



ENERGY CONSERVATION PLAN

**Quarterly Report
December 2008 – February 2009**

A. RESOURCE EFFICIENCY PLAN

**Quarterly Report
December 2008 – February 2009**

**A. Resource Efficiency Plan
FY08 Fourth Quarter Report
December 2008 –February 2009**

1. SUMMARY

The Texas Department of Transportation (TxDOT) Resource Efficiency Plan has been prepared in accordance with the State Agency Energy Savings Program Provisions identified in Executive Order RP-49.

To energy conservation, TxDOT commits to:

- an agency-determined percentage savings goal for energy expenditures
- energy conservation design guides
- energy awareness plan
- project implementation update

This second quarter FY09 report required by Executive Order RP49 provides data and status on the above identified plan commitments.

The data presented herein defines a quantitative baseline against which future quarterly and annual reports can be compared.

Energy conservation trends will be identified in future quarterly reports.

2. PERCENTAGE SAVINGS GOAL FOR ENERGY CONSERVATION

Table 1 depicts FY09 total electrical expenditures through February 2009.

Table 2 depicts FY09 total gas expenditures through February 2009.

Table 3 is a compilation of FY 09 de-regulated electricity usage and the number of accounts. In spite of a 3.1% increase in the number of accounts, the usage decreased by 1.1%

**A. Resource Efficiency Plan
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3. ENERGY CONSERVATION DESIGN GUIDES

TxDOT is committed to including energy conservation criteria in the development and design of each facility renovation and construction project. The State Energy Code (ASHRAE 90.1-2007) is the basis for all designs.

4. ENERGY AWARENESS PLAN

TxDOT is continuing the update of its Energy Management Manual to incorporate the latest energy conservation and management practices.

5. PROJECT IMPLEMENTATION UPDATE

During the second quarter of FY09, TxDOT had 5 re-roofing projects in either design or construction. These will provide additional insulation levels and increase the effectiveness of the building envelope and decrease energy consumption for building environmental control.

As part of the Council on Competitive Government's (CCG) State Energy Management contract with LPB Energy, the purchase of electric energy for all TxDOT accounts in deregulated areas of the state continued. LPB and TxDOT continued work on creating a data base for tracking all electricity, natural gas, water, and waste water accounts. When complete, this will allow more accurate tracking and trending of usage amounts and expenditures. Presently, only the de-regulated electricity accounts are in the data base. Regulated electricity, natural gas, water, and waste water accounts are scheduled to start being added to the data base in April 2009. When complete in February 2010, TxDOT will be able to compare usage and expense for utilities for all accounts.

Table 1

**FY09
Electricity
Expenditures**

	FY 09
September	\$ 1,031,988
October	\$ 3,005,189
November	\$ 2,395,549
December	\$ 3,199,433
January	\$ 3,443,864
February	\$ 3,199,907
March	
April	
May	
June	
July	
August	
	\$ 16,275,930

Table 2

FY09 Gas Expenditures

		FY 09
September	\$	2,802
October	\$	40,141
November	\$	60,501
December	\$	193,256
January	\$	367,090
February	\$	255,320
March		
April		
May		
June		
July		
August		
	\$	919,112

Table 3

TXDOT
FY 09 Year to Date vs FY 08 Year to Date

Date	FY 09 Electricity Use (kWh)	FY09/FY08 Change %	# Accts FY 09	FY09/FY08 Change %
09/08	11,798,894	-7.7%	10,373	3.9%
10/08	13,328,017	2.4%	10,400	3.3%
11/08	12,465,128	1.6%	10,378	2.7%
12/08	12,997,698	0.0%	10,443	3.1%
01/09	13,104,916	-0.2%	10,490	3.0%
02/09	11,687,731	-3.1%	10,519	2.9%
YTD Total	75,382,384	-1.1%		3.1%

B. FLEET FUEL MANAGEMENT PLAN

FY 2009 Second Quarter Report

B. Fleet Fuel Management Plan FY 2009 Second Quarter Report

1. SUMMARY

The Texas Department of Transportation (TxDOT) Fleet Fuel Management Plan has been prepared in accordance with the State Agency Energy Savings Program Provisions identified in Executive Order RP49.

