

Managing the State of Delaware Vehicular Fleet

Overview:

The State of Delaware Fleet Services manages a fleet of 2,453 passenger vehicles of which 1,813 are assigned to specific state agencies or drivers and 243 units dispatched daily from 22 sites statewide. The program receives an average of 2,356 reservation requests each month. Organized like a commercial leasing operation, charging for its service, over 16,000 state employees have access to transportation resources. The program was created to have vehicles professionally managed for maximum safety, cost effectiveness, maintenance efficiencies, availability and delivery of 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 adequate to none performed. The quality of maintenance varied, as 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 1,628 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 continuing to provide 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. Incorporated into the maintenance plan 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 reengineering of the way vehicle management was previously 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 agency operations. 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 2017

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 2,453 vehicles it operates, 1,813 vehicles are leased to agencies or drivers on an annual basis. Dedicated Fleet staff process an average of 2,356 reservations per month for 243 daily dispatch vehicles located at 22 sites statewide. Approximately 16,000 employees have access to this transportation resource. The program is staffed with 28 F/T employees, and 5 part-time employees, 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 importantly, 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. 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 approximately 350 vehicles each year.

When Fleet Services was first developed, the plan was to make cash purchases of all replacement vehicles. However, with limited "start-up" cash, 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 assets. The equipment procured would act as collateral for the borrowed funds. As collateralized loans, interest rates were very low and the length of repayment adjustable to the useful life of the asset. 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.

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. Further, since Fleet Services is operated with a self-funding model, the Legislature is alleviated from the need to appropriate funds for vehicle acquisition, maintenance and/or personnel payroll.

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 vehicles used 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 has evolved 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 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 has been a critical resource during hurricanes, snow storms, flooding and other emergencies. This enables tracking that ensures state owned vehicles are removed from evacuation zones and allows appropriate vehicles to be located and dispatched to evacuation centers.

Other initiatives implemented or in a planning stage are:

- Using the approved operator data base, matched to DMV driver data, in 2009 a weekly automated check of license validity began for approximately 16,000 registered and authorized drivers.
- In 2010, emissions data from the AVL/GPA system was sent directly to the Division of Motor vehicles eliminating the need for taking Fleet vehicles through the safety/emissions lanes. This was one of the first state fleet program integrations with DMV nation-wide.

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 from the 2008 operational fleet level.

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, FY2017 miles driven have been reduced 15.2% from FY2008 levels.

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 commercial 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.

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 fueling 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 track, 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). Over a period of time, Fleet Services included hybrid vehicles, 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 operation was centralized. 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 fuels.

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 in excess of 500 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 yet 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.

Fleet Link

The Fleet team is responsible for another "green" program, which 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 years to serve over 200 state employees utilizing 27 vans in FY2017. 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.

Future Initiatives and Operational Improvements

As previously identified, Fleet Services maintains a vehicle fleet that averages 3.5 years old. Beyond minimizing costly repairs that occur when a vehicle ages, this allows Fleet Services to realize and integrate new vehicle technologies more quickly. Improved fuel economy, cleaner burning engines and reduced emission technologies are able to be procured and introduced into the fleet's operational structures. Similarly, new standard vehicle safety features are able to be incorporated sooner into the operational lifecycle. While measuring these as tangible financial impacts to the fleet bottom line may be difficult, these intangibles raise the credibility of the department, and improve general customer opinion of the state's equipment.

Fleet Services has been a very successful program and has been named a Top 100 Public Fleet for the past eight years. Fleet Services' culture of quality principles requires an incessant search for new technologies, streamlined processes and cost efficiencies.

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/policies.shtml>

Passenger Vehicle Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=4005

Police Vehicle Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=4592

Light Truck Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=4008

Statewide Fuel Card Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=3979

Vehicle Tracking System Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=4046

Vehicle Maintenance/Repair Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=4003

Vehicle Collision Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=4379

Automotive Parts Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=3027

Tire Contract:

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

Replacement Glass Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=1999

Transmission Repair Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=2177

Towing Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=2282

Vehicle Battery Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=3027

Vehicle Auction/Disposal Contract:

- http://contracts.delaware.gov/contracts_detail.asp?i=2716

State of Delaware Executive Order #18 Reports:

- <http://www.dnrec.delaware.gov/energy/Pages/Executive-Order-18.aspx>