FLEET SIZE, VEHICLE UTILIZATION and VEHICLE USE POLICY REVIEW

FOR THE
CITY OF TACOMA
General Government Fleet

February, 2010
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INTRODUCTION

Mercury Associates is pleased to present this report to the City of Tacoma which includes a review of two specific areas of its vehicle fleet operation.

- Evaluation of fleet size and recommendations on the proper fleet size based on vehicle utilization and identification of cost savings opportunities.

- Review the City’s existing policies covering vehicle usage, take-home vehicles and use of private vehicles for City business and provide recommendations to improve these policies.

The first section of this report presents the results of our evaluation of the size and utilization of the City’s vehicle and equipment fleet.

The second section of the report is a high-level review of the City’s existing vehicle use policies. The results of this review include recommendations for additional policies that may be needed and suggestions on possible enhancements to existing procedures.

EXECUTIVE SUMMARY

Tacoma is reviewing its vehicle fleet to determine if the fleet is the correct size for maintaining the City’s many operations and ensuring the safety of its citizens. The City retained the services of Mercury Associates to examine the fleet in detail and make recommendations for possible fleet size reductions. Key findings and recommendations are presented in this Executive Summary, followed by our detailed report describing the project.

The City of Tacoma operates a fleet of approximately 1,300 vehicles and pieces of equipment that enable its employees to perform a wide array of job duties. The objective of the right-sizing phase of the review was twofold, first to determine if current practices used to control fleet size are effective and the second was to identify opportunities to right-size the City’s vehicle and equipment fleet by identifying possible under-utilized units with the intention of eliminating units that were found to not be needed by the user department. We also looked at ways of increasing the use of alternatives to the assignment of vehicles to departments such as using the existing pool vehicles or sharing assigned vehicles with others both in and outside the department.

The scope of this review included:

1. Developing a detailed fleet deployment and use profile of the City’s vehicle and equipment fleet. This involved analyzing detailed data on the utilization of the existing inventory of City vehicles by asset type, user organization, business application or job function, and physical location. Note: 2009 model year vehicles
were excluded from this review because they were too new to have reliable use data.

2. Identifying specific assets that needed further review of their job function and use with the intent of pinpointing truly underutilized vehicles. This involved identifying assets whose utilization is substantially less than that of comparable units in the fleet; surveying the users of these assets to determine whether their retention is warranted; and earmarking and establishing agreement (to the extent possible) with vehicle user organizations on the disposal of underutilized and unneeded assets.

Evaluation of the initial use profile information identified 377 vehicles which fell below the profile threshold and required further surveys to collect additional information on specific use and need.

**FLEET RIGHT-SIZING**

**Evaluation of Fleet Size**

**Study Approach and Methodology**

The primary factors driving fleet-related costs for any organization are the size and composition of the fleet. The more vehicles an organization owns, the higher the annual cost to that organization, because for each fleet asset there are costs associated with ownership and operation. Even under-utilized vehicles consume fuel and maintenance resources each year. More importantly, these units also lose value each and every day even if they are older and are fully depreciated (i.e., paid for) on the books. Time and effort are also required to maintain appropriate licenses, tags, fleet inventory records, insurance, fuel cards, etc.

There are two basic reasons why employers provide their employees with a vehicle:

1. **Compensation.** In some cases, an employer-provided vehicle is a form of remuneration that is given to certain types of employees or positions within an organization, regardless of how much or how little the employees need a vehicle to perform the duties of their position.

2. **Job Performance.** In most cases, an employer provides a vehicle to an employee because it is needed to fulfill certain job duties. That is, the job requires the transportation of people, equipment and tools, materials, and so forth or the performance of tasks that require a mobile piece of equipment (e.g., excavating a broken water main, replacing a bulb in a street light) with sufficient frequency that it is necessary and cost effective to place a vehicle or piece of equipment permanently at the disposal of one or more employees.

Certain types of fleet assets furnished to City employees pursuant to the second of these objectives were the subject of this study.
Fleet Size, Vehicle Use and Policy Review

In many cases, scrutiny of fleet size, composition, and utilization levels occurs only in response to economic pressures that force an organization to start scouring budgets for potential cost savings. Unfortunately, such reactive undertakings tend to have two critical flaws: responsibility for reducing fleet size tends to be placed solely on the shoulders of the fleet manager, and organizations tend to apply numerical vehicle usage thresholds in order to justify the retention or disposal of vehicles in the fleet. Such methods are generally ineffective and often counterproductive.