To minimize fuel use in all vehicles and equipment, TxDOT commits to:

- an agency-determined percentage savings goal for fuel expenditures
- employ a preventive maintenance program
- utilize the State's Fleet Data Management System
- document agency best practices

This report required by Executive Order RP49 provides data and status on the above identified plan commitments.

FY 2009 SECOND QUARTER FUEL REPORT ON FLEET FUEL MANAGEMENT PLAN COMMITMENTS:

2. PERCENTAGE SAVINGS GOAL FOR FUEL EXPENDITURES

TxDOT categorizes its fleet by on-road and non-road equipment. Equipment is then further defined by the use of category groups which sorts equipment by similarity in type and function, i.e. automobiles.

The attached spreadsheet contains FY 2009 second quarter fuel analysis by vehicle or equipment category groups and a summary of all fuels consumed by on-road, non-road and ferry operations for this reporting period.

3. TxDOT PREVENTIVE MAINTENANCE PROGRAM

TxDOT is responsible for properly obtaining, managing, using, and maintaining equipment to ensure appropriate use of tax dollars. TxDOT's equipment preventive maintenance (PM) program was established to comply with these responsibilities. All districts, divisions, and offices (D/D/O) that have or use equipment must follow the PM program.

The current objectives of the PM program are the efficient and effective use of equipment, manpower, tools, and facilities to achieve maximum serviceability and safety of the equipment fleet at the lowest overall cost to the department.

TxDOT is encouraged conserving energy by maintaining vehicles in top operating condition to optimize fuel consumption.

4. TxDOT PM TRACKING AND FORECASTING PROGRAM

The ability to track and manage PM allows TxDOT to leverage its resources wisely. As TxDOT seeks to extend vehicle and equipment life, it is evermore critical that preventive maintenance activities be conducted in a prudent manner.

TxDOT continues to field a centralized PM tracking program (*FleetTrackS*).

FleetTrackS allows for preventive maintenance activities to be forecast, planned and recorded. *FleetTrackS* affords qualitative benefits such as improved safety and improved equipment availability which translate into extended service life and utilization.

5. STATE FLEET DATA MANAGEMENT SYSTEM

State agencies and institutions of higher education are required to report vehicle data on a monthly basis using the State's Fleet Data Management System (*FleetFocus*).

TxDOT continues to utilize *FleetFocus* to produce and review vehicle reports, data summaries, and a minimum criteria calculation for its on-road vehicle fleet and to monitor its fleet cap.

TxDOT is also working with the Comptroller of Public Accounts (CPA) and other state agencies in fielding a new State Fleet Data Management System from Agile Assets called "Fleet Management System" (FMS). The FMS, with a 'Go-Live' date scheduled for September 1, 2009, will replace *FleetFocus*.

6. TxDOT FLEET POLICIES AND BEST PRACTICES

CPA's State Vehicle Fleet Management Plan established procedures to increase vehicle use, improve efficiency of the state fleet and reduce the cost of maintaining state vehicles.

TxDOT addressed the plan's requirements and recommendations by outlining and describing policies and procedures already in place and developing guidelines within the plan by creating the TxDOT Vehicle Fleet Management Plan.

The TxDOT Vehicle Fleet Management Plan describes the policies, procedures, guidelines, and best practices incorporated by the department for the management of its fleet. This document is a reflection of both those policies and procedures employed by TxDOT and the guidelines developed to meet the State Vehicle Fleet Management Plan's specifications.

TxDOT continues to work with CPA in updating and refining the State Vehicle Fleet Management Plan. TxDOT is also working closely with CPA in its Enterprise Resource Planning initiatives.

7. TxDOT EQUIPMENT MANUAL

The TxDOT Equipment Manual provides policies and rules that TxDOT employees are required to follow in the management, use, repair, and disposal of motorized and non-motorized major equipment.

