five staff who operate the bikes and trailer/boxes and probably 20 students workers over the course of a year who will use the bikes and trailers.

FYI our campus has about 1500 students and 34 Physical Plant staff employees and two dozen student part-timers.

- Jonathan

Jonathan Lantz-Trissel
Sustainability Coordinator
Eastern Mennonite University
1200 Park Rd, Harrisonburg VA 22802

>
> Hello,
> My Name is Neil and I am a Student at Western Washington University. I
> am working on a project to help some of our landscapers and staff that
> would like to use a bicycle for their frequent on campus travel. I am
> wondering if any of you are doing something similar for your campus.
> What trailers or saddle bags you use and how was it received by the staff?
> Who is using a bike for their on campus travel?
> Are they using their own bike or a campus owned bike?
> If the campus purchased the bike what bikes are you using?
> Thank you so much for your help! This solution will be much more cost
> and carbon efficient than our other vehicle options!
>
> ~ Neil Baunsgard
> WWU Student/ Environmental Economics
> Baunsgn@students.wwu.edu
> 425-765-2602

See the email below from our Grounds Manager for info on the bike/trailer system we have been using.

BTW – our student run restaurant on campus borrows the bikes to transport the organic greens grown in our University greenhouse to their restaurant in the student center to further reduce their footprint.

Thanks & Adios, CJD

Carol J. Dollard, P.E., LEED AP
Energy Engineer
Carol.Dollard@colostate.edu
(970) 491-0151 - Office
(970) 566-2150 - Mobile
Mailing Address:
Facilities Management
Colorado State University
6030 Campus Delivery
Fort Collins, CO 80523-6030

Visit the Facilities Sustainability Website at www.fm.colostate.edu/sustain

Please consider the environment before printing this email

From: Nagel,Douglas
Sent: Friday, September 30, 2011 9:14 AM
To: Dollard,Carol
Subject: RE: Bicycles for on Campus Landscaping

We use Cycletote Trailers, cycletote.com will get Neil to the site, we have the frame and hitch with a wood body. Sorry I can't find any pictures. We have been using bikes and trailers for over 15 years, the flower crew uses them for all of their summer maintenance. The University owns the bikes that we use. There are several different brands to choose from, some bikes are now made to haul materials, no need for a trailer. Our crews like to use the bikes, we are looking into expanding their use into other areas in our department.

Doug Nagel
Outdoor Services Manager
Colorado State University
Office 970-491-8733
Cell 970-567-6449
Fax 970-491-8705

A-1 Builders Employee Transportation Program

Bicycling and Smart Trips

(Initiated 7-9-10)

1.

Cycling

1. General notes

a. Bicycle riders using their bike to commute to or from home are *not* covered by L&I for injuries. For *work-related*, cycling round trips (RTs), L&I does cover cycling injuries (see below).

b. If a cyclist buys a high-visibility jersey we'll post our logo on the rear for free but the cyclist needs to acknowledge (and behave accordingly) that car drivers may think badly about our company if you bike poorly and don't follow the rules of the road. We don't want our exposed logo to become a marketing nightmare.

c. This incentive program will be evaluated and potentially modified at Ricks' discretion in mid-April, 2011.

d. This program applies to all company employees, but this incentive does not begin until after one's 30-day probationary period ends.

2. Incentive details

a. \$10/RT will be added to your cycling gift card on a weekly basis if you work four 10-hour days a week; \$8/RT will be added to your cycling gift

card on a weekly basis if you work five 8-hour days a week. This provides parity: if someone bikes every day, for example, they will earn the same amount of money no matter how many days they work per week.

b. Each individual cyclist is asked to report in to Bobbi by phone -- every Friday -- with how many RTs you logged. No paperwork is needed; this is all based upon trust.

i. For production folks, use your regular job clock voicemail box to record bike trips.

ii. For office folks, pick up your landline handset and type 220# (don't first dial '9' for an outside line)

iii. Leave your name, # of round trips & the week-ending date (use the Saturday date for the week ending...not the Friday date)

c. Like *Smart Trips*, someone can only log a single round trip per day.

