

Western Carolina State University

w

3476 Old Cullowhee Rd
Cullowhee NC 28901

Lauren Bishop

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Fleet Information

Total Leased Vehicles	53
Total County Titled Vehicles	0
Total State Titled Vehicles	119
Total Other Vehicles	

Breakdown of State Titled Vehicles Only

Vehicle Type	Quantity	Miles
Gasoline	104	N/A
Diesel	6	N/A
Hybrids	0	0
FFVs	2	N/A
CNG	0	0
Propane	0	0
Electric	0	0
Other	0	0
10% Eligible	7	N/A
Totals	119	N/A

Fuel Information

State Titled Vehicles Only

Fuel Type	Gallons	Pet. Eqv.
Gasoline	61,903	61,903
E10	0	0
E85	0	0
Diesel	9,577	9,577
Off-road Diesel	0	0
B5	0	0
B20	0	0
B100	0	0
CNG	0	0
Propane	0	0
Other	0	0
	Quarts	
Petroleum Motor Oils	1,503	535
Syn & Rec Motor Oils	0	0
	Total	72,015

Fueling Infrastructure

Location	Age	Size	Fuel
Facilities	1992	10,000	Gas
Facilities	1992	2,000	Diesel
Steam Pit	1992	2,000	Gas

Instructions

Fill out all information (exception - miles if N/A)
Complete with data from fiscal year 2004-2005
Please note if fuel includes more than State Vehicles
Count hybrids and FFV's only once in the breakdown,
do not count them as gasoline vehicles
10% Eligible vehicles include police & emergency
10% eligible educational vehicles must have
specific modifications for instructional purposes

Notes/Comments

48 of the 53 leased vehicles are for MFM

Potential for Biofuels Expansion

Location	Space	Tk Size	Fuel

Potential Reduction in Petroleum use for your organization;

Projected Reduction

Conservation	Reduce speeds, efficient cars, task pooling	2,160	gallons	=	3.00%
E10	Using E10 for all gasoline vehicles	6,190	gallons	=	8.60%
E85	Using E85 for all flex-fueled vehicles	993	gallons	=	1.38%
B5	Using B5 for all diesel vehicles	479	gallons	=	0.66%
B20	Using B20 for all diesel vehicles	1,915	gallons	=	2.66%
B100	Using B100 in 1/10th of your diesel vehicles	958	gallons	=	1.33%
FFV	Substituting one FFV using E85	412	gallons	=	0.57%
CNG/Propane	Replacing one vehicle with a CNG/LPG car	605	gallons	=	0.84%
Electric	Replacing one vehicle with an electric car	605	gallons	=	0.84%
Syn & Rec Oils	Using all synthetic and recycled motor oils	1,503	quarts	=	0.52%

**Petroleum
Displacement
Goal : 19.4%**
13,979 gallons

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Petroleum Displacement	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	Initial Cost	Yearly Cost
2%	Implement an organization wide campaign, WHEE Save, to reduce speeds, eliminate unnecessary idling, stop fast accelerations, and encourage carpooling					\$0	-\$3,000
2%	Purchased 3 electric cars for facilities management 2006						
8.6%		Switched over all gasoline to E10 on 7/5/07				\$3,555	
2.7%		Switched over all diesel to B20 8/29/07					
		Purchased 2 NEV's for Facilities (\$9,703.06 grant funded by DENR)				\$23,510	
		Purchased 1 NEV for Facilities Management				\$12,000	
Totals	4.0%	15.3%	15.3%	15.3%		\$39,065	-\$3,000
Possible Additional Vehicle Purchases from 2006 - 2010							
Year	Quantity, Vehicle Type and Description		Purpose	Fuel / Hybrid		Additional Cost	

A Cost to clean 3 existing underground tanks

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Fleet and Fuel Reporting

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Fleet Information	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011	
Vehicle Type	Total #	Miles	Total #	Miles	Total #	Miles	Total #	Miles	Total #	Miles	Total #	Miles
Gasoline	108	N/A	118	245,468	128	1,913,255	131	515,016	130	507,658	127	313,251
Diesel	6	N/A	6	N/A	11	111,641	12	14,327	10	34,002	10	24,710
Hybrid	-	-	-	-								
Flex-fueled Vehicles	2	N/A	2	N/A	2	N/A	2	N/A	2	N/A	2	N/A
Comp Natural Gas	-	-	-	-								
Propane	-	-	-	-								
Electric	1	N/A	4	N/A	4	N/A	6	N/A				
Emergency/Ed (10%)	7	N/A	7	46,426	7	77,523	3	26,907	2	4,863	11	76,905
Totals	124	N/A	137	291,894	152	2,102,419	154	556,250	144	546,523	150	414,866
	4%	N/A	15%	N/A	28%	N/A	29%	N/A	21%	N/A	26%	N/A

