

GEORGETOWN UNIVERSITY



FINANCIAL AFFAIRS MANUAL

Issuing Department Administrative Services Compliance and Cost Accounting	Topic: Service Centers	Policy # FA-122-04	
New	Revised 03-04-2011	Supersedes Policy CSAFA 3-1	Effective Date: 10/01/2003

100.01 POLICY:

Recharge Centers, Service Facilities, and Specialized Service Facilities

100.02 STATEMENT:

Georgetown University has many departments and other units that provide goods and services to other university departments and only incidentally to customers outside the university. Examples of this activity include campus-wide providers like Telecommunication, Information Systems, and Mail Services. Many departments establish accounts to which costs are charged initially, before they are allocated to user/benefiting cost centers, such as the monthly allocation of central supplies or postage charges.

All charge-back centers are subject to the cost principles set forth in the federal Office of Management and Budget's (OMB) Circular A-21, **Principles for Determining Costs Applicable to Grants, Contracts and Other Agreements with Educational Institutions**, as revised August 8, 2000. Circular A-21 addresses the questions of service pricing. The principles are designed to provide recognition of the full allocation of cost to such functions as sponsored research under generally accepted accounting principles. The circular allows NO profit or other increments above cost when the ultimate customer is the federal government. The rules in Circular A-21 allow break-even to be achieved over a long-term basis, if the government and the university agree in advance to a long-term objective.

100.03 APPLICABILITY:

This policy applies to all University service centers. Questions regarding any part of this policy should be addressed to the office of Cost and Sponsored Accounting. **Auxiliary enterprises are not subject to this policy.**

100.04 PURPOSE:

This policy provides guidance and procedures covering the financial operation of service centers in order to ensure their compliance with generally accepted accounting practices; applicable laws and regulations; and requirements of sponsored agreements.

100.05 ADMINISTRATION:

A. ESTABLISHMENT

Service Center Establishment. To establish a new service center, the following information must be provided to the appropriate approving authorities using the Service Center Form (Attachment A)

1. A description of the services to be provided and a listing of the potential users/customers;
2. A rationale for providing the services internally as opposed to utilizing an external source;
3. A projection of annual costs and revenues (i.e., annual budget);
4. Billing rate calculations and their comparison with the rates of external providers (wherever possible).

Service centers/recharge centers must be approved by the officials responsible for the departmental organization. All service centers require the approval of the Dean, Department Chair, or Administrative Director.

Service Facilities and Specialized Service Facilities require the additional approval of the responsible Executive Vice President or Vice President; Sponsored Programs Office and/or Research and Technology Development Services; and Financial Affairs' Cost and Sponsored Accounting. These additional approvals are necessary to ensure compliance with Cost Accounting Standards' requirement for consistency between the methods used to propose and the recording of costs within the accounting system; and revision of GU's Disclosure Statement if necessary.

Post Establishment or Currently Existing Centers.

1. Service Center are to submit a financial statement reflecting that center's general operations for the fiscal year just complete, and projections as to the planned operations for the next fiscal period. Suggested formats may be found in Attachment B and GU's template for service centers found on SAO's Cost Accounting web page.
2. At least annually, each Service Facility (SF) and Specialized Service Facility (SSF) will submit a proposal for the subsequent year's billing rates. The billing rates should be submitted annually at least 90 days prior to the start of each fiscal year. One copy of the proposal should be submitted to each of the required approving

authorities, listed above. A suggested format may be found on the Cost Accounting web page.

The responsible approving authorities will review the proposals for accuracy, completeness, and compliance with this policy and applicable regulations. The authorities will communicate their approval or rejection of the SF/SSF's proposal within 45 days of its receipt. If the proposal is rejected, the rejecting authority will provide a written explanation(s) as to why the proposal is being rejected and make recommendations to the SF/SSF as to what must be done to gain approval. The SF/SSF will incorporate the recommendations and resubmit the proposal for continued review at the level of the rejecting authority.

