WSU Sustainability & the Environment Committee
AGENDA

DATE, TIME, & LOCATION: Friday, May 6, 2011, 2:10-3:10pm, Lighty 405

ATTENDEES: Chad Kruger, Terry Baxter-Potter, Bridgette Brady, Terry Ryan, John Reed, Marty O'Malley, Rick Finch, Dennis Gransbery, Liv Haselbach, Kelsey Kracker, Jamie Bentley, Jason Sampson

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1. Call to Order – John Reed

2. Approval of 1 April, 2011 Minutes – John Reed
    a. Approval of minutes was deferred until next meeting, because nobody remembered seeing them.

3. NIRSA Conference – Joanne Greene
    a. Joanne Greene provided an overview of a presentation the WSU Student Recreation Center gave at the NIRSA Conference. There are approximately 5,000 colleges and universities that are members and about 400 went to the conference. The presentation reflected on the SRC's efforts in regards to sustainable facilities and the promotion of recycling and other environmentally friendly habits. The presentation has been placed on the sustainability website.

4. WSU Wellbeing Earth Day Activities – Jamie Bentley
    a. Jamie Bentley talked about Earth Day activities. The Thursday night Dana Lyons concert and workshops were well attended. The Earth Day fair on Friday had information from WSU and community groups regarding organic foods, (Moscow Food Coop, etc.) Green Bikes, and the Green Fund. Kelsey Kracher, the new president of the Environmental Science Club (ESC), indicated there were a lot of questions regarding the Green Fund from students and faculty. Several were inquiring about how money could be donated to help support the fund. The ESC also handed out stainless steel water bottles and tote bags to visitors of the fair. About 30 students participated in Craft Time which was an event offered by Jamie.

5. Chemical Waste Management Annual Report – John Reed
    a. Talked about the last four years of chemical waste disposal numbers for WSU-Whitman County. Explained the anomalies associated with E-waste disposal (dependent upon when shipments occur within each calendar year) and bulk organic incineration (temporary shutdown of pathological incinerator). Also, explained certain technological trends leading to steady reductions in photowaste and mixed (chemical and radiological) waste streams. John also mentioned that although the amount of research money WSU has received has steadily increased the amount of waste has remained steady.

6. Open Discussion
    a. Terry Baxter-Potter brought in two potential Green Fund proposals. The proposals were developed by students from Liv Haselbach's class who worked with Terry. Both proposals were for new bike paths, one on Spokane Street and the other on Grimes Way.
    b. Liv Haselbach asked if there was any potential of forming a subcommittee that would focus on low impact development (LID). She mentioned there had been some discussions with Dwight Hagihara. It was decided that clarification was needed between Dwight and Liv.
    c. Bridgette Brady provided the latest numbers for Zimride. The estimated gallons of gas saved were between the range of 5,281 and 1,760 gallons for the time frame of 1/12/11 to 5/6/11. The estimates are based on the use of a green calculator with upper bound of 30% ride postings completed and lower bound of 10% ride postings completed.
    d. Bridgette Brady also provided an update on the Zipcar project. They are still working on developing a workable contract.
    e. Well U Challenge was a Pac 10 program. We had approximately 500 participants. Each day participants answered questions on health and wellness. The 5th day focused on environmental questions which corresponded with Earth Day.

*NEXT MEETING: **June 3**, 2011 – Light 405 – 2:10pm-3:10pm*

[Initials]

Cougar Green Fund – Grant Proposal
Bike lane on Spokane Street

1. Project Summary

The project we propose is to implement a bike lane on the uphill side (East) of Spokane Street, in front of Dana/Sloan hall between College and Campus. This will provide a safer travel for the numerous bikers surveyed there, and will encourage more and more people to use the Green Bike program. There is only need for minimal work, such as painting, and could be achieved before the end of the year at minimal cost.

2. Scope

Need of the project

Washington State University has and will continue to improve the experience of its college students through innovation, education, community outreach, and the environment. President Floyd has revisited the Master Plan thereby reigniting the enthusiasm of Washington State to continually pursue greatness. We are proposing a small but important step in this direction by implementing a bike path on Spokane Street. As the campus continues to grow increasing campus circulation the importance for our leaders to stay active is vital to the community and the campus atmosphere. Support for a secondary means of transportation (Green Power) is essential to protect the environment, facilitate exercise, and promote public safety. Currently Spokane Street is the busiest street without a bike lane for bicyclists when looking at data taken on a survey by Andrew Kracht in fall 2009 taken on five streets in nine different time periods.

