

Northwestern University

Title: Recharge Center and Pass-Through Activity Guidelines

Applicable to: Deans, Directors, Department Heads, Business Administrators, Faculty, Finance Personnel, and Sponsored Project Personnel

Effective Date: June 4, 2010

Introduction

The purpose of these guidelines is to establish mechanisms for the operations of *Recharge Centers and Pass-Through Activities* within the University and to ensure compliance with University policies as enumerated in its Cost Disclosure Statement (DS-2) as required by OMB Circular A-21. In summary, these guidelines are necessary to assure that any fee for services or charge for *products* made by any unit of the University is based on actual costs and actual usage of the service or *product*. The procedures outlined may be new to some areas within the University and may require additional time and effort for some to accomplish. These guidelines apply to all existing activities and any new activities that may be proposed in the future. Many terms used throughout this document are defined and explained in the Glossary in Appendix A and are shown in the text in italics. In addition, Appendix D contains a list of Frequently Asked Questions pertaining to *Recharge Centers* and *Pass-Through Activities*.

Summary – Implementing Cost Accounting Standards for Recharge Centers

- Annual *cost studies* are required as a basis for establishing *User Rates* for *Recharge Centers*.
- All costs included in a Recharge Center's or a Pass-Through Activity's *User Rate* should: (1) be related to the function of the Center or the Individual *Chartstring* to which costs are allocated; (2) be allowable under OMB Circular A-21; and (3) not be included in (i.e., not be reimbursable through) the University's F&A Rate.
- All costs should be consistently classified as either direct or indirect costs across all University Departments.
- Cost, rate calculation, request for service, and documentation for billings records should be kept by the *Recharge Center* or the Department responsible for the *Pass-Through Activity* and are subject to audit.
- Fiscal year-end surpluses (less the *working capital allowance*) from a *Recharge Center's* operation must be carried forward to the next year's *User Rate*. Deficits from *Recharge Centers* must either be carried forward to the next year's *User Rate* or subsidized by other non-grant funds. *Pass-Through Activities*, by definition, will always break-even.
- At least annually, the *Recharge Center's* management should review the Center's *User Rates* to assure a significant surplus or deficit will not exist at year-end. If a significant surplus or deficit is projected, the *User Rates* should be adjusted to reduce the projected variance.
- All University users should be charged equitably according to measures of actual usage with no internal user subsidizing another University user. *Recharge centers* are established for University use only. However, at times there may be incidental usage by users external to the University. Comments regarding rates for these users are noted in various following sections of this document.

Procedures

APPROVAL OF NEW RECHARGE CENTERS

The establishment of any *Recharge Center* (including the continuation of all existing ones) must be approved by the School, by the Research Center or Administrative Center where its chartstrings will be housed, and by the Office of Budget Planning. The Office of Budget Planning will not approve a new *Recharge Center* unless it has obtained necessary local prior approvals. The mission and purpose of the *Recharge Center*, the resources needed for its operation, its proposed operating policies, its proposed allowable direct cost budget, its proposed *unallowable cost* budget, its income forecasts, and its proposed *production* budget must all be reviewed and approved.

Any questions regarding Unrelated Business Income Tax (UBIT), sales tax, or other transactions and relationships with *outside users* should be discussed and resolved prior to final approval. The Office of Budget Planning is available to assist in directing units to appropriate technical resources.

Pass-Through Activities do not need to be approved in advance by the Office of Budget Planning. *Pass-Through Activities* should be included in the original budget of the Department ID involved.

BUDGET CONSIDERATIONS

The budget process for a *Recharge Center* includes determining:

- the quantity of a *product(s)* to be produced during the year, and
- the cost of producing these *products*.

The Office of Budget Planning will determine whether or not the operation is viable as a *Recharge Center* under applicable University criteria, including conformance with OMB Circular A-21 and the University's Cost Disclosure Statement. To accomplish this, the Office of Budget Planning, along with the Office of Cost Studies, will determine the following:

- Can a measurable unit of output be readily determined?
- Can the amount of a *product* distributed to each *Individual Chartstring* be measured easily and accurately?
- Can *Individual Chartstrings* be billed for *products* based upon their actual usage at least monthly?

An operation may not function as a *Recharge Center* if it cannot determine an actual usage in measurable units of output for a user's *Individual Chartstring*, or if monthly billing cannot be made directly to a user's *Individual Chartstring*. For operations that do not qualify as *Recharge Centers*, the Department may either absorb the cost of this function as part of its operating budget or discontinue the operations and obtain the *products* from another source. If the costs of such a function are included in the operation of the Department, no charges for or distribution of expenses should be made for its services. (See Section on "Determining Measurable Units for Goods or Services" for more information on measurable units).

At this time, several questions that may have to be answered include:

- Is the Department or School willing to subsidize the Center?
- Should the Center be absorbed as part of the departmental operations?
- Should the Center's *products* be obtained from another source(s)?

