Getting in the Driver's **BEVENCE**Seat with Local Fleet Costs

hile fleet maintenance may not be a glamorous topic in local government circles, it is an area that can have dramatic effects on departments and can consume a significant portion of a locality's budget. A city with a population of 200,000, for example, can expect to spend \$4 million a year on vehicle and equipment maintenance. In spite of this large expenditure, managers often have little information on whether resources are being used effectively in this important area of operations.

Issues surrounding fleet management often center on controlling maintenance costs, maintaining vehicles and equipment in a manner that extends their useful life, controlling growth in the size of the fleet, and budgeting accurately for maintenance costs. Unfortunately, in addressing these issues, the goals of fleet management often are at odds with those of user departments. When budgets are tight, for example, vehicle maintenance often is reduced to avoid cuts in other areas of departmental operations. Departments then sacrifice preventive maintenance and delay needed repairs, often causing higher repair costs and shorter useful lives for the vehicles.

User departments, on the other hand, often complain that services performed by internal fleet departments are more costly than those done by outside commercial repair shops and that outside shops can offer faster turnaround, thereby reducing a department's downtime.

To address the concerns of both resource use and effective vehicle maintenance, Garland, Texas, assigned its

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newly formed Organizational Development Team (ODT) to perform an in-depth study of the city's fleet operations. ODT took a two-pronged approach to the study. First, it identified the operating costs and productivity levels of the city's fleet services department. From this information, billable rates were calculated and compared with those of outside commercial repair shops and other local governments.

The second half of the study developed an internal warranty program designed to encourage proper vehicle maintenance. This article presents an overview of both aspects of the study.

Garland's Fleet Services

Garland's fleet services department is an internal service fund that derives its operating revenue from services it performs for other city departments. The revenue generated should, in theory, be sufficient to cover the operating expenses of the department. The revenue structure traditionally used was based on an hourly rate for mechanical services and on a mark-up on part and fuel purchases.

The hourly rate for mechanical services applied to all service work, with no distinction made among repairs, preventive maintenance, body work, and other services provided by the fleet services department. The cost of parts was billed directly to user departments, along with a percentage mark-up to cover overhead expenditures incurred in purchasing and stocking the fleet's parts inventory. In addition, the percentage markup on parts was applied to any repair work sent to outside vendors. The fuel mark-up was added to each user department's fuel bill and was designed to recover expenses incurred in maintaining the city's fuel system and pumping stations.

Garland's Internal Warranty Program allows fleet managers to provide maintenance ********************************** at levels that will prolong the life of the city's fleet.

Fleet Cost and Rate Calculations

To address the efficiency of the fleet services department, total operating costs were calculated based primarily on the department's current budget. Once identified, these costs were allocated to three categories, which included repairs and maintenance, parts overhead, and fuel overhead. The amounts allocated to each category then were divided either by the previous year's billable mechanic hours, parts, and commercial repairs, or by the cost of fuel, to arrive at current billing rates.

An example of expense allocations and calculations of fleet rates is shown in the next column.

Fleet Rate Calculations

Fleet Services'	Operating Costs
Repairs	\$1,000,000
Parts	\$200,000
Fuel	\$100,000

Billable Mechanic Hours (25 mechanics @ average of 1,200 hours) \$30,000

Cost of Parts and Commercial Repairs \$1,600,000 Cost of Fuel \$1,000,000

Hourly Labor Rate \$50.00 Mark-Up on Parts 12.5% Mark-Up on Fuel 10.0%

The hourly rate for labor is a measure both of fleet services' operating efficiency and of the productivity level of the department's mechanics. In our example, fleet mechanics produced an average of 1,200 wrenchturning hours (wth) each in the previous fiscal year, while the national standard used by commercial repair shops is 1,500 wth annually. Therefore, the productivity level of our hypothetical mechanics was 20 percent below the national standard. Hourly labor rates based on assumptions of increased productivity would include the following:

Hourly Labor Rates and Productivity Levels

Hourly Rate	Annual Wth ¹ Per Mechanic
\$50.00	1,200 (previous year's wth)
\$44.45	1,300 % of national standard)
\$40.00	1,500 (national standard)

¹Wrench-turning hours.

A survey of local commercial repair shops and other local governments was conducted to collect rates for comparisons with Garland's internal fleet rates. In Garland's case, the survey results indicated that increases in productivity, reductions in operating costs, or a combination of both, would be necessary to provide repair and maintenance work at market rates.

As a result of ODT's study, fleet rates have become a major performance measure for Garland's fleet services department. Each year, rates are recalculated to indicate how efficiently resources are being used by fleet management. In addition, the recalculated rates are compared with those of commercial shops in the area to instill a sense of competition between the city's internal fleet department and external repair shops.

Internal Warranty Program

Annual Flat Rate per Vehicle. The second aspect of the study involved developing an alternative fleet management system that would encourage proper vehicle maintenance. The system developed by ODT also is designed to warrant programs offered by private dealerships and therefore has been named the Internal Warranty Program.

Under the program, each classification of vehicle is assessed a flat annual fee, which is paid by the user department. The annual fee covers all preventive maintenance, repair work, and parts required for the vehicle during the fiscal year.

From a maintenance standpoint, the Internal Warranty Program offers a key advantage. As discussed earlier, under the traditional hourly-rate fee structure, departments may be tempted to sacrifice preventive maintenance and to delay needed repairs due to budget constraints. Payment of a predetermined amount for fleet services eliminates this disincentive for departments to maintain their vehicles properly. The results should be lower overall repair cost and extended fleet life.

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From a budgetary standpoint, a benefit of the Internal Warranty Program is that city departments know, at the time the budget is prepared, what their maintenance and repair costs will be for the coming year. The need to bill departments for each individual service provided by the fleet services department also is eliminated.

Following is an overview of fleet services' Internal Warranty Program:

Fleet Services Internal Warranty Program

Included in Comprehensive Coverage:
Preventive maintenance
Routine maintenance
Repairs and parts
Tire repairs and replacements
Towing and road service
Services performed by outside
vendors (if authorized by fleet
services department)
State inspections

Excluded from Coverage:
Damage to body or glass
Non-factory-installed equipment
Damages due to misuse or
alteration
Fuel cost

Cost:

Annual fixed charge per vehicle

Services not covered by the Internal Warranty Program are billed to user departments based on the traditional hourly-rate structure. In addition, Garland continues to bill user departments a surcharge on fuel.

Flat-Rate Calculations. As a part of ODT's study, proposed flat rates were calculated for each classification of vehicle and equipment. Flat rates are, in effect, an average of repair and maintenance costs for each classification of vehicles and equipment. To arrive at these rates, the fleet services billing system was used to identify historical maintenance costs for each classification. These costs were adjusted to include a factor for inflation and to build in a contingency to cover anticipated changes in maintenance levels. The total adjusted classification costs were then divided by the number of vehicles in the class to arrive at a flat rate.

Designing a flat-rate structure that is fair to all departments is difficult because vehicle use and driving conditions differ among departments. Also, because flat rates are based on average repair costs, those who make light or limited use of their vehicles are penalized. This, however, can serve to reduce the overall size of the fleet because it may become more economical for departments to pay employees mileage rather than to provide a city vehicle for occasional use.

While calculating annual fleet rates gives managers a tool to measure efficiency, Garland's Internal Warranty Program allows fleet managers to provide maintenance at levels that will effectively prolong the life of the city's fleet. Combining these two approaches can give jurisdictions a framework for building more efficient and effective fleet maintenance operations.

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