

# DEVELOPING 'COMMERCIAL' CHARGEBACK RATES

**By Sal Bibona**

## INTRODUCTION

When fleet managers are asked how competitive their maintenance operations are, or how the costs of the fleet services they provide compare to the commercial market, they need to know what their true costs are and how these costs should be properly structured for charging back their customers and making comparisons to outside vendors. This will entail estimating the fully burdened labor rate of their mechanic's labor and charge back rates for providing vehicles and other fleet services.

In developing these rates they may want to know whether corporate and department overheads should be included in their rates, and if so how high up the organizational hierarchy of costs they should include. They may wonder what is a fair comparison to the \$60 per hour labor rate being charged by the dealer, or the \$25 per hour vehicle rate being charged by their local rental equipment vendor. Conversely, they need to know what is being included or not in the commercial sector rates so that fair and meaningful comparisons can be made.

This article attempts to address these issues so that fleet managers will be in a better position when their upper management questions them on how competitive their fleet operations and charge back rates are. We would submit that good charge back rates, whether for supplying mechanic labor, supplying a vehicle, or providing fleet management services should be:

- Accurate,

- Equitable,
- Stable,
- Capable of fully recovering relevant costs,
- Calculated as economically as possible,
- Easy to understand and use,
- Encouraging the efficient use of resources,
- Able to facilitate cost comparisons and decision-making,
- Able to meet regulatory requirements such as FERC and GASB, and
- Capable of handling different vehicles situations like permanently assigned versus pooled vehicles.

## FULLY BURDENED LABOR RATE

Analogous to what a dealer charges for their mechanics' labor is the fully burdened labor rate for public service fleets. This rate is the sum of costs attributed to maintenance and repair services divided by the amount of billable hours that mechanics charges to direct work.

What is direct work? It consists of the amount of "wrench turning" time that can be charged to vehicles. It should not be confused with the term "productive" work. A mechanic may be productive by performing some ancillary duty, such as servicing a natural gas compressor station, but this time should be considered indirect time, unless it is charged directly back to customer.

The principal cost elements of utility or other public service fleet operations are illustrated in Exhibit 1. These consist of personnel, materials, supplies and services, financial costs and non-departmental costs. To develop the fully burdened labor rate of mechanic labor, our focus should be on the costs elements highlighted in the upper section of Exhibit 1. These are the sum of wrench turning (direct) and non-wrench turning (indirect)

time of the mechanic staff plus the costs of maintenance supervision and shop aides, and the portion of fleet management attributable to maintenance operations.

Also, to be included are: indirect costs of services and supplies; shop rents and maintenance; consumables charged to shop overheads and not to specific vehicles; and, fleet information systems costs attributed to maintenance management. (The costs of parts personnel can be excluded if they are treated separately as a markup to parts issues.) The sum of these direct and indirect costs is divided by the total billable hours of the mechanic staff to yield the fully burdened labor rate.

Now, to what extent do utilities actually incorporate these costs elements when charging back their fleet customers for their mechanics' labor? We recently surveyed utilities on this issue. From our research we found, as illustrated in Exhibit 2, that while all the respondents include direct labor costs in the labor charge backs, not all include other costs that they should like fringe benefits, payroll taxes and mechanic supervision.

Similarly, the American Public Works Association (APWA) conducted a survey; and, reported in its "Managing Public Equipment," 2<sup>nd</sup>. Ed, August 2000 that not all public works fleets fully included the costs that should make up a fully burdened shop rate. (See in Exhibit 3.)

## DEALER RATES

What do dealers include in the charges for their mechanic services? As illustrated in Exhibit 4, total shop costs plus profit are divided by the billable mechanic hours to yield

the so called dealer “shop rate”, i.e., the rate the dealer charges its customers. The shop costs consist of mechanic staff, non-productive staff, plus fixed expenses such as facility improvements rents, and utilities.

