



**Internal Service Fund
Rate Development and Billing
for Fleet Management**

BY BRENT WAHL

Fleet management agencies are usually internal service funds, and a wide variety of methods exist for calculating and collecting charges. While some are better than others, all of these methods generally work. For some agencies, however, the methodology of rate calculation and collection may drive behavior that is counterproductive to good asset management and the best interest of fiscal stewardship. This article will explore strategies for using rates and fee collection to create incentives for good asset management behavior.

PRICING AS A TOOL

Pricing is a powerful tool that has been used to drive consumer behavior throughout the world, and it can also be used to drive behavior in your organization. Although internal service funds cannot subsidize or charge less for services than they actually cost, they can ensure that the lowest-cost alternatives are available and not lumped in with less efficient options. This situation often occurs in vehicle and equipment fleets where vehicle types are consolidated into “classes” for billing purposes. Costs are assigned to fleet users or customers based on vehicle use, and rates are determined for each class to better align the billing with the actual costs of maintaining the fleet vehicles. Although more billing classes require additional calculation and management, ensuring a situation where the most cost-effective sedan is in its own class, instead of being lumped in with more expensive vehicles, gives customers the opportunity to make the best decisions.

Regularly reviewing the class assignments can also help, as new vehicle models come, go, and change over the years. For example, the Ford Explorer has grown in size and cost from its early years and is now a more upscale and costly vehicle, but it is sometimes put into the same vehicle and billing class as the Ford Escape, a smaller and sometimes more cost-effective SUV. Given the option of paying the same price for both, most internal service fund customers will select the larger Explorer instead of the more economical Escape.

Another price tripping point is the “free” asset. Some organizations allow vehicles to stay in the active fleet after a

replacement vehicle is acquired, charging only maintenance costs—a good deal from the perspective of the department using the vehicle but bad of the government overall. This is because most vehicles that are kept past the effective economic replacement point cost the parent agency more money by allowing “fleet creep,” where the size of the active equipment fleet grows and loses value as the asset depreciates year after year.

FUEL HEDGING

This is one of the most misunderstood and underused benefits of operating an internal service fund. The idea of fuel hedging (i.e., fixing fuel prices from a vendor for a fixed period of time) to straight-line operating expenses is so appealing to private industries that some pay the additional “insurance” fees, in the forms of higher prices, just to avoid the potential one-time spike. Local governments can replicate the same hedging process by using the internal service fund and the reserves associated with it, allowing the agency to be much more aggressive in fuel price estimating instead of “padding” fuel estimates. Fund shortfalls are recovered in future periods, and excesses are returned to the customers through future reductions.

There are generally two options for hedging. Fuel is either held at a certain price for the year, regardless of cost, or a price “ceiling” is established, and fuel can be charged at any level below that price, but not above. For example, Exhibits 1 and 2 show fuel budget calculations and expenditures for two years under these hedging scenarios, with County X getting aggressive with price estimating.

Although the County X net of actual versus budget for the two-year period shortfall is only \$150,000, the shortfall of \$750,000 in Year 2 would have to be carried in the 12-month period in which it occurs, resulting in short-term operational effects on staffing and levels of service. The hedging versions, on the other hand, 1) allow more budget funds to be allocated to other activities up front, 2) provide a buffer to hold the shortfall for a period of years and allow funds to be recovered gradually, with much smaller effects on the County X budget, and 3) allow the buffer to be funded by years where the county over-collects (e.g., the Year 1 example, where the hedge

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Exhibit 1: Acquisition Costs, Year 1

Acquisition costs run at \$2.40 for the entire year and throughput is 1 million gallons.

	Throughput (Gallon)	Estimated Dollar/Gallon	Price Buffer/Gallon	Budget Dollar/Gallon	County X Budget	County Expense	Budget Variance	ISF Net
No Hedge	1,000,000	\$2.50	\$0.05	\$3.00	\$3,000,000	\$2,400,000	\$600,000	\$-
Hedge at Budget	1,000,000	\$2.50	\$-	\$2.50	\$2,500,000	\$2,500,000	\$-	\$100,000
Hedge at Cap	1,000,000	\$2.50	\$-	\$2.50	\$2,500,000	\$2,400,000	\$100,000	\$-

Exhibit 2: Acquisition Costs, Year 2

The price holds for two months at \$2.65, then spikes drastically to average \$4.00 for the year — but the 1,000,000 throughput estimate holds true.

	Throughput (Gallon)	Estimated Dollar/Gallon	Price Buffer/Gallon	Budget Dollar/Gallon	County X Budget	County Expense	Budget Variance	ISF Net
No Hedge	1,000,000	\$2.75	\$0.50	\$3.25	\$3,250,000	\$4,000,000	\$(750,000)	\$-
Hedge at Budget	1,000,000	\$2.75	\$0.25	\$3.00	\$3,000,000	\$3,000,000	\$-	\$(1,000,000)
Hedge at Cap	1,000,000	\$2.75	\$0.25	\$3.00	\$3,000,000	\$3,000,000	\$200,000	\$(1,200,000)

was at the budget number). These particular two years, of course, are examples of what would be considered “extreme” years, but this provides some insight into the hedging approach and the impact it can have on budget development.

