

Proposed Methodology for Cost Comparisons

This provides a structured approach for making cost comparisons between in-house and contract service delivery. The approach outlined here is based on: 1) public financial management thinking; 2) the best identified practices of federal, state, and local governments; and 3) a desire to keep the process as simple as possible while ensuring a high degree of validity.

Determining the Total Cost of In-House Service Delivery

The total cost of providing a target service in-house, also known as the fully allocated cost, is the sum of its direct costs plus a proportional share of organizational overhead, or indirect costs.ⁱ When the direct and overhead costs of a target service are identified, the resulting dollar amount constitutes the *fully allocated cost*, or total cost, of providing a target service in-house.ⁱⁱ

$$\text{In-House Fully Allocated Cost} = \text{Direct Costs} + \text{Share of Indirect Cost}$$

A. Direct Costs

Direct costs are those cost items that only benefit, and thus are totally (100%) chargeable to a service. Examples of direct costs include the salaries, wages, and fringe benefits of government employees who work exclusively (100%) on the in-house delivery of a service, as well as the costs of supplies, materials, travel, printing, rent, utilities, communications, and other costs consumed or expended for the exclusive benefit of a target service.

B. Direct Costs Frequently Overlooked

Some direct-cost items are routinely overlooked when computing the cost of providing a service in-house and thus warrant special mention. Frequently overlooked cost items include: interest costs, pension costs, and facility and equipment costs.

Interest Costs: Interest on capital items purchased for the exclusive (100%) use of a service through a bond issue or other financing arrangement should be included as a direct cost of in-house service provision. For example, a fire truck purchase that is financed will typically take interest payments from a local government's general fund, but this cost should be counted toward the cost of fire-protection services. (Equipment costs are handled below.)

Pension Costs: The pension costs of government employees who work exclusively (100%) on a service should be included as a direct cost of in-house service provision regardless of whether the government fully funds the pension plan or not. Unfunded and underfunded pension plans *defer*, but do not *avoid*, these costs.

Facility and Capital Equipment Costs: Facilities and capital equipment used exclusively (100%) for a service should also be included as a direct cost of in-house service provision. Depreciation costs can be computed, or, if depreciation is not appropriate or no depreciation schedule exists, a use-allowance factor can be computed. (Use allowances are employed for those capital items for which no depreciation schedule exists. For most municipal items, depreciation is appropriate.) Even when no actual cost is incurred, a use allowance factor should still be included because the asset could be used for other government purposes or sold.

C. Overhead Costs

Overhead costs, or indirect costs, are cost items that benefit the service and at least one other government service, program, or activity. The expenses of various administrative and support services provided to a target service by other governmental departments are overhead costs.ⁱⁱⁱ Examples include: salaries, wages, fringe benefits, supplies and materials, travel, printing, rent, utilities, communications, and other costs that benefit the target service and at least one other government service, program, or activity. A check should also be made to ensure that overhead costs include applicable interest costs, pension costs, and depreciation or use- allowance costs on shared facilities and equipment. If not, these costs should be added to applicable overhead costs.

Overhead costs are generally apportioned among government services, programs and activities according to some allocation scheme. The most common methods are *personnel costs*, *total direct costs* and the *step-down* method.^{iv} The personnel-cost method assumes that overhead costs are proportional to the number of employees (or full-time equivalent employees). The total direct-cost method assumes overhead is proportional to the budget of the target service. And the step-down method divides all departments into either support or production departments, and works by allocating all the costs of support departments to the other entities they serve.

Many state and local governments have automated accounting systems capable of identifying, tracking, and allocating overhead costs. Frequently, state and local governments develop overhead or indirect cost rates that are simply applied to the personnel or total direct costs of a target service.

Determining the Cost of Contract Service Delivery

The total cost of contract service delivery is the sum of: 1) contractor costs; *plus* 2) contract administration costs; *plus* 3) an allowance for one-time conversion costs; *minus* 4) off-setting revenues.

A. Contractor Costs

Contractor costs may be the easiest component of contract-service delivery costs to compute. Contractor costs are simply the total costs a contractor proposes to charge for performing the target service. Contractor costs can generally be taken directly from a contractor's bid or proposal. There is one exception though, true performance-based contracts where final contract price can fluctuate based on the performance of the contractor. However, there generally is a cap which can be used.