The office of Cost and Sponsored Accounting (CSA) will be provided with copies of all approvals or rejections by the approving authorities. CSA will be the depository for all the approvals/rejections. NO revisions to currently applicable billing rate will be authorized until all approvals have been received by CSA. CSA will notify General Accounting Office, Information Systems, and the other necessary parties for any changes necessary in the accounting system resulting from adoption of any new billing rates. CSA will also assume the lead responsibility for negotiating with the federal agency.

CSA will notify the Executive Vice President and Treasurer's office of any SF/SSF's failure to comply with this policy. The EVP&T will notify the center that it has 15 days in which to bring its operations into compliance and that failure to do so will result in that center losing its privilege to bill other departments for their products or services. This will not relieve that center from being required to continue providing the services to the benefiting cost centers. However, the SF/SSF's home department will have to "cover" all cost of the center from the department's operating budget and these cost will not be billable to sponsored programs as either direct or indirect costs. This loss of billable cost will result in the loss of revenue to the University.

B. BILLING

1. Billing Rates. In all cases, all users must be charges for the product or service in the same manner and where applicable the same rates. No provision for profit or any other incremental increase is to be included in the billing rate computations, unless sales to outside customers are anticipated. If sales to outside customers are anticipated than the center shall propose two rates, one for the Institutional customer and one for the non-institutional customer. **The billing rates for non-institutional customers can never be less than that charge to our most favored customer, the Federal government.** A billing rate(s) is the result of dividing the total estimated cost for the products or services, including departmental support and institutional indirect costs (if applicable), by the estimated total number of those products or services to be produced/provided during the accounting period.

2. Service Center billing rates should be designed to recover only direct operating costs for the product or services rendered. The service center will be responsible for developing the documentation necessary to support the charges being made to the benefiting departments. This documentation may include a sale slip, invoice, repair job order, etc., and the receiving department should acknowledge receipt of the product or service by evidence of an approval signature. The service center will be responsible for retaining all documentation in support of their billings in compliance with the University's record retention policy.

3. Service Facility billing rates are only slightly more complicated than those for Service Centers in that not only are direct costs to be recovered in the billing rate but some departmental support costs may be recovered. Departmental supports that may be included in the billing rate include such function of the department's administration as billing costs, accounting services, etc. At no time will expenditures that are specifically unallowable be included in the billing rate. The SF center will be responsible for retaining all documentation in support of their billings in compliance with the University's record retention policy.

4. Specialized Service Facilities billing rates are somewhat more complicated than those for the SF. The billing rates for an SSF include not only the direct cost of the product or service, plus a portion of the departmental support costs but also some recovery of the University's indirect costs such as rent, utilities, interest, building and equipment depreciation, as well as some other indirect expenses. These additional indirect expenses may only be available from the office of CSA, therefore, it is recommended that the SSF representative contact the CSA Cost Accountant early in the development of the SSF billing rate. The SSF center will be responsible for retaining all documentation in support of their billings in compliance with the University's record retention policy.

C. ACCOUNTING

1. Cost and Revenue Segregation and Allocation.

Cost and revenue should be segregated into organizations (cost centers) for each service that is provided. Depending on the type of service center, there may be as many as three categories of cost that need to be allocated (1) costs that are directly related to providing the services <direct operating costs>, (2) internal service center support costs, and (3) institutional indirect costs. In all three cases, the cost should be distributed to services on an equitable basis that reflects the relative benefit each service receives from the cost.

If individuals work on multiple products or services, their salaries and fringe benefits should be equitably distributed on the basis of the amount of time they devote to each product or service. Service center support costs and institutional indirect costs could be equitably distributed on the basis of total direct operating costs associated with

each service. The office of Cost and Sponsored Accounting (CSA) is responsible for determining the amount of institutional indirect costs that are allocable to each SSF.

2. Services Provided to Users External to the University.

Service centers that provide products or services directly to external customers/users may charge billing rates higher than those charged to internal users. Amounts charged to external users in excess of rates for internal users should be excluded from the computation of surpluses or deficits carried forward in the calculation of future rates.

Sales tax must also be charged to external users when applicable. Revenue from external users may result in unrelated business income, therefore, such arrangements should be approved in advance by the Tax Accounting Office of Financial Affairs.