d. If someone uses their bike for a work-related errand (i.e. bikes to the Permit Center to pick up a permit; etc.), the additional transportation time, as compared to using a car or truck, is paid time. L&I regulations insist upon this and during this work-related errand L&I covers you for a cycling injury (as opposed to commuting by bicycle; L&I does not cover injuries incurred during your *commuting* time). **However, this work-related errand RT cannot be posted as an eligible RT for this cycling incentive (even if you have no other eligible RT to post that day).**

e. After every 50 RTs an additional \$100 will be added to your cycling gift card and Rick will acknowledge this threshold to all employees via email.

f. Since we experience such different cycling weather depending upon the time of year, we also have a weather-related incentive in order to promote bad-weather cycling. We've created two separate periods of time: April through September (nicer cycling weather) and October through March (wetter, colder cycling weather).

i. An additional \$100 will be added to your cycling gift card if you had the *most* RTs in the company in one of these 6 month periods.

1. Since the production division works 4 days a week and the office folks work 5 days a week, this automatically gives the office folks more work days to log RTs. Fairness warrants normalizing this data. Therefore, we'll take the number of RTs logged by production folks and multiply this by 1.25. *We'll compare this normalized production data to the office folks*

data in order to pick the person with the most RTs in one of these 6 month periods.

a. Just to be clear, here's an example:

1. Johnny the carpenter logs 75 RTs during a 6 month period
2. Betty the designer logs 100 RTs during the same 6 month period
3. $75 \times 1.25 = 94$ RTs (what this means is that if Johnny worked 5 days a week and he biked the same percentage of work days as he did during his 4-day work week, he would have biked 94 RTs)
4. Betty's 100 RTs is higher than Johnny's 94, so Betty would win the award. *Go Betty!*

g. Hybrid trips using a bike and a car are fine. Examples include:

i. Someone who lives far from the office drives part way by car while carrying their bike, then parking their car and transitioning to the bike for the balance of the journey to our office.

ii. A production worker who lives far from their jobsite drives part way by truck while carrying their bike, then parking their truck and transitioning to the bike for the balance of the journey to the jobsite.

This option clearly creates an avenue for abuse... an office worker, for example, could drive their car to Albertson's a half block from here and then bike here from there. This is clearly not our intention. Since hard and fast rules are difficult to define, Rick will use his discretion to determine if someone is abusing this incentive. The best way to avoid this is to share with him your plan of action and let's be proactive about how your travel choices fit into this incentive.

h. Winners will be mentioned by mid-April and mid-October every year -- Rick will acknowledge this award to all employees via email.

SMART TRIPS

1. *Whatcom Smart Trips* (<https://www.whatcomsmarttrips.org>) is an ongoing partnership between local government, public agencies, employers, and schools to promote transportation by walking, bicycling,

sharing rides, and riding the bus. In support of these same goals, we've also created the following incentive.

2. Incentive details

a. This incentive does not begin until after one's 30-day probationary period ends.

b. Whoever logs the *maximum* number of *Smart Trips (ST)* in a quarter will receive:

i. A bus pass for the next 3 months, or

ii. A \$100 gift certificate to Kulshan Cycles or REI

c. Whoever has the best *percentage improvement* in a quarter as compared with the *same quarter last year* (thereby acknowledging that quarters 1 & 4 have similar weather; quarters 2 & 3 have similar weather)

i. A bus pass for the next 3 months, or

ii. A \$100 gift certificate to Kulshan Cycles or REI

d. Award 'ceremony' or recognition on April 1st of each year, recapping the Smart Trip awards of the prior year

3. We will be using the *Smart Trips* online reporting data to determine the winners.

4. We will create a quarterly report to staff via email, along with a summary posted at our front vignette so that the rest of our world will see these results. The report will:

a. List who is active in Smart Trips

b. For each active member the report will show:

i. This quarter's STs

ii. Year -to-date (YTD) STs

iii. Last year's total STs

iv. Percentage improvement of this quarter compared to *same quarter* last year

c. Also show team totals by quarter and YTD

5. All eligible *Smart Trip* forms of transportation are accepted *and* this also covers both work Smart Trips & personal Smart Trips.
6. The *Smart Trips* online posting only posts one round trip per day even if you do 2 or more. We're using the data from their program, so the same will be true for our incentive program: only one round trip per day is possible.
7. This incentive program will be evaluated and potentially modified at Ricks' discretion in mid-April, 2011.

