

11 Approaches to Right-Sizing Your Fleet

TRADITIONAL METHODS OF DETERMINING THE MOST COST-EFFECTIVE FLEET SIZE CAN BE INEFFICIENT AND INACCURATE. SEVERAL ALTERNATIVE METHODS CAN BE USED INDIVIDUALLY OR IN COMBINATION.

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By Gary Hatfield



As fleet managers know, a fleet's cost is directly proportional to its vehicle total. Today, fleet professionals are under increasing pressure to reduce costs, and one of the most obvious ways to do this is to trim fleet size. Pressure from management wanting to eliminate vehicles on one side, and pressure from customers wanting to retain vehicles on the other usually puts the fleet manager in the seemingly unfair position as an "arbitrator" in this struggle. Thus, rightsizing methods must be fact-based, apolitical, rational, and defensible to all parties.

The traditional approach to fleet rightsizing has been utilization analysis, measured by miles driven or hours used, identifying vehicles and equipment that fall below a determined usage threshold. Such thresholds are often random, such as "3,000 miles per year," usually ignore vehicle type, e.g., car versus a large truck, and don't address the job to be performed.

This step is usually followed by attempts to remove and sell vehicles whose usage falls below the threshold. This process, for obvious reasons, is ineffective and frustrating because it fails to recognize valid business needs, even if utilization may be low.

Another problem with traditional fleet-size studies is they often focus only on "vehicles," such as cars and trucks, because upper management fails to realize that "equipment," such as tractor backhoes, loaders, portable air compressors, etc., comprise a significant portion of the fleet. (Upper management drives cars, so in many organizations, that's what they know and what they invariably think of first.)

In fact, equipment is frequently underutilized because it is not shared among various operating departments and is usually very

costly to own and operate. When downsizing a fleet, large pieces of equipment offer far more “bang for the buck” than do light-duty cars and trucks (and they offer far more significant reductions in petroleum consumption and greenhouse gas emissions than the light-duty portion of the fleet).

What can be expected of a fleet downsizing initiative? Experience shows an overall fleet-size reduction in the range of 5-10 percent is reasonable. For a fleet of 1,000 units, eliminating 100 units can not only save more than \$300,000 per year, but can also yield a substantial cash infusion from the sale of eliminated units.

Thinking Differently

When times are tough, we need to toss aside the “business as usual,” status-quo ways of thinking and investigate ways to address fleet downsizing that achieve a transformation of behavior within the organization.

A variety of tools and methods are available for organizations to reduce costs by reducing their fleet size. In today’s economy, these efforts can help preserve people’s jobs and channel precious dollars to the organization’s mission. As we all know, an eliminated vehicle feels no pain, whereas an eliminated employee feels a great deal.

1. Criticality of Need vs. Utilization

It is important to recognize the requirement for a given vehicle or piece of equipment should not be judged solely on its utilization history. Many units are mission-critical regardless of how few miles they travel. For example, a fire truck is critical to public safety, yet we all hope it rarely leaves the garage. On the other hand, few non-law enforcement passenger cars are critical to an agency’s mission.

To evaluate the continued need for a given vehicle, a point system combining both utilization and criticality factors that result in a “score” for a particular unit yields a fact-based outcome difficult to argue against. Using a spreadsheet approach to the analysis, an organization can score vehicles from high to low and judge which low-scoring vehicles can be eliminated or transferred to a motor pool for shared use.

2. Personnel Ratios

In some organizations, sizing the fleet proportionally to the number of people requiring vehicles makes sense. An example is a police department that requires a specific number of patrol cars (plus detective and administrative cars) for police officer use. Obviously, such variables as whether the cars are assigned or shared by multiple shifts (“hot seating”) must be addressed, as well as the need for spares to supplement front line units.

Many governmental organizations need a combination of fleet rightsizing approaches, depending upon the respective missions of the various agencies.

3. Motor Pools

Many operating units have difficulty recognizing their vehicles and equipment are government assets that could and should be shared with peer organizations. For example, a water department may have a large (and very expensive) track hoe and the public works department may have a similar unit. Both can be found to operate fewer than 100 hours per year. This scenario is not uncommon because departments are possessive about their equipment and fear units may be misused by other departments.

This situation can be addressed by creating a well-managed motor pool serving all departments. Ideally, the motor pool should emulate the commercial rental company business model. Convenience and good customer service are fundamental requirements. A motor pool can be centrally managed, but geographically decentralized to optimize operational efficiency. Modern software, GPS devices, and vehicle key management tools can help make efficiency and convenience a reality.

For example, equipment such as tractor backhoes and air compressors can remain parked at the Public Works yard or in the location they are most likely to be used, but they are no longer “owned” by the Public Works department. Instead, they are owned by the motor pool and made available to all departments and reserved electronically.

The fleet management department usually manages such motor pools and must provide services such as vehicle cleaning and operational checks to assure customer satisfaction. If the motor pool is properly sized, it should occasionally run out of vehicles of a certain type. When this happens, the motor pool manager must have a backup plan to bring in commercial rental vehicles to fill the temporary excess demand. Customers must develop faith in the motor pool and its ability to provide almost any type of vehicle or equipment quickly and conveniently.