We should point out that if the parts operation is considered to be a separate profit-center, then the costs of that operation would be separated out and be reflected in the mark-ups applied to parts sales. Still, market forces in addition to besides cost factors play a role pricing parts to customers. These include parts volumes, customer type, and competition.

A recent survey by the National Association of Automotive Dealers (NADA) provides some further information on these matters. Shop work is an important stream of profits to dealers. The service and parts business accounted for 53% of dealership profit in 2000 according to the “NADA 2001 Data” survey. Also, average shop rates were \$60 per mechanic hour.

Other industry data reveal that mechanics achieve are expected to achieve a “billability rate” of 125%. This rate represents the ratio of the amount of mechanic time “sold” or billed to customers to the actual amount of time worked. As many fleet managers realize, the flat rate manual typically has estimated service times that are slightly longer than what a good mechanic would need to complete the service. Thus, ambitious mechanics, particularly those on a commission basis, can increase their income by beating the expected times of the flat rate manuals and performing as much work as possible. The customer will be charged the same, the stipulated flat rate, regardless of the actual time the mechanic needed to perform the work task.

Moreover, mechanics are expected to bill about 90% of their “available time”. Available time in the commercial sector is defined

slightly different than that in the public service sector. The commercial sector’s available time equals the net time remaining after time for holidays, vacation and illness have been deducted. In contrast, in the public service sector available time generally is taken as the gross amount of time in the year, 2,080 hours.

Thus, a 90% billability rate in commercial time equates to an 80% utilization rate of public service time, obtained as follows:

- 52 weeks in the year less 6 weeks assumed for holidays, vacation, and sickness equals 46 weeks of commercial available time.
- $90\% \times 46 \text{ weeks} = 41.4 \text{ weeks} \times 40 \text{ hours per week} = 1,656 \text{ hours}$ .
- $1,656 \text{ hours divided by } 2,080 \text{ hours in year} = 80\%$ .

This distinction is important when comparing utilization or billing rates among public service and private vendors.

### **CHARGING FOR VEHICLES AND OTHER FLEET SERVICES**

When the fleet manager is asked to compare the costs of providing a vehicle versus renting one instead, two important considerations are vehicle costs and vehicle usage. Vehicle costs consist of acquisition (whether vehicle is purchased or leased), maintenance, repair, outfitting, and placing into service. They also include the costs of specifying, insuring, licensing, and registrations. Please refer again to the diagrams of Exhibit 1, which illustrates the various cost components of providing vehicles and fleet services.

### **Utilization Versus Possession Rates**

Vehicle usage is a very important factor in calculating charge back rates and must be carefully understood. Dividing total fleet costs by the expected or reported usage of the vehicle in miles or hours produces what is referred to as a “utilization-based” rate. A major disadvantage of this approach is that

there is little incentive for customers to accurately report the utilization of their vehicles. However, it should be noted that if utilization is accurately reported, it could be used to evaluate the economics purchasing a vehicle versus renting one. More on this point latter.

A “possession type” of rate avoids this difficulty by charging customers based on the time that they possess the vehicle. A possession rate can be calculated by dividing the annual costs of a specific vehicle or class of vehicles by the total number of workdays per year. A customer, in turn, is charged based on the number of workdays that the customer has the vehicle in their possession.

An alternate method to calculate a possession rate, but still incorporating utilization, is to: divide the annual costs by the number of work hours in the year; and, then charge the customer eight hours of utilization for each day they possess the vehicle. The customer, in turn, charges the use of the vehicle to their respective projects or departments. For those vehicles, used less than eight hours per day, the unused time is charged to a default overhead account. Thus, the customer is still being charged for the time that they possessed the vehicle regardless of their actual usage of the vehicle.

With good utilization data, the fleet managers as well as customers are in a better position to evaluate whether they should possess the vehicle in the first place or should rent a unit instead. Dividing vehicle acquisition, maintenance and repair costs by actual vehicle usage will produce a rate that can be compared to the hourly or mileage rent charged by commercial vendors.

