

**Rensselaer Polytechnic Institute**

**Service Center Procedures  
Table of Contents**

**I. PURPOSE**

**II. OVERVIEW**

**III. GENERAL GUIDELINES**

**IV. PROCEDURES**

- A. Create a Service Center
- B. Determine Operating Costs
- C. Calculate the User Fees
- D. Obtain Approval of User Fees
- E. Subsidies
- F. Billing Procedures
  - 1. Collect Funding Authorization from each user
  - 2. Prepare and Submit Financial Transaction Requests
  - 3. Make Entries into the Accounting System
  - 4. External Users

**V. DEFINITIONS**

**APPENDICES**

- Appendix A: Approaches to Subsidies**
- Appendix B: Sample Rate Calculation**
- Appendix C: Sample Funding Authorization Form**
- Appendix D: Sample Invoice/FTR**
- Appendix E: Internal Billing Account Codes**

# Rensselaer Polytechnic Institute Service Center Procedures

## I. PURPOSE

The Institute conducts research under Government-funded agreements and service center activities often result in charges, either directly or indirectly, to federally sponsored awards. Therefore, service center procedures must reflect government regulatory costing principles such as those contained in the Office of Management and Budget (OMB) Circular No. A-21, "Cost Principles for Educational Institutions," (A-21).

<http://www.whitehouse.gov/omb/circulars/a021/a021.html>

Service center procedures have been established to provide consistent operational practices among the various service center units, and to ensure compliance with both government regulations and internal institute accounting policies.

## II. OVERVIEW

Service centers are organizational units that provide goods or services, principally to users within Rensselaer's academic and administrative community. A service center recovers the cost of its operations through charges to its users. Dissimilar services operated by the same department – a computer facility vs. a copy center vs. a machine shop - must be established as separate service center entities, with separate funds, budgets, and rates.

The cost of running the service center facility or providing the product is charged to users on a "rate" basis. Rates are generally formulated to recover the costs of operations such as salaries, benefits, maintenance, repairs, and supplies. A service center is an ongoing activity.

For the purposes of this document, the word service center will apply to all types of service center operations. The following terms are often used interchangeably:

A service center is usually a high dollar volume center that provides services to other departments that do not necessarily include F&A costs in the rate charged.

A recharge center is usually organized for the convenience of a department and may have a very low dollar volume.

A specialized service center is usually a highly complex or specialized facility that does a large volume of business and has a material effect on the F&A rate. It can be described as (but is not limited to) a configuration of complex equipment and highly trained personnel providing technical support to research and educational activities. A specialized service center will usually develop and incorporate its own indirect cost rate in order to recover utilities, space, depreciation, and other F&A costs.

### III. GENERAL GUIDELINES

The following applies to all service centers:

- a.) Costs must be based on actual use of the services and the recharge center should be operated as a break-even entity. Only federal allowable costs may be recovered in user fees. No costs other than the costs incurred in providing the services should be included in the billing rates. While the goal should be to set user fees at a level sufficient to cover non-subsidized costs on a fiscal-year basis, it is recognized that this may not always be possible. Usage of the break-even period permits the development of more stable user fees, and avoids significant user fee increases and decreases.
- b.) Separate funds and accounts, as applicable, should be established in the Institute's accounting system to record the actual direct operating overhead, revenues, billing, collections, and surplus or deficit for each service center.
- c.) The rate schedule should not discriminate between federally and non-federally supported activities of the institution. All users, based on classification (i.e. internal user, external user), should be charged for the services they receive and be charged at the same rates.\* In addition to recovering all direct costs, users may also be billed for indirect costs, administrative fees, etc. This process of 'fully loading', or charging the indirect costs to a user is usually limited to external users.
- d.) The billing rate computation should be documented and records should be maintained to document the actual direct operating costs of providing the services, revenues, units of service provided, billings, collections, and the annual surplus or deficit. In accordance with OMB Circular A-110, Section C.53, all records pertaining to recharge operation and service facility activity should be retained for four years.
- e.) Service centers should review their rates/fee structure annually and revise rates as necessary to incorporate any surpluses or deficits. A general guideline for a break-even timeframe is three years. Service centers with annual revenue of \$50,000 or more should submit the proposed rates and documentation of operating costs to Research Administration and Finance annually for approval.
- f.) Service centers will adhere to both generally accepted accounting principles and regulatory costing methods.