The first flaw forces the fleet manager into a role wherein they must demand return of vehicles that fail to meet established minimum-use guidelines and also have final authority for the approval of replacement and/or expansions to the fleet. This approach inappropriately vests decision-making authority in fleet managers who may lack the intimate knowledge of user agencies’ operations and work methods needed to make sound vehicle acquisition, usage, and retention decisions. This approach also creates, due to this lack of operational knowledge, adversarial relationships between fleet managers and their customers, the users of the fleet.

Minimum-use thresholds that are applied “across the board” are not effective because they fail to take into consideration the significant differences that exist in department missions and the vehicle assignment, deployment, and usage patterns that result from these differences. It is unrealistic to expect a vehicle assigned to an organization that operates within a closely defined area (such as a park complex or water treatment plant) to meet the same level of use as a vehicle that travels city-wide. Conversely, there are many instances where vehicle usage is so limited that the application of minimum use guidelines is justified.

The most successful fleet size management programs involve a close collaboration between fleet users – who are best equipped to define how vehicles enable them to fulfill their missions – and fleet managers – who have technical expertise and access to jurisdiction-wide fleet data that individual user agencies lack. Furthermore, it is better to use guidelines (rather than thresholds) that are designed to reflect the individual work patterns of each user department because guidelines allow the program to be flexible enough to accommodate unique operational requirements that cannot be met through alternative vehicle provision means, while still providing a method to trigger further investigation of vehicles that may not be needed based on the lack of consistency of their use compared to the guideline.

The following tasks were undertaken to perform the project:

1. Develop and submit an information and data request to the City;
2. Develop detailed usage profiles by asset type and by department;
3. Develop and conduct a Web-based survey of the users of all individual assets whose usage is substantially below the average usage of their peers;
4. Analyze survey response data and identify possible unneeded assets;
5. Meet with user agencies via conference call to review and agree on the disposition of under-utilized assets;
6. Document and present study methodology, findings, conclusions, and recommendations.

These tasks are described in further detail in the following sections.

**Screen the Fleet to Identify Candidates for Action**

To identify opportunities to reduce the size and costs of the City’s fleet, our approach was predicated on two key considerations:

- There are specific reasons why an employer provides vehicles to its employees and these reasons constitute the principal if not the sole justification for retaining or not retaining vehicles currently in the fleet; and
- It would be impractical and expensive to examine in detail the use of, and bona fide business need for, every single vehicle in the Tacoma fleet, and a reasonable filtering process therefore is needed for earmarking specific vehicles for reassignment or removal from the fleet.

These two considerations are the philosophical “underpinnings” of our approach to this part of the project. Our focus was to identify vehicles whose continued retention in the fleet is not justified by the job performance requirements of the individuals or organizations to which these vehicles currently are assigned.

The most obvious indicator of the business need for a vehicle is the amount of its use. Usually, but not always, vehicles that are genuinely needed to support the performance of City employees’ jobs are used frequently, and that usage is reflected in the number of miles (or hours, or trips) such vehicles are driven or operated. As every fleet manager knows, however, odometer readings are not always a good indicator of the need for a vehicle. Some vehicles are heavily used even though they do not accumulate a lot of miles. This undoubtedly is true of some vehicles used in the City’s Streets and Grounds Maintenance department and other departments that travel to a work site and stay in that location for most of its work cycle. Thus, while high mileage rates usually are a good indication that a vehicle is needed and should be retained, the opposite cannot necessarily be said of low mileage rates. Low-mileage vehicles are not necessarily low-usage or low-importance vehicles. They may or may not be vital to the performance of City employees’ job duties and City departments’ missions.

For this reason, the analysis aimed at optimizing fleet size by earmarking vehicles for removal focused primarily on low-mileage rather than on high-mileage vehicles. In scrutinizing seemingly under-utilized vehicles, however, it is critical to develop information on their use and importance to the City that simply is not reflected in a single metric such as annual mileage.
We began this task by performing statistical analyses of vehicle utilization data obtained through the information request submitted to the Fleet Manager. The purpose of these analyses was to identify all those vehicles that, based on available usage data, should be investigated for possible elimination from the fleet. We analyzed the vehicles in the fleet inventory by user department. We then calculated mean annual life-to-date and recent annual usage levels and the standard deviation from the mean for the fleet (which indicates the degree to which usage levels are consistent or variable across all of the vehicles). Based on these analyses, we determined that any vehicle traveling less than 50 percent of the annual miles for the vehicle class should serve as a the basis for separating vehicles that clearly should be retained in the fleet from vehicles that required more detailed investigation and possible action.

