Recharge Centers A to Z
- your comprehensive guide

Cost Studies, Office of Financial Operations
-June 2021
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- **The Recharge Process**
  - Defining what constitutes a recharge activity or center, developing the plan for a new center (or documenting an existing one), calculating rates and setting prices, establishing the account, and managing the account and other administrative requirements.

- **Policy and Procedure Links**
  - Provides the links to Northwestern’s recharge policy and other guidance material.

- **Questions & Answers**
  - Anything not covered in the presentation and questions from the audience.

- **Example/Using the Template**
  - Uses a fictional example and the Cost Studies Recharge Template to calculate rates.
Introduction & Context – why are we here today talking about recharge centers?

- Recharges are often direct costs on grants and contracts. As such, they must conform to Federal requirements (Uniform Guidance) for direct costs 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.
  - In the event of an audit, unsupported recharges are likely to result in Northwestern’s repayment of those amounts plus the associated Facilities and Administrative (F&A) cost recovery.

- Even when not costs of sponsored projects, recharges represent the distribution of costs across academic and administrative units, which effects financial reporting and analysis; most importantly: annual Financial Statements and periodic F&A rate calculation (and, of course, F&A rate is claimed against sponsored projects)
  - more on Slide 15 regarding the relationship of recharges to the F&A rate
The Recharge Process

- The five steps to the recharge process:

1. UNDERSTAND WHAT CONSTITUTES A RECHARGE ACTIVITY/CENTER (and what’s involved in operating one)

2. DEVELOP THE PLAN FOR A NEW CENTER (or document an existing center)

3. CALCULATE RATES AND SET PRICES (and obtain Cost Studies’ approval)

4. ESTABLISH THE (FUND 160) CHARTSTRING

5. MANAGE THE CHARTSTRING & OTHER ADMINISTRATIVE REQUIREMENTS
Step 1: Understand What Constitutes a Recharge Center

Ideally, the process begins with understanding what constitutes a recharge center and what it means to have one. This section will provide answers to the following questions (and many more):

- What is a recharge center and why does it exist?
- If I have a recharge center, what are the accounting and administrative requirements?
- What is the difference between a recharge center and a specialized service facility?
Recharge Centers Defined

- Activities of a unit that provides goods and/or services of a specialized nature to Northwestern users on a recurring basis and charges a fee for those goods/services that is borne by NUFinancials Chartstrings (sponsored and/or non-sponsored).

  - A recharge center may be a centrally managed service unit or a school or departmentally-managed service unit.
Criteria for Identifying a Recharge Center

A recharge activity or center exists when:

- You are providing a good/service, on a recurring basis, to Northwestern users.

- You want to recover the costs of providing the good/service through charges to users.

- Typically (but not always), there is value added by personnel in providing the good/service.

This is in contrast to departmentally-based activities where costs are collected in a single chartstring and then transferred to other chartstring based on actual usage (e.g., long distance telephone charges). In these cases (referred to as “Pass-Through” activity), no value is added by department personnel; it is simply a transfer of cost.
Program Income

• Program income is gross income—earned by a grantee, a consortium participant, or a contractor under a grant—that was directly generated by the grant-supported activity or earned as a result of the award.

• Any costs associated with the generation of the gross amount of program income that are not charged to the grant should be deducted from the gross program income earned, and the net program income should be the amount reported.

• Must be reported to the agency.
Examples of Program Income

- **Fees for services performed**
- Money from the use, sale, or rental of equipment purchased with project funds
- Sale of supplies or equipment purchased or fabricated with project funds
- Sale of software, tapes or publications
- Sale of research materials, such as animal models, vectors, or reagents
- Fees from participants at conferences or symposia
# Use of Program Income

<table>
<thead>
<tr>
<th>Program Income Alternative</th>
<th>Use of Program Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additive</td>
<td>Added to funds committed to the project or program and used to further eligible project or program objectives.</td>
</tr>
<tr>
<td>Deductive</td>
<td>Deducted from total allowable costs of the project or program to determine the net allowable costs on which the Federal share of costs will be based.</td>
</tr>
<tr>
<td>Combination</td>
<td>Uses all program income up to (and including) $25,000 as specified under the additive alternative and any amount of program income exceeding $25,000 under the deductive alternative.</td>
</tr>
<tr>
<td>Matching</td>
<td>Used to satisfy all or part of the non-Federal share of a project or program.</td>
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</table>
The Purpose of a Recharge Center

- Recharge centers exist to provide a necessary product (good and/or service) to Northwestern faculty, staff, and students. For reasons of efficiency or convenience, or because the product is not otherwise available, an internal provider (recharge center) is established rather than procuring the product from an outside vendor.

  - A recharge center may have external customers, but such usage should be on an incidental basis (more on slide 32); Northwestern users should be the primary customers.
What it means to have a recharge center: the key accounting and administrative requirements

If an activity fits the recharge center criteria, then you must:

✓ Document/calculate cost-based rate(s) and publish price(s)
✓ Adhere to the Federal cost accounting requirements in determining rate(s) and price(s) and seek review/approval by Cost Studies
✓ Establish and maintain a separate chartstring to capture expense and revenue activity
✓ Have an acceptable method/system for tracking actual usage
✓ Bill customers on a timely basis
✓ At least annually, analyze surplus/deficit position (actual expenses versus actual revenues) and ensure appropriate treatment of any carry-forward (positive or negative)
✓ Retain records to support charges
Common Recharge Questions:

Q: Do I really have to do this?
A: Yes. If the objective is to recover costs of providing a product by charging users, then it’s necessary to follow the recharge center requirements.

Q: Is there a threshold for being defined as a recharge center?
A: No. Assuming that your 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.

*Note: it’s likely that we will establish a threshold below which Cost Studies review/approval will not be required. However, all other requirements will still apply.

Q: What if my users are mostly/entirely non-sponsored (non grant) accounts?
A: The requirements still apply (although the audit risk may be lower).

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, although most other recharge center requirements do not apply.

 Alternatives to operating a recharge center?
— Share/split the costs exclusively from non-sponsored source(s) (or fund them from a single non-sponsored source)
Current Recharge Centers

- There are approximately 120 active recharge centers.
- Examples:

<table>
<thead>
<tr>
<th>Central Units</th>
<th>Departmental Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources’ PC Training Facility</td>
<td>Neurology’s Stem Cell Core</td>
</tr>
<tr>
<td>Procurement’s Copy Centers</td>
<td>Dermatology’s SDRC Core</td>
</tr>
<tr>
<td>Facilities Management’s Motor Pool</td>
<td>Radiology’s 7T Animal Magnet Core</td>
</tr>
<tr>
<td>Library Copiers</td>
<td>Cancer Center’s Flow Cytometry Core</td>
</tr>
</tbody>
</table>
Specialized Service Facilities (SSF)

Specialized service facilities (SSFs) are a designated subset of recharge centers, distinguished primarily by the way their costs are determined/rates are calculated.

