

Fleets Find Savings with Motor Pool Technology

Five fleets share their success stories in motor pool management; improvements range from reduced fleet size to enhanced customer service.

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At a Glance

Various fleets are benefiting from motor pool management systems:

- The City of Chicago reduced department-assigned vehicles by 100 units when it created a motor pool, and has since pulled 18 more vehicles.

- The State of Michigan is expanding its pool by adding two more sites in different cities.
 - The University of Colorado, Boulder increased pool utilization by 5 percent.
 - North Carolina State University cut its motor pool billing time in half and paper use by 60 percent.
 - Ventura County, Calif., created standalone pool systems with fob access for expanded service.
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In addition to managing and maintaining department-assigned vehicles, fleet managers often handle an agency's motor pool, checked out by customers who have occasional need. As technology evolves and specific functions become automated, motor pools are becoming easier to manage. Motor pool management technology is helping fleet departments reduce the number of vehicles assigned to user departments, reduce administrative time required to manage vehicles and keys, improve vehicle utilization, allow for better tracking and maintenance, and improve customer service. Five public sector fleets across the nation discuss how technology is helping them optimize their motor pool management.

Decreasing Fleet Size

Reduced fleet size is one incentive for managing an effective motor pool fleet. When mandates are enacted to reduce fleet vehicles, a motor pool can become a primary source of mobility for employees who no longer have access to department vehicles. At the same time, customer departments may be more willing to turn in their vehicles if they are aware an efficient motor pool is available for use and they realize the potential savings.

At the State of Michigan, Dave Ancell, manager, Vehicle & Travel Services, manages motor pool travel and data for one of the State's two pool sections, both using the same FleetCommander Web-based fleet and motor pool management technology provided by Agile Access Control. Ancell's portion consists of sedans and minivans, totaling 162 vehicles, situated at five locations across the State. The other section, managed by Department of Environmental Quality (DEQ) staff, has 162 vehicles across nine sites, but the fleet makeup is more diverse, with trucks and equipment as well as passenger vehicles.

When the DEQ began its automated motor pool program more than five years ago, it was able to remove 30 percent of fleet vehicles from user departments. At that time, the two pool sections were managed by different software systems, and the State converted to the current technology for both pools in 2010.

Ancell is now looking to add two more pool sites in the cities of Flint and Grand Rapids, expected to be fully in use by mid-2012. He estimates these two sites will have about 70 vehicles and will result in about 20 vehicles being returned from user departments. He also estimates a decrease in reimbursement costs for personal vehicle use.

With a motor pool consisting of 130 vehicles, North Carolina State University Fleet Manager Scott Jennings finds the FASTER Asset Solutions motor pool management technology essential. Pooling worked so well the university is expanding its motor pool by about 200 vehicles consisting of assets previously assigned to user departments, Jennings said. This expansion

began when the State wanted to ensure that all vehicles were being driven the minimum miles. Vehicles not driven the mileage requirement would be reassigned to other departments, and those drivers would then check out pool vehicles on a daily or weekly basis as needed, Jennings explained.

He expects the process to be completed by January 2012.

Since late 2009, Dennis Scamardo, fleet manager, Ventura County, Calif., has been able to reduce the County's central pool fleet from 30 to 25 due to better utilization, which he states can be as high as 100 percent on certain days. Just this year, fleet has already been able to reduce total fleet size by 27 vehicles due to combined utilization efforts, he added.

Improving Record-Keeping

Many systems offer vehicle maintenance tracking as an option. Vehicle mileage is automatically updated in the system, and it sends out maintenance alerts once vehicles reach a certain odometer reading.

Ancell stated that one of the benefits of the State of Michigan's motor pool technology is vehicle accountability. With the Web-based system, "we have greater control now," he said. "If someone hasn't picked up a vehicle in two hours [after the scheduled time], we can cancel it."

Administrators can easily see which vehicles are overdue for pickup on the dashboard, as the reservation displays in red.



In addition to the central pool, standalone systems allow Ventura County to create small pools for departments in various locations throughout the County, usually consisting of two to four vehicles.

Another benefit Ancell cited is flexibility. Because the other pool is equipment-specific, customers need to be able to pick up the exact unit for their needs, and the system allows them to reserve an exact vehicle online. Ancell, with his passenger fleet, has more flexibility with which vehicles go out, and he ensures that vehicles are rotated. The user chooses a vehicle class when making a reservation (medium sedan, large sedan, or minivan), and the system automatically assigns him or her with the vehicle that has been on the lot the longest, Ancell said.

The State chooses to keep its own maintenance records, and staff makes sure odometer readings are updated in a database weekly. These odometer readings are used to determine maintenance intervals, and staff can easily take vehicles out of rotation for routine preventive maintenance procedures, according to Ancell.