In 2010, WSU started the Green Bike program to encourage students to use bicycles instead of CO_2 emitting cars. Aside from the environmental benefits of the Green Bike program there must also be a natural concern for those riders safety. We have discovered via the department of public records that there have been over 24 bicycle related accidents over a 10 year period on Stadium Way, Colorado, Spokane, Grimes, and Spokane St. To achieve this goal, people wanting to use and currently using bikes must feel secure on the roads, which are preeminently designed for vehicles. The major conflict arises when bicyclers travel up the hill as they are not as fast as cars, downhill they are able to go with speed of traffic.

Our goals are quite simple. We want to improve campus safety, facilitate a sustainable environment, and student health. The bike lane will support these concepts while proving to be both time and cost efficient. Short term we specifically want to get an approval of our proposed plan. Long term we would like this project to be step in the right direction of producing more projects for future engineering students. We support these projects for numerous reasons, teamwork, personal gratification, and improvement of the campus.

Goals and objectives

- Provide a safe trip for bicyclists
- Prevent circulation issues with cars passing bicycles
- Reduce the carbon footprint of WSU
- Show WSU involvement in environmental effort

Scope of work

Implementing a 5ft wide bike lane on NE Spokane St. on the uphill side from NE College Ave. to NE Campus St (0.2 mile):

- Painting over old lines
- Painting new lines
- Extend the contract made by Heavy Equipment Division of Facilities and Operations for the maintenance of the paintings.
- Install Bike Lane signs

6 [E-8] REGULATORY SIGNAGE / BLADE LAYOUT (Copy w/ Symbol) - DETAIL
Scale: 3" = 1' - 0"

