



CLEAN FLEET INITIATIVE

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UW Motor Pool Sustainability and
Alternative Fuel Vehicles



What are we going to cover today?

- Introduction
- Motor Pool Policy
- Sustainability
- Clean Fleet Initiative
- Summary



Introduction to Fleet Management



- *Fleet management* is a careful balance between maintaining the standard of care for health and safety and, compliance with regulations, implementing best practices, integrating sustainable practices, all while providing leadership, exceptional customer satisfaction, and competitive day to day business services.
- David Carr, Manager Motor Pool Operations dcarr@u.washington.edu
(206) 685-1644



Motor Pool Policy - Regulations

- *Current fleet policy set by using OFM (Office of Financial Management guidelines)*
 - *SAAM Chapter 12 - Regulates use of State Motor Vehicles*
- *EPA Act (Federal Energy Policy Act)*
- "NEW" Governors Executive Order 05-01



Motor Pool Policy - Partnership

- Continue to provide **exceptional** customer satisfaction
- Make sound, **sustainable** business decisions together
- Provide the right **clean** vehicles at the right time



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Sustainability



- *Sustainable business practices* in the most recent past were not only desirable but practical since many were cost effective.
- The next generation is not going to be as easy nor without significant cost



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Sustainability

Motor Pool - Achievements



- November 2003 -4 King County Solid Waste Department awarded 5th star designation (*Demonstrate Proactive Environmental Leadership*)
- April 2004 – Awarded Washington State Recycling Association Recycler of the Year Award
- October 2004 – Washington State Department of Ecology Governors Award for Sustainability and Pollution Prevention
- 2002-2005 Top 100 Alternative Fuel Fleets



Sustainability 2006

University Policy on Environmental Stewardship

- *The University of Washington has established a commitment to environmental stewardship, **setting the bar well above merely complying with laws and standards.** The university is committed to being a positive force for enhancement of the environment, not just in research but in how it manages facilities and resources.*



Why a Clean Fleet? Health and Clean Air



- Thanks to cleaner cars and industries, air quality today is substantially improved over what it was 25 years ago. Unfortunately, there are still air pollution problems
- A 2002 EPA study places King County in the top 5 percentile in the nation for concentrations of some of the most hazardous air toxics. Cancer risks in the region top 700 in a million risk levels from these air toxics that are mostly attributable to diesel emissions.



Why a Clean Fleet? Health and Clean Air



- Monitoring by the PSCAA show our region is **close to violating the annual federal standard** for the finest particulate (PM2.5) as well as the 8-hour standard for ozone, the major component of smog.
- These air pollutants are directly related to increased incidents of allergies, asthma, emphysema and other lung problems. A national study completed in 2002 documented more deaths and emergency room visits when the air is heavily polluted.
- In 2002 the City of Seattle completed an inventory of Seattle's greenhouse gas emissions which found that, **more than half of the emissions that cause global warming** come from cars, trucks, buses and other transportation modes like boats and planes.



Sustainability Plan for the Future

- **Clean Fleet Initiative**
 - **Communication and Cooperative Efforts**
 - **Develop Clean Fleet Plan**
 - **Vehicles and Fuels**

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Clean Fleet Initiative

- **Communication and Cooperative Efforts – Campus Clients**
 - **Promote Clean Fleet Initiative**
 - Series of news articles in UWEEK
 - Department Outreach
 - ESAC
 - FS Supervisors
 - New Employee Orientation, new student orientation, etc..
 - ASUW
 - **Co-op with Transportation Office, Parking and other departments on campus to provide a more dynamic approach to promoting sustainability through out campus**



Clean Fleet Initiative

- **Co-op Efforts – Community**
 - **ASUW**
 - Biodiesel Task Force
 - **Shoreline Community College**
 - Odyssey Day's
 - **Puget Sound Clean Cities**
 - NW Ethanol Coalition
 - **Clean Air Agency**
 - Diesel retrofit funds
 - **Professional Associations**
 - NAFA Clean Fleets



Clean Fleet Initiative

- Development of a Clean Fleet Plan
 - Adapt Governors Executive Order 05-01
 - Make decision(s) regarding EPA Act
 - Develop plan and promote initiative



Governors Executive Order 05-01

- Reduce Petroleum use by 20% by September 1, 2009
- Agencies shall employ professional vehicle management and planning practices
- Agencies shall establish clear direction on rental vehicle use

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Fleet Audit

- Executive Order 05-01 - Fleet efficiency audit
 - Appropriate vehicle utilization rate and size of agency fleets.
 - ***Appropriate age and mileage for vehicle turnover to maximize performance and minimize maintenance costs and environmental impact.***
 - Cost/benefit of personal vehicle use and reimbursement policies.
 - Strategies for improving the overall efficiency of acquiring, using, and maintaining all vehicles in the state fleet.
 - Cost effectiveness of car sharing services.
 - Increasing opportunities for employee ride-sharing on business travel.



EPA Act

- State Fleet requirements
 - 75% of light duty vehicles purchased must be alternative fuel capable
 - SUV's count for credit
 - Hybrids count against credits
 - NEV's no credit
 - Biodiesel (450 gallons = 1 credit)
- Meet EPA Act
 - Waiting for ethanol
 - Reduce actual emissions?