3. SF/SSF Operating Surpluses and Deficits.

OMB's Circular A-21 allows Institutions to operate SF and SSF with the objective of "breaking-even" over a period of time. In order to achieve this object the SF/SSF must adjust the billing rates of one period by any surpluses or deficits experienced in a prior period. This practice is call "rolling over" or "carrying forward" surpluses and deficits. The carrying forward of one year's operation to another generally results in increases and decreases in the estimated cost and resulting billing rates of that subsequent period. To minimize the impact such carry forwards may have on your rate(s) we suggest that you review your projections for the current year whenever there is a significant change in your center's business structure and adjust the billing rates accordingly. Carry forwards are illustrated in the accompanying examples. (See also definition number 7 Subsidized Service Centers below.)

4. Equipment

Expenditures for capitalized equipment purchases should not be included in the costs used to establish service center billing rates. The depreciation of capitalized equipment should be included in the computations for SF & SSF if and only if a portion of the billings equal to the depreciation's contribution to the billing rate is set aside in a restricted account for the purpose of that service center having the funds it will need in the future to purchase, replace, or modernize the equipment needed in the future. (If depreciation expense is included in the billing rate such depreciation expense **must** be excluded from the Institution's F&A computation.) When new, modernized or up-graded equipment is needed, an amount equal to its cost (or reserve account balance) will be charged to the replacement reserve account. The restricted reserve fund **may not** be use for any other purpose, nor may it be used for ordinary and necessary repair of equipment. If such a restricted account is not established then the depreciation expense will not be included in the billing rate computation and the expense will stay in the Institutional F&A rate computation. A letter of understanding agreeing to the establishment of a restricted reserve account requirements will be filed with each billing rate proposal and the restricted reserve

cost center will be identified. With each subsequent proposal must contain a reconciliation of the restricted reserve account(s).

Per OMB Circular A-21, Section J.22.e. Interest expense on equipment purchases is not allowable unless the equipment is valued at over \$10,000 and the funds are borrowed from a source external to the University.

No depreciation expense may be claimed on equipment purchased entirely with federal funds. If equipment is purchase in part with government funds and in part with University funds than depreciation may be taken on that portion funded with University funds but not for the government's portion. Contact the General Accounting Office or CSA for the most recent depreciation schedules and proper depreciation method.

A listing (including GU's inventory tag number) of equipment being depreciated and included in the service center's billing rate must be provided with the annual proposal to the CSA. This will ensure that such equipment is not included in the depreciation portion of the University's F&A rates (indirect cost rates) charged to federally sponsored programs.

The receiving/benefiting department must record the SSF's billing in an account that is treated as an excluded direct cost when computing the indirect cost recoverable from the sponsor. This is because the University's F&A cost applicable to the SSF has been included in the billing rate and the University may not recover F&A on F&A. SSF billings will be treated similar to the treatment afforded to direct charged rent and equipment when computing billings to the sponsors.

5. Transfer of Funds Out of Service Centers

Surpluses cannot be transferred out of service center accounts to subsidize other University operations.

6. Inventory of Goods Held for Sale

If a service center sells products and has a significant amount of stock on hand, inventory records must be maintained. A formal inventory account is necessary if the value of the inventory exceeds \$50,000 at any given point in time. A physical inventory should be taken annually and reconciled to the inventory account. Any variance between the physical inventory's valuation and the value reflected in the financial record will require a journal entry adjusting the financial records, **not** to the inventory value. Inventory valuations may be based on any generally recognized inventory valuation method, e.g., first-in-first-out, last-in-first-out, average cost, etc.; however, once the method of valuation has been established that method may not be changed without advanced approval of all approval functionaries listed in 100.05. If the rates have been negotiated with the government the University may need to receive that agency's approval in advance also. The method of inventory valuation

will be disclosed when the center is established or the first year in which an inventory exceeded \$50,000.

