University of North Carolina Facilities 112, Campus Box 5602 Tom Freshwater 910-962-7673 601 South College Road at Wilmington Wilmington NC 28403 freshwatert@uncw.edu **Fleet Information Fuel Information Fueling Infrastructure** 44 Total Leased Vehicles **State Titled Vehicles Only** Location Age Size Fuel Total County Titled Vehicles 0 3000 Gas Fuel Type Gallons Pet. Eqv. PP Lot 20vrs Total State Titled Vehicles 126 Gasoline 42,235 42,235 PP Lot 20vrs 3000 Diesel E10 Total Other Vehicles E85 0 Breakdown of State Titled Vehicles Only Diesel 389 389 Vehicle Type **Ouantity** Miles Off-road Diesel 0 Gasoline Only 123 462,500 B5 _ Diesel 2,150 B20 B100 Hybrids CNG 0 Flex-fueled Vehicles 0 Comp Natural Gas Propane Propane Other 0 Electric **Ouarts** Other Petroleum Motor Oils 664 166 10% Eligible Syn & Rec Motor Oils 42,790 126 Total **Totals** 464,650 adj 15% for accuracy '06-'07 145 534,348 adj total by 15% 49,209 159 587,782 further adj by 10% ('08-'09) 54,129 adj for campus growth 10% Instructions Notes/Comments **Potential for Biofuels Expansion** Used best estimate for miles Location Tk Size | Fuel Fill out all information (exception - miles if N/A) Space PP Lot 40'x40' 3000 E-10 Complete with data from fiscal year 2004-2005 PP Lot 40'x40' 3000 B-20 Please note if fuel includes more than State Vehicles alternate contact: Tom Freshwater 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 making Note of modified '06-'07 adj for better accuracy Potential Reduction in Petroleum use for your organization; **Projected Reduction** Petroleum Conservation Reduce speeds, efficient cars, task pooling 1,284 gallons 3.00% **Displacement** E10 Using E10 for all gasoline vehicles 4,224 gallons 9.87% Goal: 20.0% E85 Using E85 for all flex-fueled vehicles gallons 0.00% 8,558 gallons B5 Using B5 for all diesel vehicles 19 gallons 0.05% B20 Using B20 for all diesel vehicles 78 gallons 0.18% B100 Using B100 in 1/10th of your diesel vehicles 39 gallons 0.09% FFV Substituting one FFV using E85 231 gallons 0.54% CNG/Propane 340 gallons 0.79% Replacing one vehicle with a CNG/LPG car

340 gallons

664 quarts

0.79%

0.39%

Replacing one vehicle with an electric car

Using all synthetic and recycled motor oils

Electric

Syn & Rec Oils

	North Carolina at mington		Tom Freshwater 910-962-7673 freshwatert@uncw.edu				
Petroleum Displacement	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	Initial Cost	Yearly Cost
7							
Totals							
Possible additional Year	vehicle purchases from 2		Divino a a a	Eval / Hadaa: 4		A 44:4: a m a 1 C	To at
rear	Quantity, Vehicle Type	and Description	Purpose	Fuel / Hybrid		Additional C	COST

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Fleet and Fuel Reporting

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Fleet Information	200	5-2006	200	6-2007	200	7-2008	200	8-2009	2009	-2010	201	0-2011
Vehicle Type	Total #	Miles										
Gasoline	139	475,915	156	526,293	159	540,710	154	531,763	156	512,495	155	502,400
Diesel	3	3,219	3	6,284	3	1,099	3	1,753	3	2,359	3	4,513
Hybrid	-	-					2	5,737	2	3,698	2	4,467
Flex-fueled Vehicles	-	-										
Comp Natural Gas	-	-										
Propane	-	-										
Electric	-	-							1			
Emergency/Ed (10%)	-	-										
Totals	142	479,134	159	532,577	162	541,809	159	539,253	162	518,552	160	511,380
	13%	3%	10%	0%	12%	1%	0%	-8%	2%	-12%	0%	-13%
Fuel Information	200	5-2006	200	6-2007	200	7-2008	200	8-2009	2009	-2010	201	0-2011
Fuel Type	Gal	Petr.										
Gasoline	41,860	41,860	48,128	48,128	49,158	49,158	47,086	47,086	41,771	41,771	41,882	41,882
E10	11,000	-	10,120	-	12,130	-	5,232	4,709	4,641	4,177	4,654	4,189
E85		_		_		_			.,5.1	-	- 1,00	,105
Diesel	464	464	723	723	240	240	516	516	924	924	704	704
Off-road Diesel	_	_		_		_		-	-	-		-
B5		-		_		-		-		-		-
B20		-		_		-		-		-	-	_
B100		-		-		-		-		-		-
CNG		-		-		-		-		-		-
Propane		-		-		-		-		-		-
	Qrts		Qrts		Qrts		Qrts		Qrts		Qrts	
Petroleum Motor Oils	836	209	843	211	986	247	927	232	1,037	259	981	245
Syn & Rec Motor Oils		-		-		-		-		-		_
Total Petroleum Use		42,533		49,062		49,645		52,543		47,131		47,020
% Change in PDP		-1%		0%		1%		-3%		-12.9%		-13.1%