DETERMINING THE MEASURABLE UNITS FOR GOODS OR SERVICES

The *Recharge Center* should determine a measurable unit of output for the *products* it distributes. (If a measurable unit of output cannot be determined, the activity cannot be a *Recharge center* - see section on "Budget Considerations" above). This measurable unit may be determined in terms of labor, machine time, or *product*. Examples of a measurable unit include: labor hour, machine hour, liter, page, test, test tube, tray, set-up, lab runs, slide, etc. For *products* measured in cost per hour or other measures of time, productive time (and not total hours available) should be used in the cost algorithm. Productive time is the total time available, less non-billable time such as time for vacation, sick leave, holidays, breaks, equipment downtime, machine repairs, education/certification, and meetings.

A *Recharge Center* may have different measurable units for the different types and classes of *products* it offers. Whatever the measurable unit, it should be easy to determine and quantify and should provide for an equitable distribution of costs to the *Recharge Center's* users. For example, a *Recharge Center* that performs tests on samples has two possible units of measure; it could charge per test or per hour. If the amount of time to perform each test is fairly uniform, charging on either basis is equitable. If some tests take twice as long as others, and labor is a large portion of the cost of performing a test, it is not equitable to charge each user on a per test basis. In such circumstances, the *User Rate* should be on a per hour basis.

User Rates should be based upon the number of budgeted *product* units. *User Rates* based upon flat fees per year, a percentage of salary, or Modified Total Direct Costs (MTDC) that do not relate directly to actual usage are not in compliance with Cost Accounting Standards (CAS). *User Rates* consisting of flat fees that charge per range of actual use such as light, moderate, or heavy use are not in compliance with CAS. *User Rates* should be charged directly to an *Individual Chartstring* based upon the actual number of units the *Individual Chartstring* purchases. Records documenting actual *products* purchased by *Individual Chartstrings* should be maintained by the *Recharge Center*. These records are subject to audit.

Pass-Through Activities must also determine a measurable unit of output for the costs of the *products* it distributes to other *Individual Chartstrings*. The measurable unit should relate to the invoiced *product*. Records documenting actual *product* distributed to *Individual Chartstrings* should be maintained by the *Pass-Through Activity*. These records are subject to audit.

DETERMINING THE BUDGET AND ALLOWABLE COSTS OF A RECHARGE CENTER

The budget of a *Recharge Center* includes the allowable costs of providing a *product* to other University areas. Any unallowable costs otherwise necessary for the operation of the *Recharge Center* should be budgeted in another *Individual non-sponsored Chartstring*. All allowable costs of a *Recharge Center* that will be used in establishing *User Rates* should be budgeted in and expended through one *Individual Chartstring*. The budget should be determined using the standard guidelines established by the Office of Budget Planning and the Cost Accounting Standards guidelines outlined below. Generally these costs include:

- Salaries and Wages
- Fringe Benefits
- Supplies and Materials (consumables)
- Depreciation expense on capital equipment
- Purchase costs for non-capital equipment
- Equipment Service Contracts
- Repairs and Maintenance
- Sub-contracts and Other Outside Services
- Converged Communications Fees, Mailings, Other Support Costs

Prior Year Surpluses or Deficits (after initial chartfield establishment)

Salaries and wages include those of faculty and staff who: provide the services; produce the *products*; direct the Recharge operation; supervise the Center's staff; and provide other administration and support activities. Effort Reports for all faculty charged to the *Recharge Center* should agree with salary expenditures charged to the chartstring. If faculty salaries are to be included in *User Rates*, they should be budgeted and paid from the *Recharge Center Individual chartstring*. This will require the timely preparation of Salary Distribution Adjustment forms or budgeted directly in such chartstrings.

Fringe benefits assessed on salaries/wages charged to the recharge chartstring will be budgeted and charged at the Full Non-Federal Rate.

However, because many users of recharge services are either sponsored programs or offices/functions that are allocable to the F&A rate cost pools, the fringe benefit costs included in the final rate calculations must be based on the Full Federal Rate. This means that the budget must absorb this difference.

Supplies and materials include only the technical supplies that are necessary for the operation of the *Recharge Center*. Office supplies are generally considered indirect and should not be included in a *Recharge Center's* budget. However, to the extent office supplies/materials are consumed solely for the operation of the *Recharge Center* in deliverance of its *products*, they may be budgeted and included as *allowable costs* of the Center. All supplies and materials should be clearly identifiable as benefiting the *Recharge Center* and be under the control of the Center's staff. Supplies and materials not clearly identifiable with the Center's *product* should not be included in the *Recharge Center's* budget or charged to its *Individual non-sponsored Chartstring*.