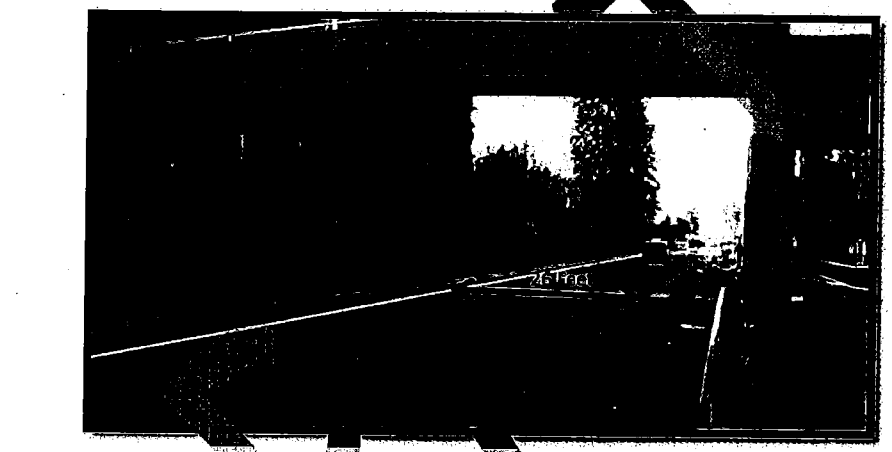
Methodology

1. Compliance with law/standards

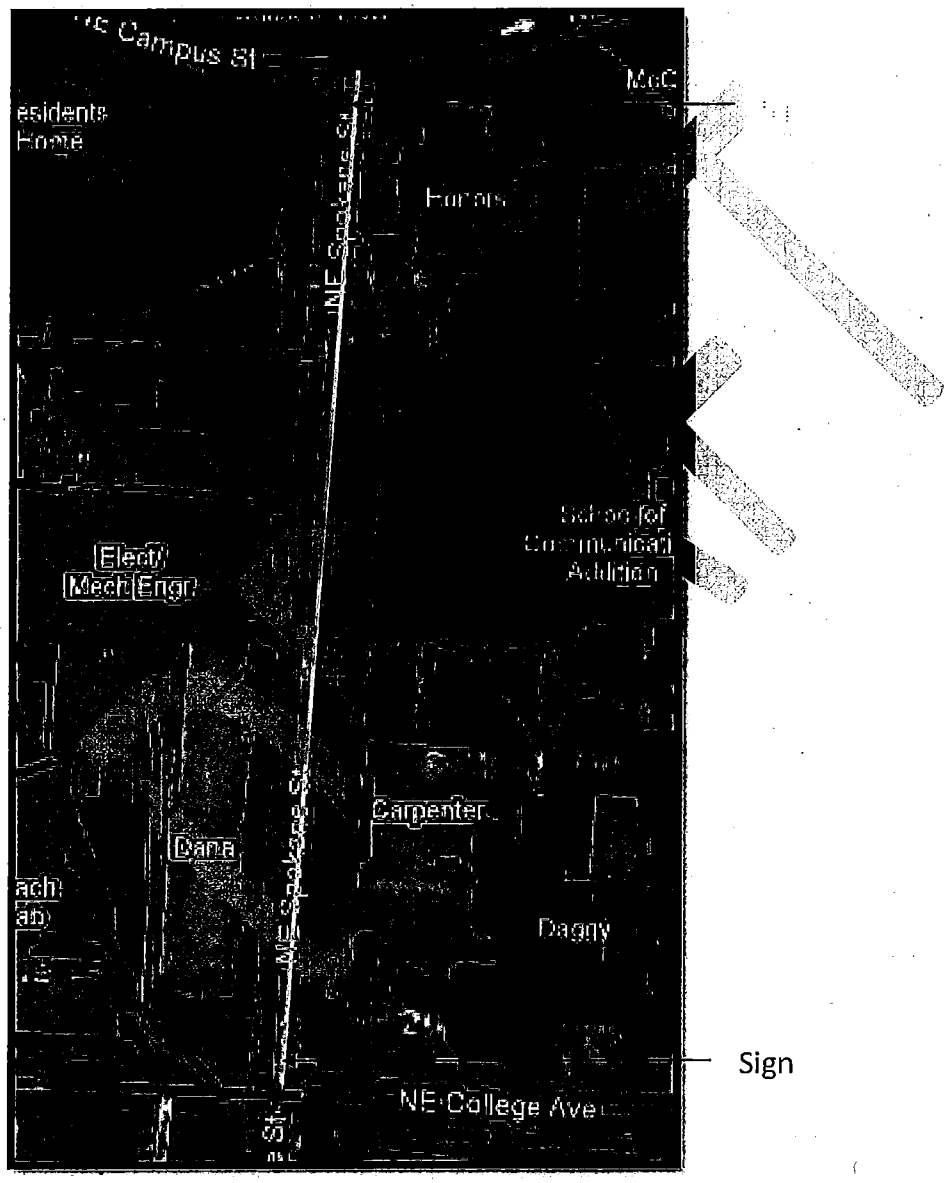
According to the comprehensive plan of the city of Pullman, WA (chapter 7, transportation), the bike lane implemented would be a class II bike lane, which must be at least 5 ft wide and designated with appropriate marking on the road surface.

After implementation of this bike lane, the available road for cars would be of 26ft as a minimum, meaning 13ft for each lane.

According to the City of Pullman, Engineering Division Staff, the minimum road with is twelve feet and the proposed 13ft exceeds that. Therefore the standard has been exceeded.



2. Maps



Work

- Modifying the maintenance contract with the painting contractor.
- Implementing the bike lane.

Potential for future phase and institutionalization

The survey mentioned earlier identified other strategic locations for bike lane. For example, Grimes Way appears to be in need for this same kind of project.

3. Project participants

Terry Baxter-Potter
Project Manager - *WSU Capital Planning & Development*

Nolan Meyer - Camille Pirou
Students in Civil and Environmental Engineering

4. Budget

1st capital cost

Initial roadway stripe painting on 1000ft – for bike lane	$3,300
New center line painting	$1,650
Signage	$4,500
Total	**$9,450**

Annual maintenance cost

The estimated annual cost increase is about 1% of the initial $10,000 contract: **$100/year.**

Notes

- Under the responsibility of Heavy Equipment Division of Facilities Operations, contracted.
- No need for bicycle symbol painted road.
- Initial cost: painting is $330/100 linear feet.
- Will be implementing bicycle signs

5. Schedule

Eric Slocum from Facility operations has disclosed that the immediate roadway painting will happen on the 17th of April. If not, the second semi-annual painting will likely occur in Fall.

