

You Can't Manage Costs that You Can't See

How a Cost Charge-Back System Can
(and Can't) Drive Fleet Cost Savings

Paul Lauria

MERCURY

Accounting Terms

- Funds
 - *Governmental*
 - General Fund
 - *Special revenue*
 - Highway trust or “road” fund, fire and rescue fund, etc.
 - *Proprietary*
 - Enterprise
 - Internal service
 - Revolving
 - Sinking or reserve
- Cost clearing account

Cost Management Terms

- Costs
 - Capital
 - Operating
 - Direct
 - Indirect
 - Overhead
 - Allocated
 - Avoidable
 - Non avoidable
- Allocation, Charge Back, Distribution, Recovery

Why do organizations use fleet cost charge-back systems?

1. To determine and recover the costs of using fleet assets for specific activities, programs, and/or projects
2. To allow for the payment of fleet asset capital costs over time
3. To distribute the costs of certain General Fund activities to non GF fleet users who otherwise might not pay their fair share of them
4. To improve the management and reduce the costs of fleet resources

How can a cost charge-back system improve resource management?

- The mere distribution of costs doesn't do so, but the *manner* in which costs are distributed can do so.
- In order for a charge-back system to improve resource management, the costs of fleet resources must be made *visible* and *comprehensible*.
- In the realm of fleet management, cost visibility makes it possible to assess cost *reasonableness* (or the lack thereof).
- The ability to assess the reasonableness of costs is essential for creating *accountability* for costs.
- Cost accountability is essential for effective cost *management* and *control*.
- No organization can effectively manage costs that it cannot see, cannot understand, and for which it cannot hold the appropriate parties within the organization accountable.
- Caveat:

In order for a cost charge-back system to improve cost management, the providers and consumers of the resources must be *allowed* to manage their costs.

Alternative Fleet Cost Distribution Methods

- Proportional Cost Allocation
- Time-Based Charge-Back Rates
- Usage-Based Charge-Back Rates
- Service-Based Charge-Back Rates

Proportional Cost Allocation

Fleet asset costs are allocated to user organizations (agencies, districts, business units, etc.) based on each organization's percentage share of the total number of assets in the fleet or of total prior-year(s) fleet costs

Proportional Cost Allocation

Advantages

- Easy to calculate and apply
- Easy for user organizations to budget for and “pay”
- Supports the equitable distribution of fleet costs at the user organization level

Proportional Cost Allocation

Disadvantages

- Creates minimal visibility of, accountability for, and incentives to proactively manage fleet costs, including service delivery and consumption costs and trade-offs between fleet asset capital and operating costs
- Does not support the allocation of fleet asset costs to specific employees, activities, or programs within a given fleet user organization

Time-Based Charge-Back Rates

- Costs are charged to users based on increments of time (usually months) that fleet assets are in their possession
- *Operating* cost rates are based on the average costs of all the fleet assets of particular types in the fleet
- *Capital* cost rates can be based on the average cost of all assets of particular types, or on the costs of individual assets

Time-Based Charge-Back Rates

Advantages

- Easy to calculate and apply compared to usage and service-based rates
- Easy for user organizations to budget for and pay
- Support the equitable distribution of fleet costs at the user organization and asset class level and of certain costs – such as asset replacement – at the individual asset level

Time-Based Charge-Back Rates

Disadvantages

- Create limited visibility of, accountability for, and incentives for proactively managing fleet costs, including service delivery and consumption costs
- Make it difficult to see and hence manage trade-offs between fleet asset capital and operating costs (to the extent that the rates are designed to distribute both types of costs)
- May treat individual users of fleet assets of a particular type inequitably due to being based on the average cost of all the assets in the fleet of that type (depending on the granularity of the rate classes used)
- Do not support the allocation of fleet asset usage costs to specific employees, activities, or programs

Usage-Based Charge-Back Rates

- Costs are charged to users based on the number of miles, engine hours, or clock hours that an asset is operated
- Rates are based on the average costs of the assets of particular types
- Rates can be used to recover asset capital and/or operating costs

Usage-Based Charge-Back Rates

Advantages

- Difficult to calculate and apply compared to proportional allocation and time-based rates due to reliance on the timely and complete capture of asset usage data
- Easy for user organizations to budget for and pay barring significant variations in their fleet asset usage levels from one year to another
- Readily support the allocation of fleet asset usage costs to specific employees, activities, or programs – especially for cost reimbursement claiming purposes
- Support the equitable distribution of fleet costs at the user organization and asset class level and of certain costs – such as asset replacement – at the individual asset level