PDP goal by 2011:

-20.0%

JO'N ref line # 38

University of North Carolina at Wilmington

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Results Noted (by FY 2009-10) as relate to your PLAN

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Plan for FY 2011-12

all PDP	participating	fleets results	to 2009-10
anrDr	participating	ficcis results	10 2003-10

	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%		

vel	nicles reported in 1	PDP		
	FY 2004-05	FY 200	9-2010	
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

Ţ	University of North Ca	rolina at Wilmington	results to dat	e (2009-10)		%	Reductions Ca	used by PDF	Actions (by	FY 09-10) a	s reported		
% of Goal	State Organization	Petro Use	Petroleum Displacement Achievements	PDP Actions (Petroleum Reduction)	Miles	E10	E85	В5	B20	B100	CNG	Prop	Syn Moil
64%	UNC Wilmington	- 1 / / / //2	making progress, has not reached Goal	fleet increase, slight mileage increase, proportionate fuel increase	-12%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

your organization plan to date

space for Plan notes

University of North Carolina at Wilmington
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	emversity of North C	aronna at Winnington		report progress	plan next year and forward	
Petroleum Displacement Actual	2005 thru2007	2007-2008	2008-2009	2009-2010	2010-2011	beyond 2011
-12.0% 1.0%	decrease in mileage (against Use of E10 has contributed	adjusted baseline) helps PDP toward PDP		Increase max/min inventories of maintenance parts in onsite warehouse to reduce driving required to pick up needed parts around town.	Continue to increase inventories as budget and space allow.	Continue to increase inventories as budget and space allow.
				Work with vendors to deliver Housekeeping supplies directly to individual buildings to reduce driving requirements of UNCW employees.	Continue efforts with Grainger to increaes amount of deliveries made directly to individual buildings instead of to on-site Warehouse.	Continue efforts with Grainger to increaes amount of deliveries made directly to individual buildings instead of to on-site Warehouse.
PLAN				Purchase electric golf carts to displace purchase of gasoline-powered trucks and other vehicles.	Continue purchase of golf carts and other utility vehicles in lieu of gasoline-powered trucks.	Continue purchase of golf carts and other utility vehicles in lieu of gasoline-
	-			Request funding to modify tankage to allow purchase of alternative fuels.	Funding has been approved to modify tank farm.	powered trucks.
				Continue trend of purchasing smaller vehicles.	Two new vehicles planned for purchase this year will be smaller than historical purchases; 1 new vehicle will be a hybrid vehicle.	correct tire inflation. Continue to reinforce efficient driving
				Ensure proper tire inflation is maintained.	Continue the practice of maintaining correct tire inflation.	-practices.
				Reinforced efficient driving practices with employees (don't accelerate unnecessarily, cut off car instead of leaving it idling, etc.	Continue to reinforce efficient driving practices.	Maximize the use of phone and video conferences; held training workshops on campus instead of out-of-town

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baseline efficiency factor efficiency factor change indicated

08-'09	09-'10	10-'11
10.86	10.86	
10.16	10.900	
-6.45%	0.37%	

Conservation and Efficiency

defining steps taken to reduce petroleum consumption

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:

your fleet efficiency appears to be consistent with baseline efficiency

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 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	0-'11
	mechanical	X			
		yes	no	yes	no
1a	changed vehicle types	X			X
	use fuel management				
1b	system				X
1c	use on-board idle reduction mechanism				X
1d	other mechanical system				

		2009	-'10	2010)-'11
	process	X			
		yes	no	yes	no
	changed fuel accounting				
2a	system				X
	reduced on-board				
2b	weight				X
2	1. 1.				37
2c	set carpooling policy				X
2.1	reassigned vehicles to				37
2d	reduce fuel use				X
	check tire pressure				
2e	routinely	X		X	
	evaluate MPG				
2f	performance by vehicle			X	
	other process system				
2g	change				

		200	9-'10	2010)-'11
	behavior	X			
		yes	no	yes	no
	trained drivers on				
3a	economical driving	X		X	
	reminded drivers to save				
3b	fuel	X		X	
	set policy on idle				
3c	reduction	X		X	
	evaluate driver behavior				
3d	(on economy)				
	carefully observe speed				
3e	limit	X		X	
	reward economical				
	driving or punish				
3f	inefficient driving				
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	1a	
FY 07-08		
FY 08-09		
FY 09-10		
FY 10-11		

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

X		

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

behavior	_
X	
2 1	
3a,b,c	
	-
	3g

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.

process

new in FY 2010-'11:

behavior

new in FY 2010-'11: Limited travel for training by use of tele-conferencing, video-conferencing, and conducting group training on-site.

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.

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 '09-'10 PDP report indicated Your answers may total 0% if not applicable, otherwise the total will be 100%.

FY	2009-10	mechanical	
FY	2010-11	mechanical	0
FY	2011-12	mechanical	

FY	2009-10	process	
FY	2010-11	process	0.00%
FY	2011-12	process	

FY	2009-10	behavior	
FY	2010-11	behavior	0.10%
FY	2011-12	behavior	