- SSF designation may be a Federal cognizant agency requirement

Northwestern’s Current SSFs:

- The Center for Comparative Medicine (CCM)
- Northwestern Information Technology (NIT) Telecommunication & Networking Services
Fully Costed versus Partially Costed versus Pass-Through terminology that appears in Northwestern’s current recharge policy

<table>
<thead>
<tr>
<th>Topic</th>
<th>Fully Costed</th>
<th>Partially Costed</th>
<th>Pass Through</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defined</td>
<td>“Specialized Service Facilities.” They use highly complex or specialized equipment/processes not usually available elsewhere.</td>
<td>These are the “Recharge Centers.” They tend to provide products that are less specialized in nature and that are used by a broader set of Northwestern users.</td>
<td>Activities where expenditures are first collected in a single account and then distributed to one or more other accounts.</td>
</tr>
<tr>
<td>Value Added</td>
<td>Variety of inputs (e.g., labor, consumables) go into providing product. Typically, value is added by personnel.</td>
<td>Variety of inputs (e.g., labor, consumables) go into providing product. Typically, value is added by personnel.</td>
<td>No value is added; the collection and distribution of costs is a matter of convenience.</td>
</tr>
<tr>
<td>Budget/ Costs</td>
<td>Includes allowable direct costs, unit indirect costs (e.g., unit administrative support), and the allocable share of University F&amp;A costs.</td>
<td>Includes allowable direct costs and unit indirect costs. Does NOT include an allocable share of University F&amp;A costs.</td>
<td>Invoice costs are passed directly through to benefiting chartstrings.</td>
</tr>
<tr>
<td>Charging Practices</td>
<td>Fees (which are based on the facility’s calculated rate) are charged to user accounts using Actuals Journals/Internal Sales Journal.</td>
<td>Fees (which are based on the facility’s calculated rate) are charged to user accounts using Actuals Journals/Internal Sales Journal.</td>
<td>Expenditures are distributed to benefiting accounts using Actuals Journals/Correction Journal.</td>
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</tbody>
</table>
Recharge Centers, SSFs and the F&A Rate

F&A Rate

Facilities costs
- Building depreciation
- Equip depreciation*
- Interest
- Oper & Maintenance
- Library

Administrative costs
- General Administration
- School/Dept Admin
- Spons Project Admin

Allocations

F&A Cost “Pools”

Recharges to Academic & Central Units, including sponsored project chartstrings

F&A Cost “Bases”

Instruction | Research | Other Spons Activity | Other Inst Activity

Direct costs on sponsored accounts

F&A costs of research

Direct costs of research (MTDC)

Includes:

- Recharge center costs (residual exp v. revenue on 160 funds)
- SSF costs (direct exp on CCM, Telecom & Networking chartstrings)

Recharges to users are included in both pools and bases of F&A rate
Recharge Centers and the Uniform Guidance /Cost Accounting Standards Consistency Principle

- OMB Uniform Guidance: Costs charged directly to sponsored projects must be adhere to the following fundamental principles:
  1. § 200.403 Allowability of costs
  2. § 200.404 Reasonable costs
  3. § 200.405 Allocable costs

- For a recharge center’s good/service to be charged to sponsored chartstrings, must first assure that it represents an appropriate direct cost
  - Or should the cost be recovered indirectly, through the University’s F&A rates?

- Examples:
  - Appropriate direct cost in form of recharge: various types of lab or scientific services
  - Inappropriate direct cost in form of recharge: administrative support services
  - Questionable: computer/network support services

- Contact Cost Studies for assistance with an evaluation
Recharge Question:

Q: What if the cost is exclusively or primarily personnel time and the users are exclusively or primarily sponsored projects. When is it appropriate to operate this activity as a recharge center (versus charging an individual’s salary directly to grants)?

A: The activity should be treated as a recharge center when:

- More than ~ 5-6 grants simultaneously benefit from the service
- The set of grants that benefit from the service changes regularly
- The amount of time the personnel spend in servicing a particular grant varies regularly

Follow-up Q: Why? A: To properly/accurately distribute an individual’s salary under these circumstances would require frequent, if not continuous, revision of payroll forms – which is not practical.

Common example: Clean Room facility – typically, these should be operated as a recharge activity.
Step 2: Develop the Plan for a New Center or document an Existing center

When the need for a new recharge center is identified, the next step is to develop a basic “business plan”. Things to document:

1. Description of the services that will be provided, and the estimated annual expenses and revenue
2. Description of the customer base. i.e. Northwestern users, external customers, etc. If providing services to external customers, describe the external customers.
3. Projected annual expense and revenue, and the identification of any need for financial support (subsidy)
4. If there is a deficit at the year end, what unit(s) will cover it?
5. Administration of the recharge monthly billing/management (roles and responsibilities)
6. Where is the facility

Once documented, the plan should be approved by the appropriate oversight unit
- e.g., in the case of a departmentally-based center, the Dean’s office
Process Flow for Setting up a New Recharge Center:

1. Dept contacts Cost Studies
2. Initial meeting - Dept responds to a set of questions with guidance
3. Dept sends Business Plan & Rates Worksheet to Cost Studies
4. Cost Studies sends dept: requirements of business plan; rate calc template & instruction
5. Cost Studies forwards business plan to Budget Office & reviews the rates
6. If both are approved, proceed to establish a new COA
7. Rates must be reviewed & approved on an annual basis going forward
Step 3: Calculate Rate(s) and Set Price(s) and Obtain Cost Studies’ Approval

This part of the process involves:

- a) estimating the center’s expenses and # of users to determine the calculated (cost-based) rates; and
- b) based on the calculated rates, determining *prices* to charge to Northwestern and any external customers

Both a) and b) must follow Federal cost accounting requirements

This step is where Cost Studies plays largest role

- We have developed a template to facilitate calculations
- We’re here to assist (as well as to review and approve)
Recharge Rate Calculation

The General Formula

Expenses (allowable and allocable) Incurred

Measurement of Actual Usage

Calculated for each product/service offered by the center
Key Cost Accounting Principles for Recharge Rates & Prices

- Rates and prices must be based on actual/estimated costs
  - They cannot be derived from the market or a “historical” rate that cannot be documented

- The numerator in calculating rates (expenses) cannot include unallowable costs (more on slide 27)

- The denominator in calculating rates (measurement of usage) must reflect all users, both internal and external, regardless of price charged

- The denominator must be a measure or reasonable proxy for actual usage
  - One-time or “membership fees” do not represent usage
Key Cost Accounting Principles for Recharge Rates and Prices continued

- Prices for internal (Northwestern) users can be \( = \) or \( < \) calculated rates, but cannot be \( > \) calculated rates
  - Prices for external users ideally should be market price \( (> \) calculated rates is acceptable)

- Prices may differ between internal users, but one internal user cannot subsidize the cost of providing the same product/service to another internal user

- Over time, a recharge center should break even; a center may lose money on its operations, but it may not earn a profit
  - After initial establishment, annual surplus/deficit analysis must be done and any carry-forward amount included in next year’s rate calculations to achieve break-even position (more on slides 46-49)
Estimating Expenses and Usage

- In the start-up phase of a recharge center, it is often difficult to estimate costs and even more difficult to estimate usage.