7. Subsidized Service Centers

In some instances, the University, or a school or department, may elect to subsidize a service center either by charging billing rates lower than actual costs or by not making adjustments to future billing rates at year end for deficits. Service center deficits caused by intentional subsidies cannot be carried forward as adjustments to future billing rates, nor may the subsidized expenses be included in the University's F&A rate computations. Subsidies are in effect considered "voluntary unallowable" or aka "voluntary cost sharing" expenses and as unallowable expense or cost sharing cannot be recovered through the F&A rate nor as a direct cost to any sponsored programs. Since subsidies can result in a loss of funds to the University, they should be provided only when there is sound programmatic rationale and with the advanced approval of the Dean, Department Chair, or Vice President. Any subsidies will be identified as a separate line item in the billing rate schedules. (See attachment C)

8. Long-term Breakeven Agreements

Long-term break-even agreements may be established for service centers in unique situations where they require multiple years to recover or spread out their operating costs. This kind of situation might occur where initial capital outlays are large or when large volume fluctuations are expected. Such agreements are negotiated with DHHS by the CSA office of Financial Affairs.

9. Record Retention

Service centers **must** keep all original records of rate calculations, billings, collections, units of service provided, costs and revenues, surpluses and deficits including all worksheets and detailed backup, for a period of three years from the end of the fiscal year in which this information was used. (See GU's policy for more details on record retention especially if federally funded sponsored programs are involved.) <http://financialaffairs.georgetown.edu/policytc.html>

100.06 DEFINITIONS

Service Center (general)

An organizational unit or activity that performs specific technical or administrative services primarily for internal University operations and charge the users for these services. There are three basic types of service centers; (a) recharge units, (b) service facilities, and (c) specialized service facilities.

(a) Service Center/Recharge Unit (SCR): A service center/recharge unit provides goods or services that do not represent the major activity of the generating department. Annual direct operating costs of the recharged activity are under \$50,000 and the services are intended as a convenience to faculty, staff and students. Rates are based on direct costs only. An example

of a recharge unit would be charges for photocopying in the Law Library or postage stamps from the mail service.

(b) Service Facility (SF): A service center providing goods or services that represent a major activity of the generating departments and may involve both direct and indirect cost allocations. Annual activity of this type of service center will generally exceed \$50,000 but will be less than \$1,000,000. Examples of this type of service facilities are the Media Education, Mail handling.

(c) Specialized Service Facility (SSF): A service center providing highly complex services, not generally available from outside vendors to the University. Annual costs exceed \$1,000,000 and include internal service center support costs and possibly institutional indirect costs. Examples of specialized service facilities are the Research Resource (Animal) Facility, Telecommunication, and Temporary Personnel Pool.

Of the three types of service centers above, the Specialized Service Facility category is the type that will most likely require negotiation with the cognizant federal agency. This is because they have been identified ("disclosed") to the government in the Cost Accounting Standards Board's Disclosure Statement (DS-2) that was originally filed in 1998 and revised in 2002.

One of the main purposes for the establishment of service centers is to allow the Institution to direct charge some/or all of the cost of the service centers to sponsored programs. Without the establishment of service centers these costs would normally have been treated as indirect costs and resulted in less cost recovery on sponsored programs.

(See Appendix I for other useful definitions.)

100.07 RESPONSIBILITIES:

The Dean, Department Chair, or Vice President is responsible for:

- the operations of all service centers within their organizational structure,
- approval for establishing the center,
- overseeing the day-to-day operations,
- billing rate calculations,
- billings,
- records retention,
- justifying deficits in excess of 10%,
- and ensuring that the billing rates are reviewed and adjusted periodically as conditions warrant in compliance with this policy.

Finance Offices are responsible for:

- ensuring compliance and
- preparation of billings

Cost and Sponsored Accounting Office is responsible for:

- reviewing service centers' proposals for billing rates,
- provide guidance to the departments concerning compliance with OMB's Circular A-21, and this policy, and the Disclosed Accounting Practices
- the accuracy of the submissions', and
- reporting failures of compliance to the CFO.

The Sr. Vice President, CFO and Treasurer's office will negotiate the proposed billing rates with DHHS if required, with the support of CSA.

100.08 ENFORCEMENT

Cost and Sponsored Accounting Office will conduct reviews to ensure that the CFO offices are enforcing this policy.