If capital equipment is involved in producing the product or service, depreciation associated with that equipment may be included in the *User Rate*. The depreciation should be calculated based on information in the University's asset system: purchase date, purchase cost, any federal contribution to the purchase (which must be subtracted from the purchase cost), and useful life. The straight-line depreciation method should be used (i.e., net purchase cost divided by the useful life). The full purchase cost cannot be included in the *User Rate*.

Any necessary capital equipment purchases need to be coordinated between the *Recharge Center* and the Department, School, and if necessary (because of the type of equipment proposed to be obtained) the Office of the Vice President for Research in order to assure that the most efficient use of all equipment is attained. The Office of Budget Planning and the Office of Cost Studies will consult with the Vice President for Research when necessary. The costs of non-capital items (i.e., items costing less than \$5,000 with a useful life of less than one year) and upgrades to these items should be classified as supplies and should be included in the *Recharge Center User Rate*.

Actual expenses for items such as travel, equipment service contracts, or long distance telephone calls incurred specifically for the operation of the *Recharge Center* should be treated as a cost of the Center and included in calculating the *User Rate*. Normally, costs associated with local phone usage are considered indirect and an *unallowable cost* to the *Recharge Center*. To the extent that costs which are normally considered indirect costs are required and incurred solely for the operation of the *Recharge Center* in deliverance of its *products*, they may be budgeted and included as *allowable costs*. These costs should be clearly identified and documented as benefiting and controlled by the *Recharge Center*.

Any surplus resulting from the prior year operations (less the *working capital allowance*) must be included in the Center's budget. With the approval of the School and the Office of Cost Studies, a surplus may be allocated to *User Rates* over several years. Likewise, any deficit resulting from the prior year's operations must be included in the next year's budget or subsidized by other non-federal funds. With the approval of the School and the Office of Cost Studies, a deficit may be allocated to *User Rates* over several years.

A subsidy to a *Recharge Center* from any University source must be included as an offset in the University's F&A Rate calculation. If the School elects not to charge for services of a *Recharge Center*, all funds used to support the *Recharge Center's* activity should be coded or otherwise identified as unallowable for F&A Rate calculation purposes. Any partial subsidy of a *Recharge Center*, whether the amount is included as part of the budget and the *User Rate* calculation at the beginning of the year or absorbed as a deficit at the end of the year, should also be coded or otherwise identified as an *unallowable cost* for F&A Rate calculation purposes.

All *allowable costs* related to a *Recharge Center* should be budgeted into one *Individual Chartstring*. Costs for contingency provisions or other reserves and costs relating to other functions of the School or Department which are unrelated to the Center's operations cannot be included as costs of the *Recharge Center*. Other *unallowable costs* to a *Recharge Center* include items such as dependent tuition benefit costs, center personnel salary expense funded on sponsored projects, depreciation expense associated with sponsored funding of equipment purchases, donated materials and supplies (where no actual expense was incurred by the center), space rental costs (whether the rent expense relates to NU-owned space or non-NU space), entertainment, bad debts, alcoholic beverages, public relations, and any cost designated as unallowable per OMB Circular A-21, Section J. If these unallowable costs are incurred by the recharge center, they represent costs that cannot be recovered through internal rates.

Exceptions to the general rules for costs included in *User Rates* are as follows:

- *Specialized Service Facilities*. *F&A Costs* will be fully allocated to the Facility and will be included in the Facility's budget. The *F&A Costs* that are included in the *User Rate* are determined by the Office of Cost Studies. Expenditures for a Specialized Service Facility's *products* charged to a sponsored project chartstring will not be included in the Modified Total Direct Cost (MTDC) base and thus, not be subject to the University's F&A Rate.
- *Partially Costed Centers*. In a limited number of special circumstances, some *F&A Costs* may be allocated to such Centers and will be included in the Center's budget and resultant *User Rates*. If *F&A Costs* are included in a Center's rate, the amount or percentage of these costs is provided to the Center by the Office of Budget Planning. *User Rates* paid by users' individual sponsored project accounts will be included in the MTDC Base and subject to the University's F&A Rate.

For internal purposes, it may be necessary to have two Department IDs to accumulate costs applicable to the operation of the *Recharge Center*. One Department ID will account for *allowable costs* that will be included in the *User Rate* calculation and the other will collect *unallowable costs*.

Pass-Through Activities include only the cost of the original *product*. No additional costs, however characterized, are allowable.

DETERMINING USER RATES

In general, a *User Rate* is calculated by dividing the total *allowable cost* of a *product* (as reflected in the approved budget) by the number of budgeted units.

In a simple case where only one *product* is defined, the *User Rate* or price can be calculated by dividing the total cost for the *product* by the estimated number of units to be sold. If a *Recharge Center* offers more than one *product*, an additional step is necessary to assign *allowable costs* to the various *products* offered. Some of these *assignments* are easy; others are more complex. For example, if *Product A* requires twice as much of a supply as *Product B*, then two-thirds of the cost of that supply should be assigned to *Product A* and one-third to *Product B*. Each type of cost must be examined to determine its proper *assignment* and the *assignment* process shall be thoroughly documented in writing.