Gardner Trip Tally Survey



We would greatly appreciate it if you tracked your work trips over the next two weeks. We're hoping to gain more insight into what types of transport are necessary for the different types of work you do during the day.

Type of Trip

Mode of Transport

	Physical Plant to Campus	On-campus	Off-campus
Truck			
Cart			
Bike or Bike with a trailer			

We invite you our project presentations at the end of the quarter: Tuesday, November 29th 5:30-6:30 Friday, December 2nd 12-1:30 (locations to be determined).



We would greatly appreciate it if you tracked your work trips over the next two weeks. We're hoping to gain more insight into what types of transport are necessary for the different types of work you do during the day.

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Type of Trip

Mode of Transport

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Truck			
Cart			
Bike or Bike with a trailer			

We invite you our project presentations at the end of the quarter: Tuesday, November 29th 5:30-6:30 Friday, December 2nd 12-1:30 (locations to be determined).

Cost list of bike parts

Costs at the Outdoor center are generally half the price as Kulshan, and the OC has a partnership with their dealers.

Cost sheet for Bike parts and labor.		
Item	Cost @ Kulshan \$\$	Cost at OC
Back Derailer	40-60	
Bell	8	
Brake pads	10	5
Cable Lock	22	
Cables	4/ft	
Chains	20	
Crank Set	50	
Disk Breakes	60	
Fenders	40	
Ft. Derailleur	30	
Gear Rack	45	
Grips	15	
Helmet	60	
Housing	3/ft	
Levers	25	
Light- Back	25	25 for both
Light- Front	20	
Panniers	165	
Pedals	20	
Platform Pedals	50	
Pump	30	
Rear Wheels	150- 200	
Saftey Vest	15	
Seats	40	

Tires	20-45	10-25
Transport Cargo Bike	1200	
Trunk Bag	60	
Tubes	7, 8	3.25
U Lock	30	20
V Brakes	20	
LABOR		
Tune Up	70	
Brake Adjustment	20	
Derailleurs	15	
Install Tire/Tube	10	

Correspondence with John Furman, Facilities Management Director

from Lauren Squires lau.squires@gmail.com
to John.Furman@wwu.edu
date Wed, Oct 26, 2011 at 10:41 AM
subject Alternative Means of Worker Transport: CSPS Project

Hi, John,

We're a team from Seth's Campus Sustainability Planning Studio exploring alternative means of worker transport this quarter.

We've been meeting with a variety of stakeholders on campus to discuss opportunities for staff to use a bike or an electric cart during the workday. We've found a group of staff in Facilities Management who are very eager to give this a shot.

We'd like to talk to you about what it would take to help these staff use alternative means of transport at work.

It sounds like you and Seth have already talked a bit about this project. We'd like to hear some of the questions and concerns you might have before we meet so we can be in touch with other universities with similar programs to see if they have any potential solutions.

We would appreciate your reply with your questions and concerns by the end of this week.

Additionally, we would like to meet with you next to discuss what we find. A couple possible meeting times are next Monday at 10:30 am or Wednesday, between 9 and 10:30 am.

Looking forward to meeting with you!

- Lauren, Neil and Carson

P.S. We will presenting our report and our findings at two class presentation times. We would like to invite you to attend one of these presentations, whichever time is most convenient to you.

Here are the dates, times and locations to put on your calendar:

Tuesday, November 29th from 5-6:30 pm in Comm Facility 120

Friday, December 2nd from 12-1:30 pm in Haggard Hall 345

Our presentation poster is attached.

Student of Urban Planning & Sustainable Design

Graduating December 2011

Western Washington University

Director of Environmental and Sustainability Programs

WWU Associated Students

<http://esp.as.wwu.edu/>

lau.squires@gmail.com

360.431.9665

from John Furman John.Furman@wwu.edu
to Lauren Squires <lau.squires@gmail.com>
cc William Managan <William.Managan@wwu.edu>,
Scott Slagle <Scott.Slagle@wwu.edu>
date Thu, Oct 27, 2011 at 4:51 PM
subject RE: Alternative Means of Worker Transport: CSPS Project

Hi Lauren,

Lots of questions from FM leadership, primarily focused on affordability and efficiency.