Cougar Green Fund – Grant Proposal
Bike lane on Grimes Way

1. Project Summary

The project we propose is to implement a bike lane on the uphill side (North) of Grimes Way, which leads into campus from the East side. Although this is a less traveled biking road now, the campus is continually changing due to Washington State University's dedication to strive for persistent improvement. The Master Plan is part of that constant improvement and one of the goals is to create a new more widely used entrance, that being Grimes Way. As a result the bike lane will provide safer travel for current and future bikers, which will encourage utilization of the Green Bike program and general bike usage. There is only need for minimal work, such as painting, and could be achieved before the end of the year at minimal cost.

2. Scope

Need of the project

Washington State University has and will continue to improve the experience of its college students through innovation, education, community outreach, and the environment. President Floyd has revisited the Master Plan thereby reigniting the enthusiasm of Washington State to continually pursue greatness. We are proposing a small but important step in this direction by implementing a bike path on Spokane Street. As the campus continues to grow increasing campus circulation the importance for our leaders to stay active is vital to the community and the campus atmosphere. Support for a secondary means of transportation (Green Power) is essential to protect the environment, facilitate exercise, and promote public safety.

In 2010, WSU started the Green Bike program to encourage students to use bicycles instead of CO_2 emitting cars. Aside from the environmental benefits of the Green Bike program there must also be a natural concern for those riders safety. We have discovered via the department of public records that there have been over 24 bicycle related accidents over a 10 year period on Stadium Way, Colorado, Spokane, Grimes, and Spokane St. To achieve this goal, people wanting to use and currently using bikes must feel secure on the roads, which are preeminently designed for vehicles. The major conflict arises when bicyclers travel up the hill as they are not as fast as cars, downhill they are able to go with speed of traffic.

Our goals are quite simple. We want to improve campus safety, facilitate a sustainable environment, and student health. The bike lane will support these concepts while proving to be both time and cost efficient. Short term we specifically want to get an approval of our proposed plan. Long term we would like this project to be step in the right direction of producing more projects for future engineering

students. We support these projects for numerous reasons, teamwork, personal gratification, and improvement of the campus.

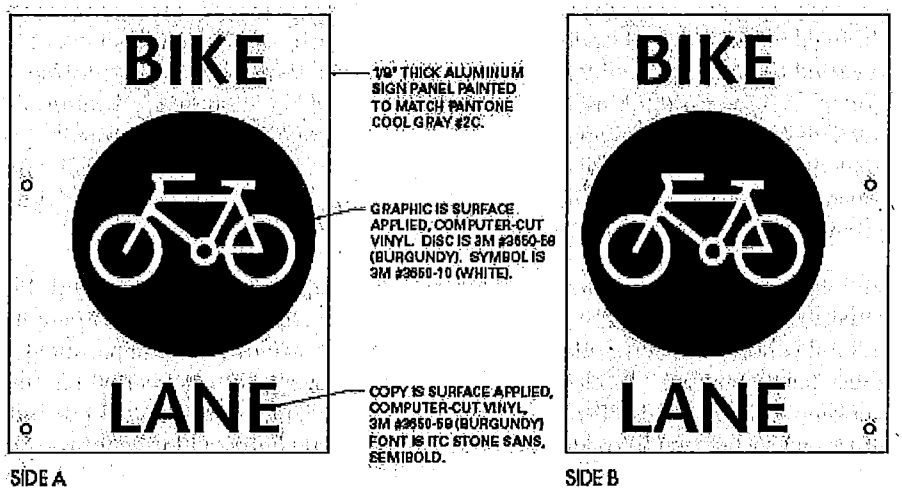
Goals and objectives

- Provide a safe trip for bicyclists
- Prevent circulation issues with cars passing bicycles
- Reduce the carbon footprint of WSU
- Show WSU involvement in environmental effort

Scope of work

Implementing a 5ft wide bike lane on North side of Grimes Way which is the uphill side from Pullman Airport road to Stadium Way (0.95 mile):