This *assignment* process may not always be easy or apparent. Any costs that cannot be assigned in a justifiable manner should not be included as a cost in establishing a *User Rate* for a *product* of the *Recharge Center*. All necessary descriptive supplemental records should be created and retained for audit purposes to support all *assignments*. The justifications supporting all cost *assignments* should be thoroughly documented in writing and retained in the permanent records of the *Recharge Center*. For example, a supervisor's salary should be assigned on an equitable basis to all the *products* of the Center. It could be assigned to all *products* based upon the direct labor involved in each *product* or the number of units of each *product* produced. Any *assignment* method used must result in an equitable distribution of costs.

Several issues may influence the calculation of the *User Rate*. Some of them are noted below:

- Volume discounts are acceptable, if it can be documented that cost savings are realized when a large quantity of a *product* is provided to an individual user.
- Different classes of users may require variations of a *product*. If a variation is significant, this *product* variation must be treated as a separate *product* and its users should be charged a separate *User Rate*. If the variation is not significant, this *product* may be combined with other similar *products*, which are then classified as one *product* and have one *User Rate*.
- Non-university users may be charged a higher *User Rate* than University users if they are purchasing the service or product with non-federal funds. *User Rates* for non-University users can include unallowable and *F&A Costs*. For the same *product*, non-university users may be charged a higher *User Rate* but never one lower than the one charged to internal users. If a surplus from a prior year is incorporated into the current year rate, rates charged to *outside users* are not required to include this surplus. Note that purchases made through sub-contracts are frequently funded with Federal funds and may not be charged at a higher rate.
- The Office of Budget Planning reviews operations throughout the year to assure that a significant surplus or deficit will not exist at year-end. If a projected surplus or deficit is significant, the Office of Budget Planning may require the *Recharge Center* to adjust its *User Rates* during the year.
- There should be no *User Rate* discrimination among internal users. Rates should be calculated consistently amongst internal users.
- The Office of Cost Studies will review all *User Rate* calculations before they can be used. The Office of Cost Studies will not approve any *User Rate* unless it has received prior School, Research Center, Administrative Center, or Office of Budget Planning approval.

Appendix B is an example of a *Recharge Center's one product User Rate calculation*. Appendix C is an example of a *Recharge Center's multiple product User Rate calculation*. The Office of Cost Studies has developed templates which can be used to facilitate *Recharge Center* rate calculation and surplus/deficit analyses. Although the final calculations do not have to conform precisely to the template formats, it is necessary that a documented methodology exist to support the rates charged. These templates are available on the Office of Cost Studies website (www.northwestern.edu/coststudies).

The *User Rate* for *Pass-Through Activities* is the amount charged on the invoice to the original *Individual Chartstring* divided by the number of units. The invoice cost should include shipping, freight, and any other applicable costs such as dry ice charges. Records of an *Individual Chartstrings* actual usage should be maintained by the *Pass-Through Activity* and are subject to audit.

For any shared/core facility that receives federal support (e.g., through a NIH P30 grant), the rate charged to a research project using non-approved stem cell lines cannot reflect that federal support. In other words, the rate must be an “unsubsidized from federal sources” rate. Northwestern’s Stem Cell Research Policy is available at the following link: <http://www.research.northwestern.edu/committees/human-stem-cell/index.html>

APPLYING USER RATES

Once rates are approved by the Office of Cost Studies, the *Recharge Center* is required to notify all users through published *User Rate* lists made available to all potential users. The Center must maintain records to support their billings to all *Individual Chartstrings*. This documentation should consist of:

- the quantity of *product* ordered,
- the quantity of *products* provided,
- the total charge to the users by *product* type, and
- the *Individual Chartstrings* charged.

Recharge Centers should charge users at least monthly. A detailed statement, including at a minimum the four items noted above, should be provided to the user in a timely manner. *Outside users* should be billed on the same basis. An accounts receivable system should be established by the Center to insure that *outside users* are paying their invoices. The *Recharge Center* is responsible for the collection of all of its receivables. Any receivables not collected are considered to be bad debt and are an *unallowable cost* to the *Recharge Center*; thus, they must be absorbed by the Department’s or School’s unrestricted funds and classified as an unallowable expense.

Recharge Centers providing *products* to instructional functions must charge the Department for the instructional function’s actual use. A lump sum subsidy is not allowable unless it can be documented that it covers the actual amount of the *product* purchased for instructional purposes.

Pass-Through Activities should allocate costs within the month after the charge is first reflected in the accounting system. How these costs are assigned to the various *Individual Chartstrings* should be documented in writing.