To decide whether the individual vehicles whose usage fell below the pertinent guideline should be retained in or eliminated from the fleet, we developed additional information on their use and the business need for them by using an on-line vehicle utilization questionnaire which asked a series of questions¹ aimed at augmenting and interpreting the annual mileage information contained in the fleet database.

**Earmark Vehicles for Action**

Upon completion of the survey, we reviewed the data for each surveyed vehicle for completeness and then analyzed the data in order to identify specific vehicles that should be removed from the department fleet or still needed further review to determine their need. The consultant established preliminary recommended actions for each vehicle that was surveyed in order to prepare for telephone interviews with management representatives from each department and the Fleet Manager.

Conference calls were held with all departments to review our findings and recommendations regarding the disposition of specific vehicles in their possession. The objective of these interviews was to review and discuss the reasonableness and acceptability of our findings and recommendations in light of considerations such as the following:

- Any special operating practices or circumstances that account for the low usage of the vehicles earmarked for elimination or assignment to a motor pool; and
- Anticipated changes in the organization’s size, mission, work methods, staffing levels, or other operating needs and parameters that might mitigate some of recommended reductions to their fleet.

On the basis of these discussions, we finalized our recommendations regarding changes in vehicle assignments that will reduce the size of the fleet to an optimal level.

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¹ Survey questions are provided in the appendix.
Finally we quantified the estimated potential cost savings associated with implementing our recommended reductions in fleet size. We did this using capital and operating cost data on each vehicle obtained via the comprehensive information request.

Findings

Immediate Fleet Rightsizing Opportunities

To right-size the City’s fleet, we used the screening process described previously to study the 1,120 vehicles included in our scope of work. We identified a total of 377 vehicles to be included in the survey process. Responses were received from 86 percent of the users of the vehicles on the “Target List”. The largest number of missing surveys belonged to the Police Department (TPD) which is missing surveys on 34 of its targeted vehicles, Solid Waste and Streets and Grounds are each missing five surveys.2

Upon completion of the surveys, we reviewed each response carefully to consider both the current level of utilization of each vehicle and how the respondents described the need for each vehicle, particularly focusing on how critical the users deemed the unit to their overall mission. Using our judgment and experience performing many fleet rightsizing studies, we created preliminary recommendations for each of the subject vehicles, proposing that they be retained by the department, be reviewed further, or eliminated.

Next, using the preliminary recommendations, we scheduled and held telephone conferences with management from almost all departments to discuss the studied vehicles in an attempt to reach consensus regarding each and every vehicle’s disposition.

Following our phone meetings with each department, we concluded that 14 of the 325 vehicles for which surveys were completed could be eliminated from the fleet. One of the 14 was recently in an accident and will not be replaced. The other 13 have low use and their current job functions can be completed using an alternative vehicle such as a pool unit or other existing vehicle in the fleet. It should be noted that the Health Department has already turned in three additional units that were on the target list. This brings the total units eliminated from the fleet we reviewed to 17, or five percent of the vehicles for which completed surveys were received.

During the interview with TPD it was determined that two of their vehicles can be designated as department pool units (00512 and 00514). As noted earlier, the TPD did not complete surveys on 34 of its targeted vehicles, however during the teleconference we were able to make determinations on the disposition of 18 of those vehicles, leaving 16 vehicles that have not been evaluated. Other departments that were able to eliminate vehicles include Waste Water with six and the Health Department with four

2 A list of all targeted vehicles without surveys can be found in the appendix.
total eliminations. The Fire Department and Streets and Grounds also have designated a vehicle for departmental pool use.

All other vehicles on the target list that were preliminarily marked as “Review” were determined to be required assets. There are two main reasons for retention of these vehicles; 1) specialized equipment is installed in the vehicle that is used at job sites; 2) vehicle is often used as an emergency response vehicle or for another critical job function such as inspections and investigations.

Vehicles with specialized equipment are generally driven to a work site and the City employees stay in the site area to perform their job functions. This practice does not lead to high mileage but does constitute high use. Emergency response vehicles are critical to maintaining the City’s safety and response times in areas such as fire, sewer repairs, sewage spills, snow removal, fallen tree removal and other emergencies.

The tables on the following pages summarize the results of our analysis and the potential savings associated with the actions we recommend.