100.09 RESOURCES:

1. Office of Management and Budget's Circular A-21, **Principles for Determining Cost Applicable to Grants, Contracts, and Other Agreements with Educational Institutions** available at <http://financialaffairs.georgetown.edu/sao/sao.htm> under Cost Accounting
2. National Center for Research Resources' **Cost Analysis and Rate Manual for Animal Research Facilities.**
3. Georgetown University – Financial Affairs Manual OBFA 2-1 **Policy on Identification and Treatment of Unallowable Costs on Federally Funded Grants and Contracts**). <http://financialaffairs.georgetown.edu/policytc.html>
4. Georgetown University – **Record Retention Policy** <http://financialaffairs.georgetown.edu/policytc.html> .
5. Cost Accounting Standards Board DS-2 Disclosure Statement <http://financialaffairs.georgetown.edu/sao/sao.htm> under Cost Accounting).

100.10 APPROVAL:

1. The office of Financial Affairs will review the service center's proposals for billing rates, providing guidance to the departments concerning compliance with Circular A-21, this policy, and the accuracy of the submission. Financial Affairs will negotiate the proposed billing rates with the DHHS if negotiation of the billing rates required.
2. The Sr. Vice President, CFO and Treasurer's Office will have the responsibility of ensuring that all service centers complies with this policy.

100.11 REVIEW CYCLE:

This policy shall be reviewed annually by the Director of Cost and Sponsored Accounting and updated as necessary without advance notice.

**SERVICE CENTER
OTHER DEFINITIONS**

Applicable Credits

Transactions that offset or reduce costs, such as purchase discounts, rebates, allowances, refunds, etc. For purposes of charging service center costs to federally sponsored programs, applicable credits also include any direct federal financing of service center assets or operations (e.g. the direct funding of service center equipment by a federal program). An example of a billing rate computation that involves direct federal financing of service center operations is in Section 100.06 C.

Auxiliary Enterprise

A unit which furnishes goods or services to students, faculty, staff and others for their own personal use, rather than as a service to internal University operations. Examples include dining facilities, residence halls and bookstores. Auxiliary enterprises are not subject to this policy.

Billing Rate

Also known as a user fee, the rate charged to customers for a unit of goods or services. The rate calculation generally follows the equation "total cost divided by total units of measure, e.g., hours of service, animal care days, tests performed, etc."

Break-even Period

A reasonable, established period of time in which revenues and/or credits are expected to match expenses, usually a University fiscal year. (see exception to break-even requirement in Section 100.05C7)

Carry-Forward

The amount of surplus or deficit carried into a succeeding year. Carry-forward amounts are included as adjustments to the total cost to be billed.

Organization (Cost Center)

A cost center account established to record expenses and revenues for goods and services.

Deficit

The situation where the total expenses exceed total revenue. Account balances should be monitored so that rates may be adjusted in order to avoid year-end deficits.

Depreciation

A method of allocating the capitalized cost of an asset over its useful life. Depreciation of donated equipment is calculated based on its fair market value at the time of the donation.

Direct Operating Costs

Costs that can be specifically identified with a product or service. These include salaries, wages and fringe benefits of personnel who are involved in providing the product or service as well as purchased materials and supplies, equipment rental, travel, etc.

Equipment

An item of tangible property having a useful life exceeding one year and an acquisition cost of \$2,500 or more. Purchases of tangible property not meeting this definition are considered consumable supplies.

Institutional Indirect Costs

The costs of administrative and support functions of the University. Institutional indirect costs consist of general administration and general expenses, such as executive management, payroll, accounting, and personnel administration; operations and maintenance expenses, such as utilities, building maintenance and custodial services; building depreciation; interest associated with the financing of buildings and equipment; administrative and supporting services provided by academic departments; libraries; and special administrative services provided to sponsored projects.

Internal Service Center Support Costs

Costs that can be directly identified with a service center, but not with a particular product or service provided by the center, such as the salary and fringe benefits of the center's director.

Surplus

Situation where total revenue exceed total expense. Account balances should be monitored so that rates may be adjusted in order to avoid year-end surpluses.

Unallowable Costs

Costs that cannot be charged directly or indirectly to federally sponsored programs. These costs are specified in OMB's Circular A-21. Common examples of unallowable costs include institutional advertising, bad debts, charitable contributions, entertainment, fines and penalties, goods and services for personal use, interest (except interest related to the purchase or construction of buildings and equipment). A more complete listing of unallowable costs is in policy # OBFA 2-1.