- Painting over old lines
- Painting new lines
- Extend the contract made by Heavy Equipment Division of Facilities and Operations for the maintenance of the paintings.
- Install Bike Lane signs



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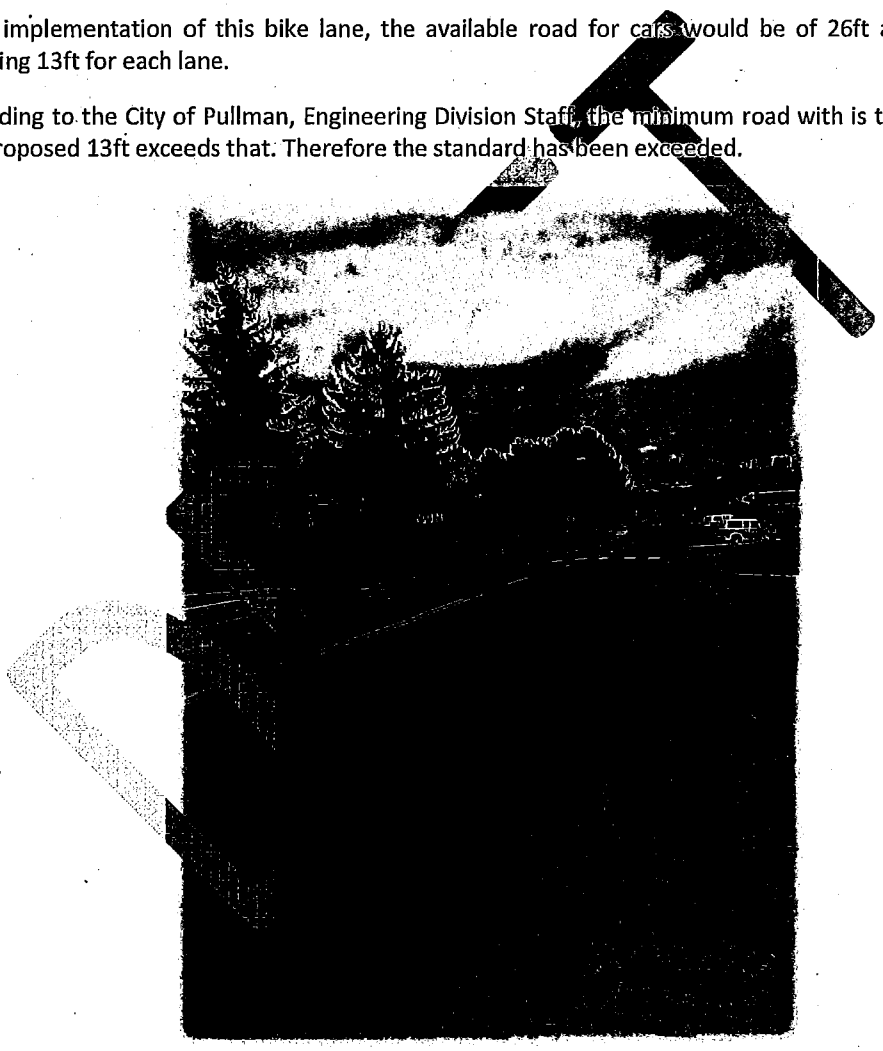
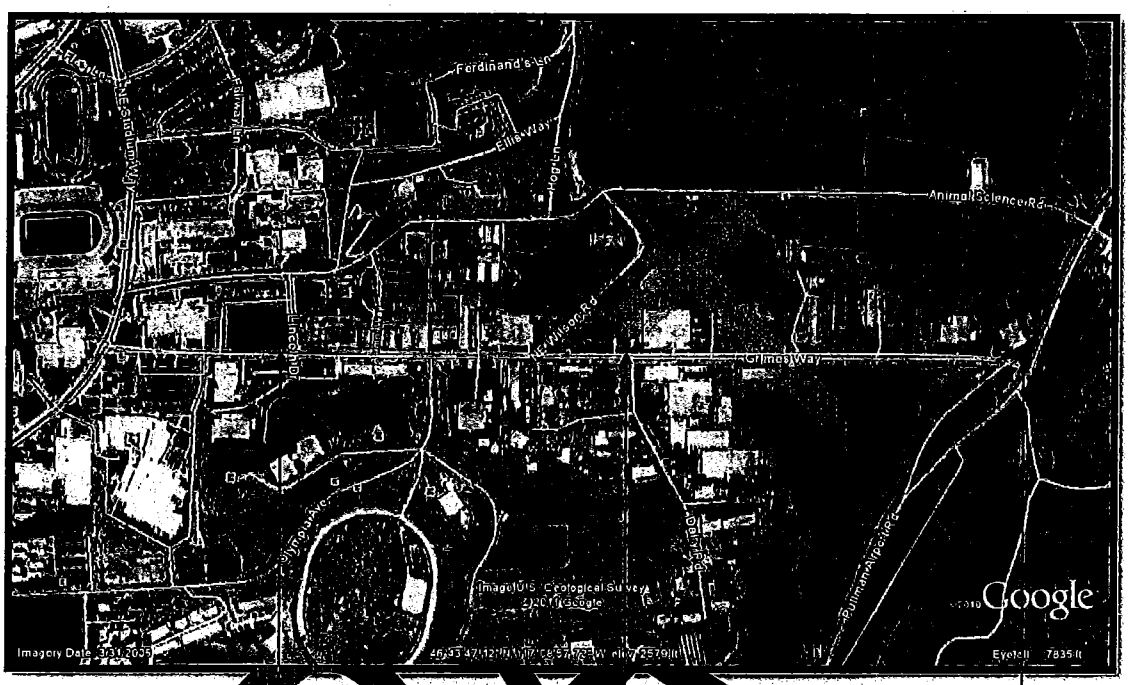