1. Productivity. There has to be a business case for FM to bear the cost on its own. We bill our time in 15 minute increments, and include costs of transportation in our overhead surcharge. If bicycles increase the amount of travel time (i.e. decrease actual time spent working), that cost has to be offset somewhere. Perhaps we could try electric cars again. We would need someone to fund a better electric vehicle current on campus. We already showed the current overgrown golf kart approach is more costly than small gas trucks, + - \$1.5/miles versus + - \$1.00/ mile. Slower vehicles take significant additional time and time is money. One reason for the high costs are starting on a hill with slight roll back and punching the accelerator torqued off the axles and battery replacement due to charge cycle limits. Bikes also face that uphill challenge.
2. Offsetting cost. Would you expect FM to rid itself of passenger vehicles to offset the cost?
3. Liability for personal injuries or something like a heart attack? I realize there will be health benefits, but I don't believe WWU's health coverage plan is flexible enough to reduce rates for healthy lifestyles.

4. Do I have to maintain/retain vehicles for the inevitable time when the employee can't ride a bike or opts out of the program?
5. Union concurrence?
6. Crew coordination – if a crew is working on a project, efficiency is lost if they don't all show up at the same time
7. What about transport of tools & material?

None of these questions are show stoppers, but there have to be good business case answers to move forward. Part of the business case might be funding of additional labor to offset efficiency losses (if there are any).

Good Luck!

John

John Furman Director, Facilities Management
(360) 650.3496
John.Furman@wwu.edu

From: Lauren Squires [mailto:lau.squires@gmail.com]
Sent: Wednesday, October 26, 2011 10:42 AM
To: **John Furman**
Subject: Alternative Means of Worker Transport: CSPA Project

Correspondence with Scott Slagle, Assistant Director of Work Control Center and Renovations Services

from Lauren Squires lau.squires@gmail.com
to Scott Slagle <Scott.Slagle@wwu.edu>
cc John Furman <John.Furman@wwu.edu>, Seth Vidana <Seth.Vidana@wwu.edu>
date Fri, Nov 18, 2011 at 9:44 AM
subject Bikes at Work: Presentation Times

Hi, Scott,

Thanks so much for taking the time to meet with me yesterday. I appreciate you candidly sharing your thoughts with me about staff using bicycles as a transportation option during the workday.

As promised here is the information about our class presentations: **Our presentation times are Tuesday, November 29th in Comm Facility 120 from 5-6:30 pm or Friday, December 2nd in Haggard Hall from 12-1:30 pm.** Feel free to attend the presentation that works the best for your schedule, lunch time or right after work. Our class presentation poster is attached to this email.

We are excited for the opportunity to address your concerns and present our findings and proposal. What presentation would work best for you to attend?

In summing up what we talked about in our meeting, you are most concerned about service workers using bikes at work and having that decrease their efficiency and ability to do their jobs. Additionally, you're concerned about the provision of space and security of supplies if staff don't have their trucks. Hauling the tools needed was something else we talked about. Is there anything I missed?

As we talked about, this is just a student project exploring the opportunities for 3 staff members to use bicycles as a transportation option where it's appropriate. It sounds like it wouldn't be appropriate for a service worker who needs a variety of tools for jobs all over campus during their workday to use a bike. However, I'm sure there are opportunities for particular staff to do their work more efficiently on a bicycle at certain times. The use of the bike means money saved and increased efficiency and ultimately jobs can be preserved because of that.

Thanks so much for your open mind and willingness to consider our idea. We're excited to share our research and proposal with you at the presentation.