Recharge Centers should charge user’s *Individual Chartstrings* by initiating either *Actuals Journals*. This transaction type credits an RDX revenue chartstring. Any sales to non-university users must be recorded as not RDX revenue.

Pass-Through Chartstrings will charge users’ *Individual Chartstrings* by using an *Actuals Journal*. This transaction type credits the *Recharge Center’s* revenue account code. All parties that receive *products* from *Pass-Through Chartstrings* should approve the transaction.

RECORD RETENTION

All formal accounting and local subsidiary records relating to a *Recharge Center’s* costs, *products*, and users must be retained for 8 years by the Center and *Pass-Through Activity*. These records are subject to audit. None of these records should be disposed of or destroyed without the approval of Accounting Services for Research and Sponsored Projects (ASRSP).

FURTHER INQUIRIES

Further inquiries on these Guidelines should be directed to the Office of Cost Studies at 7-1142.

APPENDIX A GLOSSARY

Allowable Cost - The costs incurred to produce the *products* or services the *Recharge Center* distributes. This also includes costs incurred for *Pass-Through Activities*. Costs defined as unallowable by OMB Circular A-21, or defined as "*Unallowable Costs*" below, cannot be included.

Allocation - The process of charging a cost, or a group of costs, to one or more *Individual Chartstrings* in reasonable and realistic proportion to the benefit provided or other equitable relationship. All allocation methodologies must be thoroughly documented.

Assignment - The process of distributing costs within a *Recharge Center's Individual Chartstring* to the various *products* or services provided by that chartstring in reasonable and realistic proportion to the benefit provided or other equitable relationship. All assignment methodologies must be thoroughly documented.

Cost Studies - The process through which *User Rates* are determined by estimating both the quantity of *products* or level of services distributed or provided and the cost of producing and providing the *products* or services. Cost studies may involve the process of *allocation* and *assignment*.

F&A Costs - Facilities and Administrative costs, previously called "indirect costs." The term includes costs that are included in the University's F&A Rate negotiated with the Federal government and charged to sponsored projects. These costs are incurred for common or joint objectives and therefore cannot be readily and specifically identified with a specific sponsored project, function, or activity. Such costs include building and equipment depreciation, building operation and maintenance, building interest expense, general administration and general expense, departmental administration, sponsored projects administration, library, and student services administration expenses.

Individual Chartstring - A unique combination of FUND, DEPARTMENT ID and/or PROJECT in NUFinancials. Each individual chartstring may be made up of a variety of ACCOUNT codes and/or REVENUE codes to assist in further identifying the types of costs incurred or revenues generated in carrying out the various activities of the University.

Outside User - Any entity (person or organization) external to the University that obtains *products* from a *Recharge Center*, whose use of these *products* does not directly or indirectly benefit a specific University sponsored project, function, or activity. Outside Users may not be included in *Pass-Through Activities*.

Partially Costed Centers - *Recharge Centers* whose budget includes allowable direct costs and an *allocation* of partial *F&A Costs*. The Office of Budget Planning determines which *Recharge Centers* include an *allocation* of *F&A Costs* in their budgets and *User Rates* and will provide the *Recharge Center* with an amount or percentage.

Pass-Through Activity - An activity that does not occur on a regular basis where the expenditure for a *product*, which for Departmental convenience, is collected in one *Individual Chartstring* and is then distributed in total to activities in one or more other *Individual Chartstrings*. Only the invoice costs of these *products* are charged to other *Individual chartstrings*. No value is added to the *product* other than convenience. *Pass-Through Activities* do not include *F&A Costs*.

Product - A collective term which includes goods and/or services a *Recharge Center* may produce or a *Pass-Through Activity* may distribute to other *Individual Chartstrings*.

Recharge Center - (Center) A collective term which includes *Specialized Service Facilities* and *Partially Costed Centers*. This is a University department/unit/activity/project that produces, distributes, and charges another University department/unit/activity/project for *products*. *Products* are offered on a recurring basis and are sold at an established price. Typically, there is value added by personnel in providing the *product*.

Recharge Pass-Through - See *Pass-Through Activity*.

Specialized Service Facilities - *Recharge Centers* involving the use of highly complex or specialized equipment or processes. The costs of these facilities include their allowable direct costs and their full allocable share of *F&A Costs*. Currently, the University has two designated Specialized Service Facilities – the Telecommunications/Networking operation and the Center for Comparative Medicine.

Unallowable Cost - Costs that: (1) are defined as unallowable by OMB Circular A-21, such as entertainment, bad debt, alcohol, and public relations; (2) do not benefit any of the *products* of the *Recharge Center* or the purpose of the *Individual chartstring* they are in; or (3) are included in the University *F&A Costs*, and are, therefore, not allowed for purposes of developing Recharge Center rates. *Unallowable Costs* may not be included in a *Pass-Through Activity User Rate*. *Unallowable Costs* may be necessary for the operation of a *Recharge Center*.

