

Managing the State of Delaware Vehicular Fleet

Overview:

The State of Delaware Fleet Services manages a fleet of 1869 passenger vehicles of which 1537 are assigned to specific state agencies or drivers and 289 units dispatched daily from 24 sites statewide. The program receives 3000 use requests each month. Organized like a commercial leasing operation, charging for its service, over 16,000 state employees have access to this transportation resource. The program was created to have vehicles professionally managed for maximum safety, cost effectiveness, availability and superior customer service.

A Brief History

In June of 1993 a report to the Governor and General Assembly was presented providing an overview of the condition of state owned passenger vehicles. In short the fleet was too old, too large, too costly and inequitably distributed among the agencies. Each department owned and maintained its vehicles. This resulted in maintenance ranging from none to adequate. The quality of maintenance varied, no agency could take advantage of volume discounts and obtaining vehicle replacements depended on the budget plus the agency's ability to lobby for funds. In Fiscal Year 1994 the proposed budget provided for 44 vehicles to be replaced in a fleet of 1628 passenger vehicles. At that rate, the vehicle replacement cycle would be an unsustainable once every 37 years. By Fiscal Year 2000 it was estimated \$15.1 million would be required to replace vehicles that could no longer be repaired.

With the approval of the Governor and unanimous authorization by the General Assembly a plan was initiated to consolidate the fleet, develop daily use vehicle pool sites and create contracts for all aspects of vehicle maintenance and repair. This was to be accomplished with existing funds used by agencies to support their vehicles; a one-time \$1 million General Fund allocation; implemented in such a way as to not disrupt the mission of state employee drivers; and providing superior "customer" service. From the Fleet Administrator's office the organization of Fleet Services was created to, in phases over roughly two years, assume ownership; procure a maintenance management and automated vehicle dispatch system; develop all necessary maintenance and repair contracts that included using a Delaware Department of Correction Prison Industries repair facility for roughly 40% of all routine work; and develop a perpetual vehicle replacement cycle.

It was important that the initiative obtain as much buy-in as possible as the change was a radical re-engineering of the way vehicle management was administered. As with any new product or service that is marketed in the private sector, a logo and marketing materials were created including an introductory video describing how vehicle service would be provided. Individual meetings were then held with agency heads after which mass meetings were conducted for agency employees.

At the start, a decision was made to model Fleet Services after commercial rental car agencies. This meant there would be no auto technicians to hire, train or maintain certifications; no service facilities would be required eliminating the need to manage buildings, dispose of tires, oil, antifreeze, etc.; to keep costs minimal, part-time employees would be a component of the organization to move cars and perform other non-skilled tasks.

This initial effort reduced the fleet by 13%, created 24 daily dispatch sites, began the development of a cost effective vehicle replacement cycle and created a cost avoidance savings of \$3.0 million.

Delaware Fleet Services 2012

Since 1993 Fleet Services has assumed additional management of agency owned vehicles expanding vehicle types managed to light trucks, wheelchair lift vans, small buses and an array of enforcement and emergency vehicles. Of the 1869 vehicles it operates, 1537 vehicles are leased to agencies or drivers on an annual basis. Dedicated Fleet staff process 3000 reservations per month for 289 daily dispatch vehicles located at 24 sites statewide. 16,248 employees have access to this transportation resource. The program is staffed with 36 employees, 8 of whom are part-time providing complete customer support including 24/7 roadside assistance. The expanse and level of service is provided through a network of contracts and agreements plus, and most important, a robust vehicle management information system. The system supports the operation which ensures safe, readily available vehicles that are serviced and maintained efficiently and professionally.

Vehicle Acquisition

Fleet Services' preferred replacement cycle is seven years or 80,000 miles. There are exceptions for certain vehicle types but the goal is to have an average vehicle age of 3.5 years. Current average vehicle age for Delaware's central fleet is 4.3 years which will fall back to the goal average age upon delivery of this year's replacement vehicles. This replacement cycle, besides ensuring high levels of vehicle availability, mitigates repair cost over vehicle life and optimizes disposal value. To maintain this cycle requires an annual purchase of 300 vehicles each year.

When Fleet Services was first developed, the plan was to make cash purchases of all replacement vehicles. With limited "start-up" cash however, a method was needed to quickly acquire vehicles to replace very old and undependable vehicles collected in the centralization of vehicle ownership. At that time, the State of Delaware had created, bid and awarded a Master Municipal Lease Purchase Contract (MMLP) used to borrow needed funds to purchase equipment, furniture and other fixed items that could act as collateral for the borrowed funds. Interest rates were very low and the length of repayment adjustable. Agencies that used the contract were required to have the equivalent of one year of payments on deposit and a verifiable source of revenue to the term of the contract.

With roughly \$700,000.00 on deposit Fleet Services was able to commit to the purchase of 495 sedans in 1995 or the equivalent of \$4.2 million. This method continues to be used to maintain a perpetual, stable replacement cycle and avoids issues of excessive cash accumulation.