B. Contract Administration Costs

Contract administration costs may be the most difficult component of contract-service delivery costs to compute. Contract administration can be defined as all those activities that take place from the time a decision is made to contract out until the contract is fully executed and final payment is made.^v Contract administration costs include: procurement, contract negotiations, contract award, the processing of amendments and change orders, the resolution of disputes, the processing of contractor invoices, and contract monitoring and evaluation.

$$\text{Total Contracting Cost} = \text{Contractor Cost} + \text{Administration Cost} + \text{Conversion Costs (Amortized)} - \text{New Revenue}$$

Informed Judgment: E. S. Savas, a nationally recognized expert on contracting, estimates the cost of contract monitoring *exclusive of other contract administration costs* at between 2 and 7 percent of contractor costs.^{vi} John Rehfuss, another contracting expert and a former city manager, suggests that the cost of contract monitoring *again exclusive of other contract administration costs* is probably closer to 5 or 10 percent of contractor costs.^{vii} *This cost may depend on what sort of service is contracted, and the ease with which it can be objectively measured and monitored.*

The state should already conduct at least some monitoring of in-house service delivery; so contract-monitoring costs should not represent entirely new costs.

When all contract administration costs *not just monitoring costs* are considered, estimates can increase substantially. A reasonable estimate for contract administration costs is between 10 and 20 percent of contractor costs.^{viii} A general rule of thumb in applying this cost range would be to move toward the higher end of the range for small dollar contracts and the low end of the range for large dollar contracts. In instances where existing staff are assigned contract-monitoring responsibilities, the low end of the range should probably be used.

C. One-Time Conversion Costs One-time costs are sometimes incurred when converting a service from in-house to contract service delivery. Examples of one-time conversion costs include: 1) personnel-related costs; 2) material-related costs; and 3)

other costs. When substantial one-time conversion costs are involved, these costs should be amortized over multiple years. The *front-end-loading* of substantial one-time conversion costs into one year can skew cost comparisons between in-house and contract service delivery in favor of the former.^{ix}

Personnel-Related Costs: include unemployment compensation, accrued annual and sick-leave benefits, and other severance items that must be paid to terminated government employees. This can be avoided if there are not any reductions-in-force. Every effort should be made to reposition existing employees into other positions.

Material-Related Costs: include costs associated with the preparation and transfer of government property or equipment to be made available to a contractor for use in providing a target service.

Other Costs: include any other one-time conversion costs, such as penalty fees associated with terminating leases or rental agreements, the costs of unused or underused facilities and equipment until other uses are found or they are sold, and other costs associated with the transition.

D. Off-Setting Revenues

An off-setting revenue is any new or enhanced revenue stream (e.g. state or local income, sales, property or other taxes, user fees, etc.) that will accrue to the government as a result of contracting out a target service. An item here that is sometimes overlooked is revenue to be derived from the sale or other disposition of facilities or equipment made redundant as a result of contracting out a service. Any amount included in this section represents a *deduction* from the cost of contract service delivery.

E. The Total Cost of Contract Service Delivery

When contractor costs, contract administration costs, and one-time conversion costs are combined and reduced by any off-setting revenues, the resulting dollar amount represents the total cost of contract service delivery.

Comparing the Costs of In-House and Contract Service Delivery

A. When to Use Fully Allocated Costs

As noted earlier, the total cost, or fully allocated cost of providing a service in-house is the sum of its direct and overhead indirect costs. Cost comparisons using fully allocated costs are useful in determining if the in-house cost of providing a target service is comparable with private-sector market prices.^x The state of Texas, for example, routinely compares the fully allocated cost of in-house service delivery with private-sector market prices. If the fully allocated cost of in-house service delivery is greater

than 110 percent of the prevailing private-sector market price, the state agency must reduce its costs within a specified period of time or the service may be targeted for contracting out. (Need to check for accuracy)

B. When Not to Use Fully Allocated Costs

The use of fully allocated costs is generally inappropriate in estimating the *savings* to be realized by contracting out a target service that is currently being conducted in-house. In other words, the amount of money that is likely to be saved is not simply the difference between fully allocated in-house costs and the total contracting cost. This is because contracting out does not generally result in a dollar-for-dollar reduction in governmental overhead costs. For example, the contracting out of a target service, or a portion thereof, may result in decreasing the workload of service departments like personnel, finance, and facilities management but the workload reductions may be insufficient to have any significant effect on the costs of maintaining these departments. When attempting to determine the potential cost savings associated with the contracting out of a target service, the appropriate in-house costs to use in the comparison are the *avoidable costs*.

C. Avoidable Costs

Avoidable costs are those in-house costs that will not be incurred if a service, or portion thereof, is contracted out.^{xi} How-to contracting books,^{xii} as well as several contracting-out guides prepared by state and local governments,^{xiii} recommend the use of avoidable costs when assessing the likely cost savings achievable through contracting out. The use of avoidable, or incremental, costs is also the generally accepted managerial accounting approach to conducting the financial component of a business *make-or-buy* decision.^{xiv} Determining which in-house costs are avoidable is not a simple task. Of course, virtually all direct costs will be avoidable. But ascribing what portion of overhead costs are avoidable is a matter of judgment, and depends largely on three factors:

1. The determination of the public sector to reallocate resources efficiently;
2. The extent of the privatization effort, both in the service area and in other services that employ the support of the same government departments; and
3. The time period in which resource allocation is expected to occur.