User Rate - The price charged to a buyer for a unit of the *product* distributed from a *Recharge Center* or *Pass-Through Activity*.

Working Capital Allowance - Equal to two months of prior year operating expenses, the *Working Capital Allowance* represents the amount that can be deducted from the prior year surplus in order to determine the amount of prior year surplus required to be carried forward into the current year's rate calculation.

APPENDIX B RECHARGE CENTER WITH ONE PRODUCT LINE

Assumptions

The following three steps describe the process necessary to establish *User Rates* for a *Recharge Center* that runs tests for a number of Departments in various Schools across the University. The Center's Director and Administrator spend half their time running this *Recharge Center* and half their time running another *Recharge Center* in another School. Performing these tests is the only function of this *Recharge Center*.

1. Determining the Recharge Center Operation and Budget

The process begins by estimating the number of test units the Center will perform during the year. Using experience and knowledge of the Center's client base, during the year it is estimated that 3,000 tests will be performed and the tests will take approximately 4,164 hours to run. The assumptions and data supporting the estimates of the number of tests and of the time required to run them should be documented in writing and maintained in the permanent files of the *Recharge Center*. All such back-up material is subject to audit. In some cases, copies of the documentation may have to be provided to other University offices.

After determining the number of tests, an estimate of the costs necessary to perform them can be made. This becomes the *Recharge Center's* expenditure budget which is approved and established through the normal budget process. This example includes costs for: salaries to operate and manage the Center; related fringe benefits; technical materials and supplies; long distance telephone calls; maintenance of equipment; service contracts; and the prior year deficit. (Note: If a subsidy existed, it would have been shown as a credit to the budget.) Only costs that directly benefit the *Recharge Center* are included. Costs deemed unallowable by Federal regulations, included in the University F&A rate, or not directly benefiting the Center are not included in the budget.

2. Determining Billable Hours, or Unit of Measure

Experience indicates that it takes about the same amount of time to perform each test. Because of this, users may be charged on a per test basis or on a per hour basis. Whichever method is chosen, it should result in the user paying about the same amount. The method selected must be applied consistently.

It should be noted that if the time to perform each test varies significantly, it is not equitable to charge on a per test basis; it would be necessary to charge on an hourly or fraction of an hour basis. However, it would be equitable to determine an individual rate for each type of test performed, thereby introducing other *products*. See Appendix C for an illustration with a cost *assignment* between multiple *products*.

Because this illustration shows a billing on the basis of hours, a determination of the number of billable hours must be made. Billable hours are determined by taking the total number of hours an individual is paid for the year (i.e., normally 2,080 - based upon a 40 hour week) for a full time position, less the unbillable hours. Unbillable time includes estimates for vacation, holiday, sick, and other non-good producing time such as equipment down-time, meetings, breaks, and educational/certification time. *User Rates* should be calculated based upon actual production time or billable hours and not on total time.

3. Calculating User Rates

The *User Rate* is determined by dividing the total *allowable costs* (assume \$240,000) of the *Recharge Center* by the number of units estimated to be produced. In this example, divide the \$240,000 by the 3,000 tests to reach a price of \$80.00 per test or the \$240,000 by the 4,164 direct costs hours to reach a price of \$57.63 per hour. For billing purposes, because the *User Rates* are based upon estimates, the rounded dollar amounts \$80 and \$58 should be used. The *Recharge Center* must decide upon one approach and use it consistently throughout the year. However, if circumstances change significantly, *User Rate* adjustments may be necessary. *User Rates* should be revised for any significant changes from original assumptions, projections, and/or budget.

APPENDIX C RECHARGE CENTER WITH MULTIPLE PRODUCT LINES

Assumptions

In this example, the *Recharge Center* illustrated in Appendix B has undergone changes in how it views its activities. Many basic assumptions remain the same; however, it is now apparent that time spent training users which was once considered to be insignificant, now accounts for over 500 of the hours previously classified as downtime. The Center decided that it is no longer equitable to distribute this "downtime" cost to all the users having tests performed but should create a *User Rate* for training. In this example, the *Recharge Center* changes its pricing structure and assigns the budgeted costs between the two *product* lines it now offers to its users, i.e. testing and training.

1. Determining the Recharge Center Output and Budget

This step is the same as in Appendix B. The process is expanded by estimating the number of training sessions the Center will perform. The process begins by estimating the number of test units the Center will perform. Using experience and knowledge of the Center's client base, it is estimated that 3000 tests will be performed, which will take approximately 4,164 hours to run. In addition, it is estimated that 275 training sessions will be run, taking approximately 552 hours to conduct. The assumptions and data supporting the estimates of the number of tests and training sessions and of the time required to run them should be documented in writing and maintained in the permanent files of the Center. All such back-up material is subject to audit. In some cases, copies of the documentation may have to be provided to other University offices.