### **Direct Actual Versus Average Rates**

When ownership and operation expenses are charged directly to the specific vehicle, users pay for the actual costs of operating the vehicle. Alternately, when these costs are aver-

aged per vehicle class, customers are paying on a so-called “socialized basis”. Depending on the type of expenses being charge back, averages can be based on per mile, per hour or per vehicle.

There are advantages and disadvantages to each approach. Under the direct approach, users know they are being charged only for the costs of their specific vehicles. However, this approach may require more elaborate cost accounting. It can also lead to periodic spikes in rates when unusual or extremely expensive repairs are charged in a particular month to a vehicle account. Therefore, to avoid this situation some fleets use a “rolling average” approach to smooth out vehicle specific costs through time.

Under the average approach, or “socialized” approach the customer is charged on based on the average ownership and/or maintenance costs for the vehicle type. Some customers may object to this approach when they feel that they may be inadvertently paying for excessive repair costs caused by other departments’ misuse of vehicles and mounted equipment. However, this approach does have advantages in that it is easier to calculate and that users will know what their costs will be in advance.

A case can be made that this approach mostly closely resembles the approach in renting a commercial unit. A customer pays on the basis of the type of unit rented not the

age of the individual unit. However, successful application of this approach necessitates charging vehicle damage costs directly to the specific customer, like rental vendor would, and not averaging the costs among different customers.

Finally, if there are wide fluctuations in vehicle ages among the customer bases, then one could argue that separate rates, newer versus older equipment, should be developed. The commercial analogy would be renting late model or more productive equipment instead of older less productive equipment.

### **How Utilities Are Charging**

Our most recent fleet management survey sought to answer how utilities charge back their customers for vehicles. From this survey we found that:

- The majority (54%) use average rates rather than direct rates.
- Less than half (42%) include such corporate overheads like:
  - Information Technology,
  - Human Resources,
  - Facilities Management
  - Material Management
  - Shared Services
  - Fringe Benefits

### **OTHER ASPECTS**

Charge back rates can be structured to include both ownership and operating expenses in one rate such as a flat fee, or be split into ownership and operating components. The ownership component can be used as part of

an equipment replacement-funding program. The operating component can be used to recover annual vehicle operating or variable costs associated with maintenance, repairs and fuel.