**GEORGETOWN UNIVERSITY
SERVICE CENTER FORM**

Please check one of the following:

- Responding to Service Center Survey (2003 Re-certifying Survey)
- Establishing a New Service Center
- Submitting a New Annual Rate Calculation
- Discontinuing a Previously Established Service Center

On Which Campus is the Service Center Located? _____
 For What Fiscal Year are the Rates to be applied? _____

Service Center Name: _____

Classification of Center: (*check one*)

- Recharge Unit
- Service Facility
- Specialized Service Facility

Organization (Cost Center) Numbers and Product or Service Provided:

_____	_____
_____	_____
_____	_____
_____	_____

List of Actual/Potential Customers for the Product or Service with estimated annual dollar volume:

Internal (*other GU departments or sponsor*)

_____	\$ _____
_____	_____
_____	_____
_____	_____

External (*non GU department and non-sponsors, such as commercial business*)

_____	\$ _____
_____	_____
_____	_____
_____	_____

Approvals

Provide name, signature, and telephone number

*If responding to a Service Center Recertifying Survey **or** for the Establishment of a New Service Center*

Dean or Administrative Director (for recharge units): _____

Executive Vice President or Vice President
(for Service Facilities and Specialized Service
Facilities) _____

If Submitting Annual Rate Calculation/Proposal:

Billing Rate Service Center Director: _____

Dean or Department Chair _____

SAMPLE RATE CALCULATIONS

Sample Rate Calculations

1. Simple Service Center/Recharge Center

The Chair of Department (A) wants the Paint Department (B) to paint his office which is not due to be repainted for another 3 years. In this case B is the service department and will provide A with an estimate of what B will be billing for the paint job and A agrees to the price.

1 st class Painter	10 hours @ \$19.16	\$191.60
Trim painter	1 hour @ \$21.55	21.55
Painter's helper	8 hours @ \$12.00	<u>96.00</u>
Total labor		\$309.15
Fringe Benefits at 28%*		86.56
Paint	3 gallons @ \$15/gallon	<u>45.00</u>
Total Billable cost		<u>\$440.71</u>

Rates per hour:

1st class Painter salary = \$40,000/yr/number of hours per year 2,088 = \$19.16

Trim Painter salary = \$45,000/yr/number of hours per year 2,088 = \$21.55

Helper's wages = \$12.00 hour

Remember: Recharge centers only recovery/bill direct cost.

* Contact the Budget Office, General Accounting, or CSA for most current applicable fringe benefit rate.

B. Service Facility.

Assume the same facts as in A except that the Paint department is now a Service Facility and the department did 1,000 of these jobs during the year, with departmental expenses equaling \$500,000 and that department B allocated its departmental expenses over total direct costs which during this year equaled \$800,000. What is my total billable cost?

Department B estimated/contracted with A for the total price of \$600.00 because I underestimated my departmental expenses.

	<u>Year 1</u>	<u>Year 2</u>
Total Revenue	<u>\$600,000</u>	<u>\$1,400,000</u>
Total direct cost \$440.71 * 1,000	\$440,710	625,000

Departmental expense \$500,000/\$800,000 or \$0.625 per direct dollar	275,440	390,625
Deficit/(surplus) carry forward	<u>0</u>	(A)116,150
Total Billable	<u>\$716,150</u>	<u>1,131,775</u>
Deficit/surplus	<u>\$116,150(A) (\$268,225)</u>	

Assuming that there was no plan for the department to be subsidized for any deficit than the deficit (A) above would be carried forward to the next fiscal year and would increase the total expense that the Paint department would be expected to recover. In the second year the Paint Department was more aggressive in the billing process that resulted in a surplus in the second year that would be carryover into the third years billing rate computations. Paint must now reduce its billing rates in year three in an attempt to come closer to “break even”.

C. Specialized Service Facilities.

For this example lets use a “wind tunnel” and have it operated by department WT. WT has a complete staff for operating and maintaining the wind tunnel, an administrative department to handle purchasing, accounting, time keeping, billing, etc. WT is a department at Bob Hope University and the institute has an F&A rate for this SSF of 55%.