Information System

Delaware Fleet Services utilizes Asset Works Fleet Focus system to track/manage vehicles and to record and dispatch, daily use vehicles from multiple sites statewide. From the beginning, the ability to summarize vehicle use by agencies and then electronically bill was critical. Reservations were made by the pre-registered employee sending a fax or email requesting a vehicle. Fleet Services "reservationists" entered the request and sent confirmation. This process is now updated to allow drivers to make reservations from any computer device without any reservationist intervention and receive instant confirmation. The employee goes to a dispatch site, acquires the keys, drives the vehicle and returns the keys. The use information is then summarized and billed monthly. This system electronically withdraws payment from the agencies funds.

The heart of the system is the maintenance module which tracks all aspects of vehicle use, maintenance and repair. Implemented modules besides motor pool and maintenance include operator/driver database, online (internet) reservation portal, InfoCenter reporting module, MaxQ interface for download of meter readings, email confirmations and automated license check process.

Information System (continued)

Matched to this software is the data from the AVL/GPS (vehicle tracking) system acquired in 2006. Initially planned as a phased in process over months, the data received was so valuable the decision was made to install AVL/GPS on all vehicles. Daily odometer reading downloads enhanced and strengthened the maintenance module. The AVL/GPS is used to monitor speeding, excess idle time, pool site utilization, individual vehicle utilization, logistical dispatching for law enforcement and other emergency response agencies and tracking unauthorized commuting or vehicle misuse. The system was critical resource last year prior to Hurricane Irene, in tracking and ensuring state owned vehicles were removed from the evacuation zones and appropriate vehicles were located and dispatched to evacuation centers.

Other initiatives implemented or in a planning stage are:

- In 2010, emissions data from the AVL/GPA system is sent directly to the Division of Motor vehicles eliminating the need for taking Fleet vehicles through the safety/emissions lanes.
- Using the approved operator data base, matched to DMV driver data, in 2009 a weekly automated check of license validity began for 16,248 registered and authorized drivers.
- Currently in testing is the development of a customized billing process to download monthly billing costs to the state's new financial system.

Metrics

The success of Fleet Services has been a constant commitment to having the best cutting edge "tools" to manage the program, an almost obsessive commitment to measurement and a high level of entrepreneurial thinking. There are measurements for every component of activity. Using the data collected from vehicle maintenance activity; reservations; AVL/GPS tracking and utilization of individual vehicles and groups of vehicles; constant adjustments and changes are made to all aspects of the operation. This data was most valuable when the Governor requested that the fleet be reduced by 20% from 2008 levels. Using pool site information, utilization history from both individual and groups of vehicles and logistical data, Fleet Services cut 22.6% or 579 vehicles.

In addition the Governor issued Executive Order 18 seeking a 15% reduction in miles driven as well as a reduction in fuel consumption and the resulting pollution emissions. Using all aspects of the AVL/GPS data, miles driven have been reduced 21.62% from FY2008 levels and fuel use reduced by 11.22%, saving \$874,732.80 in fuel costs through the end of FY12. Less fuel burned reduced CO2 pollution by 5,851,660 pounds.

There is an ongoing commitment to using metrics to efficiently and cost effectively, manage the fleet.

Benchmarking

As created, Fleet Services is an internal service unit structured comparable to private rental companies such as Enterprise and Hertz. The program receives no direct funding from the General Assembly but instead charges for its services by monthly billing to user agencies. This arrangement places additional financial responsibility on Fleet Services to provide a high level of service and product at the lowest possible price. Each year a detailed analysis of Fleet costs and vehicle expenses including acquisition, service/repairs, fuel, miles per gallon, etc. is conducted. From the analysis, chargeable rates are set by vehicle type and then benchmarked against both government and commercial operations. This year vehicle rates were reduced by 4.9% meaning a daily rate for a sedan is \$25.44 which includes fuel, AVL tracking and EZPass. This rate appears lower than any commercial or government operation in the region, with the possible exception of Federal GSA.

Fueling the Fleet

In 1988 the State of Delaware in response to Federal Clean Air Act requirements related to the fueling facilities it owned, elected to significantly reduce the number of underground storage tanks to avoid an estimated \$20 million in upgrades or replacements. To offset the loss of fuel sites, the State bid for a fuel card that would keep costs as low as possible. The initial award was cost competitive and featured a bonus of broad spectrum use data and security controls not previously in the old State system. The debit card system (restricted to fuel and oil only) remains in place today providing critical detailed data used to monitor fuel use by restricting use by fuel type, quantities by fuel event, daily and monthly amounts based on travel patterns and fuel tank size. The card system allowed the State to close state owned fueling sites eliminating the need for maintenance of the tanks while avoiding the costs of spills or leaks and the associated environmental damage. One other feature of any awarded card is the requirement that the State of Delaware, being tax exempt, is not to be charged for both Federal and State of Delaware motor fuel taxes. There is no need to audit and invoice taxing entities for reimbursement.

