Establishing an Effective Fleet Management System

The establishment and effective administration of a fleet management program can have a positive impact on the cost effectiveness and efficiency of a locality’s fleet operation.

Because each municipality’s fleet and usage is unique, a universal management guide does not exist that can be applied to all types of fleets for every locality. For example, a police vehicle has different maintenance demands than a pickup truck in the department of public works. Likewise, a police vehicle in an urban setting has requirements different from a rural county sheriff’s vehicle. Even within a single department, a vehicle used by a detective may be maintained and replaced on a different schedule than that of a patrol car.

However, some commonalities exist. An effective fleet management program for any local government should establish guidelines for the acquisition, maintenance, replacement and disposal of vehicles. Local officials should put together a fleet management policy that clearly covers all of the guidelines established. This policy should be monitored for compliance by the heads of each of the individual departments. Essential to this oversight is the maintenance of pertinent records such as vehicle daily mileage logs, fuel usage logs, and the cumulative costs of parts, labor and overhead by a vehicle over its life.

This brochure is designed to help local officials craft an effective fleet management system best suited to their individual needs.
Components of an Effective Fleet Management Program

An effective fleet management program should include policies and procedures on acquisition, maintenance, replacement and disposal of vehicles.

**ACQUISITION**

Procedures supplementing the municipality’s procurement policy should be established on how vehicles will be acquired and what type of vehicles should be acquired based on their intended use. The goal of optimized acquisition is to obtain the lowest possible price and the highest possible quality.

In many cases, it is more cost effective to have employees use their own cars and reimburse mileage rather than purchase a vehicle. However, the vehicle’s use will drive this decision. For example, a probation officer who is conducting home visits may require a county-owned vehicle for personal privacy and security reasons.

When it is necessary to acquire a vehicle, local government officials should investigate purchasing through a State contract. Political subdivisions in the State are eligible to purchase approved products and services, including vehicles, through contracts administered by the New York State Office of General Services. These contracts leverage the State’s buying power. For more information, contact the Procurement Services Group at (518) 474-6717 or visit their website at [www.ogs.state.ny.us](http://www.ogs.state.ny.us).

There may be vehicles, such as water rescue crafts, that are not available through State contract. General Municipal Law establishes a bidding threshold of $10,000 for purchase contracts; any vehicle above this threshold must be awarded to the lowest responsible bidder after advertising for bids. Contact the OSC regional office serving your county, or the OSC Division of Legal Services, if you need more information on competitive bidding.

For More Information on Fleet Management:

- **A Report of Fleet Management of Law Enforcement Vehicles**

- **Delaware County Fleet Management**
  [www.osc.state.ny.us/localgov/audits/2003/counties/delawarefleet.htm](http://www.osc.state.ny.us/localgov/audits/2003/counties/delawarefleet.htm)
Another maintenance decision may involve extended warranties, which are offered on most vehicles. Once again, adequate record keeping will assist you in making this decision, as it is important to analyze historic repair information in determining whether or not it makes sense to purchase an extended warranty.

Local officials may need to decide whether it makes more sense to refurbish an existing vehicle or purchase a new one. The refurbishment process is often used to avoid the cost of replacing a vehicle. While this seems to be cost effective, several local governments that have tried refurbishment have reported that the expected results of a “new” vehicle were not achieved. This was also evident from an analysis of maintenance information for refurbished vehicles in a sample taken during an audit by our office.

**REPLACEMENT**

Local officials should analyze the cost of owning and maintaining municipal vehicles over the life of those vehicles and establish a vehicle replacement standard. Different replacement standards may be considered depending on the results of the analysis and the different vehicle types and usage patterns.

As with other aspects of fleet management, replacing a vehicle too soon or too late wastes money. A replacement standard can be developed by analyzing the costs associated with a vehicle and identifying the point when, on average, a vehicle is reasonably depreciated but not yet incurring significant maintenance costs. By replacing vehicles at this point, a municipality can usually avoid escalating maintenance costs and optimize vehicle resale value. Two criteria to consider when establishing a vehicle replacement standard are vehicle mileage and age. Remember to factor in any pertinent information on use and location that may affect the optimal time to replace a vehicle.

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**Determining the Better Deal - A Case Study**

A local government may need to make a determination on what type of vehicle is needed. A general rule of thumb is that used vehicles may require more frequent and costly maintenance than new vehicles. A real life example follows:

A county was faced with the choice of either purchasing used mid-sized vehicles or new compact models for use by departmental staff. The used vehicles were approximately one year old and each had been driven between 15,000 and 30,000 miles. Costing about the same or slightly less than new compact models, they had more options (e.g., power windows and locks) and a smoother ride than their newer counterparts – therefore, they appeared more desirable.

To determine if buying used mid-size cars was cost effective, a sample of compact and mid-sized cars was analyzed and the total cost of operating the vehicles was calculated after by... 

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<thead>
<tr>
<th>Vehicles</th>
<th>Average Miles per Gallon</th>
<th>Average Fuel Cost</th>
<th>Maintenance Cost</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used</td>
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<td>$1,103</td>
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<tr>
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<tr>
<td>Variance</td>
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<td>$287</td>
<td>$238</td>
<td>$525</td>
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The point here is not that a new vehicle is better than a used one, or that a compact is preferred over a full-size, but that a cost analysis based on total costs is needed in order to determine the best option based on the local government’s needs.
Local officials should establish preventive maintenance intervals, based on local driving conditions and manufacturer’s recommendations, for each type of vehicle and each type of maintenance service. Overly frequent or delinquent preventive maintenance intervals are counterproductive to controlling costs. Standards of acceptable quality should also be set for vehicle parts and fluids used.

As with all other areas of fleet management, there is no one maintenance template that will cover all vehicles in all local governments. However, an effective scheduled maintenance program will hold down maintenance costs. Preventive maintenance is the key to avoiding the repair or replacement of costly major vehicle components such as engines, transmissions and drive trains. For example, officials in one municipality reported paying for a $1,550 transmission replacement that might have been avoided with a $50 transmission servicing.

It is important, however, to make adjustments to the manufacturer’s recommendations based on the specific vehicle’s use. For example, a police vehicle may idle for an extended period of time while an officer monitors a high-risk area. When an engine idles, it incurs wear and tear that will require future maintenance. So the maintenance schedule for a vehicle that runs idle 50 percent of the time may be as frequent as that of a comparable one that drives more miles.

Accurate and complete vehicle maintenance records are a key tool for making fleet management decisions. Vehicle maintenance costs are variable and distinct to each vehicle. Without proper records of accumulated maintenance costs, the basis for many management decisions, including replacement, is limited at best. As a result, decisions become educated guesses instead of informed choices.

Pertinent records that should be maintained for each vehicle are:

- vehicle daily maintenance logs
- fuel usage logs
- cumulative costs of parts, labor, and overhead by a vehicle over its life.

It is important that the CEO and Board remain involved in oversight to ensure that appropriate records are maintained, and that policies and procedures are being followed.

Maintenance costs represent a significant portion of the total cost to own and operate a vehicle and tend to increase as a vehicle ages. Escalating maintenance costs are a key factor in determining when to replace a fleet vehicle. In addition to the added cost of maintenance as a vehicle ages, there is an additional cost to the municipality when a vehicle is in the garage receiving maintenance and not available for use.

Our office sampled municipalities to compare the average cost per mile for maintenance over time. The results are shown below: