



**Fleet Management
(Vehicles Services)
Focused Review Final Report
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FLEET MANAGEMENT INDUSTRY BEST PRACTICES RELATIVE TO IDENTIFIED CUSTOMER SERVICE ISSUES

INTRODUCTION

This report is part of an effort by the City of Portland to improve the overall cost effectiveness of its fleet operation , which is managed by the Vehicle Services Division (VSD) of the Office of Management and Finance (OMF). In the first phase of this project, a communications facilitator was retained to work with fleet users (i.e. operating bureaus) to identify issues and concerns that they have with the services provided by VSD. Mercury Associates was then retained to identify best practices employed by industry leaders to deal with the issues raised by fleet users. These best practices, as well as alternative solutions that we will develop in concert with VSD, will be incorporated in a fleet management business process improvement plan that will ultimately be presented to the Mayor and Council for approval.

Thirty-two issues and concerns were identified by operating bureaus. We grouped these issues into a number of primary functional areas of fleet management. These functional program areas included organization and mission; charge-back rates and billing; fleet replacement and purchasing practices; maintenance management; and customer communications. Best practices for these functional areas of fleet management are discussed below.

FLEET ORGANIZATION AND MISSION

Background and industry best practices: Both government jurisdictions and private companies use vehicles and motorized equipment to facilitate the provision of goods and/or services to taxpayers or customers. Few organizations of either type



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engage in activities that do not rely on some sort of vehicle. Consequently, the principal mission and primary focus of any fleet management organization should be to meet the transportation needs of its customers by providing them with vehicles that are available, reliable, and appropriate for their intended use. That is not to say that other aspects of fleet program mission such as cost control and environmental stewardship are not important. However, these strategic objectives should all be viewed as subordinate to the primary job of meeting fleet users' needs. After all, without fleet users, there would be no need for fleet management organizations.

Another clear best practice for fleet management programs, and a dominant trend over the past 20 years or so, is the consolidation of fleet management functions into one centralized service organization. Traditionally, it was believed that the effectiveness or responsiveness of a fleet management organization is highly correlated to its physical and organizational proximity to the vehicle users it serves. The result of this belief was the creation of numerous independent fleet management programs within a city or other jurisdiction, each of which was intended to serve the purportedly unique needs of its own group of customers relying on its presumably specialized skills and knowledge.

Increasingly, however, it has come to be recognized that many if not most fleet user needs can be met more cost effectively through a consolidated approach to fleet management. The trend in the fleet industry clearly is toward more rather than less consolidation of fleet management functions, and most cities of Portland's size have developed a centralized fleet management program.

The move toward consolidation can be traced to the increasing complexity and



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cost of fleet management endeavors over the last 20 years or so and to a simultaneous increase in emphasis on governmental efficiency – particularly in the face of competition from contract providers of fleet management services. During this period, developments in such areas as information technology, human resources management and professional development, risk management, regulation of environmental protection and occupational safety and health, and automotive technology have essentially changed the definition of "effective" fleet management, making it prohibitively expensive for many small, independent fleet management organizations to keep up. In short, the complexity of fleet management today produces significant economies of scale which often can be captured only through collective effort.

Thus, the key objective in defining the organization of fleet management functions in a city such as Portland is to determine what type of structure will produce the best mix of service quality and cost control , always keeping in mind that fleet customer service considerations should take precedence over cost reduction and other considerations because it is customer needs that dictate the need for fleet management endeavors in the first place.

Current practices and customer issues in Portland: VSD is the central provider of fleet services to all City organizations with the exception that the Fire Bureau, manages the maintenance and replacement of its fire-fighting apparatus. VSD provides a full range of fleet management services to its customers including fleet replacement planning, acquisition, and disposal; maintenance and repair including body and paint services; fuel services; and short-term daily motor pool services. VSD has a staff of 83 and operates 8 separate repair facilities in order to provide its customers with



convenient access to repair services.

One of the concerns that operating bureaus have expressed about the City's current fleet management program is that VSD sometimes seems to place more emphasis on regulating fleet users than on serving them. While operating bureaus are appreciative of VSD's efforts on their behalf, they feel that the amount of regulation that is occurring impacts negatively on their ability to effectively conduct their mission-critical activities. In other words, fleet users feel that VSD should concentrate on meeting its customers' fleet needs and let the operating bureaus use vehicles as they see fit in conducting their own business.

To be fair to Vehicle Services, its current approach to fleet management largely reflects the will of the Mayor and Council which has focused a great deal of attention on the appropriateness of the cost, size, composition, and use of the City's fleet in recent years. Moreover, discussions with VSD management and staff indicate that they too are not happy with the current state of affairs that causes them to whipsaw between serving customers (saying yes) on one hand and regulating them (saying no) on the other. We also believe that VSD is far more service oriented than some fleet users give them credit for. Positive comments to the communications facilitator during the first phase of this project regarding VSD's maintenance operations and the professionalism of staff are cases in point.

A major concern, we believe, is that fleet users resent the need to justify the number and type of vehicles that they require to individuals in VSD who are not particularly knowledgeable about the mission and associated operational needs of line organizations. Bureaus feel that having a group of "overseers" deciding how many or



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what types of vehicles they can have to do their jobs sends the message that VSD and OMF are distrustful of their motives, their judgment, and their managerial ability.

Such resentment is not unique to the City of Portland. Striking the right balance between controlling fleet size and composition and serving – that is, accommodating – fleet users is one of the most fundamental challenges in all of fleet management. In Portland's case, however, we sense that there currently is too much emphasis on central regulation of this aspect of fleet management and that operating bureaus want more control over decisions that are fundamental to their ability to accomplish their day-to-day work activities.

Alternatives for addressing customer issues: The primary alternative for resolving this customer issue is for VSD to adopt more of an advisory relationship towards the City's fleet users on issues such as fleet size, composition, and costs. Ultimate responsibility for the efficient or inefficient use of fleet assets under this approach would rest with operating bureaus, not with VSD. Accountability for fleet performance in these organizations would be to their respective bureau heads and to the Mayor and Council, not to another City agency that exists to provide internal support services. The Mayor and Council, of course, would need to approve such a shift in fleet program accountability.

We believe that a number of initiatives would be required to make this shift viable for the City. We have listed these in following paragraphs:

- Development of a new service-based mission for VSD – which would clearly specify its role as a service provider and the boundaries of its oversight responsibilities;



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- Development of specific initiatives to improve the quantity, frequency, and quality of communications between VSD and its customers;
- Development of a comprehensive set of fleet operating policies – which would clearly spell out Council directives relative to fleet operations, standard procedures, processes for and conditions under which exceptions would be granted to standard procedures (we understand that VSD is currently working on such a policy document);
- Development of financial incentives for line bureaus to optimize their consumption of fleet resources and services; and
- Development of better and more readily available management information on fleet costs and other performance statistics.

Many of these initiatives are covered later in this report as part of discussions of best practices in charge-back rates and customer communications.

FINANCIAL STRUCTURE, CHARGE BACK RATES, AND BILLING

Background and industry best practices: There are basically two ways that *operating* funds can be provided to a fleet management organization to support the management, maintenance, and fueling of a fleet: through direct appropriations to the organization or through the use of a charge-back system which recovers the organization's costs through charges to other organizations for the goods and services it provides them.

Similarly, there are two ways that *capital* funds can be provided to support the acquisition of new and replacement vehicles: lump-sum amounts can be appropriated to the fleet management organization or to the departments it serves on an ad hoc basis, or capital costs can be amortized over the lives of the vehicles in the fleet through the use of a reserve fund and charge-back system or a debt financing arrangement such as a lease-purchase program.

There are three reasons why the use of a cost charge-back system is preferable



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to the direct appropriation of funds to a fleet management organization, a fleet user department, or some combination of the two. One is that properly designed charge-back systems improve the consumption and provision of fleet resources by 1) illustrating linkages between the behavior of vehicle users and the costs of the vehicles and related services they consume; and 2) encouraging fleet users to hold fleet management organizations accountable for the quality and costs of the goods and services the latter provide.

The second reason for implementing a charge-back system is to promote equitable treatment of fleet users. Since users pay only for the resources they consume, there is no cross-subsidization of fleet costs under a properly designed and implemented charge-back system. One of the implications of this benefit is that fee-supported departments and programs pay the full cost of the fleet resources they consume and do not receive any subsidies from the general fund, which often occurs when a fleet management organization is part of the General Fund.

The third reason for implementing a charge-back system is to ensure the timely replacement of capital assets. Using a charge-back system to accumulate replacement funds allows for vehicle capital costs to be amortized over several years thereby making it easier to accommodate peaks in annual fleet replacement spending requirements which usually cannot be accommodated by (generally static) operating revenue sources.

Since using a charge-back system to finance a fleet operation means *selling* vehicles and related services rather than *giving* them away, fleet users behave much more cost effectively than they do when such resources are given to them. For the



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same reason, users also put much more pressure on fleet management organizations to charge competitive (with comparable organizations and the private sector) prices for goods and services than they do when they receive these resources free of charge.

In implementing a charge-back system, the significance of customer pressure needs to be fully understood because this pressure can become counterproductive to improving fleet organization performance. Unlike a private fleet services company, a governmental fleet management organization does not always have the ability to make required investments (in facilities or employee training, for example), compensate employees on the basis of their performance and contributions to the bottom line, or cut costs (of people or overhead costs, for example) in the face of changing customer demand. Nonetheless, in a charge-back environment fleet users will expect an in-house organization to perform at or near the level of alternative service providers in the private sector.

The use of charge-back rates is often associated with establishment of an Internal Service Fund. These funds are used by state and local governments to account for the financing of goods and services provided by one department or agency to other departments or agencies, and to other government jurisdictions, on a cost-reimbursement basis. The use of Internal Service Funds has the following advantages:

- The ability to identify and accumulate the total cost of a support activity, including the depreciation of capital assets;
- Facilitates costing and pricing of support services;
- Allows for the accumulation of funds for equipment replacement; and
- Allows the allocation of General Fund overhead costs to the Internal Service Funds for redistribution to the benefiting programs.



The design and management of ISFs and charge-back systems should comply with the guidelines of the Federal Office of Management and Budget (OMB) *Circular A-87*. OMB A-87 establishes principles and standards for determining costs for federal awards carried out through grants, cost reimbursement contracts, and other agreements with state and local governments. The purpose of OMB A-87 is to provide a uniform approach for determining allowable costs incurred by local governments. To the extent that the City of Portland receives any federal funding, either directly or on a pass-through basis, the guidelines of OMB A-87 must be followed – at least for calculating the fleet service costs that are charged to federally subsidized programs. Even where no federal funding is involved, many cities have adopted OMB A-87 guidelines as the de facto standard for the design of charge-back systems and the management of internal service funds.

Basic principles articulated in this circular (and OMB *Circular A-21* for institutions of higher education) require that charge-back-funded organizations (they need not be classified as internal service funds) operate on a break-even basis; recover only allowable costs from federally funded customer organizations; make adjustments for under and over recovery of costs (preferably through adjustments to future billing rates); bill all users at the same rate for similar services; utilize billing units which represent services provided or benefits received, and not improperly utilize revenues generated by one type of service to finance the delivery of another type of service. ISF's are permitted to have fund balances (reserves) that are being accrued for the purpose of asset replacement as well as to finance near-term working capital requirements. Any



reserves being accumulated for financing operations are limited to three months' worth of operating expenditures by OMB A-87 guidelines.

Current practices and customer issues in Portland: Many operating bureaus raised issues relating to the current fleet cost charge-back system during the first phase of this project. Under this system customers receive a periodic charge (every four weeks for the thirteen accounting periods of each fiscal year) for each unit that they operate. These charges are based on the average cost of each unit in a class of vehicles, and contain a maintenance and a capital cost component. The maintenance cost component covers maintenance and repair activities (excluding repair of accident damage) and activities associated with in-servicing and decommissioning vehicles. Maintenance cost averages are developed by calculating the percentage that each vehicle class represents of total maintenance costs over the past five years. This percentage is then applied to an estimate of current year maintenance costs, which is derived by adding direct costs (such as mechanic salaries) for maintenance activities to an estimate of indirect costs (such as the cost of office supplies) that is developed through a cost allocation process. The capital cost component is based on an amortization of replacement costs.

Accident repair costs and fuel costs are billed directly to customers. Fuel costs are marked up by a five-percent surcharge on the cost of fuel that each customer consumes in order to cover fuel program administration costs. These costs are estimated as part of the previously mentioned cost allocation process.

Concerns raised by customer bureaus mainly revolved around the issues of the clarity and equity of the current rate methodology. Regarding clarity, many customers



suggested that the logic behind the current rate methodology simply has not been adequately explained to them. The remedy for this is, of course, self-evident and fairly easy to execute. However, in our opinion the root of this issue lies in the other primary area of customer concern – that is, in the question of whether the current rate methodology is fair.

Customers understand the current rate system well enough to realize that charges are derived by blending the costs of all units in a particular class of vehicles to arrive at an average unit cost, which all customers who are assigned such a vehicle are billed each accounting period. The process of calculating averages, of course, necessarily includes low values and high values being amalgamated into an average billing rate. It is perhaps human nature that some customers feel that they operate all of the low-cost vehicles and are, therefore, subsidizing other users who are driving all of the high-cost vehicles. This feeling is magnified by the absence of complete documentation and full disclosure to customers of the intricacies of the current rate development methodology.

Alternatives for addressing customer issues: There are four basic types of cost charge-back systems used by fleet service organizations, as described below:

- *Proportional Cost Allocation Systems* – these systems distribute fleet costs to customers by prorating the fleet service organization’s costs to customer organizations. This is normally done on an annual basis and is calculated by an allocation statistic such as the percentage of the total fleet that is assigned to each customer agency.

These systems have the advantage of being simple to calculate; easy to administer; and also provide budget certainty for customer organizations. The principal disadvantage of these systems is that they do not promote cost recognition (capital and operating costs are mingled together, and it is nearly impossible for customers to understand and measure their costs against market



comparables). They also are not equitable because everyone is charged the same regardless of their driving behavior and actual costs.

- *Time Based Systems* – these systems charge the cost of fleet services activities to customers on some increment of time, the most common of which is by the month. Costs are normally grouped into vehicle classes and charges to customers are based on the average unit cost in each class.

The advantages of these types of systems are that they work well for fixed fleet costs such as vehicle depreciation (which are time based) and they also provide budget certainty for customer organizations. The principal disadvantages of these systems are that they are difficult to calculate and administer; they result in cross subsidization between customers and funds (because low cost units subsidize high cost ones); they do not facilitate cost recognition (capital and operating costs are mingled together, and it is nearly impossible for customers to understand and measure their costs against market comparables); and they are not equitable (because everyone is charged the same regardless of their driving behavior and actual costs).

- *Usage Based Systems* – these distribute systems allocate fleet costs to users based on the number of miles (or engine hours) that are driven in a defined period of time (normally monthly). As with time based systems, class average rental rates are calculated.

The advantages of these types of systems are that they work well for variable (but not fixed) fleet costs and they also provide budget certainty for customer organizations. The principal disadvantages of these systems are that they are difficult to calculate and administer; like time based systems they result in cross subsidization between customers and funds; they do not facilitate cost recognition; and they are not equitable (because everyone is charged the same regardless of their driving behavior and actual costs). Another disadvantage of usage based systems is that fleet management organizations are forced into the position of being the “usage reporting police” and are required to hound customers each month to complete mileage reporting forms.

- *Service Based Systems* – These charge-back systems operate much like those used by commercial repair shops and car leasing/rental companies. Fully allocated charge-back rates are calculated for each line of business in which the fleet management organization engages (such as maintenance and repair labor, asset acquisition and disposal, parts, fuel services, etc.). Customers are then charged for the actual services that they consume, such as hours of labor (at a fully burdened rate per hour).

The advantages of these systems are that they are intuitively understandable; they are equitable in that customers pay the only for the specific goods and services that they consume; and there is limited cross subsidization between



customers and funds. The principal disadvantages of these systems are that they are somewhat complex to design and maintain; they are very dependent on the quality of data captured on the shop floor and at the parts counter; they can cause customers to experience fluctuations in fleet-related expenditures from month to month and year to year (and so accurate budgeting can be difficult); they may encourage customers who run out of funds at the end of a fiscal year to defer vehicle maintenance in order to stay within budget; and they encourage customers to scrutinize and question the rates used and prices charged by the fleet management organization (which we consider to be an advantage of these systems).

The purpose of a charge-back system is not merely to recover the costs of providing a good or service. If it were, this objective could be achieved far more easily by appropriating all of the funds needed to operate a fleet to one agency, which would then be responsible for delivering fleet resources to whoever needed them (that is, by financing fleet operations the old-fashioned way). Internal service funds and charge-back systems were invented, first and foremost, to promote cost recognition and control. In other words, fleet cost charge-back systems should be designed so as to enable and encourage fleet users to see, care about, and control fleet costs (for example, to purchase the least costly vehicle for a given job, to keep the size of their fleet to the minimum size possible, and to care for vehicles properly). This requires that the rate structure and billing process clearly illustrate the linkage between fleet user behavior and fleet costs.

Usage and time-based systems (such as the City's current charge-back system) do a poor job of illustrating this linkage because they treat vehicle costs as either entirely fixed (in the case of time-based rates) or entirely variable (in the case of usage-based rates), when some vehicle costs are fixed while others are variable. In addition, they base charge-back rates on the costs of an average vehicle, which few individuals



or agencies actually operate. The development of rates by class often results in inequitably high rates for new assets and inequitably low rates for older assets, which usually require more maintenance and repair. Users are thus misled as to the appropriateness of replacing older, higher maintenance assets in a timely manner.

Service-based charge-back rates make it easier for both fleet users and fleet management service providers to see how much specific goods and services cost. Insofar as transaction-specific costs are itemized on customer bills, this type of rate structure encourages the efficient provision and consumption of fleet resources and services. Time and usage-based rates, in contrast, make it difficult to discern what portion of a user agency's monthly charges is attributable to vehicle maintenance, fuel, other fleet management services, and so forth.

A good charge-back system promotes efficiencies in both the provision and consumption of fleet resources. Conversely, a poorly designed charge-back system is a constant irritant, and will do nothing to allay concerns about the legitimacy of VSD's user charges, the efficiency of its employees, and the cost competitiveness of its services.

VEHICLE REPLACEMENT, ACQUISITION, AND DISPOSAL

Background and industry best practices: Vehicles and equipment are replaced at various times depending on the type of vehicle and the nature and intensity of its use. Timely replacement is important for controlling vehicle availability, safety, reliability, and efficiency. The economic theory of vehicle replacement holds that vehicles should be replaced when the sum of ownership and operating costs is at a minimum. The chart below demonstrates this concept. The chart shows three cost

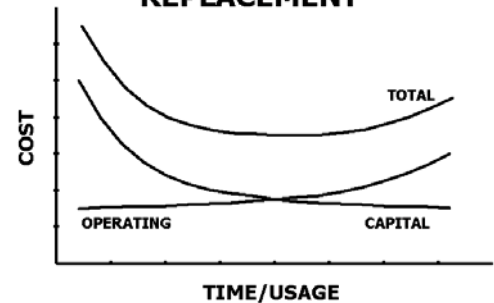


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curves. The capital (ownership) cost curve shows the decreasing cost over time of a vehicle as it ages and depreciates. The operating cost curve illustrates the increasing maintenance, repair, and fuel costs for the same vehicle over time. The total cost curve combines the two.

The most advantageous point to replace this vehicle from an economic perspective is when the total cost curve is at its lowest. That is, when the combined cost of owning and operating the unit is at a minimum, just before it begins to increase. Delaying replacement much beyond this point actually causes total vehicle costs to rise, making a fleet more costly – not cheaper – to own and operate.

ECONOMIC THEORY OF VEHICLE REPLACEMENT



An effective fleet replacement program has four major components:

- A set of replacement guidelines for the various types of assets in the fleet;
- A long-term replacement planning process;
- A replacement financing program that assures that there are sufficient funds to replace all vehicles when they come due for replacement; and
- A short-term replacement earmarking and budgeting process.

Replacement guidelines are used to project and plan for future fleet replacement requirements and to trigger assessments of the need to replace individual vehicles whose age and/or life-to-date usage is approaching established guidelines. There are two primary methods of setting vehicle replacement criteria and retention cycles - the empirical (or life cycle cost) method and the best practice method.

The empirical approach to establishing vehicle replacement criteria involves an



analysis of the economics of various replacement cycles. To examine the economics of various replacement cycles, a life-cycle cost analysis technique that revolves around the computation of a vehicle's equivalent annual cost over varying periods of time is often used.

Life-cycle cost analysis involves estimating the costs associated with acquiring, maintaining, and disposing of vehicles over various replacement cycles, and determining which cycle has the lowest cost (fuel costs can be included as well, if it is believed that they will vary materially across cycles). To determine the minimum cost cycle, the net present value of each stream of costs is computed and converted to an equivalent annual cost amount.

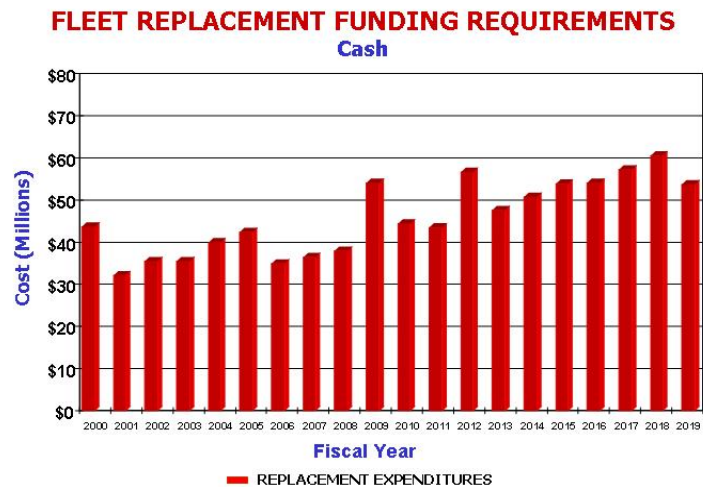
The drawback of life-cycle cost analysis is that it is time consuming and difficult for many fleet management organizations. Consequently, most organizations prefer to set their replacement cycles by using the best practice method. This method involves surveying a number of best-in-class fleet organizations which have comparable fleets. The results of the survey are compiled and adjustments (if required) are made in order to take into account factors unique to each fleet organization such as annual usage levels, types of use, the number of back-up units available, weather, and operating terrain. This method has the advantage of being straightforward and relatively easy to implement, while still producing replacement criteria that can be defended to decision makers.

A fleet replacement plan projects future replacement dates and costs for each vehicle in a fleet. Its purpose is to identify long-term spending needs and associated budgetary requirements. In most fleet operations, vehicle replacement practices are



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dictated primarily by the availability of replacement funds rather than by objectives such as minimizing vehicle life-cycle costs. Consequently, the comparison of projected annual fleet replacement costs with historical replacement spending levels provides a good



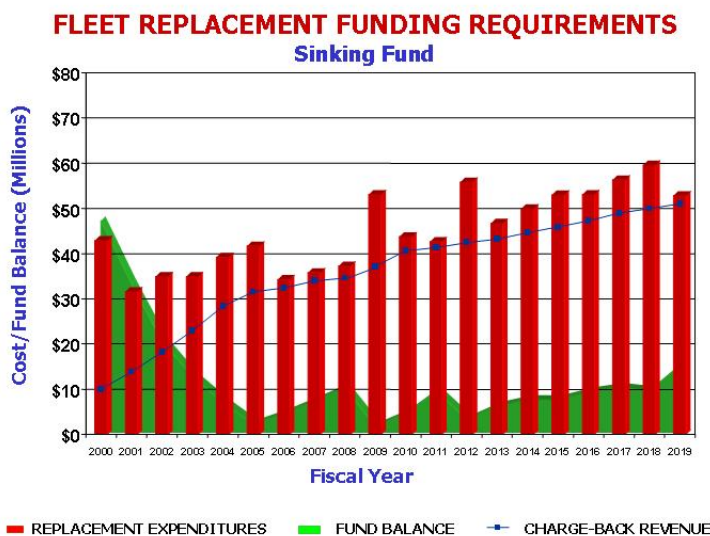
indication of the adequacy of fleet replacement practices – as opposed to guidelines or goals. Inadequate replacement spending not only increases the age and operating costs of a fleet, but results in the accumulation of replacement needs which, if left unattended, can become so large that significant fleet downsizing is unavoidable.

There are three basic financing alternatives available to organizations for funding replacement of fleet assets: cash, savings, and debt (including leasing). The graph at right illustrates a 20-year replacement plan for a state government fleet of about 9,300 vehicles and pieces of equipment and the funding requirements associated with financing all of the purchases in the plan with ad hoc appropriations of cash. As can be seen, a major drawback of cash financing is that it makes fleet replacement funding requirements volatile and unpredictable because the long-term replacement spending requirements of most fleets are inherently and unavoidably lumpy. This is due to the simple fact that different types of vehicles and equipment have different life expectancies and come due for replacement in such a way that spending needs fluctuate from year to year. As can be seen in the above graph, there are some



pronounced peaks and valleys in future spending needs that any organization would have difficulty accommodating. For example, projected replacement costs are about 45 percent higher in 2009 than in 2008.

Most organizations have difficulty dealing with fluctuations in fleet replacement spending needs because the amount of funds they can devote to the purchase of vehicles each year generally does not fluctuate. In fact, while the number of fleet assets that need to be replaced may “zig” upward (say, by 45 percent) in a given year, government revenue in that year may not only not increase by a corresponding percentage, but may actually “zag” downward. When this happens, some fleet



replacement purchases must be deferred and a backlog of replacement spending needs begins to accumulate.

Fleet replacement financing approaches such as a reserve fund and lease purchasing allow an organization to spread the capital

cost of each vehicle over its useful life. This makes fleet replacement funding requirements smooth and predictable and reduces the likelihood that critical replacement purchases will be deferred and that a backlog of replacement spending needs will develop.

The graph at left shows the long-term funding requirements associated with financing the replacement costs of the 9,300-vehicle fleet above with a sinking fund and



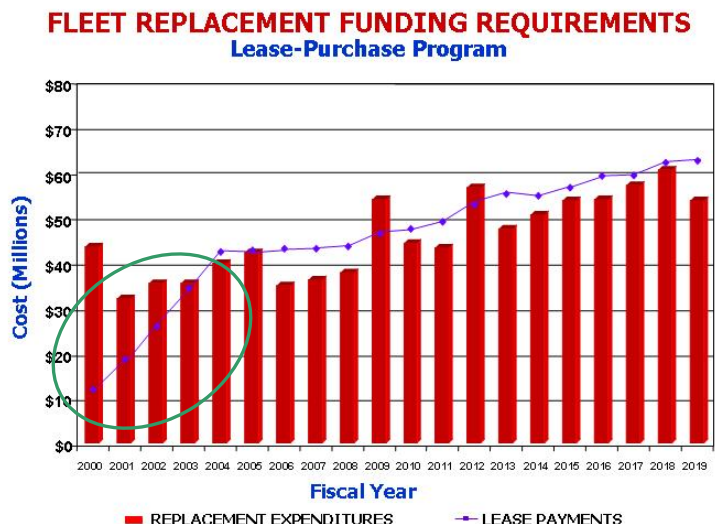
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charge-back system. Although replacement spending requirements are identical to those shown in the earlier graph, funding requirements (represented by the charge-back revenue line) are not at all volatile.