Definitions for Table 1:

- **Eliminate** – the vehicle should be returned to Fleet Maintenance for disposal (vehicle returned may be a different vehicle at the option of the department manager);
- **Already Gone** – the vehicle has been removed from service because it has either been replaced or is no longer needed (basically an inventory correction);
- **Motor Pool** – the vehicle should be transferred to a departmentally managed Motor Pool where it will be evaluated to determine whether it should be retained or eliminated;
- **Retain** – the vehicle is justified for retention.
### Table 1 – Vehicle Actions

<table>
<thead>
<tr>
<th>Department</th>
<th>Eliminate</th>
<th>Already Gone</th>
<th>Retain</th>
<th>No Survey or Decision</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CED</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HR</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>IT</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>PAF</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Pierce Co Health Dept</td>
<td>1</td>
<td>3</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>PW BLUS</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>2</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>PW Constr Mgmt</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>PW Engr</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>PW Fleet/Fac/Asset Mgmt</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>PW St &amp; Gmrs</td>
<td>0</td>
<td>0</td>
<td>47</td>
<td>0</td>
<td>0</td>
<td>48</td>
</tr>
<tr>
<td>PW Surface Water</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>1</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>PW SW</td>
<td>4</td>
<td>0</td>
<td>37</td>
<td>3</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>PW Wastewater</td>
<td>6</td>
<td>0</td>
<td>62</td>
<td>1</td>
<td>0</td>
<td>69</td>
</tr>
<tr>
<td>PWF</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>TFD</td>
<td>0</td>
<td>0</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>TPD</td>
<td>2</td>
<td>0</td>
<td>61</td>
<td>18</td>
<td>0</td>
<td>83</td>
</tr>
<tr>
<td>Grand Total</td>
<td>14</td>
<td>3</td>
<td>4</td>
<td>330</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>% of Total</td>
<td>3.71%</td>
<td>0.80%</td>
<td>1.06%</td>
<td>87.53%</td>
<td>6.63%</td>
<td>0.27%</td>
</tr>
</tbody>
</table>

Detailed, vehicle-by-vehicle recommendations have been provided to the City electronically via email.

### Potential Cost Savings

There are both “hard” and “soft” cost savings that can be realized by implementing our recommended actions. Savings will be derived from:

- The sale of eliminated vehicles
- The avoidance of the costs of replacing eliminated vehicles in the future
- The avoidance of some of the maintenance, fueling, and other operating costs of the vehicles that are eliminated, although increased utilization of remaining assigned vehicles will offset some of these cost savings

The following tables summarize the estimated cost savings over the next five years associated with rightsizing the fleet:

### Table 2
**Capital Cost Savings Estimates**

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoided Replacement Cost of Immediately Eliminated Units (1)</td>
<td>$77,832</td>
<td>$79,389</td>
<td>$80,976</td>
<td>$82,596</td>
<td>$84,248</td>
<td>$405,041</td>
</tr>
<tr>
<td>Proceeds from Sale of Immediately Eliminated Units (2)</td>
<td>$118,204</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>$118,204</td>
</tr>
<tr>
<td>Total Capital Cost Savings</td>
<td>$196,036</td>
<td>$79,389</td>
<td>$80,976</td>
<td>$82,596</td>
<td>$84,248</td>
<td>$523,245</td>
</tr>
<tr>
<td>NPV of Total Capital Cost Savings</td>
<td>$499,881</td>
<td>$118,204</td>
<td>$80,976</td>
<td>$82,596</td>
<td>$84,248</td>
<td>$523,245</td>
</tr>
</tbody>
</table>
(1) This is the net annual replacement cost that otherwise would be incurred for eliminated vehicles. Savings calculated by determining the monthly depreciation for each asset and multiplying by 12 months, then inflating by three percent each year.

(2) Estimated based on expected resale values in 2010.

Table 3
Operating Cost Savings Estimates

<table>
<thead>
<tr>
<th>Operating Cost</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of M&amp;R Costs of Eliminated Units that is Avoidable (3)</td>
<td>13%</td>
<td>26%</td>
<td>39%</td>
<td>40%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>M&amp;R Cost Savings from Immediately Eliminated Units</td>
<td>$14,316</td>
<td>$29,491</td>
<td>$45,563</td>
<td>$48,133</td>
<td>$49,577</td>
<td>$187,080</td>
</tr>
<tr>
<td>Percentage of Fuel Costs of Eliminated Units that is Avoidable</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Fuel cost savings from immediately eliminated units(4)</td>
<td>$13,794</td>
<td>-$</td>
<td>-$</td>
<td>-$</td>
<td>-$</td>
<td>$13,794</td>
</tr>
<tr>
<td>Total Operating Cost Savings</td>
<td>$28,109</td>
<td>$29,491</td>
<td>$45,563</td>
<td>$48,133</td>
<td>$49,577</td>
<td>$200,874</td>
</tr>
<tr>
<td>NPV of Total Operating Cost Savings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$187,786</td>
</tr>
</tbody>
</table>

(3) Assumes that 40 percent of the M&R cost of the eliminated units can be avoided within 3 years; the percentage is not higher because 1) 50 percent of the use of the eliminated units is assumed to be transferred to other units in the fleet; and 2) M&R costs are only 80 percent avoidable.