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\* See section IV.E. regarding subsidies

## IV. SERVICE CENTER PROCEDURES

### **A. Create a Service Center**

Contact Research Administration & Finance for assistance in creating a new service center if you anticipate having a recharge center that will charge out \$5,000 or more annually. A service center fund will be established using an unrestricted fund with a prefix of '15' under an appropriate organization. The department will designate a fund financial manager. The fund financial manager is the individual responsible for maintaining and documenting the billing rates and monitoring operating costs. This can also be, but is not necessarily, the same person who is responsible for tracking usage, creating invoices or managing the service center.

### **B. Determine Operating Costs**

User fees must be based on and designed to recover no more than the federal allowable operating costs for the goods or services being provided. Examples of federal **allowable** operating costs include:

- salaries and wages, and applicable university benefit rates
- supplies and materials
- subcontracts and outside services
- non-capital equipment lease or rental
- prior-year operating deficit (increase to user fee);
- prior-year operating surplus (decrease to user fee);
- other directly-related expenses (e.g., travel, communications);

**Costs that must not be in user fees** because they are recovered through another means, such as the indirect cost recovery mechanism, include:

- building depreciation
- facilities expense (utilities, maintenance, and custodial cost) paid by the Institute and not recorded in the recharge operation or service facility account
- Institute and departmental overhead costs that are not charged to the recharge operation or service facility account
- purchase price or value of equipment

**Costs that must not be in user fees** because they are federal **unallowable** and must not be recorded in recharge operation or service facility accounts include, but are not limited to:

- entertainment;
- bad debt;
- advertising;
- public relations;
- alcoholic beverages;
- contributions and donations.

### **C. Calculate the User Fees**

1. User fees are calculated in terms of units of output (a specified quantity of product from a recharge operation or service facility, such as a copy, an hour of machine time, or an hour of labor, that acts as the basis for the calculation of a user fee).
2. Develop an estimate of the demand for each product or service in terms of units of output. This can be derived from past results and/or using information from likely users.

*Caution: When hours is the chosen unit of output, it is important to ensure that the total hours used to calculate the user fee reflects estimated billable hours (hours demanded) and not available hours (readiness to serve). Available hours do not directly relate to the number of hours that will be demanded by and billed to your customers. Usage of available hours may result in a lower user fee and an under-recovery of costs (operating deficit). However, usage of billable hours will yield a user fee that reflects the actual costs of providing the product/service.*

3. Develop an expense estimate for each product or service provided based on the demand estimate from step two above. Typical expenses include salaries & wages, employee benefits, supplies, depreciation, communications charges, equipment repair and maintenance, etc.  
*Caution: Federal unallowable expenses must not be included in the expense estimate (see the "What Must Not be Included in a User Fee" segment of this document in Section IV. B.).*
4. Determine the amount of any applicable user fee subsidy.
5. Subtract the amount of any user fee subsidy from total estimated expenses to determine net expenses.
6. Divide net expenses by the demand estimate from step 2 above to determine the user fee for a particular product or service.
7. Multiply the demand estimate developed in step two above by the user fee calculated in step 6 above to determine estimated revenue. The resulting revenue figure should equal estimated expenses.

The method selected to develop and calculate a compliant and equitable user fee will vary depending upon the nature and complexity of the operation or facility. Because user fees are developed using estimated revenues and expenses, there may be some variance between estimated and actual revenues and expenses. This variance is referred to as a "carry-forward." Carry-forwards can be either positive or negative indicating either an operating surplus or an operating deficit. If actual operating revenues exceed actual operating expenses, then a surplus results, which must be factored into the development of subsequent user fee calculations. Likewise, if actual operating expenses exceed actual operating revenues, then a deficit results, which can also be factored into the development of subsequent user fee calculations.

*Under no circumstances may an operating surplus be transferred out of the recharge operation or service facility account to subsidize other activities.*

Please see **Appendix B** for a sample rate calculation.