One of the challenges of managing a reserve fund properly is calculating charge-back rates so that the reserve fund balance does not get too big or too small. Many government jurisdictions with which we have worked in this area have built up unnecessarily large fund balances due to improper rate setting and/or an incomplete understanding of how a reserve fund should operate. In many such cases the reserve fund gets depleted by political decision makers who are looking for reserves of “extra” cash during tight budget times.

Like a reserve fund, lease purchasing makes replacement funding requirements smooth and predictable by spreading the capital cost of each vehicle in the fleet over its useful life. This approach also is attractive to many cities, counties, and states that use it because it eliminates the need to manage a replacement fund balance (which can be susceptible to raiding in an economic downturn), and because making the switch from cash financing or a sinking fund to debt financing can produce very large budget savings in the near term.

The graph at right shows the funding requirements associated with financing the replacement of





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our sample 9,300-unit fleet using lease-purchase financing. Under this approach, the purchase of every vehicle and piece of equipment in the fleet would be financed over a period of seven years, slightly less than the weighted average life expectancy (i.e., replacement cycle goal) of the various types of assets in this particular fleet.

As in the two previous exhibits, the bars represent projected annual replacement spending requirements. The line in this graph illustrates projected lease payments and, consequently, the fleet's replacement funding requirements. Although the volatility of future spending needs has not changed, funding requirements are now smooth and predictable.

Equally, if not more, important, however, are the significant budget savings associated with changing replacement financing approaches. The area of the graph that is circled shows how a switch from cash financing to leasing can significantly reduce fleet replacement funding requirements in the short term, creating very sizable, albeit temporary, budgetary windfalls. These budget savings result from the fact that cash financing requires paying for vehicles before they are used, whereas lease purchasing permits an organization to pay for its vehicles and equipment while these assets are being used.

The last step in an effective fleet replacement program is a short-term replacement decision making process that identifies and prioritizes when to replace individual vehicles and pieces of equipment. Although replacement guidelines usually trigger an assessment of the need to replace a particular vehicle, some assets will need to be replaced earlier than expected (for instance, due to unusual wear and tear or recurring mechanical problems) and some units will be cost effective to operate well



beyond the age or usage threshold suggested by replacement guidelines.

Consequently, fleet management organizations need to include a number of factors beyond age and accumulated usage in the process of identifying the specific units most deserving of replacement in any given year. These factors include historical repair costs, type of use (such as severe duty, mission critical or back-up), reliability, and an assessment of a candidate unit's current condition.

Many municipalities have developed a point system that mixes the factors listed above into a quantitative process of assigning replacement priorities. This has the advantage of taking most of the politics out of the replacement decision-making process because all stakeholders (including budget staff and fleet users) understand the factors being considered and have bought into the process.

The methods used to acquire vehicles can have an impact on the price of a unit, the amount of time required to deliver it to a user, and the responsiveness of the vendor to customer needs. Acquisition policies should consider how to leverage the City's buying power to obtain the best possible price and insure the timely delivery of properly constructed and outfitted equipment. Additionally, procedures should exist to review vehicles upon delivery to ensure their compliance with purchase specifications. Critical parts lists, service manuals, and user and/or mechanic training services should be included in purchase specifications for units that are new to the fleet or for specialized equipment whose operating and maintenance requirements are not self evident.

Many public sector organizations have developed initiatives aimed at streamlining the new vehicle purchasing process and decreasing the administrative level of effort associated with buying new vehicles. These initiatives include issuing



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multiple rather than single year bids for vehicles, taking advantage of cooperative purchasing agreements (with State agencies for instance), and piggy-backing off of other public agency bids (such as other cities and counties in the region). All of these initiatives should be employed to streamline the new vehicle purchasing process, reduce purchasing time, and standardize the composition of the fleet.

Once vehicles have completed their service lives, the procedures undertaken to remove the vehicle permanently from service and the methods used to dispose of the unit should aim to maximize vehicle residual value, avoid the unauthorized retention and use of assets that officially have been replaced, and ensure that replacement parts that no longer are needed are removed from inventory. Sales should also be conducted frequently (on a monthly or quarterly basis) in order to maximize cash flow and avoid unnecessary depreciation of assets as they wait for sale. Sale prices should also be compared against market resale guides in order to gauge the effectiveness of the asset disposal program.

Current practices and customer issues in Portland: Some customer bureaus expressed concern about certain aspects of vehicle replacement, acquisition, and disposal practices. One issue that was raised is that VSD bases replacement decisions entirely on time rather than on other factors such as cost and usage. This issue most likely is the result of a misunderstanding of the difference between long-term replacement planning and the short-term replacement decision making process. As described above in industry best practices, it is appropriate to base long-term replacement planning and budgeting on vehicle age. Some fleet management organizations also include a projection of accumulated use in their long-term



replacement plans, but this increases the complexity of the computer programming required to model future replacement costs and funding requirements.

However, the process of determining which vehicles should actually be replaced in any given year needs to include a number of other factors such as functional obsolescence, type of use, accumulated usage, condition, and operating costs. VSD reports that such factors are included in the replacement decision making process. Consequently, as with a number of other customer issues, the source of this issue may be tied to the need to improve communications between VSD and its customers. One initiative that would likely help in this regard is development of a quantitative methodology to set annual vehicle replacement priorities. We have provided a sample point system from a past client that can serve as an example for VSD to use.

Another issue that was raised by customers was that the City does not provide the flexibility to consider financing alternatives such as leasing in its vehicle replacement process. As described above in industry best practices, lease purchasing can be a very attractive alternative for public sector agencies to consider from both an economic and fiscal perspective. It may well be possible for the City to reallocate or refund the majority of its current replacement reserve fund balance (currently around \$9 million) by switching to a lease purchase financing program. Even in the absence of a change in financing approaches, the size of this fund balance should be optimized through the development of a long-term replacement plan and funding analysis.

The City should also review its current age-based replacement cycles, which are longer than those that we typically see in comparable cities. For example, common replacement cycles for sedans and light trucks (including pickups, vans and SUVs)



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range from five to nine years and average seven years. The City's replacement cycles for these vehicles range from nine to twelve years.

Another issue raised by customer bureaus relates to vehicle specifications in general and specifically to consideration of ergonomics in the purchasing process. In our experience such issues are normally related to an incomplete understanding of how customers are going to use a vehicle or piece of equipment. VSD has already implemented a number of best practices in this area including development of a written form that all customers complete when a vehicle has been identified for replacement aimed at defining factors that are critical to preparing appropriate specifications such as how the vehicle will be used, passenger carrying requirements, cargo carrying requirements, towing requirements, etc. VSD's specification writer also spends time with customers to understand their equipment requirements so that vehicle specifications are matched to customer needs. Ergonomic issues clearly need to be considered in the vehicle purchasing process and balanced against other concerns such as cost.

Another issue raised by customers relates to the long time that it takes VSD to acquire and place some vehicles in service. Initiatives such as developing multi-year contracts and piggy-backing off of other agency purchases can improve the timeliness of the new vehicle purchasing process. Specialty equipment, which can sometimes take over a year to acquire, may be the source of the issue raised by customers. Since there are few vendors available for some types of equipment, there probably is not much that VSD can do to improve service in this area. One initiative that we have seen work is to include a specific delivery timeframe requirement in specifications for



specialty equipment. Delivery then becomes one of the decision points in evaluating bids for new equipment. The report that VSD provides to customers documenting the status of their new equipment as it moves through the purchasing process should help identify any opportunities to eliminate purchasing bottlenecks.

A final issue that was raised by customers related to auction proceeds and whether the costs of preparing vehicles for resale were recovered at sale. Our review of the prices received by the City for its used equipment reveals that it is recovering a very high percentage of the original purchase price (which generally averages ten percent in the industry) of almost every vehicle class. Consequently, this issue likely relates back to communication with customers and VSD should develop a sales history report that demonstrates the considerable value that it is providing in this area. The report should include an analysis of the net sales revenue when repairs are made to vehicles before auction.

CUSTOMER COMMUNICATION

Background and industry best practices: Good customer service management stems from an acute sensitivity to the needs and concerns of fleet users, and manifests itself in a set of communication, decision-making, reporting, and feedback processes which encourage fleet users to actively participate in the management , and not simply the use, of vehicles and equipment.

A clear understanding of the needs and concerns of customers is also critical to effectively running a fleet management organization. The organization's understanding of its customers' needs should not be based solely on informal communication. The lack of a formal customer communication infrastructure can limit a fleet organization's



ability to quickly revise its service practices to keep pace with changes in its customers' service needs. Relevant information may be lost or misinterpreted if communicated only through informal channels. In addition, the lack of a formal communication process can prevent the fleet organization from gathering consistent information with which to evaluate customer satisfaction with its services.

One way to improve customer communication and relations is through the development of detailed service agreements. These agreements should include a description of service procedures, prices and billing procedures, repair priorities, repair authorization limits, performance standards, contact persons, and customer responsibilities. The agreements provide customers with a better understanding of the range of services offered by the fleet services organization and how to access these services. They also establish a clear understanding of how the fleet organization's performance should be judged.

In addition to the development of written service level agreements, a number of fleet management organizations have also formed a Customer Advisory Board. The purpose of creating an advisory board is to give the major customers who rely on vehicle services an active role in running the fleet business. Board members provide perspectives, experiences and talents that enable the fleet services organization to improve operations and to increase the satisfaction of all customers. The Board should participate in recommending policy changes, review financial performance, and monitor achievement of production and customer service goals, among other activities.

Implementation of a system of meaningful key performance indicators is another important initiative that a fleet management organization can pursue to improve



communication with its customers and to demonstrate the value of the services that it provides. Performance measurement allows an organization to:

- Reduce reliance on subjective judgment and speculation;
- Track performance against standards and benchmarks;
- Home in on areas of the organization that require improvement; and
- Track trends over time.

The following table provides a description of common performance measures tracked by leading fleet management organizations:

<i>Performance Measure</i>	<i>Description</i>
Average Fleet Age	The age and accumulated use of a fleet has a great impact on the cost and performance of fleet operations. As such, relative fleet age should be tracked over time in parallel to key performance measures in order to track trends and to document the impact of lower or higher capital spending levels.
Fleet Operating Rates Hourly Labor Rate Parts Markup Fuel Markup per Gallon Sublet Markup	Properly constructed operating rates provide a strong indication of cost competitiveness, and an ongoing mechanism of comparison with alternate and peer service providers.
Number of Vehicle Equivalents per Technician	A measure of staffing reasonableness and adequacy. In a fleet of reasonable age and condition, each FTE technician should be able to support a benchmark number of vehicle equivalents.
Technician Utilization (billable labor hours)	A measure of maintenance program productivity, this measures the average annual number of hours billed to work orders by each FTE technician. Low utilization indicates possible over-staffing and/or inefficient work processes.



<i>Performance Measure</i>	<i>Description</i>
Overtime Rate	A measure of staffing efficiency and effectiveness. A benchmark level of utilization coupled with reasonable overtime levels indicates an optimally staffed operation. Low productivity and high overtime indicates serious staffing imbalances. High productivity and high overtime indicates probable staffing shortages
PM Program Compliance Rate	This measures the number of PM's performed within schedule. A low compliance rate indicates that PM's are not being performed regularly. A high PM compliance rate is a basic building block for an effective maintenance and repair program.
Scheduled Repair Rate	Measures the portion of all repairs identified and conducted in a controlled, planned manner. The combined purpose of the PM program, operator inspections, and service writing is to identify and take care of problems in a planned, scheduled manner so vehicles do not suffer unscheduled and costly breakdowns.
Road Call Rate	This measures the percentage of all repairs conducted on vehicles that breakdown in the field and cannot be driven to the shop. In combination with the scheduled service rate, it provides an indication of PM and overall maintenance program effectiveness.
Comeback Rate	This measures the percentage of time a customer returns a vehicle or piece of equipment to the shop for the same problem within a specified period of time. It is a measure of service quality that reflects the accuracy of service writing and diagnostic activities as well as repair quality.
Fleet Availability Rate	This is one of the key measures of success in a fleet management program; the degree to which the fleet service provider is able to ensure the regular availability of fleet units to their user departments. Availability rates should be highest



<i>Performance Measure</i>	<i>Description</i>
	for mission critical vehicles and should be calculated to reflect the work schedule of each vehicle.

Organizations need to take care that they limit the number of measures being tracked to a manageable number. Reporting of key measures of success, and progress towards meeting them, should extend from within a fleet management organization, to its customers, and to decision makers in the greater organization.

All fleet services organizations capture a vast amount of equipment data in their fleet management information systems. Routine monthly information should be provided to middle managers within the City regarding the costs for equipment maintenance, repair, and replacement as well as utilization. One of the goals of any internal service fund and charge-back system is to heighten customer awareness of the cost and utilization of equipment so that they are willing to evaluate alternatives. Without timely and useful information regarding the costs for equipment maintenance, repair, and replacement as well as utilization, such a process will not occur.

Standard reports provide some access to this data; however, ad hoc reports are often required to customize data retrieval to a particular issue that is being researched. Many fleet management organizations now use a standard ad hoc report writing program such as *Crystal Reports* to publish Intranet-based reports for their customers to access. This allows the users of vehicles to manage their equipment more effectively.

Current practices and customer issues in Portland: Most customer bureaus have indicated the need for improved communication with VSD. The concern in this area is not about communication for communication’s sake. Rather, the issue is that



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customer bureaus believe that they do not have sufficient information on their fleet costs to make informed decisions regarding the size, deployment, use, and replacement of their fleet assets. Since fleet performance has a profound impact on customer bureaus' ability to perform their jobs, and the fleet is a major cost factor for many bureaus, customers rightly feel that they are entitled to actively participate in the management decision making process regarding the fleet. In order to do so, however, they must be provided with full details regarding the rationale behind the manner in which the fleet is structured from a financial perspective (charge-back rates, replacement plans, etc.), receive timely and useable management reports (on fleet costs, utilization, etc.), and be consulted before major decisions impacting fleet operations are made.

We believe that all fleet management organizations should view the interest by their customers in actively participating in management of the City's fleet as a positive. After all, how vehicles are used in the field and other actions by fleet users have a profound impact on the costs and overall effectiveness of any fleet management program. Consequently, cities that have developed industry-leading fleet management programs have created a partnership between the fleet services provider and fleet users.

VSD generates and has access to the great majority of data and statistics regarding the City's fleet. Customer bureaus have developed the feeling that since VSD has not shared this information in the past, they must have something to hide. This issue, along with definition of VSD's mission as a service provider and not a regulator, lies at the heart of customers' concerns about VSD and the City's fleet management program.



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Implementing service-based charge-back rates would aid in customer communication because customers would receive monthly statements that itemize the cost of each vehicle that they use in a way that is easy to understand. VSD can also prepare Web-based reports that keep a running tab of year-to-date charges for each customer bureau and for each vehicle. More detailed reports, such as vehicle life-to-date cost reports (subject to the availability of pre-*Fleet Anywhere* data), also can be provided to VSD customers .

Vehicle Services should make the generation, analysis, and distribution of management information regarding fleet operations one of its core fleet management services. This activity is an essential aspect of fleet management and is one of the key services that separate fleet management organizations from mere maintenance service providers. Many fleet management organizations employ a management analyst who is responsible for meeting management's and customer's data analysis and reporting needs. Such a position is required to wade through the vast amount of data captured by VSD's fleet system and turn this data into meaningful management information that can be used to make more informed decisions regarding the operation of the City's fleet. We believe that VSD should add such a position and make the distribution of management information one of the cornerstones of its efforts to improve customer service.

The Division should also consider implementing the other best practices cited above such as written service agreements, forming an advisory board, and tracking a set of focused performance measures. The initiatives cited above will assist VSD in changing the perception that some customers have that it is an insular gatekeeper of



information. We suspect that this perception is one of the major issues that is impacting customer relations in Portland.

FLEET MAINTENANCE AND REPAIR

All vehicles and other pieces of motorized equipment require maintenance and repair during their life. Since a fleet management organization's primary mission is to maximize the availability of vehicles so that its customers can productively do their jobs, the focus of maintenance management for such organizations needs to be in developing practices that minimize unscheduled incidents of repair and that return vehicles requiring repair to service in as little time as possible.

The objective of a PM program is to minimize equipment failure by maintaining a constant awareness of the condition of equipment and correcting defects before they become serious problems. A PM program also minimizes unscheduled repairs by causing most maintenance and repair activities to occur through scheduled inspections. An effective PM program pays dividends not only in improved vehicle safety and reliability, but also financially by extending the life of vehicles, minimizing the high cost of breakdowns, and reducing lost employee productivity resulting from fleet downtime.

Work orders should be used to document all maintenance and repair services provided to a vehicle. Procedures also should be in place for monitoring the progress and, where necessary, to expediting the completion of work. These include a process for passing uncompleted jobs from one shift to the next, from one technician or shop to another, and from an in-house garage to a vendor. Procedures also should exist for following up on repairs whose completion by a mechanic or vendor is excessively slow and on parts whose delivery is overdue. The service writer or other individual opening a



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work order should estimate the time and services required to complete a needed service or repair by consulting appropriate repair time estimators or in-house time and task standards to estimate the cost of the repair.

Work authorization procedures should ensure that appropriate controls are in place over the service and costs provided by a vendor. Such controls are particularly important as vehicles approach their planned replacement dates. In order to ensure the cost-effective utilization of in-house maintenance resources and to minimize maintenance and repair turn-around time and downtime, processes should be in place for scheduling work into a shop in advance and for performing minor repairs while the driver/operator waits. Service hours and scheduling processes should be flexible enough to accommodate vehicle users' work schedules, but also should seek to maintain a steady flow of work to mechanics and minimize peaks and valleys associated with scheduled service requests.

Procedures should be in place to distribute work to mechanics so as to promote high levels of mechanic productivity and efficiency and to minimize repair turn-around time; and assign the work to a specific mechanic based on an assessment of mechanics' availability and skills. Additionally, a prioritization system should be used to identify vehicles that are to be moved ahead in the repair queue based on their importance to the customer organization.

Vendors may be relied upon to perform fleet maintenance and repair services for a variety of reasons, including managing in-house work backlogs; avoiding costly investments in facility construction, tooling, training, and staffing to meet low volumes of service demand in remote areas or for specialty repairs; and to achieve a degree of



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flexibility (e.g., in terms of locations, hours of service, etc.) in the provision of services. The cost-effective use of vendors requires, however, that procedures be followed for 1) determining the comparative cost effectiveness of performing a service in house or using a vendor; 2) managing and controlling vendor performance relative to individual service orders and ongoing service levels (in the case of contract providers of services); and 3) capturing all relevant information on vendor-performed services so as to maintain a complete record of vehicle maintenance history and costs and provide for timely user billing via a charge-back system.

Repair quality assurance procedures are used to ensure that requested services are performed properly. When repairs are not completed correctly, the vehicles are often returned resulting in “comeback” repairs. One of the best strategies for avoiding comebacks is to utilize some form of post-repair quality assurance process. Quality checks can range from simple road-tests, to quality checklists, to the complete observation of the repair. No matter what procedure is used, good quality programs are integral to insuring customer satisfaction.

Current practices and customer issues in Portland: Only a few issues were raised by customer bureaus in the area of fleet maintenance. The first has to do with the method of scheduling preventive maintenance services. Currently, PM services are scheduled primarily by time because VSD’s customers have chosen not to record odometer readings when they fuel their vehicles. Occasionally, this results in customers receiving PM service due notices for vehicles that are used infrequently and/or on a largely seasonal basis. This has raised questions in some quarters as to the possibility that VSD is over maintaining vehicles.



These types of questions are easily addressed by explaining to fleet users the rationale behind a good fleet PM program, how the PM scheduling module of *Fleet Anywhere* works, and by customizing scheduling parameters for seasonal and low-use vehicles.

Another issue raised by customers in the area of fleet maintenance relates to warranties. Some customers perceive that VSD does not have an active process in place to identify repairs that are under warranty. VSD should strengthen its practices in this area by utilizing the functionality of the Fleet Anywhere program to help identify vehicles, components, and parts that are covered by manufacturer warranty. Significant cost avoidance and recoveries can be achieved through proactive efforts in this area. Some organizations have outsourced warranty recovery activities to private sector firms that specialize in this service. These firms often perform on a contingent fee basis and are paid by taking a percentage of the money that they recover for their clients. In any event, VSD should also report on its annual warranty recovery efforts as a further way of demonstrating the value of its services.

Another warranty issue relates to VSD providing a warranty for in-house repairs and not charging for repeat repairs. We believe that this is a best practice and helps to improve customer relations. However, customers must understand that VSD has an obligation to recover all of its costs and, therefore, must include the costs not charged for repeat repairs in its rate calculations (just as a commercial vendor does). More importantly, and as noted in a previous section of this report, a fleet industry best practice is to have an active process to track and report on the frequency of repeat repairs.



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A final issue relating to fleet maintenance had to do with the definition of what services are performed in-house versus being outsourced to commercial vendors. The particular customer concern stated relates to the desire to continue outsourcing certain services on specialty equipment to commercial vendors. VSD reports that it has no plans to discontinue this practice.



Appendix A

Consultant Report on Customer Service

January 15, 2003

Prepared by Martha Bueché



**City of Portland
Vehicle Services Division
Consultant Report**

January 15, 2003

**Prepared by Martha Bueché
Bueché & Associates
3918 SE 10th Avenue
PORTLAND, OR 97202**

Purpose: To provide Vehicle Services with Customer Service Feedback that can serve as a basis for the development of needed improvements.

Process: The information in this report represents input that was gathered in two stages.

Section One is input developed in a Group Forum of approximately 15 major customers of Vehicle Services, which was held on December 13 2002. Three representatives of Vehicle Services were also present and the minutes of this meeting have been reviewed and approved by those participating.

Section Two represents input derived during one hour interviews with one or two representatives of the individual Bureaus that were involved in the December meeting. These interviews were conducted the following few weeks and completed before the end of the year. The purpose of the interviews was to capture additional data not presented at the December 13th meeting, and capture data specific to Customer Service issues of individual Bureaus.

In all cases, Customers were asked to share their perceptions about what is working well and less well in relation to the Products and Services that Vehicle Services provides. In addition, customers were asked to link their input to business impacts whenever possible.

Section Three represents overall themes that arose as a result of input collected.



Section One

Data Collected from Dec 13th Meeting

Collected Customer Input on what's working and what needs adjustment

What aspects of services and products provided by Vehicle Services work?

1. Shop located on sites
2. Turn around on maintenance is very good, and seasonal priority on vehicles is good
3. The individual employees and the way they handle themselves professionally
4. Quality repairs across the spectrum, especially considering wide variety exists
5. Quarterly Meetings
6. Monthly status reports
7. Procurement card for small purchases
8. Refueling system - Pacific Pride, the stations, multiple locations, and emergency fuelling
9. Night Shifts - flexibility, specific to night shifts
10. Work to accommodate needs i.e. night shift , emergency response, weather etc
11. Body Shop - very quick, responsive, high quality
12. Turn around of short term rentals
13. New vehicle specifications and preparations, and level of detail on specs
14. Direct bill (authorized to prior cost)

What aspects of services and products need improvement?

WHAT NEEDS IMPROVEMENT

WHAT IS THE BUSINESS IMPACT

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Actual cost info on each vehicle 2. Lack of detailed information on logic behind rate development | <p>Hard to evaluate whether to keep or eliminate vehicle</p> <p>Difficult to understand and manage costs</p> |
|---|--|



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3. Methodology to determine the maintenance schedule being mileage based or seasonal based
Unnecessary services, and premature retirement of the vehicles
4. Vehicle replacement based on time rather cost or usage
Unnecessary servicing, premature retirement plus some vehicles are kept too long
5. One size fits all approach to rate development and replacement
Equipment wears out too fast or too slow, and no incentive for best practices by the user
Customer can't respond quickly
Least cost not assured
6. Tone is of regulatory vs. customer services nature
Can't possibly keep up with the changes
Lack of trust.....
7. Low info and awareness on vehicle ergonomics
Large number of reports of back pain, lower worker productivity. Increased risk issue.
Trend to buy more expensive vehicles increases
8. Don't have the variable cost information to integrate into Customer costs
Can't easily collaborate with fleet to adjust for changes, actual costs don't match
9. Actual cost don't match what you get charged
Can't control costs. Have to balance to bottom line not to actual units of service.
Can't be more efficient
10. No flex for financing alternatives (i.e., lease etc)
Increased cost to the tax payer and timing delay. Acquisition is slowed
11. Lag time from budget availability to on the road is too long
Program costs - unnecessary leases, deferring program activity and looking at temporary solutions
Drives up the maintenance costs
12. The balance of servicing of specialty vehicle in vehicle house vs. out sourced
Response time costs time and productivity
Vehicle time out of service is high



- | | |
|---|--|
| | More back up vehicles are necessary |
| 13. No express lane process available for simple service, i.e. lube | Two to three hour turn around for staff to wait, leads to aversion to maintain, or stalls on appropriate maintenance |
| 14. No method to track down time for vehicles and related cost | Increases the cost of delivery of service. Lose labor productivity and operator efficiencies |
| 15. No credit for vehicle downtime (in repair) | Total cost not reflected, Bureau eats the cost, bureau cost of services goes up. Difficult to prioritize repairs |
| 16. Inaccurate inventory for bill charges and budget | Two or more employees needed to review monthly and redo work
Duplication of work efforts
Budget is inaccurate
Cost reflected unrealistically high |
| 17. No inter bureau communication on fleet | Inefficient use of fleet |
| 18. Charged for vehicles that have not arrived or ready and after they're gone | Charged for services not provided - overcharged. Trust reduced |
| 19. Two way information, especially information back to Customer, is time delayed or not available | Creates suspicion, Customers often rely on rumors and duplicate systems in bureaus |
| 20. Info regarding policy etc. is inconsistently presented | Decisions made base on politics vs. good business judgment
No front end control |
| 21. Vehicle classes undefined, called same class and charged different, or called different and charged the same, | Cost unknown -blind sighted. Annual cost affected by hidden cost consequences |



- different bureau use
different classes
22. Repeat repairs - no warranty Lower motivation on QA. Can't sort out Vehicle Services, parts, operator or manufacturer as problem source
 23. Rely on rate structure Penalty for early retirement
 24. Not a good timely interchange from customer to vehicle services regarding warranty tracking and then back to the customer- system wide i.e. the loop regarding warranty Lose window of opportunity
Reduced incentive to notice warranty
 25. Arbitrary changes with out customer communication i.e. lifecycles lengthened Reduced Trust
 26. Front end communications and follow through with Customers is low Reduced Trust
 27. Roles and responsibility undefined Lost opportunities. Increased duplication
 28. "Not Direct" bill does not have same protocol as "Direct" bill Inappropriate Repairs
 29. Recommendations not followed through after studies Reduced Trust
 30. Revenues for auctioned vehicles may not equal cost of repairs for resale Bureaus eat costs
 31. No definition of standard fees or who makes judgments Lack of clarity
 32. Decision making criteria is not clear Logic behind business decisions questioned