The manual provides TxDOT managers and equipment users or maintainers with the basic policies and procedures to manage the TxDOT equipment fleet.

The manual also provides updated information on laws, rules, policy, and procedures that govern the use, control, and management of the TxDOT equipment fleet.

TxDOT performs annual updates to the Equipment Manual and will continue to incorporate appropriate issues relating to energy conservation.

**TEXAS DEPARTMENT OF TRANSPORTATION
2ND QUARTER FY 2009 FUEL REPORT**

ON-ROAD FUEL CONSUMPTION

CAT	FUEL	GAS QTY	ALT FUEL QTY	DIESEL QTY	Average of MPG	Count of EQUIP NO
Automobiles						
	FLEX	4,128	-	-	29.7	30
	GASOLINE	8,541	160	-	28.2	101
	HYBRID	2,429	-	-	54.8	49
	PROPANE	4,522	2,683	-	22.5	99
Automobiles Total		19,620	2,843	-	31.2	279
Pickups						
	BIODIESEL	-	-	1,226	19.6	6
	CNG	138	-	-	14.6	1
	DIESEL	-	-	170,792	14.5	614
	FLEX	262,644	2,503	-	16.2	1,153
	GASOLINE	341,742	5,451	-	13.9	1,566
	HYBRID	1,991	-	-	17.7	11
	PROPANE	114,126	86,359	-	12.2	893
Pickups Total		720,641	94,313	172,018	14.3	4,244
Truck-Mounted						
	BIODIESEL	-	-	6,960	-	41
	DIESEL	165	119	1,150,233	-	4,177
	GASOLINE	10,313	-	-	-	89
	PROPANE	7,083	5,244	-	-	79
Truck-Mounted Total		17,561	5,363	1,157,193		4,386
Utility Vehicles						
	FLEX	548	-	-	18.2	2
	GASOLINE	20,361	135	-	23.0	179
	HYBRID	6,858	-	-	30.6	72
	PROPANE	5,258	2,629	-	17.5	69
Utility Vehicles Total		33,025	2,764	-	23.6	322
Vans						
	DIESEL	-	-	6,212	15.3	20
	FLEX	832	-	-	31.8	6
	GASOLINE	9,990	-	-	18.0	84
	PROPANE	3,114	1,514	-	13.7	44
Vans Total		13,936	1,514	6,212	17.0	154
Grand Total		804,783	106,797	1,335,423	15.9	9,385

NON-ROAD AND FERRY FUEL CONSUMPTION

CAT	FUEL	GAS QTY	ALT FUEL QTY	DIESEL QTY	Count of EQUIP NO
Ferries					
	DIESEL			356,433	
Ferries Total				356,433	
Non-Road					
	BIODIESEL	-	-	1,867	19
	DIESEL	34	35	337,561	3,619
	ELECTRIC	-	-	-	66
	GASOLINE	2,395	36	-	315
	NONE	492	-	63	2,636
	PROPANE	71	4,734	-	238
Non-Road Total		2,992	4,805	339,491	6,893
Grand Total		2,992	4,805	695,924	6,893

TOTAL FUEL CONSUMPTION FY 2009 2ND QUARTER

FUEL	GAS QTY	ALT FUEL QTY	DIESEL QTY	Count of EQUIP NO
BIODIESEL	-	-	10,053	66
CNG	138	-	-	1
DIESEL	199	154	2,021,231	8,430
ELECTRIC	-	-	-	66
FLEX	268,152	2,503	-	1,191
GASOLINE	393,342	5,782	-	2,334
HYBRID	11,278	-	-	132
NONE	492	-	63	2,636
PROPANE	134,174	103,163	-	1,422
Grand Total	807,775	111,602	2,031,347	16,278

None denotes trailers, etc. that are not powered but may have a small auxiliary engine that consumes fuel. Additionally other types of units may also have auxiliary engines (such as cranes) with a different fuel type than the main engine so the quantities of fuel are charged to the same unit and consequently may show two types of fuel. This is an exception to alternative fuel, bi-fuel, vehicles.