Resource Reallocation: In the private sector, the decision to discontinue a particular function is usually accompanied by a swift reallocation of resources in support areas as well. For example, a company that eliminates a product line that accounts for 30 percent of sales will not only eliminate those positions directly involved in manufacturing that product, but is also likely to reduce the size of support staff, such as personnel, procurement, accounting, etc., by something approaching 30 percent. The private sector has a strong incentive to reduce overhead as much as possible. The public

sector lacks such strong incentives, and the extent to which overhead costs can be avoided in the wake of contracting out is partly a function of political will.

Extent of Privatization: The reduction in overhead costs is related to the extent of the privatization. There is a cumulative effect to be considered, in that contracting out not only in the target service but in other services which make use of the same overhead support functions influences the potential for overhead reduction. For instance, contracting out a service with only five employees would be unlikely to reduce overhead by any appreciable amount, *unless* several other small programs were also being contracted out as well. Several small contracts, which considered separately would have a negligible impact on overhead, could in the aggregate reduce overhead significantly.

Time Factor: There are many costs that cannot be avoided in the short term that may be avoidable in the long term. For example, contracting out of a portion of transit service may leave a public entity holding a lease for more storage and maintenance capacity than is necessary. In the *short term*, that cost may be unavoidable, but in the *long term* the public entity could decline to renew the lease. Similarly, there may be instances in which contracting out leaves a public entity overstaffed but legally obligated not to lay off workers. In the short term, this represents an unavoidable cost, but in the long term, staff levels could be reduced to efficient levels through attrition.

Avoidable costs can never exceed fully allocated costs. You can never avoid more than the service currently costs to provide. Over the long term, however, an organization should reconfigure itself so that overhead is adjusted downward to an efficient level. MIT's Jonathan Richmond has written that "in the longer term, as a general rule...marginal costs approach and converge with fully allocated total costs."^{xv} In this way, fully allocated costs can be thought of as the long-term theoretical upper limit of avoidable costs.

This emphasis on avoidable costs does not mean that computing the fully allocated costs of providing a service in-house is a superfluous exercise. In order to determine the costs to be avoided by contracting out, the fully allocated costs of in-house service delivery must first be determined. And, as mentioned previously, fully allocated costs are appropriate when comparing operating efficiencies of the public and private sectors.

In all cases, the sought-after figure when estimating cost savings should be:

$$\text{Avoidable Costs} - \text{Total Contractor Costs} = \text{Cost Savings}$$

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- i. *Fully Allocated Cost Analysis: Guidelines for Public Transit Providers* (Washington, D.C.: Price Waterhouse, 1987), p. 1.
 - ii. *Ibid.*, 1987.
 - iii. David E. Ammons, *Administrative Analysis for Local Governments* (Athens, GA: University of Georgia, Carl Vincent Institute, 1991), p. 88.
 - iv. In the step-down method, the costs of support-service departments (e.g., finance, procurement, facilities management, etc.) are allocated to user departments (i.e. line units that directly service citizens) based upon the actual amount of support services received during some prior time period or the anticipated amount of support service to be received in some future time period. For a more detailed explanation of the step-down method see: *Guide To Implement the Competitive Cost Review Program* (Austin: Office of the State Auditor, State of Texas, 1989), pp. 28-31.
 - v. Peter M. Kettner and Lawrence L. Martin, *Purchase of Service Contracting* (Beverly Hills: Sage Publications, 1987).
 - vi. E. S. Savas, *Privatization: The Key to Better Government* (Catham, NJ: Catham House, 1987), p. 260.
 - vii. John A. Rehfuss, *Contracting Out in Government* (San Francisco: Jossey-Bass, 1989), p. 96.
 - viii. See Martin, 1992.
 - ix. These cost categories were developed by the City of Cincinnati. See City of Cincinnati, 1985, p. 17.
 - x. Stevens, 1984.
 - xi. Donald W. Dobler, David N. Burt and Lamar Lee, *Purchasing And Materials Management* (New York: McGraw-Hill, 1990), p. 156.
 - xii. For example: John Tepper Marlin, ed. *Contracting Municipal Services: A Guide for Purchase from the Private Sector* (New York: John Wiley & Sons, 1984); Kelley, 1984; Rehfuss, 1989; and Dobler, Burt and Lee, 1991.
 - xiii. For example: *Privatization Assessment Workbook*, Colorado State Auditor's Office, 1989; City of Cincinnati, 1985; Office of the State Auditor, State of Texas, 1989.
 - xiv. Ray H. Garrison, *Managerial Accounting*, 6 ed. (Homewood, Ill: Richard D. Irwin, 1991).
 - xv. Jonathan Richmond, "The Costs of Contracted Service: An Assessment of Assessments," MIT Center for Transportation Studies, July 20, 1992.