(4) Assumes that 50 percent of the fuel cost of the eliminated units can be avoided because 50 percent of their use will be eliminated immediately.

Table 4
Total Cost Savings Estimates

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Replacement (avoided costs)</td>
<td>$77,832</td>
<td>$79,389</td>
<td>$80,976</td>
<td>$82,596</td>
<td>$84,248</td>
<td>$405,041</td>
</tr>
<tr>
<td>Sale of Used Vehicles (cash on the barrelhead)</td>
<td>$118,204</td>
<td>$118,204</td>
<td>$118,204</td>
<td>$118,204</td>
<td>$118,204</td>
<td></td>
</tr>
<tr>
<td>Maintenance and Repair (avoided costs)</td>
<td>$14,316</td>
<td>$29,491</td>
<td>$45,563</td>
<td>$48,133</td>
<td>$49,577</td>
<td>$187,080</td>
</tr>
<tr>
<td>Fuel (avoided costs)</td>
<td>$13,794</td>
<td>$13,794</td>
<td>$13,794</td>
<td>$13,794</td>
<td>$13,794</td>
<td></td>
</tr>
<tr>
<td>Total Cost Savings (nominal dollars)</td>
<td>$224,145</td>
<td>$198,079</td>
<td>$126,539</td>
<td>$130,729</td>
<td>$133,825</td>
<td>$724,119</td>
</tr>
<tr>
<td>NPV of Total Cost Savings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$687,667</td>
</tr>
</tbody>
</table>

As summarized in the tables above, the City can save over $220,000 in the first year, and should see annual savings of over $100,000 per year for the next four years, assuming our recommendations are implemented.

Alternatives to Assigned Vehicles

The City of Tacoma, as is the case with most mid- and large size cities, is organized into many departments which carry out the various functions that are required of a municipality. Each department has its own vehicle fleet. Some departments prefer to budget and pay for a replacement vehicle in full in the year in which it is replaced. Other departments choose to pay for their vehicles utilizing the vehicle replacement program offered by Fleet Services. This replacement program allows departments to lease a vehicle from Fleet Services and pay a monthly rate. In this scenario Fleet Services will then maintain the vehicle.

Based on our interviews, alternatives to the full time assignment of vehicles to a department appear to be rarely considered by City agencies. Such alternatives include the use of rental equipment, the use of the centrally or departmentally managed motor
pool, inter-departmental sharing, the use of Personally Provided Vehicles (PPV’s), and even contracting services where economically feasible.

Consider the following:

- The cost of owning and operating a City-owned passenger vehicle is estimated at $4,500 per year including depreciation, licensing, maintenance, fuel, administrative, and other costs.
- For $4,500 per year, one could take 225 taxi rides @ $20 each (almost one every working day).
- For $4,500 per year, the City could pay for PPV use for approximately 8,900 miles per year (@ the current IRS rate of $0.505 per mile)
- For $4,500 per year, one could rent a car for 100 days (@$45 per day)

Interviews indicate that inter-departmental sharing of vehicles occurs infrequently, on an informal basis. This is typical of most governments we have studied and seems to be caused by the belief that the vehicles used for one job function are most likely unsuitable for other job applications. While this is true in some cases it is not true across the fleet where similar assets are used by departments.

The City instituted a small motor pool during the past year but it has a limited quantity and selection of vehicles (six Toyota Prius) for use by any City employee. Some departments (BLUS for example) gave up some of their assigned vehicles so this pool could be established. Other departments said they would use the pool more often if it included four-wheel drive vehicles which are often needed in the area (Human Resources for example). Tracking the utilization of these vehicles reveals that they are only being used 43 percent of the hours that they are available, indicating that much more use of these assets is possible.

**Fleet Size and Utilization Management**

The City lacks policies and procedures for measuring and monitoring vehicle utilization and for handling those assets deemed to be under-utilized. Adding to this situation is the fact that the SAP program utilized by Tacoma lacks a meter validation function. Therefore meter readings captured from fuel cards, work orders and other sources are not captured in SAP for use in determining vehicle utilization. The City should have a meter validation module built outside SAP that could feed valid meters to the system. Mercury could provide this service if desired (fee based service).