2. **Maps**



Sign

Sign

Work

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3. Project participants

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Project Manager - *WSU Capital Planning & Development*

Nolan Meyer - Camille Pirou
Students in Civil and Environmental Engineering

4. Budget

1st capital cost

Initial roadway stripe painting on 5150ft – for bike lane	$17,000
New center line painting	$8,500
Signage	$4,500
Total	**$30,000**

Annual maintenance cost

The estimated annual cost increase is about 2% of the initial $10,000 contract: **$200/year.**

Notes

- Under the responsibility of Heavy Equipment Division of Facilities Operations, contracted.
- No need for bicycle symbol painted road.
- Initial cost: painting is $330/100 linear feet.
- Will be implementing bicycle signs

5. Schedule

Eric Slocum from Facility operations has disclosed that the immediate roadway painting will happen on the 17th of April. If not, the second semi-annual painting will likely occur in the fall.

- get Ad from Evergreen
- Zipcar - still working on contract

zimride

WASHINGTON STATE UNIVERSITY

System Total

Stats Reporting
Dashboard
Matches
Distance
Commute Frequency
Green
Campus User Counts
Definitions

Users & Rides
Users
Ride Posts

Admin Controls
Trusted Partners
Marketing Plan

Manage Content
Banner Text
Q & A Box
Promos
Trans. Links
Other Content

Green Calculator

This page allows you to calculate number of miles taken off the road and Green House Gas (GHG) emissions reduced. As it is extremely difficult to determine the precise number of carpools formed using the system, we calculate ranges for these savings instead.

All numbers and assumptions used by the calculator are customizeable and savings can be calculated over any date range. We have specified default values encompassing the lifetime of your system, standard emission numbers**, and what our survey results and other metrics have indicated is the typical range for these variables at a particular campus.

For more granular controls over the assumptions, click on the *Show Advanced Controls* link. To control the average MPG of a vehicle or the amount of CO2 and other GHG emitted per mile traveled, click the *Set GHG Assumptions* link.

Coefficient	Value	
	Starting Date:	Ending Date:
Date Range	01/12/2011	05/06/2011
	Upper Bound:	Lower Bound:
% Ride Postings Completed	% 30	% 10

Show Advanced Controls

Calculate Savings Set GHG Assumptions

Results (01/12/2011 to 05/06/2011)	Upper Bound Saved	Lower Bound Saved
Miles Saved	134,674	44,891
Gallons of Gas Saved	5,281	1,760
Pounds of CO2 Emissions Saved	102,457	34,152
Grams of Volatile Organic Compound (VOC) Emissions Saved	57,101	19,033
Grams of Nitrogen Oxides (NOx) Emissions Saved	72,454	24,151
Pounds of Carbon Monoxide (CO) Emissions Saved	1,481	493
Grams of Particulate Matter (PM) Emissions Saved	29,358	9,786
Grams of Sulfur Dioxide (SO2) Emissions Saved	9,561	3,187