Greening Delaware's Fleet

One of the key components of the consolidation of the fleet in 1994 was to enhance compliance to the Federal Clean Air Act (CAA) and the Energy Policy Act (EPACT). From the beginning Fleet Services has acquired and tested vehicles that used compressed natural gas (CNG) or propane (LPG). Later years included a battery powered truck, battery powered electric vehicle to grid (EVG) and other variations of flex (dual) fuel vehicles. Limited availability to the alternative fuel types has been the problem since the beginning. CNG vendors expanded access to two of the counties but technical problems and limited users resulted in closure of all but one site. LPG vendors could not agree on price and acceptance of the fuel card. In addition both fuel types had created vehicle technical problems switching back and forth between gasoline and the alternative fuel.

To meet the CAA and EPACT requirements the State began the purchase of ethanol (E85) capable vehicles. In addition all gasoline sold in the State has 10% ethanol content. To date Delaware has exceeded the CAA and EPACT requirements and currently has 464 credits which can be used by the State to buy non-qualifying vehicles when needed or sold as a commodity to other covered fleets for the same purpose. Delaware also uses bio-diesel made from soy in its heavy equipment which also generates credits. Hybrid electric vehicles have been purchased in limited quantities but have not shown to be life cycle cost effective. As an alternative to reduce fuel consumption, the State has concentrated on "right sizing" the fleet both in the number of vehicles and purchasing vehicles that provide significantly increased fuel economy. These actions along with the previously mentioned miles driven reduction of 15%, eliminated 5,851,660 pounds of CO2 pollution

Another "green" program is the employee vanpool program called Fleet Link. Originally operated by the Delaware Ride Share organization, Fleet Services assumed responsibility in 1999 with the intent of improving and expanding the program. At the time of transfer 19 vanpools were in operation and as designed, the ridership paid the full cost to own and operate each van. The vehicles in operation varied greatly in model year/age; had odometer readings in excess of 150,000 miles; and a confusing and uneven rate structure. Van pools paid rates based on actual purchase price and repair costs of their specific van. The pools were also required to pay the costs of vehicle insurance as the Delaware Ride Share program was structured as a non-government entity.

By Fleet Services assuming responsibility the program became part of the statewide fleet system and its program costs could be spread across a much larger organization. This change provided lower cost contracted maintenance/repair; capital costs contained in a measured, perpetual replacement cycle; insurance coverage under the State's self insurance plan; and resulted in a lower cost program operating new, safe and well maintained vehicles. These changes resulted in the expansion of the program over the

Greening Delaware's Fleet (continued)

years to serve 536 state employees utilizing 57 vans in FY2012. The benefits to the employees include an automated pre-tax payroll deduction; a cost effective way to and from work; and semi-customized, safe, reliable transportation.

From the "green" perspective, an estimated 479 vehicles are removed from State highways that would each need to travel 81.4 miles to and from work each day. If assumed that the average employee vehicle gets 22 miles per gallon, this program reduces annual gasoline consumption by 437,327 gallons; CO2 emissions by 8.4 million pounds annually; and mitigates highway congestion and parking by having state employees share a ride.

Future Initiatives

Fleet Services has been a very successful program and has been named a Top 100 Public Fleet for the past four years. Fleet Services' culture of quality principles requires an incessant search for new technologies, streamlined processes and cost efficiencies. Convergence of technologies such as voice communication, vehicle tracking, video monitoring, mapping/directions and other related features must be understood and adapted to remain a relevant and cost effective operation. Operational software and peripheral equipment used to track all aspects of the program are critical. Plans for the coming year include enhanced vehicle reservation access for drivers; unattended key dispatch and key return; and enhanced AVL/GPS speed tracking.

References/Resources

Fleet Services:

- <http://gss.omb.delaware.gov/fleet/>

Fleet Services Policies and Procedures:

- <http://gss.omb.delaware.gov/fleet/policies.shtml>

Fleet Link Employee Van Pool Program:

- http://gss.omb.delaware.gov/fleet/documents/fleetlink/fl_explain_prog.pdf

Passenger Vehicle Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=202

Police Vehicle Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=182
- http://contracts.delaware.gov/contracts_detail.asp?i=793
- http://contracts.delaware.gov/contracts_detail.asp?i=896

Light Truck Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=210

Handicap Vans Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=308

References/Resources (continued)

Statewide Fuel Card Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=29

Vehicle Tracking System Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=621

Vehicle Maintenance/Repair Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=1201

Vehicle Collision Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=1178

Automotive Parts Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=304

Tire Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=845

Replacement Glass Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=94

Transmission Repair Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=88

Towing Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=757
- http://contracts.delaware.gov/contracts_detail.asp?i=756

Vehicle Battery Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=304

Vehicle Auction/Disposal Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=3

State of Delaware Executive Order #18 Reports:

- <http://mymarketplace.delaware.gov/> , then Click on “Results Delaware”

Fuel and Miles:

- http://mymarketplace.delaware.gov/documents/fuel_utilization_070312.pdf