POINT-OF-SALE PRICING

Point-of-sale collection can be a sensitive process, as it can make internal service fund customers feel that they will benefit their agencies by shopping for “better” pricing. The best examples of this are generally fuel and “time and materials” shop billing. As an example, City A supplements its in-house fueling operation with fuel credit cards that can be used when city sites are not close by. This approach will cause some drivers to start looking at fuel prices for “savings.” If they see the agency fuel island posting a fuel price of \$2.10 a gallon (\$1.80 a gallon cost plus \$0.30 per gallon mark-up), and the “cheap” station

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in the neighborhood is at \$2.08 a gallon, they will think they are saving money by purchasing fuel from the neighborhood station. What they fail to see is that the acquisition costs are the same, but instead of paying their own agency the \$0.30 needed to maintain the fuel operations and infrastructure,

they are paying the vendor \$0.28. This scenario has a spiral effect, as every gallon purchased outside the agency increases the next year’s mark-up, as it will be based on less volume.

To avoid this problem, governments can apply the charges associated with maintaining the fuel operations and infrastructure as a lump sum at the beginning of the year and sell fuel at the agency pump at cost. This eliminates the potential “shopping” by the driver. The calculation is done by taking the total cost of supporting the fuel activity, which was calculated in the rate development, and distributing it through all departments, based on previous year’s fuel throughput and

Exhibit 3: Breakout of \$200,000 in Fuel Activity Costs in City Y

Department	Agency Site (Gallon)	Credit Card (Gallon)	Total Gallon Used	Percent of Total	Department Change
Fire	50,000	10,000	60,000	12%	\$24,000
Police	200,000	100,000	300,000	60%	\$120,000
Public Works	100,000	–	100,000	20%	\$40,000
Parks	20,000	20,000	40,000	8%	16,000
Total	370,000	130,000	500,000	100%	\$200,000

using agency fuel sites and credit card volume. See Exhibit 3 for a summary of the mathematical operation, using a scenario in which four departments use a total of 500,000 gallons per year, with an annual fuel activity cost of \$200,000 (including capital replacement, as all rates should).

A quick check of the calculated cost per gallon markup ($\$200,000/500,000 \text{ gallon} = \$0.40/\text{gallon}$) confirms that the percentage-of-use calculation will offer the same net result. This technique is sometimes criticized because the overhead is charged on previous fuel use history, but it 1) ensures that users make the best decision for their agency, not just their department or section, and 2) captures the overhead costs that go with supporting the fuel card programs, which often go uncalculated.

ASSET MANAGEMENT AND COSTS FOR SERVICE

Time and materials charging can also be counterproductive to good behavior. Like the fuel scenario above, paying for shop services as they occur can cause users to “save money” by delaying turning vehicles in for scheduled services. Of course, this only creates higher costs in the long run by creating more failures. To avoid this problem, the most effective rate development methodology is charging an operating cost per mile or cost per period.

Fuel hedging allows more budget funds to be allocated to other activities upfront. It also provides a buffer to hold the shortfall for a period of years and allow funds to be recovered gradually, with much smaller effects on the budget, and it allows the buffer to be funded by years where the county over-collects.

FEES

This can also be an excellent way to target a specific behavior that is counterproductive to good asset management, the two most common of which in the fleet industry are minimum usage and idling.

Minimum usage can be a very effective tool for agencies that create charge-backs based on usage, otherwise known as a cost-per-mile or cost-per-hour rate. The cost-per-mile rate may lead customers to attempt to control costs by managing their usage. Although users could turn in low-use vehicles and save the replacement cost, they often decide to pay the replacement costs and just not drive the vehicle, reasoning that they might need the asset someday. This scenario causes a shortfall in maintenance costs for these vehicles, as they still require service based on the individual repair shop’s standards (often four- or six-month minimum intervals). For example, Department A only drives a vehicle for 160 miles over a six-month service interval. Department A is charged \$0.35 per mile and thus only generates \$70 in revenue for the internal service fund, likely well short of the operating costs for the period. The revenue shortfall versus expenditures is then passed on to other vehicles.

Several of the major fleet management information systems have a minimum usage application that is generally easy to implement. Common trigger points range from 200 to 400 miles per month. To help reward good behavior, internal service funds should track the additional revenue from this fee and reduce the following year’s rates for other vehicles. For example, a vehicle billing class that drives 100,000 miles and costs \$30,000 to operate will charge \$0.30 a mile. However, if the agency has a 200-mile-a-month minimum charge, and the previous year’s additional minimum usage revenue (charged in addition to the actual miles driven by the low-mileage units) was \$3,000, the rate for the next year can be set at \$0.29 a mile, creating a reward for the agencies that use their vehicles appropriately and driving better behavior in the future.

Idling is one of the hidden cost drivers of fleet operations across the world. An average hour of idling in the common sedan used by agencies is approxi-

mately equivalent to 25 miles driven. Many governments have implemented an anti-idling policy, but they remain difficult to enforce without the use of vehicle monitoring technologies (telematics, or GPS-style technologies). Agencies that have telematics can apply this fee like the minimum mileage charge is applied. A special field can be added to your fleet management information systems (most aren't set up with it) to which the telematics data can be imported. This field can be set up like a second odometer, and the amount of idle time can be added to the vehicle record throughout its life. Like the minimum usage fee, idling charges should be set up to reduce the overall cost of the class and provide a cost reduction for the remainder of the vehicles.

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methodologies can be used to drive better customer department behavior and result in better asset management and taxpayer savings. Your government's procedures may not accommodate all of the strategies outlined in this article, but it should allow some, if not most. You might also want to contact neighboring local governments to find out what rate development techniques they use. And keep in mind that benchmarking is one of your most effective tools. |

CONCLUSIONS

Internal service fund rate development and collection

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