Section Two

Individual Bureau Meetings

Additional Bureau Specific Input

Police Bureau

- Multiple face to face meetings and considerable time and effort to work out issues have been helpful. (Police)
- Informational efforts on the part of Vehicle Services have created more clarity regarding "Cost Basis". (Police)
- When the operational need for a vehicle changes after a vehicle purchase is made, in certain circumstances, necessary adjustments are difficult. (Police)
- Conversations regarding legitimate vehicle specifications are ignored or dismissed. Requests have to be made multiple times with no result. (Police)
- Employees with legitimate expertise in the arena of vehicle specifications and general fleet issues are discounted or patronized. (Police)
- Legitimate data for input to decisions have to be presented multiple times and often with no recognition. This wastes time and increases frustration. (Police)
- In efforts to problem solve, Vehicle Services most often quotes policy rather than focusing on developing solutions. (Police)

Water Bureau

- The complexity of the functions of Vehicle Services is appreciated. (Water)
- Recent conversations have been helpful. (Water)
- Information on total costs for prior year is not detailed. (Water)
- Lack of information and education regarding the billing process hinders business attempts to analyze information and correct problems. Repeated requests for this data are postponed or ignored. (Water)



- In an attempt to be responsive to repair issues staff say yes to repair request only to have the vehicle sit for days. This seriously affects the work out put of the staff assigned to the vehicle. The staff person is on hold or has to be reassigned and efficiency is lost. (Water)
- The practice of tracking mileage only when the vehicle is serviced, makes it very difficult to utilize best practices to manage assets and inventories. (Water)
- The format for monthly charges is unusable and formatted in WORD which has to be converted to a compatible system taking a full time employee over one day per month. (Water)
- Vehicle Services operating on a Calendar Year Basis when the rest of the City operates on a Fiscal Year Basis is inefficient. (Water)
- No "Cradle to Grave" information is ever available for any vehicle. (Water)
- There is no prior notification when a vehicle is removed from service. (Water)
- Use of a one year Warranty is useless because it is never matched with vehicle usage. (Water)
- The final bill for repairs is based on mechanic efficiency and time rather than a set job cost. This results in a lack of mechanic accountability and an inability to evaluate repair problems. (Water)
- Cash financing 100% of Vehicles doesn't match Capitol financing. (Water)
- The perception that the Vehicle Services system is designed to keep the Status Quo at the cost of the overall City is strongly pervasive. (Water)
- There exists a great deal of concern that the use of the "Technical Consultant" to solve any of the above is misplaced and will only result in Vehicle Services maintaining the Status Quo. (Water)
- It will remain unknown as to what true technical issues need to be addressed, until better, more open data is shared with Customers. (Water)
- All of the above issues have been raised numerous times and are repeatedly ignored, postponed or discounted. (Water)



Maintenance Bureau

- A belief that Vehicle Services would genuinely like to have better relationships with their customers exists. (Maint)
- The day to day relationship with line staff is good. (Maint)
- The Bureau Manager reports a positive relationship with the Vehicle Services Director. (Maint)
- The Bureau is not interested in outsourcing the general function of Vehicle Services. (Maint)
- The frustrations that exist are not in the realm of front line service delivery or technical vehicle maintenance issues but rather in the arena of administration. (Maint)
- It is recognized that the History of a Regulatory role for Vehicle Services from City Council has created a platform for some of the current frustrations. (Maint)
- A general tone of information sharing and collaborative problem solving needs to be developed and maintained. (Maint)
- Changes are often announced later rather than explained early. Changes are often viewed to be in the best interest of maintaining the Vehicle Services current position rather than in the best interest of the larger good. (Maint)
- Cradle to grave transaction history needs to be made available on a constant basis for all vehicles, not on a request by request basis. (Maint)
- Lack of information and the general approach to explaining rate methodology is problematic. (Maint)
- The resistance to embrace an entrepreneurial philosophy which could utilize other Bureau resources as well as resources outside of the City cultivates doubts about best value for dollars spent. (Maint)
- Past studies which have culminated in plans which highlight revamping relationships with Customers and a history of raising similar concerns have left doubts that this effort will be followed up with any results that will prove of substantial help. (Maint)



Bureau of Transportation

- Less than open discussions regarding resources and deficits in IT functions within Vehicle Services and current Data Base capacity to track or comply with related Customer requests, results in other Bureaus inability to be of assistance in sharing resources that may help all concerned. (Trans)
- The replacement Fund based on age vs. condition is problematic. The method is a poor indicator and doesn't really help with cash flow problems. (Trans)
- Customers feel "In the Dark" regarding rate methodology and receive mixed messages regarding this area. (Trans)

Bureau of Environmental Services

- Information regarding Rate Methodology is not supplied. Therefore there are concerns as to whether the model used is sound. (BES)
- Lag time necessary to bundle vehicle purchases wastes needed time. (BES)
- Quarterly meetings don't include Vehicle Services Staff at the appropriate level to affect the larger shifts that are needed. (BES)
- The level of Vehicle Services involvement is often mismatched to the level of business need of the customer, ie golf carts and the "anything that has wheels is Vehicle Services domain" philosophy. (BES)
- The tone of Regulatory Control vs. Collaborative Problem Solving results in mistrust and multiple unresolved problems. (BES)

Parks Bureau

- Lag time on vehicle purchases due to Batching creates unneeded down time and especially affects the enthusiasm of new employees. (Parks)
- Parks bureau could save time and money for Vehicle Services, Parks and the City as a whole, if information was shared more openly and Customers were considered as equal players in the problem solving process. (Parks)
- The Organizational Culture of Vehicle Services which is one of a Regulatory Tone and founded on a Cost Plus basis is not working. (Parks)



Bureau of Development Services

- Minor repairs are fixed on the spot and correctly. (Dev Serv)
- Quarterly Meetings are more than adequate to meet needs. (Dev Serv)
- Delays in receipt of new vehicles increase the chances that employees who view themselves potentially "At Risk", will actually file claims rather than wait. (Dev Serv)

Fire Bureau

- The level of trust between Vehicle Services and Fire is reported as critically low or non existent. (Fire)
- Requests for specific vehicles are ignored. Repeated requests are postponed and ignored. (Fire)
- Legitimate expertise is discounted. Therefore pertinent industry data is unused. (Fire)
- When valid business problems are raised employees are patronized or ignored. (Fire)
- Quarterly meetings are useless. Regular, helpful, face to face contact is absent. (Fire)
- Vehicle Services seems uninterested in updating themselves regarding pertinent industry developments in the area of Fire Operations that would maximize effectiveness and safety. (Fire)
- Costs saving innovations or measures that are suggested which would maximize operations and public safety are blocked, ignored or countermanded. (Fire)
- Vehicles ready and needed for current operations have been on hold for more than six months over a color dispute with Vehicle Services. (Fire)
- Upper Management is viewed as unresponsive and uninterested in making a genuine shift in Customer Service. (Fire)



SECTION THREE

Overall Themes

- Customers are requesting a major organizational shift in the style of operations in the Vehicle Services Division. They report that the current tone of regulatory control and or parental benevolence is inappropriate and not longer viable in light of the cultural, economic, and political climate that currently exists in the City.
- The vast majority of concerns related were not in areas of day to day technical operations or relationships with front line staff, but rather in the administrative arena.
- The time it takes to get a Vehicle is problematic.
- In the administrative area, the relationship between Vehicle Services and most of their customers is reported to be in critical condition. Trust is low or non-existent.
- The level of dissatisfaction is in direct relationship to the complexity and the level of involvement that Customers have with Vehicle services.
- Upper Management is viewed as unresponsive and unwilling to change their approach to doing business with their Customers.
- Customers are concerned that current problematic practices are not in the best interest of the City as a whole.
- Many Customers view this project as a token gesture that will result in little or no substantial change and that there is a possibility these findings will not be shared with the appropriate people.
- Every Customer expressed interest in working with Vehicle Services in a collaborative manner to improve the situation. They believed that a long term effort of this nature would benefit not only their operations, but the operations of Vehicle Services and the City as a whole.