EPAct - Waiting for Ethanol?

- **October 6, 2006 - E85 Stations Reach 1,000**

Jefferson City, MO -- There are now over 1,000 publicly and privately accessed E85 fueling locations throughout the United States!

The number of E85 stations has grown significantly in just a short period of time. Below is an approximation of how many E85 outlets were in operation over the past several years:

January 2003: 100

January 2004: 150

January 2005: 285

January 2006: 600



Clean Fleet Initiative Goals

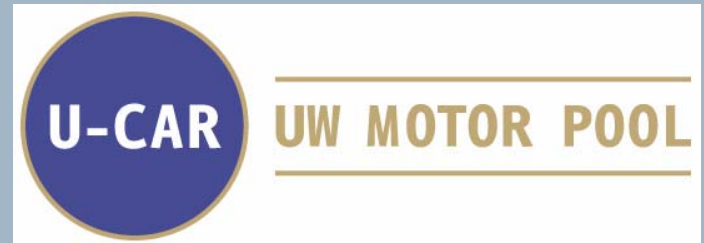
- Reduce petroleum use by 20% by 2009
- Reduce Fleet Size by 10% by 2009
- Purchase Hybrids and fuel efficient vehicles
- Meet EPA Act (75% of light duty vehicles must be AFV's)
- Eliminate light duty vehicles manufactured prior to 1996
- Reduce emissions
- Reduce miles traveled
- Freeze 4x4's
- Employ professional vehicle management and planning practices

Clean Fleet Initiative Action

- Trial with demo's and pilot projects



- UCAR – car sharing
 - Motor Pool (pilot)
- Neighborhood electric vehicles
 - EV car show
 - Demo's on campus



- Develop and encourage alternatives to vehicles
 - Facilities Services - Job Boxes/Transport to Job Sites (pilot)
 - Ugly Bikes

- Lighter vehicles campaign

- Remove excess materials
- Use aluminum instead of steel

- Alternatives to Business travel

- Teleconferencing
- Ride sharing board
- Walking

- UPASS & Transportation programs



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Flexcar[™]

U-PASS



U-CAR



UW MOTOR POOL

The UCAR program is a unique car rental program being piloted by the Motor Pool. Located in the CPG, using “Invers” key locker technology, it allows renters to access vehicles 24/7.

For departments who wish to pool their assigned vehicles they will no longer have one assigned vehicle but they have access to a fleet of vehicles.





Clean Fleet Initiative Vehicles and Fuels

- **Vehicles**
 - Alternative Fuel
 - Hybrids
 - Neighborhood Electric vehicles
 - Cleaner replacement vehicles
- **Fuels**
 - Cleaner diesel
 - Ultralow sulfur diesel
 - Biofuels
 - Biodiesel
 - Ethanol
 - Electricity
 - Hydrogen

Alternative Fuel Vehicles Achievements


- Alternative fuel and hybrid vehicles comprise a significant portion of the Motor Pool fleet (660 vehicles).
- ***180 flexible fuel vehicles (E85)***
- ***19 hybrid gasoline / electric***



Alternative Fuel Vehicles 2006-2007 FFV - Ethanol

- Taurus/Chevrolet Impala
- Chevrolet Suburban
- Chevrolet ½ Ton Van
- Ford F150






Alternative Fuel Vehicles Next Gen - Hybrids

- Toyota Prius Hybrid





Alternative Fuel Vehicles Next Gen - Hybrids

- Ford Escape Hybrid



Alternative Fuel Vehicles Next Gen - Hybrids

- 2008 Cadillac Escalade Hybrid



Alternative Fuel Vehicles Next Gen - Ultralow sulfur diesel & Biodiesel

- Ford Superduty
- Dodge Sprinter
- Isuzu (GMC) Cargo



Alternative Fuel Vehicles Next Gen – NEV'S – CNG?

- Available in 2006- 2007
 - Neighborhood electric vehicles
 - Compressed Natural Gas (CNG)?





Summary

- Motor Pool is committed to long term stability and sustainability in partnership with our customers
- Decision to use or not use alternative fuels driven by economics / need to be competitive **MUST ALSO** consider health care effects and environmental impacts
- Clean Fleet Plan
 - **Work closely with customers to make sure changes work – demos & pilots**
 - **Implement plan while maintaining value**
 - Introduce new vehicles and fuels
 - Look for partnerships / funding opportunities
 - Continuous / incremental improvement



Odyssey Day's

- Odyssey Day's - Shoreline Community College
- Friday - Saturday
October 13 - 14, 2006 - 9:30 AM - 4:00 PM
Free & Open to the Public

- **Join us for 2006 Washington State Odyssey Days**
...Driving Toward the EverGreener State!

Come and explore the "truth" about global warming and what it means to you and your future. This free, two-day, "hands-on" event is open to the public with workshops, demonstrations, expert panels of speakers, test drives of alternative vehicles, and interactive activities for all ages to raise public awareness about transitioning to cleaner, advanced energy technologies and sustainable business practices