Creating Better Utilization

One benefit many fleet managers cited with their systems is the availability of information - specifically, utilization reports that can usually be pulled at any time. This allows fleet managers to determine whether their pool utilization is high enough to warrant the number of vehicles. Ancell from the State of Michigan said his fleet's goal is 70-80 percent utilization, but actual numbers can vary depending on day of week or season and rise as high as 100 percent.

Ancell monitors utilization and talks to customers to see if they expect use patterns to change to determine the right size of the fleet. As utilization decreases after Thanksgiving, fleet sells vehicles and reduces its motor pool size, and as utilization increases in March, fleet purchases new vehicles to meet that need.

Bryan Flansburg, CAFM, director of transportation for the University of Colorado Boulder (UC Boulder), said automation of the university's motor pool fleet of 47 vehicles has led to a 5-percent utilization increase due to more availability, particularly during non-business hours. The previous drop-box return meant that when drivers dropped off keys during off-hours, the keys would sit there all night or weekend until an employee could confirm that they were returned and be available to hand them out again.

"We couldn't dispatch that vehicle because it was still dispatched to someone else. Now the [AssetWorks KeyValet] system automatically knows, yes, here's a car, now I can give it back out again, so we have better utilization," Flansburg said.

With the system, Flansburg is finding 38 percent of vehicles are dispatched during off-hours, and 53 percent are returned during off-hours.

Jennings finds that specific vehicle classes are getting more use than others at North Carolina State University. Being able to break down utilization by class type allows him to view which vehicle types are performing better - utilization rates for buses, for example, are often at 100 percent.

Carshare/Motor Pool Combination Ideal for Chicago

In an effort to reduce fleet size and retire older vehicles, the City of Chicago implemented both motor pool and carsharing, a combination it believes will lead to maximum savings and is best suited for the City's urban location and fleet use patterns.



Using the same technology as the City's carsharing platform, FlexFleet drivers use a card to obtain access to reserved vehicles.

The City's Fleet Management Department first looked into vehicle utilization rates and was able to pull 100 low-use non-emergency vehicles from customer departments, according to Kevin Campbell, automotive engineer for the City. The City tried to remove vehicles with less than 50-percent average utilization and targeted drivers who drove less than 14 hours per week. These vehicles were either retired or switched out with other departments, depending on age and mileage.

As demand spiked for City pool vehicles, Zipcar won the competitive bid for carsharing. City employees on official business began using the 500 available Zipcar vehicles located downtown, which typically record low public use during workday hours.

Because most carsharing vehicles are parked downtown, a City motor pool, called FlexFleet, was also created. The first FlexFleet consisted of six vehicles located at fleet management headquarters, about $\frac{3}{4}$ of a mile away from the nearest shared car location. Chicago has expanded to five pool locations with 50 vehicles and is looking into adding five more locations for a total of 100 vehicles. The utilization goal is 75-80 percent, tracked by use hours rather than reservation hours. One of these locations is downtown, making vehicles available for evening and weekend hours when carsharing vehicles are in use by the public.



The City of Chicago's first FlexFleet motor pool location was at fleet management's headquarters. The City now has five separate FlexFleet locations.

According to Campbell, advantages of the FlexFleet system include route tracking capability, the ability to view extended schedules, and no external key management system needed, ideal for the multiple vehicle locations. Savings have been realized through reduced fleet size and freeing up expensive parking space. The City has been able to eliminate an additional 18 fleet vehicles since the initial pool was created.

Enhancing Customer Service

The ability to reserve vehicles online at all times, as well as 24/7 access to pool vehicles, has improved customer service, allowing for more flexibility in reservations and pickups, various fleet managers cited.

Using the INVERS Mobility Solutions' motor pool system, Scamardo said drivers at Ventura County are benefiting from more convenience compared to the previous, more manual key disbursement procedure. "If [drivers] had an early departure, they would have to pick up the keys the night before or on a Friday, so there were some logistics issues with getting the keys. We also didn't have vehicles at the outlying locations because we didn't have people at the outlying locations to administer the keys."



At the State of Michigan, motor pool drivers pick up their reserved vehicle 15 minutes before reserved time, inputting their ID number and password on a touch-screen kiosk.

Another customer service advantage is drivers are able to begin and end their workday at the County's remote pool locations. "Instead of going all the way to the government center, picking up a car, and backtracking, [employees] can report to work at one of the [remote motor pool] facilities, check out a car, and perform their duties in that area. If they're doing outwork, they can

start and end there," Scamardo said. He added that this saves time and fuel and reduces emissions and freeway congestion, not to mention driver frustration.

Flansburg stated that one advantage he's heard UC Boulder drivers like is immediate invoices. "They really appreciate the fact that the system automatically gives them a detailed invoice as soon as they return [the vehicle]," he said. This includes information such as days rented and mileage accrued, and many are finding an instant invoice sent to their email address more convenient than waiting for a paper invoice to come at a later date.