Usage-Based Charge-Back Rates

Disadvantages

- Create limited visibility of, accountability for, and incentives to proactively manage fleet costs, including service delivery and consumption cost
- Make it difficult to see and hence manage trade-offs between fleet asset capital and operating costs (to the extent that the rates are designed to distribute both types of costs)
- May treat individual users of fleet assets of a particular type inequitably – albeit less so than time based rates – due to being based on the average cost of all the assets in the fleet of that type

Service-Based Charge-Back Rates

- Rates are based on the fully loaded (direct and indirect) cost of each type of service provided to fleet users (e.g., asset acquisition and disposal, in-house M&R labor, in-house parts and fuel management, motor pool operation, etc.)
- Costs of goods and services procured on behalf of fleet users (e.g., parts, fuel, third-party upfitting and repair services) are passed through at actual cost, with markups to recover the costs of their procurement, inventory management, and disbursement
- Costs are charged back to fleet users primarily on a per-transaction basis via monthly invoices or billing reports

Service-Based Charge-Back Rates

Advantages

- Create good visibility of, accountability for, and incentives to proactively manage fleet costs, including service delivery and consumption costs
- Make it easy to see and hence manage trade-offs between fleet asset capital and operating costs
- Treat fleet user organizations and individual users within organizations equitably (assuming rates are calculated correctly) by tying charges to the actual costs of managing and operating individual assets
- Support the allocation of fleet asset usage costs to specific employees, activities, or programs with limited additional computational effort

Service-Based Charge-Back Rates

Disadvantages

- The most difficult types of rates to calculate and apply compared to proportional allocation and time-and-usage-based rates due to reliance on sound cost allocation methods and the timely and complete capture of M&R and fuel transaction
- Somewhat more difficult than other charge-back methods for fleet user organizations to budget for and pay charges due to the “real world” unpredictability of fleet repair requirements and fuel costs

Developing Service-Based Rates

1. Identify costs to be recovered
 - Capital versus operating
 - Budgeted versus recent and YTD actual
 - Budgeted versus total
2. Define rate structure

Rate Structure Design Considerations

- Cost Visibility and Accountability
 - Logical and directly tied to specific goods and services
 - Capable of being benchmarked
- Impact on Behavior
 - Customer
 - Fleet management organization
- Administrative Effort
 - Data capture
 - Billing

Developing Charge-Back Rates

1. Identify costs to be recovered
 - Capital versus operating
 - Budgeted versus recent and YTD actual
 - Budgeted versus total
2. Define rate structure
3. Create cost pools
 - Overhead costs
 - Service delivery costs
 - Pass-through costs
4. Develop cost allocation statistics
5. Allocate projected line-item costs to pools and sum
6. Project annual volume or value of goods and services to be consumed by fleet users
7. Divide total annual goods and services costs by volumes/value of goods and services to be consumed to determine unit cost or cost markup

Typical Service-Based Rate Structure

- **Asset Management** – fixed monthly fee per asset; can be tiered based on asset capital cost
- **Fuel** – actual average cost paid per gallon/gallon equivalent times quantity of gallons consumed per transaction
- **Fuel Management** – fixed cents per gallon/gallon equivalent markup times quantity of gallons consumed per transaction
- **In-House M&R Parts**– actual cost(s) paid times quantity(ies) consumed per transaction
- **In-House Parts Management** – percentage markup times actual costs paid for item(s) consumed
- **Sublet Services** – actual cost paid for services procured per transaction
- **Sublet Services Management** -- percentage markup times actual cost paid for services procured
- **In-House M&R Labor** – fully loaded rate(s) per hour times *actual* number of hours spent per transaction
- **Motor Pool Vehicle Rental** – fully loaded rental rate(s) per day times number of days rented per transaction

Sample Service-Based Charge-Back Rate Model

Implementing and Using Rates

- Developing usage-based rates from service-based rates
- Customer budget forecasts
- Unpredictability of charges
- Scrutiny of fleet management organization performance – the Jiffy Lube question
- Using rates to gauge competitiveness
- Involvement of maintenance technicians and other employees
- Billing and collections

Recap

- Good cost charge-back systems make fleet asset and fleet management costs visible
- Visibility enables fleet users to scrutinize and manage the costs of the resources they consume, and for management to hold users accountable for such consumption
- Such scrutiny also enables fleet users to hold fleet management organizations accountable for the costs of the fleet resources they deliver to fleet users
- Accountability for the costs of both the provision and consumption of fleet resources fosters engagement and collaboration in the management of such costs
- Engagement leads to decisions and behavior that reduce fleet costs
- Not all of the costs in a fleet management organization's budget, and hence in its charge-back rates, are determined or controlled by the organization; nor are all of these costs avoidable
- Don't confuse reasonable unit costs or charge-back rates with reasonable service delivery costs

For More Information

Paul Lauria

Mercury Associates, Inc.

plauria@mercury-assoc.com

301 519 0535

www.mercury-assoc.com