Today there is not a threshold for annual mileage or hours of operation to determine the costs of furnishing an employee with a City-owned vehicle versus the costs of meeting the need for a vehicle through other means. Additional research is needed to determine if there are other cost effective methods for the City to provide the vehicles and equipment used to support the City’s mission.
Policy and procedures are needed to clearly define how fleet utilization is to be monitored and fleet size controlled. The policy must address how and when utilization will be reviewed, who is responsible for each step of the process, what types of communication are required, and what actions are to be taken and how disputes will be handled. Note: this topic is covered in more detail in the next section of this report.

In support of the policy, a set of procedures are needed to guide the responsible managers in the performance of fleet size control. The procedures must set forth utilization guidelines that are specific for each department and vehicle type. They must require the evaluation of alternatives to the full-time assignment of a vehicle when a vehicle is found to be used consistently below the guidelines, or when an under-utilized vehicle comes due for replacement. The procedures should not be overly complex or require excessive administrative time, but should be clearly communicated to all responsible parties and supported by the top levels of City management via policy.

Note that we recommend the use of utilization guidelines, rather than the establishment of minimum utilization thresholds. In our experience, when an organization establishes and publishes the minimum number of miles (threshold) that must be travelled by a vehicle in order for it to continue to be retained in its present assignment, employees often react by driving needless extra miles simple to assure the threshold mileage is exceeded. Guidelines, on the other hand, allow management the flexibility to make rational decisions regarding vehicle assignments and the use of alternative means of transportation.

We will cover vehicle utilization policies in the next section of this report.

**Fleet Utilization Recommendations**

The City should take the following actions to right size the vehicle and equipment fleet in order to reduce costs with as little impact as possible on service delivery, and to establish improved controls for future management of the size and cost of the fleet:

1. Require implementation of the vehicle-by-vehicle recommendations provided in this report.
2. Issue a management directive that establishes guidelines for future control of fleet size and the utilization of the City’s vehicle and equipment fleet; also develop and publish utilization guidelines along with other procedures for vehicle justification recommended in this report.
3. Build a meter validation program to ensure correct meter readings are recorded in SAP.
4. Research alternative methods to meet the needs for specialized vehicles and equipment to determine if some low use vehicles could be replaced cost effectively through use of a rental.
5. Encourage use of the existing pool vehicles to better utilize these assets.
6. Report progress on fleet size reduction goals to City management on a quarterly basis for the next year, and annually thereafter.

In summary, an effective fleet size management program starts with recognition that an organization does not have to own all of the vehicles necessary to conduct its business. It simply has to have access to such assets when they are needed, for the duration that they are needed, and at a reasonable cost and level of convenience. Options such as renting a vehicle on an as-needed basis or sharing similar assets within and among other operating departments should be considered to fulfill vehicle needs.
VEHICLE USE POLICY REVIEW

The City of Tacoma has existing vehicle use policies in place that govern how vehicles are used to provide services to the City. Mercury was contracted to review the policies for vehicle use in three situations and recommend ways to improve them and determine opportunities for cost savings. The policies studied for in this report are:

- 3.01 – City policy on staff use of City vehicles
- 3.02 – Policy when City vehicles are taken home
- 5.04 – Private vehicles for City business

In this section we will outline revisions and additions that we believe will enhance the City’s current policies.

3.01 – Policy on staff use of City vehicles

This policy provides direction to employees regarding who may drive a City vehicle and includes limited guidelines for the operation of the vehicles. It also lists the responsibilities of the operator in the case of an accident. Recommendations for additions to the policy (by section) are:

Authorized Users

- If a City employee has an out-of-state license and becomes a resident of Washington, he or she has 60 days to obtain a valid Washington driver’s license. The license must be in the possession of the driver at all times when operating a City vehicle, and be of the appropriate class governing the vehicle being operated.

Vehicle Inspections

- When using a pool or other vehicle not assigned to an individual, employees must perform a pre-trip and post-trip inspection of the vehicle or piece of equipment they shall be operating. Any problems must be reported to the Shop Supervisor.
- Vehicles should be visually checked for proper tire inflation. If a tire appears to be under-inflated it should be checked with a pressure gauge and filled to the appropriate PSI rating as shown on the tire and loading decal located in the driver’s door well.
- Under no circumstance should an employee operate an unsafe vehicle. All unsafe equipment must be reported immediately to Fleet Services.
- Operators are responsible to ensure the vehicle has all required documentation in the vehicle including registration and insurance card.

Driving
Vehicle operators must obey and comply with all traffic laws and regulations governing the operation of motor vehicles. Copies of any law enforcement traffic citations received by the City will be forwarded to each department for the appropriate disposition. Operators under the influence of alcohol or drugs are prohibited from operating City vehicles. Operators convicted of driving a City vehicle while under the influence of alcohol or drugs may not drive a City vehicle.