- With actual experience, it becomes somewhat easier to estimate. However, you will always have to estimate and it will never be a perfect science.
Types of Expenses included in the Rate Calculations

- Salary and Fringe
- Materials and Supplies (consumables)
- Capital Equipment (items costing $5k or more): depreciation expense
- Software (items costing $5 or more): amortization expense
- Non-Capital Equipment: purchase cost
- Equipment Service Contracts
- Other Service Costs
- Converged Communications Fee, Mailing, Other Support Costs
- After initial establishment, surplus or deficit amount from prior year
Fringe Benefits

- Salaries of recharge center personnel are assessed the Full Non Federal Rate. However, because many recharges are either sponsored project costs or costs of offices/functions in the F&A rate cost pools, the fringe benefits costs included in rate calculations should be based on the Full Federal Rate.

- The differential (representing Northwestern’s dependent tuition benefit) is a built-in loss to a recharge center’s operating budget.
Costs that cannot be included in the rate calculation

- EXAMPLES:
  - Dependent tuition benefit costs
  - Center personnel salary expense funded on sponsored projects
  - Depreciation expense associated with sponsored funding of equipment purchase (more on slide 28)
  - Entertainment/alcoholic beverages (center parties or events)
  - Donated materials and supplies (where no actual expense incurred by center)
  - Space rental costs (whether the rent expense relates to Northwestern-owned space or non-Northwestern space)
  - In general, any cost designated as unallowable per OMB Uniform Guidance

- If incurred by the recharge center, these represent costs that cannot be recovered through internal rates
Capital Equipment/Depreciation Expense

- For centers that use machinery and other capital equipment, rate calculations may include an amount for equipment depreciation expense if the cost must be recovered through the charge.

- Depreciation expense is derived from original cost of the equipment (less any sponsored funding), divided by item’s estimated useful (accounting) life.
  - Cost and useful life information must reconcile to the information contained in the University’s capital asset inventory system, maintained by Accounting Services

- When depreciation is reflected in price, a “capital reserve chartstring” (fund 171) should be established (more on slides 39-40)
Common Recharge Questions: Capital Equipment/Depreciation Expense

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.

Q: What if my records on original equipment cost don’t agree with the information in Accounting Services’ asset system?
A: You should send Cost Studies your records of the asset’s purchase. We will alert the Equipment Inventory Coordinator to the discrepancy and we will work together to reconcile it.
Smoothing the Big Expenditure

- If you have a large, non-capital ‘start-up’ expenditure, you may build it into your calculated rates over a 2-3 year period to help “smooth” the rates.

- As with capital equipment replacement, the first year in which any major non-capital expenditure (or portion thereof) can be included in rates is the year in which it is actually incurred.
## Determining the Usage Basis

<table>
<thead>
<tr>
<th>Allowable Methods</th>
<th>Unallowable Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Hours used</td>
<td>■ Annual Fee</td>
</tr>
<tr>
<td>■ Tests performed</td>
<td>■ Arbitrary pricing</td>
</tr>
<tr>
<td>■ Lab Runs</td>
<td></td>
</tr>
<tr>
<td>■ Any other method that measures or reasonably approximates actual usage</td>
<td></td>
</tr>
</tbody>
</table>

If you are finding it difficult to identify a method, please contact Cost Studies and we can work together to determine a viable metric.
External Customers/Sales – Summary of Principles

- External Sales are sales made by an Northwestern recharge center to an outside entity
  - Outside entities include Northwestern affiliates (e.g., Rehabilitation Institute of Chicago)

- External sales should be incidental, and thus represent only a small portion (if any) of recharge center revenues.
  - Remember: primary reason for existence of recharge center is to provide necessary/convenient services to Northwestern users

- If external customer usage is more than incidental, could subject Northwestern to:
  - Charges of “unfair” competition with local vendors if Northwestern does not charge comparable market prices
  - Unrelated Business Income Tax (UBIT) implications; specifically, Northwestern could have to pay tax on external sales (because they represent income earned by a tax exempt entity that does not result from tax exempt activities).
When calculating cost rate for a given service, usage by external entities must be included in denominator
- Unless costs associated with providing service to external customers are significantly different than costs for service to internal customers (then calculate separate rates)

Prices to external users will need to be appropriately costed including application of any applicable Facilities and Administrative (F&A) costs and can include a reasonable additional fee in excess of the cost of the service.
- Unlike with rates applicable to internal users, prices can be “market-based”

Expenses and revenues associated with external customers must be recorded in same chartstring as all other center expenses and revenues

It’s good business practice to establish formal agreements/purchase orders for external customer usage
- Address agreed-upon pricing and payment terms
- Address risk management issues, especially if non-Northwestern personnel will be on-site (e.g., using equipment in facility)
- Address potential data security concerns
- Other legal protections
Rate Submission and Approval Procedures

- Once rate calculations are complete, they must be reviewed and approved by Cost Studies before they can be implemented (i.e., used to charge customers).

- Annually, Cost Studies notifies the service centers in June with the updated worksheets/instructions and **deadline** for submission. Cost Studies then reviews the submitted worksheets for the next FY. Upon approval, Cost Studies notifies the center. Instructions and worksheets can be downloaded from: [http://www.northwestern.edu/coststudies/recharge.html](http://www.northwestern.edu/coststudies/recharge.html)

- Follow-up emails will be sent to remind the delinquent centers and notify the dean’s office that the users cannot be charged with unapproved rates.

- Accounting Services for Research and Sponsored Programs (ASRSP) and Accounting Services receive from Cost Studies a list of identified recharge centers and their rate approval status on a regular basis. If your center is not on the list or does not have approved rates, your Actual Journal to charge a sponsored or non-sponsored chartstring may not be processed.