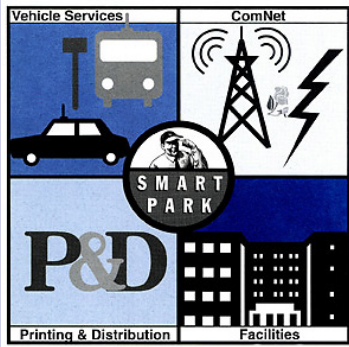


Appendix B

Business Process Improvement Plan Presentation

April 7, 2003

Mercury Fleet Management Consulting



DISCUSSION OF FLEET MANAGEMENT BUSINESS PROCESS IMPROVEMENT PLAN

APRIL 7, 2003

VEHICLE
SERVICES
DIVISION

MERCURY
FLEET MANAGEMENT CONSULTING

PURPOSE OF THE PLAN

- TO RESPOND TO ISSUES AND CONCERNS IDENTIFIED BY VEHICLE SERVICES' CUSTOMERS
- TO IMPROVE CUSTOMER SERVICE LEVELS AND FLEET COST PERFORMANCE
- TO STRENGTHEN ONGOING COMMUNICATION AND COLLABORATION BETWEEN VEHICLE SERVICES AND ITS CUSTOMERS

PURPOSE OF THIS MEETING

- TO PRESENT AN OUTLINE OF ISSUES AND DISCUSS ALTERNATIVES FOR THE PLAN
- TO GAIN CONSENSUS ON PLAN GOALS AND STRATEGIES
- TO DEVELOP AN INITIAL TIMELINE FOR PRESENTATION OF THE PLAN TO CUSTOMERS AND CITY COUNCIL
- TO DETERMINE NEXT STEPS



CUSTOMER SERVICE IMPROVEMENT GOALS

SERVICE IMPROVEMENT GOAL #1

IMPROVE FLEET COST DISTRIBUTION

■ ISSUES

■ SUGGESTED STRATEGY

- IMPLEMENT SERVICE-BASED CHARGE-BACK RATES AND TRANSACTION-BASED CHARGES (I.E., A “DIRECT CHARGE” SYSTEM)**

■ RATIONALE

- SERVICE-BASED RATES AND TRANSACTION-BASED CHARGES CLARIFY THE COSTS OF THE GOODS AND SERVICES PROVIDED TO, AND CONSUMED BY, CUSTOMER BUREAUS**
- DIRECT CHARGES ARE MORE EQUITABLE THAN THE AVERAGE COST-BASED CHARGES CURRENTLY USED**

SERVICE IMPROVEMENT GOAL #1

IMPROVE FLEET COST DISTRIBUTION

■ SAMPLE IMPLEMENTATION STEPS

- SECURE CUSTOMER AND CITY COUNCIL BUY IN**
- DEFINE RATE STRUCTURE**
- ALLOCATE COSTS**
- PROJECT BILLABLE UNITS OF SERVICE**
- CALCULATE RATES**
- ESTIMATE CUSTOMER CHARGES FOR BUDGETING PURPOSES**
- UPGRADE DATA CAPTURE PROCESS**
- DEVELOP BILLING METHODOLOGY**

SERVICE IMPROVEMENT GOAL #2

IMPROVE AVAILABILITY OF FLEET INFORMATION

- **ISSUES**

- **SUGGESTED STRATEGIES**

- **DISTRIBUTE STANDARD AND CUSTOM MANAGEMENT REPORTS TO VSD CUSTOMERS VIA CITY INTRANET**

- **RATIONALE**

- **IMPROVED REPORTING OF FLEET COST AND PERFORMANCE INFORMATION WILL PROVIDE CUSTOMER BUREAUS WITH INFORMATION THEY NEED TO MAKE SOUND BUSINESS DECISIONS**

SERVICE IMPROVEMENT GOAL #2

IMPROVE AVAILABILITY OF FLEET INFORMATION

■ SAMPLE IMPLEMENTATION STEPS

- PROVIDE CUSTOMERS WITH EXAMPLES OF STANDARD *FLEET ANYWHERE* REPORTS**
- DEVELOP REPORT DISTRIBUTION SCHEDULE FOR EACH BUREAU**
- DEFINE CUSTOM REPORT REQUIREMENTS FOR EACH BUREAU**
- DEVELOP REPORTS AND MAKE AVAILABLE ON THE CITY INTRANET**
- ESTABLISH CUSTOMER AD HOC QUERY SERVICE CAPABILITY**

SERVICE IMPROVEMENT GOAL #3

IMPROVE FLEET REPLACEMENT PRACTICES

- **ISSUES**

- **SUGGESTED STRATEGY**

- **REFINE REPLACEMENT PROJECTIONS AND FUNDING REQUIREMENTS**

- **RATIONALE**

- **TIMELY REPLACEMENT OF VEHICLES IS IMPORTANT FOR CONTROLLING VEHICLE AVAILABILITY, SAFETY, RELIABILITY, AND EFFICIENCY**

SERVICE IMPROVEMENT GOAL #3

IMPROVE FLEET REPLACEMENT PRACTICES

- **SUGGESTED STRATEGY**

- **REFINE FLEET PURCHASING PRACTICES**

- **RATIONALE**

- **OPTIMIZING PURCHASING PRACTICES ENSURES THAT THE RIGHT VEHICLES ARE PURCHASED AND DELIVERED IN AS LITTLE TIME AS POSSIBLE**

SERVICE IMPROVEMENT GOAL #3

IMPROVE FLEET REPLACEMENT PRACTICES

- **SAMPLE IMPLEMENTATION STEPS:
REPLACEMENT PLANNING**
 - **BENCHMARK REPLACEMENT CYCLES**
 - **RECALCULATE ANNUAL FUNDING REQUIREMENTS**
 - **CALCULATE REPLACEMENT CHARGES**
 - **DETERMINE FUND BALANCE REQUIREMENTS**
 - **DOCUMENT AND REFINE A SYSTEM FOR SELECTING VEHICLES TO ACTUALLY BE REPLACED**
 - **DEVELOP COMPREHENSIVE DOCUMENTATION OF REPLACEMENT POLICIES AND PRACTICES**

SERVICE IMPROVEMENT GOAL #3

IMPROVE FLEET REPLACEMENT PRACTICES

- **SAMPLE IMPLEMENTATION STEPS:
PURCHASING PRACTICES**
 - **SEEK APPROVAL TO ISSUE MULTIPLE
YEAR BIDS FOR VEHICLES AND
EQUIPMENT**
 - **DEVELOP DELIVERY TIME
REQUIREMENTS FOR EACH VEHICLE
CLASS**
 - **DEVELOP COMPARATIVE VEHICLE
RESALE REPORT**

SERVICE IMPROVEMENT GOAL #4

IMPROVE COLLABORATION AND COMMUNICATION WITH CUSTOMERS

■ ISSUES

■ SUGGESTED STRATEGY

- ESTABLISH VSD'S ROLE AS AN ADVISOR TO CUSTOMERS AND CITY MANAGEMENT AND SHIFT RESPONSIBILITY FOR FLEET COST CONTROL TO CUSTOMER BUREAUS**

■ RATIONALE

- EFFECTIVE MANAGEMENT OF THE CITY'S FLEET REQUIRES A PARTNERSHIP BETWEEN FLEET USING ORGANIZATIONS AND VSD**

SERVICE IMPROVEMENT GOAL #4

IMPROVE COLLABORATION AND COMMUNICATION WITH CUSTOMERS

■ SUGGESTED STRATEGY

- IMPLEMENT PROACTIVE STEPS TO IMPROVE THE ANALYSIS AND DISSEMINATION OF DATA RELATING TO FLEET OPERATIONS**

■ RATIONALE

- NEITHER VSD NOR CUSTOMER BUREAUS CAN EFFECTIVELY MANAGE FLEET RESOURCES WITHOUT READY ACCESS TO MANAGEMENT INFORMATION**

SERVICE IMPROVEMENT GOAL #4

IMPROVE COLLABORATION AND COMMUNICATION WITH CUSTOMERS

■ SAMPLE IMPLEMENTATION STEPS

- CLARIFY VSD AND CUSTOMER ROLES IN THE IMPROVEMENT PLAN THAT IS PRESENTED TO CITY COUNCIL**
- ESTABLISH A CUSTOMER ADVISORY BOARD**
- DEVELOP REPORTS AND DATA QUERY TOOLS AS PREVIOUSLY DISCUSSED**
- DEVELOP A PERFORMANCE MEASUREMENT SYSTEM**
 - DEFINE KEY MEASURES OF SUCCESS FOR THE CITY'S FLEET PROGRAM**
 - ESTABLISH TARGETS OF PERFORMANCE FOR MEASURES**

SERVICE IMPROVEMENT GOAL #4

IMPROVE COLLABORATION AND COMMUNICATION WITH CUSTOMERS

■ SAMPLE IMPLEMENTATION STEPS

- DEFINE SOURCES OF DATA FOR PERFORMANCE MEASURES**
- ESTABLISH REPORTING FORMAT AND FREQUENCY FOR MEASURES**
- ADD A NEW FLEET ANALYST POSITION TO VSD**
- DRAFT JOB DESCRIPTION FOR FLEET ANALYST AND RECOMMEND SALARY**
- RECRUIT FOR POSITION**

SERVICE IMPROVEMENT GOAL #5

IMPROVE CERTAIN ASPECTS OF THE FLEET MAINTENANCE PROGRAM

- **ISSUES**

- **SUGGESTED STRATEGIES**

- **IMPROVE THE CURRENT PREVENTIVE MAINTENANCE PROGRAM**
- **IMPROVE WARRANTY PRACTICES AND REPORTING**

- **RATIONALE**

- **MAINTENANCE PRACTICES IMPACT THE COST, AVAILABILITY, RELIABILITY, AND SAFETY OF FLEET EQUIPMENT**

SERVICE IMPROVEMENT GOAL #5

IMPROVE CERTAIN ASPECTS OF THE FLEET MAINTENANCE PROGRAM

■ SAMPLE IMPLEMENTATION STEPS

□ PREVENTIVE MAINTENANCE

- COLLECT METER READINGS IN THE AUTOMATED FUELING SYSTEM**

□ WARRANTY PROGRAM

- DEVELOP WARRANTY RECOVERY REPORT**
- DEVELOP WARRANTY PROGRAM FOR VSD PROVIDED SERVICES**

EXECUTING THE PLAN

- **PRIORITIES**
- **TIMELINES**
- **ACTION PLANS**
- **DELIVERABLES**
- **RESPONSIBILITIES**
- **RESOURCE REQUIREMENTS**