After determining the number of tests and the amount of training, an estimate of the costs needed to perform them can be made. This becomes the *Recharge Center's* expenditure budget which is approved and established through the normal budget process. This example includes costs for: salaries to operate and manage the Center; related fringe benefits; technical materials and supplies; long distance telephone calls; maintenance of equipment; service contracts; and the prior year deficit. (Note: If a subsidy existed, it would be shown as a credit to the budget.) Only costs that directly benefit the *Recharge Center* are included. Costs deemed unallowable by Federal regulations, included in the University F&A rate, or not directly benefiting the Center are not included in the budget.

2. Determining Billable Hours, or Unit of Measure

Experience indicates that it takes about the same amount of time to perform each test and each training operation. Because of this, users may be charged on a per test basis, a per training session basis, or on a per hour basis for either testing or training. Whichever method is chosen, it should result in the user paying about the same amount. The method selected must be applied consistently.

It should be noted that if the time to perform each test or run each training session varies significantly, it is not equitable to charge on a per test basis or a per training session basis. It would be necessary to charge on an hourly or fraction of an hour basis. However, it would be equitable to determine an individual *User Rate* for each type of test performed or each level of training provided.

Because this illustration shows a billing on the basis of hours, a determination of the number of billable hours must be made. Billable hours are determined by taking the total number of hours an individual is paid for the year (i.e., normally 2,080 - based upon a 40 hour week) for a full time position, less unbillable hours. Unbillable time includes estimates of vacation, holiday, sick, and other non-good producing time such as equipment down-time, meetings, breaks, and education/certification time. *User Rates* for each *product* line should be calculated based upon actual *production* time or billable hours and not total time.

3. Assigning Budget to Product Lines

Many costs can be equitably assigned to either testing or training based on the ratio established by the hours spent on each activity. Certain costs cannot be assigned in this manner and must be assigned using another documentable method. All assumptions that assign costs among *product* lines must be thoroughly documented in writing.

To illustrate, chemicals are used in the training process, but are not used proportionately to labor time. A log is maintained which determines the value of chemicals used for testing and training. This log becomes the basis for the *assignment* of the cost of chemicals between testing and training. Further, based on experience, it is recognized that repairs and the costs of the service contract are not assignable to training.

4. Calculating User Rates

The *User Rates* for testing and training are determined by dividing the total *allowable costs* (assume \$200,000 for testing and \$50,000 for training) assigned to each function by the number of units estimated to be produced. In this example for testing, divide the \$200,000 by the 3,000 tests to reach a price of \$67 per test or the \$200,000 by the 4,164 direct cost hours to reach a price of \$48 per hour. In this example for training, divide the \$50,000 by the 275 training sessions to reach a price of \$180 per class or the \$50,000 by the 552 hours to reach a price of \$91 per hour. The *Recharge Center* must decide upon one approach and use it throughout the year. However, if circumstances change significantly, *User Rate* adjustments may be necessary. *User Rates* should be revised for any significant changes from original assumptions, projections, or budgets.

**APPENDIX D
FREQUENTLY ASKED QUESTIONS**

Recharge Chartfield Set-Up

Q: When is a recharge center required?

A: When the objective is to recover the costs of providing a product by charging users, then it is necessary to follow the recharge center requirements.

Q: Why are recharge rate calculations and established User Rates required?

A: Recharges are often direct costs on grants and contracts. As such, they must conform to federal requirements for direct costs (in OMB Circular A-21) as well as specific federal requirements related to how rates/fees are established and assessed to users. And, like any other sponsored project cost, in the event of an audit, documentation must exist to support them.

Even when they are not costs of sponsored projects, recharges represent the distribution of costs across academic and administrative units, which effects financial reporting and analysis.

Q: What are the implications of not establishing and submitting rate calculations?

A: In the event of an audit, unsupported recharges are likely to result in Northwestern's repayment of those amounts (plus the associated F&A recovery) and will be allocated to a department chartstring.

Also, Actuals Journals to charge sponsored and non-sponsored chartstrings may not be processed.

Q: Is there a threshold for being defined as a recharge center?

A: No. Assuming that the center meets the other recharge criteria, it does not matter whether you have \$250,000 in revenue or \$2,500...you are required to follow the recharge center requirements.

Q: What if the users are mostly/entirely non-sponsored (non-grant) chartstrings?

A: The requirements still apply.

Q: What if the good/service is being provided on a non-recurring basis?

A: Documentation of costs/rates and recording of revenues and expenses on the appropriate chartstring are still required. Consider a pass-through methodology.

Q: What do we do if an existing chartstring reflects a mix of unrelated activities, only one of which is a recharge activity?

A: The preferred solution is to remove the recharge activity from the chartstring and open up a separate Fund 160 chartstring.