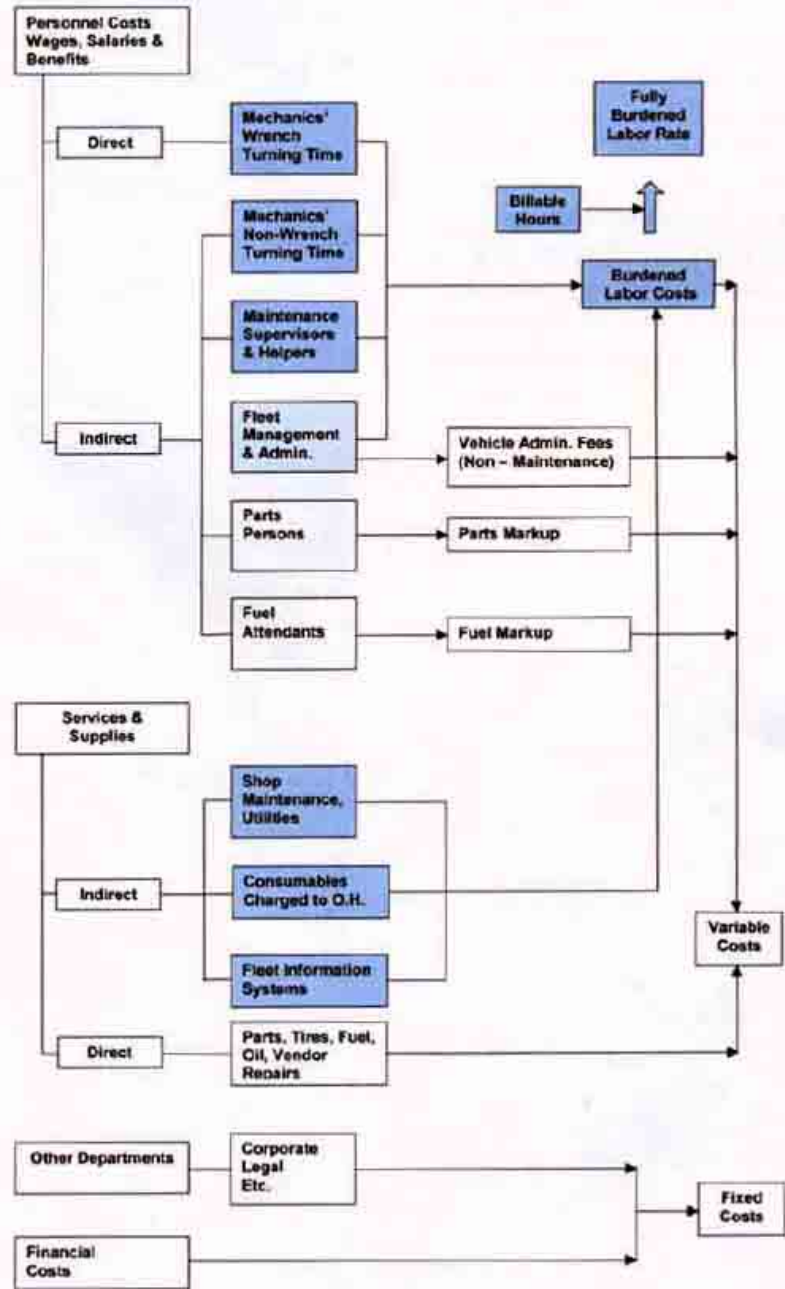
Further refinement can be made to the charge back rate structure. For example, if fleet administration costs can be easily separated out, these can be charged backed on the number vehicles that customer has. Materials management costs can be charged as a markup to parts costs. Similarly, fuel administration costs can be charged as a markup to fuel costs.

Another variation is charging less for *temporary* use of a vehicle that is being surplused. Also, incentive rates can be developed for customers to use motor pool vehicles instead of being assigned a vehicle. Nevertheless, fleet managers should periodically compare their motor pool rates to those that could be negotiated from a car rental company to assess whether the fleet should remain in the motor pool business, or whether this should be outsourced to a private vendor.

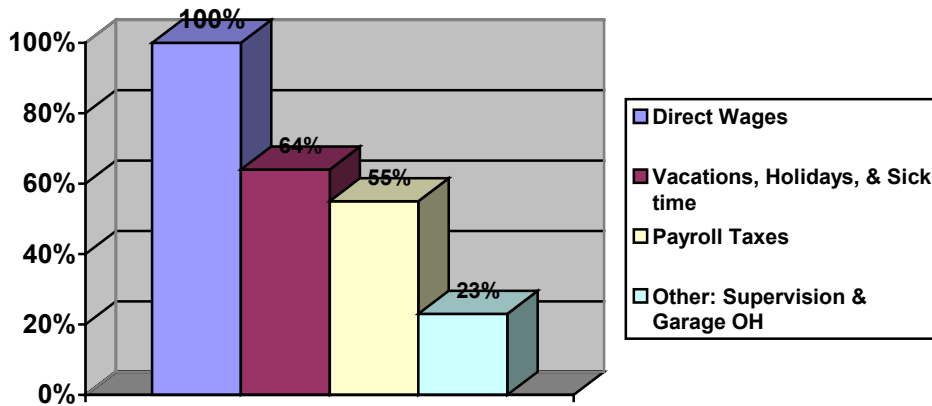
In any event fleet managers need to know and understand the costs of providing various fleet services. Otherwise, they will be unable to adequately answer the question, “How competitive are we?”

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### Exhibit I: Categorization of Public Service Fleet Expenses



### Exhibit II: Percent of Utilities Including Certain Cost Elements In Their Labor Chargebacks



### Exhibit III: Percent of Public Works Fleets Including Certain Costs Elements In Their Labor Chargebacks