The wind tunnel facilities cost \$3,000,000 (of which the governments co-funded \$1,000,000) and is being depreciated at the rate of \$250,000 per year. WT bills its customers for the actual time that the customer uses the wind tunnel, i.e., from the time they enter the structure until the time they leave. The scheduled demands for the wind tunnel are such that there is no down time during normal business day. The normal year has 261 days. The customers normal buy their time in blocks of 4 hours each and the cost is \$2,500/block include the operators of the machinery. Direct labor cost \$250 per hour, fringe benefits = 28%, and operating cost equals \$100 per hour.

Bob Hope U’s F&A-WT rate (55%) is applied to total allowable direct cost.

Solve for deficit or surplus.

What must WT do to avoid having a deficit? Surplus?

Total potential revenue = 261days*2 blocks per day*\$2,500		\$1,305,000
Direct labor 2088 hour * \$250	\$ 522,000	
Operating cost 2088 hours* \$100	208,800	
Fringe Benefits @ 28% direct labor	<u>146,160</u>	
Total	\$876,960	
BH’s F&A rate for WT 55%	<u>482,328</u>	
Total cost		<u>\$1,359,288</u>
Deficit/(Surplus)		<u>\$ 54,288</u>

Important Note:

When determining the quantity of units produced, you must include the pre-approval items produced as well as the delivered quantity. For example, if a production run of 1,000 units requires your department to produce five (5) "proofs", then the total quantity used as your unit cost **must include** the proofs. In this case you actually produce 1,005 units, so the cost per unit is \$xxx/1005, not \$xxx/1000.

RATE CALCULATION FOR PROVIDING SERVICES

1. Calculation of Service Center's Average Operating Costs per Productive Hour of Direct Labor

Salaries & Fringe Benefits (5 technicians)	\$270,002
Communications	2,800
Training & Development	300
Repairs & Maintenance	4,350
Supplies	5,500
Equipment Depreciation	<u>6,345</u>
Total current operating expenses	289,297
Prior Year Operating Surplus	<u>(1,000)</u>
Total Direct Operating Cost	\$288,297

2. Internal Service Center Support Costs

Center Director Salary & Fringe Benefits	<u>\$38,057</u>
Total Operating Costs & Service Center Support Costs	<u>\$326,354</u>

3. Calculation of Units of Output

261 day/year/technician	2,088 hrs
Total available hours =	
2088 x 5 technicians =	10,440 hrs
Less:	
Average* Vacation/Sick leave hours=	
40 hrs x 4 weeks x 6 technicians	(960)hrs
Holidays =	
13 days x 8 hrs x 6 technicians	(624)hrs
Average* Lost time due to weather conditions	
2 days x 8 hrs x 6 technicians	<u>(96)hrs</u>
Total productive hours	<u>8,760 hrs</u>

Departmental cost per direct labor hours=
 $\$326,354/10,440 \text{ hrs} =$ $\$31.26 / \text{dir hr}$

Departmental cost per productive labor hour=
 $\$326,354/8,760 \text{ hrs} =$ $\$37.26 / \text{prod hr}$

This service center would bill its customers \$37.26 per hour for the technicians, no consideration is given in difference in the pay scale of the technicians.

* When using averages, as in this case, the department should use **its** actual experience.

RATE CALCULATION FOR PROVIDING GOODS

Calculation of Cost of Goods Sold:

a) Assuming there is **no** inventory at the beginning or end of the accounting period.

Chemicals	\$100,000
Supplies	50,000
Glassware	<u>31,250</u>
Total Cost of Goods Sold	<u>\$181,250</u>

b) Assuming there is inventory involvement.

Beginning inventory		\$ 75,000
Purchases:		
Chemicals	\$100,000	
Supplies	50,000	
Glassware	<u>31,250</u>	
Total Cost of Goods Available for Sale		256,250
Less Ending Inventory		<u>(94,352)</u>
Total Cost of Goods Sold		<u>\$161,898</u>

RATE CALCULATIONS INVOLVING SUBSIDIES

Assumptions:

Total Operating Costs and Service Center Support Costs:	\$200,000
Annual Rate of Usage:	20,000 Units
Cost per Unit Usage:	\$10 (\$200,000/20,000)

The Cost per Unit to All Users, whether Internal or External: \$10

External Subsidy:

Example 1: The grantee institution does not receive subsidized support for the facility from any source.