The use of mobile phones is permitted only with hands-free devices. Texting or using a mobile device for any other purpose is not permitted while operating a City vehicle.

Avoid eating, drinking and other distractions when operating a City vehicle.

Returning a motor pool vehicle

- The operator must record the ending odometer reading on the post-trip inspection form (or other City form that is appropriate).
- Vehicle must be cleaned of all personal items and trash.

Accidents

In addition to the current stated policies for reporting accidents, City employees should also follow these guidelines when dealing with an accident:

- Make no statements as to who is at fault in the accident and do not discuss the circumstances of the accident with anyone other than proper agency authorities and law enforcement officials.
- Obtain the names, addresses, and phone numbers of any witnesses and/or other persons involved in the accident.
- Exchange the information required by state law for motor vehicle accidents with the operator(s) of any other involved vehicle(s).
- Use only City authorized towing companies to move an unsafe or inoperable vehicle and have towed to City facility.
- Cooperate and comply with the instructions of any law enforcement, fire, or medical personnel at the scene of the accident.

If it does not currently do so, the City should offer driver safety training to all vehicle operators. Safety training, especially defensive driver training, has been shown to reduce accidents and improve driving skills; in fact motor vehicle crashes are the number one cause of death and injury for all ages.³ Additionally the City should perform motor vehicle record checks (commonly referred to as MVRs) to ensure that each driver has a valid license, free from DUI or other violations that would prohibit the driving of

City vehicles. Failure to verify drivers have the proper license to operate a City vehicle could open the City up to “vicarious liability” claims in the event of a serious accident.4

3.02 – Policy when City vehicles are taken home

This policy outlines the responsibilities of the driver when a City vehicle is driven home on a periodic basis. Suggestions for additional criteria are listed below.

- Employees approved for take-home vehicle use should be required to record their mileage on a daily basis in a trip log and provide this data when requested by Fleet Services. The log should include the date and purpose of the trip.
- Commuting is not considered business use of a City vehicle. The City will be responsible for reporting to the IRS any taxable income earned by the employee for the use of the vehicle based upon current tax law. In addition, FICA and federal withholding taxes may apply to the imputed income. Mercury can provide more details on the IRS regulations if desired (fee based service).
- The City will perform motor vehicle record checks (MVRs) on all employees with take-home vehicle privileges.
- Violation of the take-home policy should have consequences outlined in the policy.

5.04 – Policy for use of private vehicles for City business

This policy describes the procedure for obtaining mileage reimbursement when an employee uses a private vehicle for official City business. Suggestions for enhancements to the policy include:

- Employees who utilize a private vehicle for City business must provide appropriate insurance coverage.
- Reimbursement will be at the current rate per the IRS for mileage reported by the employee and verified by Fleet Management. Gasoline, insurance and other related costs of operation are not reimbursable separately (they are included in the IRS cents-per-mile calculation).

Other vehicle use policies

In our opinion the City of Tacoma should have some additional vehicle utilization policies that cover the following topics:

- A set of guidelines that outline annual vehicle use targets by class of vehicle and department in either miles or hours, whichever is applicable to the vehicle class.

4 http://legal-dictionary.thefreedictionary.com/Vicarious+liability
Fleet Size, Vehicle Use and Policy Review

- An on-going utilization monitoring process that will identify low and high use vehicles in the future and how to handle these vehicles once identified.
- A policy to increase or reduce the fleet size based on a set of parameters. These parameters should include target miles or hours required to keep a vehicle and conversely a top-end annual mileage or number of hours that would indicate the need for additional vehicles.

Summary of recommendations on vehicle use policies

1. Require all vehicle operators to perform pre- and post-trip inspections and notate any safety or mechanical issues with a vehicle.

2. The use of mobile phones and other digital devices (PDAs, PCs, etc.) should be banned while operating a City vehicle.

3. Eating and drinking should be avoided when operating a City vehicle.

4. The City should begin a program to pull motor vehicle record checks for all employees authorized to drive City vehicles.

5. A defensive driving safety program should be implemented for all employees who drive City vehicles. Mercury can assist the City in finding a suitable safety program if desired (fee based service).

6. City employees with DUI or other serious moving violations should not be allowed to drive City vehicles.

7. City vehicles used for take-home purposes accrue commuting miles which should be assessed to the vehicle operator (unless they are for on-call purposes).