Q: What if a recharge chartstring reflects a single activity or related set of activities, but only a select set of users are charged for their usage...how are the chartstrings set up?

A: There is no need to establish a separate chartstring. The solution is to calculate a rate based on all costs and all users, and then charge that calculated *User Rate* only to the select group of users being charged.

Q: What happens if the recharge center chartstring is established during the year?

A: All current year revenues and expenses (that were credited or charged to a different chartstrings) should be moved into the new Fund 160 recharge chartstring.

Q: If the costs associated with the good/service provided are primarily or exclusively personnel time and the users are primarily or exclusively sponsored projects, when is it appropriate to operate this activity as a recharge center (as opposed to charging an individual's salary directly to grants)?

A: The activity should be treated as a recharge center when there are more than 5 grant chartstrings simultaneously benefiting from the service, the set of grants that benefit changes regularly, and the amount of time that the personnel spend in servicing a particular grant varies regularly.

F&A Impact

Q: How do recharge activities impact the University's F&A Rate?

A: Recharges are included in both the F&A Cost "Pools" (as part of the numerator of the F&A Rate calculation) and in the F&A Cost "Bases" (as part of the denominator of the F&A Rate calculation).

Equipment Depreciation

Q: Can depreciation expense be taken for equipment that is past its useful life but still active in use?

A: Yes. As value is still being derived from the item (even though it has no remaining book value), a recharge center may include a proxy for depreciation expense into its rates for such an item. The amount should be calculated as: original purchase cost (less any sponsored funding)/15.

Q: If I take depreciation expense for equipment that is past its useful life, will that still allow me to build a capital reserve?

A: Yes. As long as depreciation expense is reflected in prices charged to users, you can build a capital reserve.

Q: If I choose not to include equipment depreciation expense in my prices, can I still build a capital reserve?

A: No. Depreciation expense must be incorporated in rates to users for a capital reserve to be accumulated.

Q: How do I buy new equipment if I don't establish a capital reserve chartstring?

A: The equipment should be charged to the center's 171 chartstring, and funds to support the cost will have to be identified (i.e., either a subsidy from the department, school, or Office of Research is requested, or a grant for equipment acquisition could be written).

Q: What if my records on original equipment cost don't agree with the information in the University's (Accounting Services') asset system?

A: You should send your records of the asset's purchase to the Office of Cost Studies. We will alert the Equipment Inventory Coordinator to the discrepancy and we will work together to reconcile it.

Q: Does the cost of a capital lease get expensed over the term of the lease or depreciated over the useful life of the equipment itself?

A: The total cost of the capital lease should be depreciated (straight-line) over the life of the equipment itself. This depreciation expense may be used in calculating the *User Rate*.

Q: Can I build the cost of a future replacement into my rates?

A: You can only include costs anticipated in the upcoming fiscal year (i.e., the one you are calculating the rates for), not time periods beyond.

Budgeting

Q: What happens if my actual expenses exceed the budgeted amounts?

A: On individual expense line items, actual expenses and encumbrances may exceed budgeted amounts. But the total for expenses and encumbrances for the chartstring overall cannot exceed the total budgeted amount for expenses. You can request a budget increase, but that will increase both budgeted expenses and budgeted revenues.

Q: What classes are assigned to Recharge Centers?

A: Recharge centers should be assigned class 197. Specialized Service Facilities should be assigned class 198.

Rate Calculations

Q: In terms of establishing the User Rate versus the Calculated Rate, what User Rate may I charge?

A: The User Rate charged to internal (NU) users can be less than or equal to the calculated rate, but cannot be greater than the calculated rate. Prices for external (non-NU) users can be less than, equal to, or greater than calculated rates (bear in mind that external usage should be incidental).

Q: When do I have to submit my annual surplus/deficit analysis and rate re-calculations?

A: You will receive a memo (from the Office of Cost Studies) during the summer which will remind you that rates need to be submitted for the upcoming fiscal year.

Q: Do I have to submit something even if I am keeping my rates the same as the previous year?

A: Yes. It is important to have documentation of the surplus/deficit analysis and the most current rate calculations on file.

Q: Can I adjust my prices mid-year?

A: Absolutely. If your estimates going into the year prove to be significantly different than the center's actual revenues/expenses, you should feel free to re-calculate rates and submit your revised worksheet to the Office of Cost Studies for review. Once approved, the new rates can be used.

Surplus/Deficit Analysis

Q: The surplus in the chartstring from the prior year is large. Does the entire surplus have to be carried forward into the calculated rates?

A: A large surplus need not be eliminated in its entirety within one year; however, a plan should be in place to reduce it over the course of a few (2 – 4) years.

Q: How is the surplus/deficit calculation handled for a center that provides multiple goods/services?

A: The surplus/deficit should be calculated at 2 levels: in aggregate (across all goods/services) and then by product.