While flexibility may be a convenience for some, it's of essential need to other fleet drivers. According to Ancell, the State of Michigan offers a "grab and go" feature that doesn't require a reservation, available at select locations or for specific functions. One such function is for protective casework, when State employees need immediate access to a passenger vehicle for emergency services.

Reducing Administrative Time

At UC Boulder, use of a motor pool management system led to reduced administrative costs by 60 percent, according to Flansburg. He explained that an employee whose previous position was to handle dispatch and vehicle return had 60 percent of her position automated. She was reassigned, and a part-time employee took on the administrative role. This cost savings is given back to customers in the form of a 5-percent reduction in rental rate.

Scamardo reported that Ventura County was able to reassign the person handing out keys, reducing one full-time position.

In addition to reduced staff time, administrators have also found the motor pool billing process improved at North Carolina State University. Previously, a multiple-step process was needed just to generate a lengthy file that had to be reviewed; now, the university's motor pool software has an "accounting center" that customizes billing based on how fleet managers want to view it. "Our billing time has been cut in half. Something that would take us a full day to process, now you can do it in several hours," Jennings said.

Jennings added that the system has allowed fleet to cut paper consumption by 60 percent. Prior to setting up the system, each department had its own full-page invoice for each vehicle, and other charges such as those from the auto shop were listed on another invoice. The system allowed fleet to consolidate invoices into an easily viewable format, with a general overview and breakdown of charges. While reducing paper consumption may not be the first point on a fleet manager's list of goals, the sheer amount of paper saved isn't something anyone can complain about: Jennings said paper use has reduced from about 1,000 sheets to just over 300 for each billing cycle, twice monthly.

Creating Standalone Pools

At Ventura County, Scamardo finds a combination of centralized motor pool and standalone systems work best for his fleet. The central motor pool consists of 25 vehicles with an automated

outdoor kiosk located near the vehicles for key management, while nine remote motor pools "give flexibility to have smaller pools assigned to any County building," he said.



Ventura County's central kiosk manages keys for 25 pool vehicles.

Scamardo explained that fleet services has created a "fractional share" model for departments in buildings not centrally located that have fractional vehicle needs. For example, a department program needing 2.3 vehicles would normally have three assigned vehicles. By taking the "fractional" assigned vehicle away and pooling it, the department reduces its assigned vehicles, which reduces its fleet costs. Since these locations usually only require two to four pooled vehicles, the upfront cost of implementing a kiosk for key management was too high, and fleet decided instead to implement INVERS' StandAlone carshare systems to augment the traditional motor pool. Scamardo says 10 vehicles is a good indicator of the need for a kiosk.

These standalone vehicles are charged by the hour and miles used. When an online reservation is made, the motor pool system broadcasts the reservation to the car. The driver uses an assigned fob to unlock the door, enable the vehicle, and obtain the keys from the glove compartment, Scamardo said.

As the trend toward automation continues, it's hard to predict how motor pools may evolve in the coming years. Pools could expand with added carsharing through national or regional providers, or smaller, remote locations may be combined with a central pool to provide more services. With expanding options and increasing technological changes, motor pool management will only get more comprehensive.

Tips for Vehicle Utilization and Motor Pool Management

In his duties as a fleet consultant, James Wright, founder and CEO of Fleet Counselor Services, finds that many fleets can cut down their fleet size on average by 10-12 percent just with better utilization. When taking low-use vehicles and putting them into a motor pool, the pool should be run just as a rental company manages its fleet, with true profit and loss, he said.

When evaluating possible motor pool vehicles, don't forget that heavy equipment can also be shared across user departments. "Right-sizing your fleet by implementing complete motor pools, including trucks and equipment, can lead to a large amount of savings," Wright said.

By keeping utilization records, fleet managers can see, usually within a year, whether utilization is high enough to warrant keeping a vehicle. If motor pool rental rates for heavy equipment are high, and utilization is low, it might be in the best interest for the fleet and the user department to rent the unit out from an equipment rental company and sell the pool unit. Rental companies can also be used as a backup.

"Some agencies contract out the pool duties to a rental business and require them to provide all vehicles on-site so the government agency will not have to own the assets," Wright added.

At what point should a user department turn its vehicle over to a motor pool? Wright recommends starting with the following mileage requirements, averaged over the previous 12 months:

City: 300 miles per month

Country: 400 miles per month

State: 400 miles per month

University: 200 miles per month

Airport: 200 miles per month

Heavy Equipment: 20 hours per month

Sources:

- **Dave Ancell**, manager, Vehicle & Travel Services, State of Michigan
- **Kevin Campbell**, automotive engineer, Department of Fleet Management, City of Chicago
- **Bryan Flansburg**, CAFM, director of transportation, University of Colorado, Boulder
- **Scott Jennings**, fleet manager, North Carolina State University
- **Dennis Scamardo**, fleet manager, Ventura County, Calif.
- **Jim Wright**, founder and CEO, Fleet Counselor Services