Fuel Information	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011	
Fuel Type	Gal	Petr.	Gal	Petr.	Gal	Petr.	Gal	Petr.	Gal	Petr.	Gal	Petr.
Gasoline	58,055	58,055	58,427	58,427		-		-		-		-
E10	-	-	-	-	54,082	48,674	56,644	50,979	60,170	54,153	58,674	52,806
E85	-	-	-	-		-		-		-	-	-
Diesel	8,637	8,637	10,078	10,078		-	800	800	6,590	6,590	5,970	5,970
B5	-	-	-	-		-		-		-		-
B20	-	-	-	-	7,435	5,948	4,935	3,948		-	-	-
B100	-	-	-	-		-		-		-		-
CNG	-	-	-	-		-		-		-		-
Propane	-	-	-	-		-		-		-		-
	Qrts		Qrts		Qrts		Qrts		Qrts		Qrts	
Petroleum Motor Oils	1,535	384	1,759	440	1,953	488	731	183	1,543	386	1,758	440
Syn & Rec Motor Oils	-	-	-	-		-	-	-		-		-
Total Petroleum Use		67,076		68,944		55,110		55,910		61,129		59,216
% Change in PDP		-7%		-4%		-23%		-22%		-15%		-18%

PDP goal by 2011:

-19.4%

all PDP participating fleets results to 2009-10			
Overall Results from all participating fleets			
	FY 2004-05	FY 2009-2010	
Fuel Type	thousand of gallons	thousand of gallons	% change
Gas	14,935	3,165	-79%
E10	598	11382	1803%
E85	242	398	64%
Diesel	8,526	1602	-81%
B5	-	7	
B20	1,870	8157	336%
B100	-	2	
Total Biodiesel as B20	1,870	8,167	337%
CNG	3	0	-92%
Propane	56	5	-91%
Petroleum Motor Oils	48	35	-27%
Syn & Rec Motor Oils	3	6	115%
Total Fuel	26,283	24,760	-5.8%
Total Petroleum	25,581	21,638	-15.4%
T.Fuel (adj. for growth)	26,877	24,760	-7.88%
T.Petro (adj for growth)	26,153	21,638	-17.26%

vehicles reported in PDP			
	FY 2004-05	FY 2009-2010	
Vehicle Types	#	#	% change
Gasoline	10,816	9,436	-13%
Hybrid	78	129	65%
Flex-fueled Vehicles	4,752	7,018	48%
Comp Natural Gas	14	5	-64%
Diesel	4,498	5,066	13%
Propane	192	150	-22%
Emergency/Ed (10%)	6,007	5,871	-2%
Electric	13	199	1431%
Total	26,370	27,874	6%

Of the Overall 17.5 % petroleum reduction:
3.95% displaced by reduced mileage (conservation)
4.01% displaced through E10 use
0.49% displaced through E85 use
4.7% displaced through biodiesel use
4.3% displaced through efficiency

Your organization result to date														
Western Carolina State University				results to date (2009-10)		% Reductions Caused by PDP Actions (by FY 09-10 as reported)								
% of Goal	State Organization	Petro Use	Petroleum Displacement Achievements	PDP Actions (Petroleum Reduction)		Miles	E10	E85	B5	B20	B100	CNG	Prop	Syn Moil
78%	Western Carolina Univ	-15.12%	near goal	continued use of E10 and NEV's, quality issue with B20 resulted in discontinuance		N/A	9.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

your organization plan to date

Western Carolina State University								report progress	plan next year and forward
Petroleum Displacement	2005 thru2007	2007-2008	2008-2009	2009-2010		2010-2011	beyond 2011		
Actual	-4%	-23%	-22%	-15%		-18%			
9.0%	Use of E10 has significantly contributed to petro displacement			Implemented Fuel Master pump station with prokey to monitor gas usage and prevent theft		Investigating CNG pump and conversions a portion of our motor pool fleet			
0.0%	Use of B20 has contributed to PDP								
Previously Noted									
2%	Implement an organization wide campaign, WHEE Save, to reduce speeds, eliminate unnecessary idling, stop fast accelerations, and encourage carpooling								
2%	Purchased 3 electric cars for facilities management 2006								
PLAN									
8.6%		Switched over all gasoline to E10 on 7/5/07							
2.7%		Switched over all diesel to B20 8/29/07							
		Purchased 2 NEV's for Facilities (\$9,703.06 grant funded by DENR)							
			Purchased 1 NEV for Facilities Management						