- The length of time it takes to establish a recharge center varies, but rate calculations are usually the most time-intensive step in the process.
Step 4: Establish the (Fund 160) Chartstring

- Each recharge center should have at least one chartstring exclusively dedicated to capturing all expenses and revenues associated with the activity
  - Ensures expense and revenue activity is properly aligned and facilitates ability to analyze center financial performance
  - Ensures proper classification of activity (as recharge) for Financial Statement, F&A rate calculation and other reporting purposes

- A unique fund – 160 – exists in NUFinancials for recharge centers
  - Budget is set so budgeted revenues = budgeted expenses
  - Expenditures + Encumbrances cannot exceed budget
    - Can request budget increase, which increases both revenues and expenses
    - Can exceed budget on individual line items, as long as overall budget is not exceeded.

- A New chartstring Request form must be completed and submitted to Accounting Services (Chartfield Request form can be found under NUPortal à Staff tab à Finance & Budgeting tab à Chartfield Request Form)
  - Expense Account Codes and budgeted amounts should correspond to costs included in rate calculations
  - Revenue Account Codes: select code that best describes nature of service(s); should be at least 2 (Internal sales with “RDX” starts with 5, External Sales without “RDX” starts with 4)

- If equipment depreciation is reflected in prices to be charged, also need to establish a Capital Reserve Chartstring (more on slides 39-40)
Chartstrings

- **Fund 160 Chartstrings**
  - Other than certain Facilities Management recharge centers which remain under the Fund 110 group, all recharge centers should have chartstrings in Fund 160.

- **Fund 172 Accounts**
  - Fund 172 accounts are classified as “Current Funds – Self-Supporting”

- **Class**
  - Class 197 is for recharge center chartstrings
  - Class 198 is for specialized service facilities chartstrings
Common Recharge Question:

Q: What if: a) an existing chartstring reflects a mix of unrelated activities, only one of which is a recharge activity; or b) an existing chartstring reflects a single activity or related set of activities, but only a select set of users are charged for their usage?

A:

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

b) 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 rate only to the select group of users.
Mid-Year Chartstring Establishment

- If a recharge center is opened during the fiscal year, all current year recharge revenues and expenses (that were credited or charged to a different chartstring) should be moved into the new 160 recharge chartstring.

  The 90 Day Rule Policy should be applied to transferring charges/revenues to all Northwestern funds
Capital Reserve Chartstrings

A Capital Reserve Chartstring (CRC) is established for centers that include equipment depreciation expense in their prices (either internal prices, external prices or both).

- A CRC segregates capital from operating expenses, and allows for the accumulation of a reserve to be used to fund new/replacement capital equipment when needed.
  - Remember: the reserve should be maintained in the CRC (fund 171) and should not be accumulated on the center’s operating (160) chartstring.

- A unique fund group, 171, exists in NUFinancials for CRCs
  - And, like 160 fund chartstrings, CRCs are established by the Accounting Services.

- The chartstring is funded annually by charging the operating (160) chartstring for the equipment depreciation expense and crediting the CRC.

- When a CRC exists, all capital equipment purchases should be charged to it.
  - No other expenses should be charged to it.
  - Because equipment purchases can be “lumpy”, at any time the CRC may be in a surplus or deficit position.
Recharge Questions: Capital Reserve Chartstrings

Q: If I don’t include equipment depreciation expense in my prices, can I still build a capital reserve?
A: No. Depreciation expense must be passed down to users for a capital reserve to be accumulated.

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: How do I buy new equipment if I don’t establish a capital reserve account?
A: The capital equipment should be purchased with non-sponsored sources excluding 160 fund or specifically authorized under a sponsored agreement.
Step 5: Manage the Chartstring & Other Administrative Requirements

- After the recharge center is established, there are ongoing accounting and administrative requirements, including:
  - Proper booking of the center’s expenses and revenues
  - Timely billing to customers
  - At least annual surplus/deficit analysis and re-calculation of rates (including Cost Studies’ review/approval)
  - Record retention
Booking Recharge Center Expenses and Revenues

- General principle: **all** expenses and revenues associated with a center’s activities should be booked on the 160 chartstring, and nowhere else.
  - Applies even to expenses that you anticipate won’t be recovered; in this case, a subsidy (revenue) should be transferred into the 160 chartstring.
  - An exception exists if a CRC has been established, in which case capital equipment expenses should be charged to it.

- Highlight on salaries: If you build a portion of someone’s salary (and fringe) costs into your recharge rate calculation, that portion of their salary (and fringe) must be charged to the 160 chartstring.

- For example . . .
  - 5% of Joe Smith’s effort and time will be devoted towards the recharge center.
  - 5% of Joe’s salary should be factored into the costs of the recharge operation.
  - Thus, 5% of Joe’s salary should be charged to the Fund 160 recharge chartstring.
The Importance of Accurate Revenue Classification

- All revenues from internal (Northwestern) sales must be credited on a revenue account with the RDX starts with number 5.
  - Any external sales should be credited on the corresponding non-RDX code starts with 4

- Revenue account codes that begin with number 5 (RDX) signifies that the source of revenue is internal.

- Proper use of revenue account codes is critical to ensure accurate accumulation of institutional expenses for the annual Financial Statements, periodic F&A rate calculation, and other reporting.
  - Ensures we don’t double-count expenses
Billing

- Billing must be done on a timely basis. **Bill Monthly:** Due to the implementation of the new HHS Payment Managements System (PMS), we strongly recommend that all service charges must be posted prior to the project end date to avoid disallowance.

- Ensures costs posted to grants within budget/project periods and compliance with 90 Day Rule
  - Facilitates ability to accurately gauge center’s financial position
  - Good business practice

- Billing should occur after the service or the agreed portion of the contract work is performed.
  - If the completion of the service overlaps the fiscal year, the rate should be utilized proportionally based on the fiscal year service was performed.

- Correct and consistent expense account codes and revenue account codes must be used on actual journals
  - Same account code of expense should be used for debits (charges) to all user chartstrings
  - More on slide 43 regarding the importance of using correct revenue account codes

- Customers seek maximum information on recharge transactions when they review their own account statements
  - Enter meaningful detail on transaction description lines
  - Notion of providing “pre-charging” notification

- Must be prepared to provide support for billed amounts when requested by customers and/or auditors
Annual Surplus/Deficit Analysis and Rate Re-calculation & Submission

- To ensure and document that a center is operating toward a break-even position over time, an annual surplus/deficit analysis must be prepared.
  - In general, the annual surplus/deficit amount must be carried-forward (included in) the next year’s rate calculations
  - If surplus, exclude 2-month working capital: 2 month-working capital = total fiscal year operating cost ÷ 12 x 2

- In conjunction with this analysis, rates should be re-calculated (and include any surplus/deficit amount(s)) and submitted to Cost Studies for approval.
  - Cost Studies has developed a template to facilitate the surplus/deficit analysis
  - Again, we are here to assist on an ongoing basis
The importance of breaking even ...