#### **D. Obtain Approval of User Fees**

1. User fee calculations may occur at any time during the first year of operation. Once the center is operating, the billing rates should be reviewed and revised annually.
2. Any service center operation with \$50,000 or more of annual revenue should submit the rate calculation to Research Administration & Finance (RA&F) for review and approval. All recharge center operations should maintain documentation for the rate calculation and operating costs for a period of 4 years.
3. Submit a proposed line-item budget as part of the fee approval process. Budgeted expenses should be listed by account code group (e.g., Salaries and Wages, Benefits, Supplies) for ease of review. Estimated revenues must be documented as proposed user fee(s) multiplied by the estimated units of output. Estimated revenues should equal budgeted expense plus or minus prior-year operating surplus or deficit.
4. The document submitted to RA&F should include the service center's fund and organization, the fund financial manager, and the appropriate certification and signatures (see Appendix B). If the facility occupies a room or rooms dedicated to its activity, the building and room numbers in which the facility is located must also be provided with the user fee.

#### **E. Subsidies**

Departments may choose to subsidize the operation of a recharge operation or service facility. Before developing a user fee that includes a user fee subsidy, management should carefully examine the economic factors and operating environment confronting the recharge operation or service facility. Under normal circumstances, recharge operations and service facilities should be able to cover operating expenses through non-subsidized user charges.

The subsidizing of user fees should only occur after it is determined that:

1. doing so furthers the accomplishment of a primary mission area (i.e., instruction, research or public service); and
2. the goods or services provided either are not available from sources external to the Institute, or cannot be provided from external sources in a more cost effective or efficient manner.

The continual subsidization of inefficient or non-competitive recharge operations and service facilities redirects vital Institute resources from activities that could further the accomplishment of the Institute's primary missions.

See **Appendix A** for examples and different approaches to subsidizing service centers.

## **F. Billing Procedures**

### **1. Collect Funding Authorization from each user**

Recharge center business managers are responsible for invoicing and collecting revenue for their service center. In order to properly charge sponsored projects, the service center manager will collect the authorization for funding source before the service is provided. A sample “Service Center Funding Authorization” form (Appendix C) is completed and signed by the principal investigator for each user of the service center. This form is updated as frequently as necessary when the funding source changes, but not less frequently than annually.

### **2. Prepare and Submit Financial Transaction Requests**

No less frequently than quarterly, financial transaction requests (FTRs) should be prepared detailing the charging information. (See Appendix D). These FTRs differ slightly from the typical FTR because they include information about the number of units used, the rate per unit, the time period covered, and the total price. The debit will be the fund authorized by the “Service Center Funding Authorization” and the credit will be the service center fund. Typical account codes for service centers can be found in Appendix E.

### **3. Make Entries into the Accounting System**

Some of the larger, higher volume service center financial/business managers have been authorized to enter the charges directly into the Institute’s finance system. Those individuals will enter the information and then submit the FTRs and printed screens to:

*RA&F in West Hall for approval if there are any sponsored funds involved in the transactions; or The Accounting Office at the Rice Building for non-sponsored funds.*

Once the transactions are entered and approved, they will show up in the financial accounting system and the data warehouse.

For recharge center managers not entering their own transactions, the FTRs should be submitted to the proper unit (RA&F for sponsored funds, Accounting for all other) for input into the accounting system.

***Please note that if there are insufficient funds or if the charges fall beyond the end date of the sponsored fund that was originally authorized, the individuals entering the charges are authorized to charge the home organization (or portfolio owner’s organization if necessary).***

### **4. External Users**

When billing customers outside the Institute community, the applicable negotiated indirect cost rate should be added to the calculated user fee. Where applicable, sales tax must also be charged to outside parties. Any amounts charged to outside parties in excess of the regular internal Institute billing rates should be excluded from the computation of a service center’s surpluses and deficits for the purposes of making carry-forward adjustments to future rates. External Users must provide either a purchase order, credit card, advance payment, or be a customer in good standing (customer with no delinquent accounts). [Please contact Research Administration and Finance for information on processing external use payments.](#)

Since revenues from outside parties may have Unrelated Business Income Tax (UBIT) implications, the Controller’s Office will monitor revenue from external users.

## V. DEFINITIONS

Allocable - A cost is allocable to a particular activity (i.e., a specific project, sponsored agreement, department, or the like) if the cost (a) was incurred specifically for the activity; (b) benefits both the activity and other activities, and can be distributed amongst them in reasonable proportion to the benefits received; or (c) is necessary to the overall operation of the activity, although a direct relationship can not be shown.

Break-even Period - A reasonable time-period over which cumulative revenue for a service or product equals cumulative expenses. Generally, break-even periods do not exceed three years.