To cover its costs, a motor pool operation requires a chargeback system; however, the overall result is always a net cost reduction due to increased sharing of vehicles and equipment and fleet downsizing.

4. Rental Contracts

Generally, operating departments initiate vehicle and equipment rentals directly as a need arises. Rarely do blanket rental agreements specify cost and performance factors such as delivery services and timeliness. Because rentals are not centralized or coordinated with fleet management, a governmental entity's total overall need for commercially rented assets is difficult to determine. This approach precludes data aggregation that might provide economic justification for purchase of certain types of vehicles or equipment for inclusion in a centrally managed motor pool.

A centralized approach for renting that works hand-in-hand with the centralized motor pool is more efficient. Customers take advantage of "one-stop shopping" to obtain temporary vehicles and equipment. Tracking and analyzing use of different equipment types become important tools in managing fleet size because demand data either indicates when to permanently assign vehicles to a department or justifies purchase of a new motor pool unit.

A more comprehensive rental contract with a major provider can also be an alternative to establishing an internally managed motor pool, assuming the vendor can supply the variety of vehicle and equipment types required.

The government's cost of owning and operating a passenger vehicle is estimated at \$4,500 per year, including depreciation, licensing, maintenance, fuel, administrative, and other costs. For \$4,500 per year, a car can be rented for 100 days (at \$45 per day, dry).

5. Car-Share Contracts

The emergence of car-sharing companies such as Zipcar has added a new option to help organizations reduce fleet size. This new twist on vehicle rental makes sense for many situations in which proximity of the vehicles is convenient for users and when outsourcing management of the motor pool is more practical. Companies that provide this type of arrangement are usually open to contractual relations with government agencies.

6. Public Transportation

There was a time when few, if any, government employees used a form of public transportation, such as buses, subways, and taxis, except in urban centers such as New York or San Francisco. Today, many more governments are investigating alternative methods for people to move about. One form of public transportation often overlooked is the taxicab. It is a misconception taxis are always an expensive way to travel. Consider, however, that for \$4,500 per year, one could take 225 taxi rides at \$20 each (\$10 each way), almost one every working day.

7. Personal Vehicle Use

The use of personally provided vehicles (PPVs) is another tool gaining popularity in public sector jurisdictions. However, this tool is not always easy to manage. Some governments prohibit PPV use due to legal concerns, and many employees refuse to use their personal vehicles for company or government business.

From a strictly financial perspective, PPV use is very attractive. Consider the cost of owning and operating a passenger vehicle at \$4,500 per year. For the same cost, an organization could pay for PPV use for over 8,000 miles per year (at the current IRS rate of 55 cents per mile).

8. Fleet Renewal

Fleet renewal is an important component of fleet downsizing. Older fleets require more spare vehicles and tend to foster operating department hoarding of retired vehicles as backups to cover excessive downtime (also known as “fleet creep”). A fleet of cars and light-duty trucks should have an overall average age of 4-6 years, yielding an imputed turnover cycle of 8-12 years. Larger trucks and construction equipment may have longer lifecycles depending on their utilization rate.

A quick analysis of average annual utilization by model-year nearly always reveals older vehicles are used far less than newer units. Thus, a strategic fleet renewal plan is essential to controlling fleet size.

9. Rotating Assignments

Occasionally, identical vehicles record vastly different rates of utilization. For example, a compact pickup in department A may see usage averaging 15,000 miles per year, while an identical unit in department B is used only 3,000 miles per year. Does it make sense to “rotate” or exchange these assignments at some point to balance out usage? The answer is “sometimes.”

As fleet managers know, the process of rotating assignments is difficult to manage, and operating departments usually resist such efforts, despite financial benefits such as balancing depreciation. The authority to enforce such actions usually resides at the highest levels in the organization, and upper management is often not interested in such mundane activities.

Rotating assignments makes sense when the vehicles involved are costly to own and operate. Large rubber-tired loaders are good candidates for rotation if utilization is seriously unbalanced. In the absence of such actions, a fleet manager might need to replace a highly used loader at five years of life, while a similar loader might last 20 or 30 years due to low utilization.

10. Federal Initiatives

The federal law mandates every executive agency create and use a formalized “Vehicle Allocation Methodology” or VAM. This is simply an order to “right-size” the fleet in a documented and orderly fashion. Mercury Associates developed the first-ever VAM for the U.S. General Services Administration. This electronic tool addresses both criticality of need and utilization to produce recommendations for vehicle eliminations. Efforts are currently underway to produce VAMs for other federal agencies and the U.S. Marine Corps.

11. Vehicle Utilization Review Board

A “best practice” process used by some federal agencies is establishment of a “Vehicle Utilization Review Board” (VURB). The board comprises several major operating department representatives who meet annually to review a fleet management report identifying suspected underutilized vehicles. The board discusses the need for the questionable vehicles and attempts to reach consensus on actions for elimination, retention, or transfer to a centralized motor pool.

A VURB removes the fleet manager from the position of “utilization cop” or “bad guy.” Instead, the fleet organization takes on the role of management information provider and advisor. Note that a similar process can be used to negotiate and prioritize a fleet capital replacement budget.

Gary Hatfield is director of public fleet consulting services for Mercury Associates Inc. He can be reached at gthatfield@mercury-assoc.com.