- Northwestern is a not-for-profit organization. In keeping with that standard, no recharge center should be earning a profit at the expense of an internal user, especially at the expense of Federal (or non-Federal) grants. At the same time, it is understood that a center should be able to recover the costs of its operations.
Annual Surplus/Deficit Principles

- The center’s surplus/deficit amount(s) cannot necessarily be taken directly from a chartstring statement.
  - Use Recharge Rate Calculation Template”

- For a center that provides multiple goods and/or services, the surplus/deficit should be calculated at 2 levels: in aggregate (across all services) and then by service.
  - The by-service calculations are necessary to arrive at a reasonable amount to carry-forward into the next year’s rate calculations (which are by service).
  - The Template facilitates both levels of calculation.

- If a unit has > 1 good/service and/or > 1 recharge center/chartstring, the individual surplus/deficit amounts can only be combined if the user populations are the same across goods/service and/or chartstrings.

- While both should be resolved over time, from a compliance perspective it is more critical to address a surplus than a deficit (but . . . the department/school likely will be interested in resolving any deficit).
Annual Surplus/Deficit Principles continued

- Some amount of surplus at year’s end is acceptable, and does not have to be carried-forward into the next year’s rate calculations
  - The Federal guidelines permit the equivalent of 2 months of operating expense to be retained as “Working Capital”

- 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.

- There are two kinds of deficits that should be addressed in different ways:
  - a) “unplanned deficits”: those that result from expenses being greater or usage being less than estimated in the rate calculations – these should be carried-forward into the next year’s rate calculations
  - b) “planned deficits”: those that result from setting internal prices < calculated rates – these should not be carried-forward as they represent permanent subsidy; funding should be brought into the 160 chartstring to eliminate these deficits before the new year starts
### Annual Surplus/Deficit Analysis and Rate Re-calculation & Submission

<table>
<thead>
<tr>
<th>Things you are dying to know…</th>
<th>Secrets revealed…</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ When do I have to submit my annual surplus/deficit analysis and rate re-calculations?</td>
<td>■ You will receive a memo (from Cost Studies) during the summer which will remind you that rates need to be submitted for the upcoming fiscal year.</td>
</tr>
<tr>
<td>■ Do I have to submit something even if I am keeping my rates the same as the previous year?</td>
<td>■ Yes. It’s important to have documentation of the surplus/deficit analysis and the most current rate calculations on file.</td>
</tr>
<tr>
<td>■ Can I adjust my prices mid-year?</td>
<td>■ 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.</td>
</tr>
</tbody>
</table>
Record Retention

- A recharge center should maintain records of:
  - Center expenses & revenues (e.g., chartstring statements)
  - Usage “logs”
  - Rate calculations and annual surplus/deficit analyses

- Records should be retained for at least 8 years.

Together, are the basis for billings
Closing down a recharge center

If the decision has been made to close the center, then the following steps should be taken:

- Step 1: Ensure all applicable expenses are booked, resolve all outstanding encumbrances, and bill and collect for any outstanding receivables
- Step 2: Determine the final surplus/deficit amount and work with Cost Studies, the Budget Office, and your oversight unit regarding its proper disposition
- Step 3: Inform the Budget Office to close the chartstring
RECHARGE RATE CALCULATION TEMPLATE

- The recharge rate calculation template and step by step instructions are available on Cost Studies website:
  
  http://www.northwestern.edu/coststudies/recharge.html

- The Template is an Excel file consisting of several tabs or worksheets. The basic process is to go tab by tab, filling in the green highlighted areas (cells). Formulas to perform certain calculations and links to feed information from one tab to another are already created. The template should be used in conjunction with one another.

- Using the template is optional, but a documented methodology must exist that supports the rates charged. So, whatever format you use should be similar in content and methodology to our template.

- Contact Cost Studies: we’re here to help!
  - E.g., if you have more services than are currently configured in the template, we will assist in tailoring it for your use.

- The following section is designed to show you how to use the Cost Studies Recharge Rate Calculation Template.
The Fictional Recharge Situation – Let’s set the mood

- A Recharge Center is provides services to Northwestern departments and the occasional external users.

- There are two employees (a manager, and a technician) working in the center, each of which allocates some percentage of his time to the center.

- Only one piece of capital equipment is being depreciated.

- In FY13, the center generated an aggregate surplus of $14,133, which must be factored into the annual surplus/deficit analysis after reduction of two months working capital along with any surplus/deficit being generated in FY12.

- There are 2 services being provided: X-ray and MRI.
Using the :Template Start with the **Description of Service** tab

<table>
<thead>
<tr>
<th>Description of Services</th>
<th>Applicable for Fiscal Year: 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Recharge/Service Center:</strong></td>
<td>Cost Study Recharge Ctr.</td>
</tr>
<tr>
<td><strong>NUFinancials Chartstring:</strong></td>
<td>160-1234567</td>
</tr>
<tr>
<td><strong>Facility Location:</strong></td>
<td>619 Clark St. Rm. 1234</td>
</tr>
</tbody>
</table>

Please enter a short name for each Service after the colon each box.

<table>
<thead>
<tr>
<th>Service 1: X-Ray</th>
<th>Service 2: MRI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Name:</strong> 3D X-Ray</td>
<td><strong>Full Name:</strong> HPD MRI</td>
</tr>
<tr>
<td><strong>Description:</strong> Small X-Ray for aminas</td>
<td><strong>Description:</strong> Small MRI machine for animals</td>
</tr>
</tbody>
</table>

For each of the three questions below, click on the corresponding green-shaded cells to see the available options. You may enter your own data if it is not listed.

<table>
<thead>
<tr>
<th>What is the nature of the service?</th>
<th>Clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are human subjects involved?</td>
<td>No</td>
</tr>
<tr>
<td>Do you provide services to external customer?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

If you provide services, please list the full names and affiliations of your external customers.