space for Plan notes

08-'09	09-'10	10-'11
8.69	8.69	
8.890	8.140	
2.30%	-6.33%	

Conservation and Efficiency

defining steps taken to reduce petroleum consumption

your fleet efficiency appears to have decreased from baseline, about 6%

In the process of reporting PDP results we have been able to directly attribute petroleum use changes due to: mileage; alternative fuel use; number of vehicles; use of synthetic or recycled motor oil. Indirectly we have been attributing any other change to "change in efficiency", a positive change may be called "conservation". To better define what portion of PDP performance is due to "change in efficiency or conservation" Please answer the following:

Has your agency/ department/ organization initiated any steps, **not previously reported**, intended to improve fleet vehicle efficiency? Please place "X" as appropriate

	2009-'10	2010-'11		2009-'10	2010-'11
YES	X		NO		

what did you change? Place "X" in appropriate box(es)

examples: a mechanical change could include equipment changes to vehicles or fueling infrastructure to make them more efficient. New hybrid autos or new fuel card reader systems would be mechanical. Process change could be an accounting system change, vehicle reassignment, or a carpooling system. Behavior could be drivers improving fuel economy by driving more efficiently or drivers combining errands or carpooling to reduce mileage.

		2009-'10		2010-'11	
mechanical		X			
		yes	no	yes	no
1a	changed vehicle types		X		
1b	use fuel management system	X			
1c	use on-board idle reduction mechanism		X		
1d	other mechanical system change		X		

		2009-'10		2010-'11	
process		X			
		yes	no	yes	no
2a	changed fuel accounting system	X			
2b	reduced on-board weight		X		
2c	set carpooling policy		X		
2d	reassigned vehicles to reduce fuel use		X		
2e	check tire pressure routinely	X			
2f	evaluate MPG performance by vehicle		X		
2g	other process system change		X		

		2009-'10		2010-'11	
behavior		X			
		yes	no	yes	no
3a	trained drivers on economical driving		X		
3b	reminded drivers to save fuel	X			
3c	set policy on idle reduction		X		
3d	evaluate driver behavior (on economy)		X		
3e	carefully observe speed limit		X		
3f	reward economical driving or punish inefficient driving		X		
3g	other behavior change		X		

when did you first change it? Place "question #" in box best marking when process began. There may be multiple marks.

	mechanical
before 2005	
FY 04-05	
FY 05-06	
FY 06-07	
FY 07-08	
FY 08-09	
FY 09-10	1b
FY 10-11	

	process
before 2005	2e
FY 04-05	
FY 05-06	
FY 06-07	
FY 07-08	
FY 08-09	
FY 09-10	2a
FY 10-11	

	behavior
before 2005	
FY 04-05	
FY 05-06	
FY 06-07	
FY 07-08	
FY 08-09	3b
FY 09-10	
FY 10-11	

How did you change it? Please note question # you are referring to.

examples may include new procedures, training, or directives affecting vehicle choice or vehicle use; installation of new equipment to dispense fuel or account for its use.

mechanical

new in FY 2010-'11:

process

#2c - No car pool policy has been implemented however, an online ride share board system was created and posted on the WCU website. In 2008 information was sent out campus wide to promote its use. We investigated several options for a vanpool program but could not ma

new in FY 2010-'11:

behavior

new in FY 2010-'11:

From your Results Noted tab you are now aware of what portion of your PDP performance change (positive or negative) was attributed to efficiency and conservation last year.

Your '09-'10 PDP report indicated -6.33% was attributed to change in efficiency. Of the noted changes in each of these three categories what part will you attribute to current and future activities in each?
Your answers may total 0% if not applicable, otherwise the total will be 100%.

FY	2009-10	mechanical	
FY	2010-11	mechanical	
FY	2011-12	mechanical	

FY	2009-10	process	
FY	2010-11	process	
FY	2011-12	process	

FY	2009-10	behavior	
FY	2010-11	behavior	
FY	2011-12	behavior	