Chemical Waste Generated at WSU-Pullman

Management Method	1997 (kg)	1998 (kg)	1999 (kg)	2000 (kg)	2001 (kg)	2002 (kg)	2003 (kg)	2004 (kg)	2005 (kg)	2006 (kg)	2007 (kg)	2008 (kg)	2009 (kg)	2010 (kg)
Off-site:														
Incineration/Treatment	31,320	24,818	46,337	20,637	24,004	23,205	37,038	24,494	32,334	22,681	42,337(c)	52,156(d)	29,099	26,228
Used Oil Recycling	4,472	3,893	4,235	0	0	0	0	0	8,185	10,480	10,838	7,949	9,418	7,193
Mixed Waste	4,747	5,026	3,158	4,015	3,578	3,011	1,525	1,466	1,150	1,041	996	893	867	213
Recycling	272	884	1,299	1,144	382	0	135	0	0	0 (b)	0	1,452(e)	1,586(f)	3,482
Landfill	0	6,217	3,528 (a)	5,462	5,744	2,852	36,457	60,339	54,535	35,000	0	0	0	2,430 (h)
E-Waste Recycling	0	0	0	0	0	8,206	10,586	17,912	13,337	26,213	20,808	25,857	43,787	23,055
Off-site Subtotal	**40,811**	**40,838**	**58,557**	**31,258**	**33,708**	**37,274**	**85,741**	**104,211**	**109,541**	**95,415**	**74,979**	**88,307**	**84,757**	**62,601**
On-site:														
Treatment-Photo waste	17,124	15,086	14,617	14,784	12,660	12,933	12,198	11,235	9,040	7,581	6,457	5,394	4,862	3,518
Treatment-Chemicals	883	1,370	4,162	5,906	2,213	2,427	8,069	3,330	4,669	4,482	5,439	5,427	4,438	3,986
Chemical Recycling	828	1,104	2,496	1,938	4,127	1,850	1,876	1,067	1,623	791	1,475	1,323	1,370	1,334
Used Oil Recycling	0	0	0	8,727	10,909	8,909	12,441	12,488	0	0	0	0	0	0
On-site Subtotal	**19,744**	**17,560**	**21,275**	**31,355**	**29,909**	**26,119**	**34,584**	**28,120**	**15,332**	**12,854**	**13,371**	**12,144**	**10.670**	**8,838**
TOTAL	**60,555**	**58,398**	**79,832**	**62,613**	**63,617**	**63,393**	**120,325**	**132,331**	**124,873**	**108,269**	**88,350**	**100,451**	**95,427**	**71,439**
	(66.6 tons)	(64.2 tons)	(87.8 tons)	(68.9 tons)	(70 tons)	(69.7 tons)	(132.4 tons)	(145.6 tons)	(137.4 tons)	(119.1 tons)	(97.2 tons)	(110.5 tons)	(105 tons)	(78.6 tons)
Number of waste containers collected	9,555	9,278	9,116	6,112	7,246	6,441	10,954	12,218	10,498	11,422	11,940	8,693	17,766(g)	20,476 (i)

(a) + 79,143 kg (87 tons) of lead contaminated debris from Martin Stadium east end zone bleachers
(b) + 437,230 kg (481 tons) of bunker fuel oil recycled from College Avenue Steam Plant
(c) includes 15,860 kg (17.5 tons) of diagnostic specimens formerly disposed of at the WSU waste incinerator
(d) includes 15,942 kg (17.5 tons) of diagnostic specimens formerly disposed of at the WSU waste incinerator
(e) 1,215 kg batteries and 237 kg gas cylinders
(f) 1,158 kg of batteries and 428 kg of light bulbs
(g) includes Troy Hall cleanout of vacated laboratories = 4,063 containers
(h) + 119,350 kg (131 tons) of lead contaminated debris from Carver Farm
(i) includes Troy Hall cleanout of vacated laboratories = 4,254 containers