The schedule of rates is:

Internal Users	\$10 cost per unit usage
External Users	\$10 cost per unit usage

Example 2: The grantee institution receives \$100,000 to support the facility from the National Cancer Institute (NCI) under a P30 Center Core Grant. The \$100,000 will be used to subsidize \$5.00 ($\$100,000/\$200,000 \times \10) of the \$10 per unit usage rate incurred by cancer center members for federally sponsored research projects.

The schedule of rates is:

Cancer Center Member - Federally Sponsored	\$10 cost per unit usage \$5 subsidized by the NCI P30 \$5 charged to the user
Cancer Center Member - Non-federally Sponsored	\$10 charged to the user
Other Internal Users	\$10 charged to the user
External Users	\$10 charged to the user

Example 3: The facility receives \$100,000 to support the facility from the NCI under the P30 and \$50,000 to support the facility from the National Institute of Environmental Health Sciences (NIEHS) under an Environmental Center Support Grant (P30). The \$100,000 from the NCI will be used to subsidize \$5 of the \$10 unit usage rate incurred by cancer center members for federally sponsored research projects. The \$50,000 from the NIEHS will be used to subsidize \$2.50 ($\$50,000/\$200,000 \times \10) of the \$10 unit usage rate incurred by the environmental center members for federally sponsored research projects.

The schedule of rates is:

<u>NCI Subsidy</u> <u>Cancer Center Member</u> – Federally Sponsored	\$10 cost per unit usage \$5 subsidized by the NCI P30 \$5 charged to the user
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Cancer Center Member - Non-federally Sponsored \$10 charged to the user

NIEHS Subsidy
Environmental Center Member –

Federally Sponsored	\$10 cost per unit usage \$2.50 subsidized by the NIEHS \$7.50 charged to the user
Environmental Center Member - Non-federally Sponsored	\$10 charged to the user
Other Internal Users	\$10 charged to the user
External Users	\$10 charged to the user

External and Internal Subsidy:

Example 4: The facility receives \$100,000 to support the facility from the NCI under the NCI P30, \$50,000 to support the facility from the NIEHS under the NIEHS P30, and \$50,000 to support the facility from institutional funds. The \$100,000 from the NCI will be used to subsidize \$5 of the \$10 unit usage rate incurred by cancer center members for federally sponsored research projects. The \$50,000 from the NIEHS will be used to subsidize \$2.50 of the \$10 unit usage rate incurred by the NIEHS center members for federally sponsored research projects. The \$50,000 from the institution will be used to subsidize \$2.50 ($\$50,000/\$200,000 \times \10) of the \$10 unit usage rate incurred by all institutional users.

The schedule of rates is:

NCI and Institutional Subsidies

Cancer Center Member - Federally Sponsored	\$10 cost per unit usage \$5 subsidized by the NCIP30 \$2.50 subsidized by the institution \$2.50 charged to the user
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Cancer Center Member - Non-federally Sponsored	\$10 cost per unit usage \$2.50 subsidized by the institution \$7.50 charged to the user
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NIEHS and Institutional Subsidies

Environmental Center Member - Federally Sponsored	\$10 cost per unit usage \$2.50 subsidized by the NIEHS \$2.50 subsidized by the institution \$5.00 charged to the user
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Environmental Center Member - Non-federally Sponsored	\$10 cost per unit usage \$2.50 subsidized by the institution \$7.50 charged to the user
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Other Internal Users	\$10 cost per unit usage \$2.50 subsidized by the institution \$7.50 charged to the user
External Users	\$10 charged to the user

Source: National Cancer Institute draft document, "NCI Grants Management Update"

**GEORGETOWN UNIVERSITY
TEMPLATE/FORMAT**

A suggested Service Center Template/format with its related instructions, and a completed example of the template may be found at <http://www.georgetown.edu/finaff/sao.sao.htm>.