All the best,

Lauren Squires

Student of Urban Planning & Sustainable Design

Graduating December 2011

Western Washington University

Director of Environmental and Sustainability Programs

WWU Associated Students

<http://esp.as.wvu.edu/>

lau.squires@gmail.com

360.431.9665

from Scott Slagle Scott.Slagle@wwu.edu
to Lauren Squires <lau.squires@gmail.com>
cc John Furman <John.Furman@wwu.edu>,
Seth Vidana <Seth.Vidana@wwu.edu>
date Fri, Nov 18, 2011 at 2:32 PM
subject RE: Bikes at Work: Presentation Times

Other issues:

- 1) How is success measured and the (3) individuals you talked about are already avid bike riders so In my opinion it will not be a true test across the diverse groups at FM if this can be adopted in the future.
- 2) During the day we call workers to report to different locations than they were sent to in the morning or at different times of the day. These calls may require different tools and supplies than they took with them original that would likely be in their trucks. This could means they cannot respond and some else will need to respond and that person is working on something that we do not want the working being stopped.
- 3) I do not see trucks being eliminated and the replacement of trucks is not based on mileage instead time owned. So again is the question how do we measure actual saving against productivity and who will be doing the tracking? Weather along will drive FM keeping the trucks.
- 4) How much cost or stopping other work will there be at FM to help provide tracking information?
- 5) Who is buying the bikes and what kind are recommended?
- 6) Will FM bikes, for parking and riding in dismount zones, be treated different than students? i.e. closer to buildings?
- 7) Who will provide the maintenance on the FM bikes?
- 8) Who will review and prepare the procedures / requirements for FM workers riding bikes

With all this said – I do not want to seem negative I’m just a believer that as many things as possible need to be considered prior to making a decision. Good-luck and I enjoyed talking with you.

University Bicycling Policy

POL-U5620.05 USING BICYCLES ON CAMPUS

This policy applies to all individuals riding, walking, parking or otherwise operating a bicycle on campus.

This policy does not apply to either motorized bicycles or minimotorcycles. These are considered to be motorcycles and are

subject to all traffic rules and regulations controlling motorcycles.

See WAC 516-13 for specific details on rules and regulations.

Definitions:

Pedestrian: Any person who is afoot or who is using a wheelchair, a powered wheelchair or a powered scooter for persons with disabilities.

1. Bicycles are a Preferred Form of Transportation

Bicycles are an essential component of a sustainable transportation system, providing safe and equitable access to and around campus by all users. They are a preferred form of transportation in the University’s Institutional Master Plan.

Bicycle use also encourages the reduction of commute trips among employees who drive single occupancy vehicles to, from, and/or on campus.

2. Bicyclists Must Yield the Right-of-Way to Pedestrians

Bicyclists must use caution when riding bicycles on campus. Especially in high traffic pedestrian areas, bicyclist must keep in mind that they must yield the right-of-way to pedestrians and that the safety of WWU pedestrians is vital.

3. Mutual Respect Among All Transportation Modes is Essential

Respect and consideration for others on campus is a critical requirement for having different modes of transportation mix within a congested campus. The safety of pedestrians and cyclists depends on every person being careful and

aware of their surroundings. Every person is strongly urged to watch out for the safety of others, especially those persons using modes that are more vulnerable to get to and around campus. POL-U5620.05 Page 2 of 2

POLICY

POL-U5620.05 Using Bicycles on Campus

4. Bicyclists Comply with Regulations

Bicyclists must comply with regulations to ensure the safe operation, use, and parking of bicycles on the campus.

It is the responsibility of bicyclists to:

- Use bicycles on campus for transportation only in compliance with WAC 516-13 and the WWU Bicycle Responsibility Code; U
- Use them to and from campus in compliance with City of Bellingham bicycle regulations; and
- Use them in compliance with any other applicable rule or regulation.

Bicyclists must comply with University designated dismount zones, speed limits, use limitations and other safety precautions for bicycles as described in WAC 516-13.

5. Police Enforce Bicycle Rules and Regulations

A bicyclist who violates applicable rules and regulations in WAC 516-13 may be issued a university notice of infraction (NOI) by the University Police or a citation from another applicable law enforcement agency.

6. Exceptions May Occur on Campus

Requests for exceptions to this policy for programmed events involving the use of these or similar devices must be made in writing to the Viking Union Facilities Director for review and approval.

7. The University Promotes Safety Education

The University recognizes the importance of education for safe transportation

in all modes on campus and for safe interactions between bicyclists, pedestrians, skateboarders and motor vehicle operators. The University supports this endeavor.

Departments on campus are strongly encouraged to provide educational opportunities for students and/or employees in these aspects of transportation safety and sustainability.