Carry-forward - The over or under-recovery of operating costs from one period that is included in the user fee calculation of a subsequent period to promote break-even operations. Carry-forwards are allowable cost adjustments to subsequent year user fee computations.

Deficit - The amount by which a fund's expenses exceed its revenues, net of any transfers.

Expense - An expenditure of the recharge operation or service facility incurred, whether paid or accrued, that benefits only the current fiscal period.

External User - A recharge operation or service facility customer who does not pay for goods or services with an Institute fund.

Federal Allowable Cost - A cost identified in Section J, in the OMB Circular A-21, as reimbursable by the federal government, unless specifically superseded by the terms and conditions of a sponsored program. Only federal allowable costs can be recovered through recharge operation and service facility user fees (even if recovery is from non-federal funds).

Federal Unallowable Cost - A cost identified in Section J, in the OMB Circular A-21 as nonreimbursable by the federal government. Federal unallowable costs must be excluded from recharge operation and service facility user fees. Examples of federal unallowable costs include advertising of services/products, alcoholic beverages, bad debts, entertainment (amusement and social activities), and fines and penalties.

Internal User - A recharge operation or service facility customer who pays for goods or services using an Institute fund.

Operating Cost - The total cost of providing goods or services (e.g., supplies, salaries, benefits, and depreciation).

Program Income - Gross income earned by the Institute that is 1) directly generated by a sponsored program; or 2) earned as a result of a sponsored program.

Rate - Also known as Billing Rate or User Fee. The rate used to recover some or all of the costs associated with producing a good or providing a service. The user fee may vary by types of customers and/or services/products, however, user fees charged to federal funds, either directly

or indirectly, may not subsidize non-federal users or user fees in any way. User fees may also include surcharges (i.e., facilities and administrative costs) to non-Institute users in an effort to promote full costing.

*Rate Subsidy* - A subsidy provided to a service facility in order to lower the rate charged to all customers for a given product or service. This subsidy covers operating deficits that result from the charging of a reduced user fee. *Caution: Rates charged to federal funds, either directly or indirectly, must not subsidize non-federal users or rates in any way*

*Reasonable* - A cost may be considered reasonable if the nature of the good or services acquired or applied, and the amount involved therefore, reflect the action that a prudent person would have taken under the circumstances prevailing at the time the decision to incur the cost was made.

*Revenue* - Amount recovered for providing goods or services.

*Surplus* - The amount by which a fund's revenues exceed expenses net of any transfers.

*Unit of Output* A specified quantity of product from a recharge operation or service facility, such as a copy, an hour of machine time, or an hour of labor, that acts as the basis for the calculation of a user fee.

*Unrelated Business Income* - Any activity that is:

- carried on with a profit motive--an intention to produce a net income after deducting all direct and indirect expenses

AND

- regularly carried on (i.e., regularly occurring or seasonal, rather than intermittent, casual, or sporadic)

AND

- not "substantially related" to the Institute's tax-exempt purpose (i.e., teaching and research)

- Note: Activities that contribute importantly to the accomplishment of the Institute's tax-exempt purposes (other than by providing funds) are considered "related."

AND

- not covered by specific IRS code exceptions (e.g., an activity conducted primarily for the convenience of the Institute community)

- Income from unrelated business is subject to taxation under IRS code Sections 511-513.

Contact the Controller's Office for assistance in the determination of what constitutes unrelated business income.

## **APPENDIX A**

### **Approaches to Subsidies**

#### **Option A**

All users are charged less than the total cost of the goods or services provided.

Example: a service facility receives an appropriation from the college to defray costs not included in the user fee. If there is no user fee subsidy to your service facility, record expenses and revenues in one operating fund. If, however, there is a user fee subsidy, record the dollar amount of the subsidy in a separate service facility fund with the appropriate revenue fund.

#### **Option B**

Certain users are not charged for the cost of the goods or services provided.

Example: a department does not bill students for the use of a service facility. The department must transfer allocations to the service facility fund to cover the cost of providing the service to students. The lab manager must track the usage of all users in order to determine the actual 'rate'.