<table>
<thead>
<tr>
<th>List of external Customers</th>
<th>List of external Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baxter</td>
<td>Baxter</td>
</tr>
</tbody>
</table>
Using the Template: step 2, the Effort Billable Hours tab

<table>
<thead>
<tr>
<th>Total Recharge Hours for Full-time Employees</th>
<th>John Smith</th>
<th>Jack Dower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>1,950</td>
<td>1,950</td>
</tr>
<tr>
<td>Technician</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leave/Benefit Hours</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacation and PTO Hours</td>
<td>128</td>
<td>128</td>
</tr>
<tr>
<td>Sick Time Hours</td>
<td>113</td>
<td>113</td>
</tr>
<tr>
<td>Holiday Hours</td>
<td>76</td>
<td>76</td>
</tr>
<tr>
<td>Total Benefit Hours</td>
<td>323</td>
<td>323</td>
</tr>
</tbody>
</table>

| Total Available (non-benefit) Hours        | 1,627      | 1,627      |
| % Salary on Recharge and Planned Subsidy   | 100%       | 100%       |
| Total Recharge Hours/Year (Service & Non-Service) | 163  | 1,627 |

### Recharge Hours by Service

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Total Hours to be Allocated</th>
<th>Current Total Hours Allocated</th>
<th>Are All Hours Allocated?</th>
<th>% of Recharge Time on Non-Service Activity</th>
<th>Hour per Year on Non-Service Activity</th>
<th>Hour per Year providing Service to Users</th>
<th>Hour per Year Spent Supporting Service Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Smith/Manager</td>
<td>163</td>
<td>16</td>
<td>Yes</td>
<td>100%</td>
<td>16%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Jack Dower/Technician</td>
<td>1,627</td>
<td>1,627</td>
<td>Yes</td>
<td>51%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>1,790</td>
<td>1,794</td>
<td>Yes</td>
<td>113</td>
<td>0%</td>
<td>63%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Hours on Service Line Activities

<table>
<thead>
<tr>
<th>John Smith/Manager</th>
<th>Jack Dower/Technician</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hours on Non-Service Activities

<table>
<thead>
<tr>
<th>John Smith/Manager</th>
<th>Jack Dower/Technician</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Breakdown of Total Direct Hours

<table>
<thead>
<tr>
<th>Total Direct Service Line Hour Per Year</th>
<th>1,627</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing Direct Service to User</td>
<td>0</td>
</tr>
<tr>
<td>Spent Supporting Service Line</td>
<td>0</td>
</tr>
</tbody>
</table>

### Breakdown of Non-Service Hours

<table>
<thead>
<tr>
<th>Total Non-Service Activity Hours</th>
<th>163</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakdown of Non-Service Hours</td>
<td></td>
</tr>
<tr>
<td>Supervised/Facility Management</td>
<td>66</td>
</tr>
<tr>
<td>Professional Conference/Development</td>
<td>63</td>
</tr>
<tr>
<td>... other line away from providing services</td>
<td></td>
</tr>
</tbody>
</table>

| Sum of Non-Service Hours Breakdown | 163  |
| Are All Hours Allocated?           | Yes  | Yes  |
Using the Template: step 3, the Salary & FB Exp Tab

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Total Base Salary</th>
<th>% Salary from Effort Billable Hours</th>
<th>Recharge/Planned Subsidy Salary</th>
<th>Non-Federal FB</th>
<th>Federal FB</th>
<th>Difference</th>
<th>Total Net Salary &amp; Allowable FB</th>
<th>% Time</th>
<th>Sal + FB</th>
<th>% Time</th>
<th>Sal + FB</th>
<th>% Time</th>
<th>Sal + FB</th>
<th>% Time</th>
<th>Sal + FB</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Smith Manager</td>
<td>Manager</td>
<td>$70,000.00</td>
<td>10%</td>
<td>$7,000.00</td>
<td>$1,504.00</td>
<td>$1,390.00</td>
<td>$14.00</td>
<td>$8,880.00</td>
<td>100%</td>
<td>$8,880</td>
<td>0%</td>
<td>$-</td>
<td>0%</td>
<td>$-</td>
<td>100%</td>
<td>$8,880</td>
<td>$8,880</td>
</tr>
<tr>
<td>Jack Davis Technician</td>
<td>Technician</td>
<td>$50,000.00</td>
<td>10%</td>
<td>$50,000.00</td>
<td>$13,600.00</td>
<td>$13,500.00</td>
<td>$100.00</td>
<td>$63,500.00</td>
<td>0%</td>
<td>$-</td>
<td>51%</td>
<td>$32,276.88</td>
<td>49%</td>
<td>$31,223.11</td>
<td>100%</td>
<td>$63,500</td>
<td>$63,500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>$57,000.00</td>
<td></td>
<td>$15,504.00</td>
<td>$15,500.00</td>
<td>$14.00</td>
<td>$72,390.00</td>
<td>$8,880.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$8,880</td>
</tr>
</tbody>
</table>

### Allocation of Time and Salary/Fringe to Services/Activities

<table>
<thead>
<tr>
<th>Non-Service/Admin</th>
<th>Service 1: X-Ray</th>
<th>Service 2: MRI</th>
<th><strong>Total</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Time</td>
<td>$8,880.00</td>
<td>$32,276.88</td>
<td>$31,223.11</td>
</tr>
</tbody>
</table>

### Allocation of Non-Service and Administration Salary & FB Across Direct Services

- **Directly Assigned Salary & FB**: $32,276.88, $31,223.11, $63,500.00
- **% of Total Direct Labor Per Service**: 51%, 49%, 100%
- **Non-Service/Admin Labor Per Service**: $4,518.76, $4,371.24, $8,890.00
- **Total After Alloc.**: $36,795.65, $35,594.35, $72,390.00

Each "Total After Alloc." figure feeds into the Summary tab.
Using the Template: step 8, the top section of the **Summary** tab

<table>
<thead>
<tr>
<th>Allocation to Services</th>
<th>Service 1: X-Ray</th>
<th>Service 2: MRI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries, Wages &amp; Fringe Benefits from Salary &amp; Fringe Benefits worksheet</td>
<td>$36,795.65</td>
<td>$35,994.36</td>
<td>$72,790.00</td>
</tr>
<tr>
<td>Non-Labor Expenses from Non-Labor Expense worksheet</td>
<td>$3,000.00</td>
<td>$2,000.00</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>Capital Equipment Expenses from Equipment worksheet</td>
<td>$1,000.00</td>
<td>$4,000.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td><strong>Total Non FT Expenses</strong></td>
<td>$40,795.65</td>
<td>$42,994.36</td>
<td>$83,790.00</td>
</tr>
<tr>
<td><strong>Planned Subsidy to Reduce Rate</strong></td>
<td>$5,000.00</td>
<td>$10,000.00</td>
<td>$15,000.00</td>
</tr>
<tr>
<td><strong>Surplus/Deficit to Include in Rate</strong></td>
<td>$7,000.00</td>
<td>$66.50</td>
<td>$7,066.50</td>
</tr>
<tr>
<td><strong>Total Cost in Rate Calculations</strong></td>
<td>$20,795.65</td>
<td>$34,927.86</td>
<td>$55,723.50</td>
</tr>
</tbody>
</table>

**Utilization**

- **Current FT Utilization (1)**
  - NUI Users: 200
  - External Academic Users: 0
  - External Commercial Users: 5

(1) **Current FT Utilization:** Please indicate utilization figures for the current fiscal year, including an adjustment for final utilization figures through August 31st. These figures should form a basis for next year’s Projected Utilization.