8. Institute the other vehicle utilization policies outlined in this report that will help ensure the fleet does not grow unnecessarily in the future.
APPENDIX

The following documents will be provided digitally to the City:

1. Online Survey Questions
2. Survey Results with Vehicle Recommendations – Detail
3. Targeted vehicles with No Survey Completed
Appendix 1 – Mobile Equipment Utilization Survey

Acquisition

1) Is this vehicle/piece of equipment assigned to you under a vehicle assignment program?
   
   Yes
   No

Usage

2) Is this vehicle/piece of equipment suited to the tasks performed?
   
   Yes (skip to Q4)
   No

3) Please describe the vehicle/piece of equipment that would be better suited.
   
   ______________________________________________________________________

4) Does this vehicle/piece of equipment have an odometer?
   
   Yes
   No (skip to Q 6)

5) What is the current odometer reading?
   
   _______________Miles (Enter whole numbers only)

6) Does this vehicle/piece of equipment have an hour meter?
   
   Yes
   No

7) What is the current hour meter reading?
   
   _______________Hours (Enter whole numbers only)

8) How many hours per week is the engine running, regardless of whether or not the vehicle is moving?
   
   0 to 1
   2 to 5
   6 to 10
   11 or more

9) What is the primary use of this vehicle/piece of equipment?

   Transportation of people
   Transportation of equipment, materials, or supplies
Fleet Size, Vehicle Use and Policy Review

Transportation of both people and equipment, materials, or supplies
Mobile tool or work platform (e.g. backhoe)

10) Please list any specialized equipment mounted in or on this vehicle such as tool boxes, lift gates, cranes, etc.

_____________________________________________________________________________

11) How many people are transported by this vehicle/piece of equipment?

   1 (driver or operator)
   2 to 3
   4 or more

12) Is this vehicle used to tow a trailer or piece of trailer mounted equipment?

   Yes
   No (skip to Q14)

13) If yes, please provide the equipment number of trailers and trailer mounted equipment towed by this vehicle.

14) How many times per week does this vehicle/piece of equipment get used? (Use: When the operator takes the equipment from its normal parking area and then returns it to that general area.)

   1
   2 to 3
   4 to 6
   7 to 12
   13 or more

15) How many weeks per year is this vehicle/piece of equipment used?

   1 to 24
   25 to 47
   48 to 52

Replacement/Alternatives

16) Is this vehicle/piece of equipment assigned to:

   A specific individual
   A specific work crew or group
   A pool of shared assets and/or pieces of equipment
Fleet Size, Vehicle Use and Policy Review

17) Are similar types of City-owned vehicles/pieces of equipment parked nearby?
   Yes
   No
   Don't Know

Location

18) Where is this asset/piece of equipment usually parked/stored during normal work hours when it is not being used?
   City-owned facility
   Non-City facility (parking lot or garage)
   Other (Explain Below)

19) Please explain the answer to the previous question.
____________________________________________________________________________

20) What is the address of the asset/piece of equipment’s primary parking/storage location during normal work hours?

   Facility/Yard Name* __________________________
   Address 1* __________________________
   Address 2 __________________________
   City* __________________________
   Zip* __________________________

21) What is the address of the asset/piece of equipment’s primary parking/storage location outside of normal work hours?

   Facility/Yard Name* __________________________
   Address 1* __________________________
   Address 2 __________________________
   City* __________________________
   Zip* __________________________
Mission

22) Would any operations be adversely affected without this vehicle/piece of equipment?

Yes
No

23) Please describe the mission that this vehicle/piece of equipment fulfills.

_____________________________________________________________________________

24) If you no longer had this vehicle/piece of equipment, how would you fulfill your mission?

Work/mission could be eliminated (no longer performed)
Contract to have the work done
Borrow another government vehicle/piece of equipment
Rent a vehicle/piece of equipment from commercial sources as needed
Other

25) Please explain how the loss of the vehicle/piece of equipment would affect the public.

_____________________________________________________________________________

Surveyor Information

26) Are you the regular driver/operator of this vehicle/piece of equipment?

Yes
No, I supervise the driver, or I am the department vehicle coordinator, etc.

27) Information about the person completing this questionnaire:

| Last Name | ________________________________ |
| First Name | ________________________________ |
| Phone number | ________________________________ |
| Email | ________________________________ |
| Job title | ________________________________ |
## Exhibit 2 – Summary of Recommendations

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| % of Total                       | **3.45%** | **0.80%**    | **1.06%**  | **87.80%** | **6.63%**              | **0.27%**   | 100.00% |

*Note:数据已按部门列出，总计为377个建议。*
## Appendix 3 – Vehicles with no survey received

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