**APPENDIX B**  
**Sample Rate Calculation**  
**For Fiscal Year 2XXX**

Expenditure Summary for <Lab Name> <FUND> <ORG> <DEPT>

Lab Manager: \_\_\_\_\_ Fin Mgr (if different): \_\_\_\_\_

Lab Location: \_\_\_\_\_

<u>EXPENSES:</u>	<u>FY 2005</u>	<u>Notes</u>
Salaries	57,697	
Fringe Benefits	17,425	
Supplies/Services	4,499	
Machining	-	
Equipment	3,245	
Postage	53	
Phone	21	
Copying	48	
Maintenance	22,869	
Travel	(1,216)	
<b>Total Expenses</b>	<b>104,641</b>	<i>All expenses for the FY are included and should tie out to Banner/Brio. Projections can be used for the last quarter.</i>
<i>Less Unallowables:</i>		
Equipment	3,245	
Phone (T01)	-	
Other	-	
<b>Total Unallowables</b>	<b>3,245</b>	<i>Since equipment depreciation expense is already included in the F&amp;A rate, equip. purchases are not allowed.</i>
<b>Total Allowable Expenses</b>	<b>101,396</b>	
<b>REVENUE:</b>	<b>92,256</b>	<i>Revenue is actual revenue from Banner/Brio through the 3<sup>d</sup> quarter. Projections can be used for the last quarter.</i>
Revenue - Expenses: (Carryforward)	(9,140)	<i>Any carryforward (surplus or deficit) must be taken into account and the rate adjusted accordingly.</i>
<b>Total Expenses plus Revenue Shortfall</b>	<b>110,536</b>	
<b>Total Logged Hours</b>	<b>2,194</b>	<i>The 'base' for the rate can be a combination of actual use plus projections for the upcoming FY.</i>
<b>Actual Rate for FY 05</b>	<b>\$ 50.38</b>	<i>Total expenses plus/minus carryover divided by usage units.</i>
<b>Rate for External Users with Overhead</b>	<b>\$ 77.72</b>	<i>A separate calculation on MTDC costs is necessary for external users.</i>

**Certification:** I certify that these calculations are consistent with past performance and future estimates. I understand that if deficits occur I will be required to raise the rates to compensate or cover the deficit from Departmental or Division Sources:

Lab Manager/Financial Manager Signature: \_\_\_\_\_  
 Department Chair or Center Director: \_\_\_\_\_  
 Dean or VP for Research as appropriate: \_\_\_\_\_



**APPENDIX D  
Sample Recharge Center Invoice/FTR**

**RENSSELAER MICROPHONE LABORATORY INVOICE**

DATE **4/25/2005**

FROM **Keith Richards, Lab Manager**

USER **Mick Jagger (Fund Owner)**

PERIOD OF USAGE **March 1 - 31, 2005**

**USAGE INFORMATION:**

Date	Units Used	User	Rate	Total
3/2/2005	11	Jagger	\$50	\$ 550.00
3/10/2005	15	Beyonce	\$50	\$ 750.00
3/20/2005	20	Jagger	\$50	\$ 1,000.00
<b>Total for Period:</b>				<b>\$ 2,300.00</b>

**FINANCIAL TRANSACTION REQUEST:**

Fund	Org	Acct	Prog	Activity	Amount	D/C	Description
A12345	9999	33	20500	200207	\$ 1,550.00	<b>D</b>	Microphone usage March 2005
150999	1111	04A	20500	200207	\$ 1,550.00	<b>C</b>	Microphone usage March 2005
A12222	9999	33	20500	200207	\$ 750.00	<b>D</b>	Microphone usage March 2005
150999	1111	04A	20500	200207	\$ 750.00	<b>C</b>	Microphone usage March 2005
<b>Total (Debits only)</b>					<b>\$ 2,300.00</b>		

**AUTHORIZATIONS:**

\_\_\_\_\_  
Signature Phone Date

\_\_\_\_\_  
Printed Name

*Note: If A or B funds are being charged, submit this form to RF&A in West Hall, otherwise submit to Accounting in the Rice Building.*

## APPENDIX E

### Internal Billing Account Codes

<b>Type of Service</b>	<b>Debit</b>	<b>Credit</b>
Electron Microscope	033	04A
LINAC	052	04A
Other Laboratory Services	056	04A
Copy Services	038	04B
Computer Services <b>NON-RCS</b>	059	04C
Parking Fees	093	04D
Visitor Lot Fees	093	04E
Miscellaneous Supplies	Various	011
Other Internal Billings	047	051
Computer Services - <b>RCS ONLY</b>	163	163*

*\*Note: 163 is to be used ONLY for RCS computer charges only.*