- **Projected Utilization for Next FT**
  - NUI Users: 200
  - External Academic Users: 4
  - External Commercial Users: 5

- **Total Projected Utilization for Next FT**
  - NUI Users: 200
  - External Academic Users: 4
  - External Commercial Users: 5

**Rates**

- **Calculated Billing Rate for Next FT**
  - NUI Users: $157.75
  - External Academic Users: $165.21

- **Established Billing Rates for Next FT**
  - NUI Users (2): $157.75
  - External Academic Users (2): $165.21
  - External Commercial Users (2): $228.96

---

Northwestern
Using the Template: step 4, the Non-Labor Costs tab

<table>
<thead>
<tr>
<th>Non-Labor Expense</th>
<th>Projected Expense</th>
<th>%</th>
<th>Amount</th>
<th>%</th>
<th>Amount</th>
<th>%</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment under $5,000 (77000)</td>
<td>$ 1,000.00</td>
<td>50%</td>
<td>$ 500.00</td>
<td>50%</td>
<td>$ 500.00</td>
<td>100%</td>
<td>$ 1,000.00</td>
</tr>
<tr>
<td>Supplies (73000)</td>
<td>$ 2,000.00</td>
<td>50%</td>
<td>$ 1,000.00</td>
<td>50%</td>
<td>$ 1,000.00</td>
<td>100%</td>
<td>$ 2,000.00</td>
</tr>
<tr>
<td>Supplies, Restricted (73001)</td>
<td>$ 3,000.00</td>
<td>50%</td>
<td>$ 1,500.00</td>
<td>50%</td>
<td>$ 1,500.00</td>
<td>100%</td>
<td>$ 3,000.00</td>
</tr>
<tr>
<td>Services (75000)</td>
<td></td>
<td>1%</td>
<td>$ -</td>
<td>1%</td>
<td>$ -</td>
<td>3%</td>
<td>$ -</td>
</tr>
<tr>
<td>Travel, Domestic (76761)</td>
<td></td>
<td>1%</td>
<td>$ -</td>
<td>1%</td>
<td>$ -</td>
<td>3%</td>
<td>$ -</td>
</tr>
<tr>
<td>Travel, Student (76776)</td>
<td></td>
<td>1%</td>
<td>$ -</td>
<td>1%</td>
<td>$ -</td>
<td>3%</td>
<td>$ -</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 6,000.00</strong></td>
<td></td>
<td><strong>$ 3,000.00</strong></td>
<td><strong>$ 3,000.00</strong></td>
<td><strong>$ 3,000.00</strong></td>
<td><strong>$ 6,000.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note:

If your recharge center's customers include NU federal sponsored projects, the allowability of the costs must adhere to OMB Uniform Guidance Costing Principles and NU's policy, Charging Sponsored Project. Refer to the policy to determine if it is appropriate to include the charges in the above section:

http://www.northwestern.edu/coststudies/Charging_Sponsored_Projects.pdf
Using the Template: step 5, the **Equipment** tab

### Calculation of Equipment Depreciation Expenses

<table>
<thead>
<tr>
<th>Tag #</th>
<th>Description</th>
<th>Manufacturer</th>
<th>Purchase Date</th>
<th>First Fiscal Year for Depreciation</th>
<th>Chart String that Funded Equip</th>
<th>Total Cost</th>
<th>Federal Contribution</th>
<th>Equipment Life</th>
<th>Depreciation Base</th>
<th>Years of Useful Life Remaining</th>
<th>Depreciation Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>123456</td>
<td>MRI Machine</td>
<td>GE</td>
<td>9/1/2013</td>
<td>2013</td>
<td>171-50000000-10022542</td>
<td>60,000.00</td>
<td>10</td>
<td>60,000.00</td>
<td>9</td>
<td>6,000.00</td>
<td>$ 6,000.00</td>
</tr>
</tbody>
</table>

**Total Depreciation Expenses**

$ 6,000.00

### Equipment Service Contracts

#### Equipment under contract

<table>
<thead>
<tr>
<th>Tag #</th>
<th>Description</th>
<th>Service Contract Vendor</th>
<th>Service Contract Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>234567</td>
<td>X-Ray</td>
<td>GE</td>
<td>$ 1,000.00</td>
</tr>
</tbody>
</table>

**Total Equipment Contract Expenses**

$ 1,000.00

### Allocation of Equipment Expenses to Services

<table>
<thead>
<tr>
<th>Tag #</th>
<th>Description</th>
<th>Depreciation Expenses</th>
<th>Service Contract Expenses</th>
<th>Total Equipment Expenses</th>
<th>%</th>
<th>Amount</th>
<th>%</th>
<th>Amount</th>
<th>Total must = 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>123456</td>
<td>MRI</td>
<td>$ 6,000.00</td>
<td>$ -</td>
<td>$ 6,000.00</td>
<td>100%</td>
<td>$ 6,000.00</td>
<td>100%</td>
<td>$ 6,000.00</td>
<td></td>
</tr>
<tr>
<td>234567</td>
<td>X-Ray</td>
<td>$ -</td>
<td>$ 1,000.00</td>
<td>$ 1,000.00</td>
<td>100%</td>
<td>$ 1,000.00</td>
<td>$ -</td>
<td>$ 1,000.00</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$ 6,000.00</td>
<td>$ 1,000.00</td>
<td>$ 7,000.00</td>
<td>$ 1,000.00</td>
<td>$ 6,000.00</td>
<td>$ 7,000.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Using tab 7 to determine S/D: step 6, the **S/D In Aggregate** tab

*Does not apply to 1st-time rate calculations*

### Revenue In Aggregate

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Carry forward (total prior fiscal year surplus or deficit)</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>B</td>
<td>Current total year-to-date user revenue (not including subsidy transfers)</td>
<td>$70,000.00</td>
</tr>
<tr>
<td>C</td>
<td>Estimated additional user revenue through end of current year</td>
<td>$10,000.00</td>
</tr>
<tr>
<td></td>
<td>Adjust for:</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Subsidies transferred to the Recharge Chart String year-to-date</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>E = A + B + C + D</td>
<td>Total current year Estimated Revenue</td>
<td>$105,000.00</td>
</tr>
</tbody>
</table>

### Expense In Aggregate

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Current total year-to-date Operating Expenses</td>
<td>$70,000.00</td>
</tr>
<tr>
<td>G</td>
<td>Estimated additional Operating Expenses through end of current year</td>
<td>$2,000.00</td>
</tr>
<tr>
<td></td>
<td>Adjust for:</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Equipment/Depreciation Expenses</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>I</td>
<td>Other unallowable costs charged to operating account</td>
<td>$14,000.00</td>
</tr>
<tr>
<td>J = F + G + H + I</td>
<td>Estimated Total Allowable Current Year Expenses</td>
<td>$77,886.00</td>
</tr>
<tr>
<td>K = J - E</td>
<td>TOTAL SURPLUS/(DEFICIT) FOR CURRENT YEAR</td>
<td>$27,814.00</td>
</tr>
<tr>
<td></td>
<td>Adjust for:</td>
<td></td>
</tr>
<tr>
<td>L = J * (3/12)</td>
<td>2 Months' Working Capital Allowance</td>
<td>$12,981.00</td>
</tr>
<tr>
<td>M</td>
<td>If Deficit: Other Subsidy (beyond Line D, this includes year-end deficit coverage)</td>
<td>$14,133.00</td>
</tr>
<tr>
<td>N = K + M or N = K + M - L</td>
<td>NET SURPLUS/(DEFICIT) LESS TWO MONTHS WORKING CAPITAL IF APPLICABLE</td>
<td>$14,133.00</td>
</tr>
</tbody>
</table>

### Description of Surplus Deficit Status

- **Three Possibilities:** Deficit, Surplus less than 2 months working capital, and large surplus
- Complete the following tab if required by the "Description of Deficit Status" instructions

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q = N/J</td>
<td>Net Surplus/(Deficit) as % of Total Est. Expense</td>
<td>18%</td>
</tr>
</tbody>
</table>

### Surplus/(Deficit) To Include in Rates

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Surplus will be split into two years</td>
<td>13</td>
</tr>
</tbody>
</table>
Using tab 8 to determine S/D by service lines: step 7, the S/D by Service tab

*Does not apply to 1st-time rate calculations

<table>
<thead>
<tr>
<th></th>
<th>Allocation to Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Totals from &quot;S/D in Aggregate&quot;</td>
</tr>
<tr>
<td>Revenues by Service</td>
<td>$ 105,000.00</td>
</tr>
<tr>
<td>Expenses by Service</td>
<td>$ 77,886.00</td>
</tr>
<tr>
<td>TOTAL SURPLUS/(DEFICIT) FOR CURRENT YEAR</td>
<td>$ 27,114.00</td>
</tr>
<tr>
<td>WORKING CAPITAL AND OTHER SUBSIDY ADJUSTMENT</td>
<td>$ (12,981.06)</td>
</tr>
<tr>
<td>NET SURPLUS/(DEFICIT)</td>
<td>$ 14,133.00</td>
</tr>
<tr>
<td>SURPLUS/(DEFICIT) TO INCLUDE IN RATES</td>
<td>$ 7,066.50</td>
</tr>
<tr>
<td>SURPLUS/(DEFICIT) NOT INCLUDED IN NEXT YEAR'S RATES</td>
<td>$ 7,066.50</td>
</tr>
</tbody>
</table>
Using tab 8 to determine S/D by service lines: step 7, the S/D by Service tab

*Does not apply to 1st-time rate calculations

<table>
<thead>
<tr>
<th>Totals from &quot;SD in Aggregate&quot;</th>
<th>Allocation to Services</th>
<th>Amount</th>
<th>Amount</th>
<th>Are all Dollars Allocated?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Service 1: X-Ray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues by Service</td>
<td></td>
<td>$105,000.00</td>
<td>$50,000.00</td>
<td>$55,000.00</td>
</tr>
<tr>
<td>Expenses by Service</td>
<td></td>
<td>$77,886.00</td>
<td>40%</td>
<td>$31,154.40</td>
</tr>
<tr>
<td>TOTAL SURPLUS/(DEFICIT) FOR CURRENT YEAR</td>
<td></td>
<td>$27,114.00</td>
<td></td>
<td>$18,846.00</td>
</tr>
<tr>
<td>WORKING CAPITAL AND OTHER SUBSIDY ADJUSTMENT</td>
<td></td>
<td>$12,981.00</td>
<td>40%</td>
<td>$5,192.40</td>
</tr>
<tr>
<td>NET SURPLUS/(DEFICIT)</td>
<td></td>
<td>$14,133.00</td>
<td></td>
<td>$13,653.20</td>
</tr>
<tr>
<td>SURPLUS/(DEFICIT) TO INCLUDE IN RATES</td>
<td></td>
<td>$7,066.50</td>
<td></td>
<td>$7,000.00</td>
</tr>
<tr>
<td>SURPLUS/(DEFICIT) NOT INCLUDED IN NEXT YEAR'S RATES</td>
<td></td>
<td>$7,066.50</td>
<td></td>
<td>$6,653.20</td>
</tr>
</tbody>
</table>
Using the Template: step 9, the Reconciliation to the Budgets section of the Summary tab

<table>
<thead>
<tr>
<th>Add: Expenses not included in rate calculations</th>
<th>Unallowable FB</th>
<th>$ 57.95</th>
<th>$ 56.05</th>
<th>$ 114.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Expenses + Unallowable Costs</td>
<td>$ 28,853.60</td>
<td>$ 34,583.90</td>
<td>$ 63,437.50</td>
<td></td>
</tr>
<tr>
<td>Total Expense Budget on Chartstring(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chartstring:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chartstring:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chartstring:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chartstring:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference (should = $0)</td>
<td>$ 28,853.60</td>
<td>$ 34,583.90</td>
<td>$ 63,437.50</td>
<td></td>
</tr>
<tr>
<td>Projected revenues from services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NU users</td>
<td>$ 27,555.65</td>
<td>$ 33,041.00</td>
<td>$ 60,596.65</td>
<td></td>
</tr>
<tr>
<td>External Academic Users</td>
<td>$ 551.11</td>
<td>$ 660.82</td>
<td>$ 1,211.93</td>
<td></td>
</tr>
<tr>
<td>External Commercial Users</td>
<td>$ 1,129.78</td>
<td>$ 1,354.68</td>
<td>$ 2,484.46</td>
<td></td>
</tr>
<tr>
<td>Total Projected Revenues</td>
<td>$ 29,236.54</td>
<td>$ 35,056.50</td>
<td>$ 64,293.05</td>
<td></td>
</tr>
<tr>
<td>Other Subsidy (Next FY)</td>
<td></td>
<td></td>
<td></td>
<td>$ -</td>
</tr>
<tr>
<td>Rev. + Other Subsidy - Expenses</td>
<td>$ 382.94</td>
<td>$ 472.60</td>
<td>$ 855.55</td>
<td></td>
</tr>
</tbody>
</table>

Northwestern
Recharge Center Policies and Procedures on the Northwestern Website

- **Cost Studies Recharge/Service Center URL:**

  [http://www.northwestern.edu/coststudies/recharge.html](http://www.northwestern.edu/coststudies/recharge.html)
Any questions???

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