2003.900 – RESEARCH SERVICE CENTERS

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Additional References:
Title 2 Code of Federal Regulations Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
North Carolina General Statues §147-86.20 - §147-86.26 Article 6B – Statewide Accounts Receivable Program
North Carolina Office of the State Controller Policy 102.1 – Capitalization/Classification Policy

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I. INTRODUCTION
University regulation REG07.30.07 provides a comprehensive reference for uniform interpretation of the conditions under which the University may establish research service centers, develop user rates, and ensure compliance with sound accounting principles and governmental regulations. Compliance with University regulation REG07.30.07 is imperative and the Standard Operating Procedures described herein should be used as guidelines for research service center operations. The Standard Operating Procedures apply to new and existing research service centers. Topics include establishing a new research service center, federal compliance regulations, business plans, roles and responsibilities, rate setting and utilization, allowable and unallowable costs, billing and accounting best practices, internal controls, and record retention.

Research service centers that charge fees to federal sponsored projects and awards for services must comply with regulatory cost principles. Noncompliance may result in return of funds, as well as adverse publicity that is damaging to ECU and may negatively impact future funding. Research service centers must comply with the federal cost principles and cost accounting
standards defined in the Office of Management and Budget (OMB) Code of Federal Regulations Title 2, Chapter II, Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards and Cost Accounting Standards (i.e., Uniform Guidance), and must also comply with the University’s accounting policies and related procedures. The Standard Operating Procedures include key federal compliance requirements:

- The costs of services, when material, must be charged directly to applicable awards based on actual usage.
- Cost of services must not discriminate between activities under federal awards and other activities.
- Internal user rates must be based on recovery of the aggregate costs of the goods and/or services provided.
- Costs of each service must consist of direct costs as defined in the federal Uniform Guidance, and when applicable indirect costs.
- User rates must be reviewed at least biennially and adjusted if warranted.
- Adjustments to user rates must account for both over/under recovery of costs.
- Costs must be allowable, reasonable, and allocable.

II. DEFINITION
The characterization of a research service center is complex, technical, and highly regulated. Specialized research facilities, animal research facilities, and other specialized technical facilities owned or leased by ECU and organized to provide specific goods and/or services to support internal users within the University are considered research service centers by ECU if users of those services can be or are billed when those services are used by or on behalf of ECU to conduct research. Research service centers do not conduct research, but may provide goods and/or services to external users on a limited and incidental basis, subject to applicable law and University constraints including but not limited to the Umstead Act and bond covenants limiting private use of facilities constructed with the proceeds of certain types of bonds. Subject to the referenced laws and constraints, research service centers may be made available to users who need access to infrastructure, technologies, and services that are often beyond the technical or financial capability of individual investigators.

III. CHARGES
Research service centers charge the costs of goods and/or services directly to users based on (1) established billing rates, as reviewed and approved by Financial Services, and (2) the actual usage of the services. For internal users, rates charged for a good or service are based on actual direct costs, are consistently applied, and do not discriminate as to the type of sponsored funding. Research service centers must charge all users for services provided. A research service center may establish tiered rates for users external to the University; however, tiered charge rates must equal or exceed the total cost (direct and indirect costs) to provide the service. Financial Services will conduct a review of the research service center rates annually for adjustment or sustainability.

Research service centers may not establish fees or rates solely for generating discretionary departmental income. Research service centers must recover costs on a breakeven basis while accounting separately for revenue generated by the research service center and the costs to provide the goods and/or services. The academic home department administering the research service center generally will attribute (transfer) relevant direct expenses (labor/supplies) to the research service center to operate and administer the research service center so that the true cost of operating the research service center is stated and the research service center revenues are used to cover those costs. This process may free up home department budgeted funds for repurposing by the home department. If a research service center charges sponsored projects
or external federal users, the activity is subject to federal regulation as described in Title 2 Code of Federal Regulations Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

IV. EXCLUSIONS
REG07.30.07 does not apply to the following: auxiliary and business services, fundraising/advancement or development events, intercollegiate and non-intercollegiate athletic events, or entertainment events. None of these meets the definition of a research service center as defined in section 2 of REG07.30.07. Financial Services may authorize other exclusions.

REG07.30.07 does not apply to the process for setting student tuition and fees, continuing education non-credit course fees, or long-term and short-term lease or rental fees. Although a clinical trial does not mandate creation of a research service center, if services provided by a research service center are billed to a clinical trial, the billing should be consistent with rates established under REF07.30.07.

V. GENERAL INFORMATION
The following principles guide the management of a research service center:
- Identify goods and/or services to be provided to users;
- Understand the differences between an internal user and an external user;
- Develop an internal user rate to recover the direct costs of providing those goods and/or services, not to make a profit or to generate a residual;
- Apply sound cost principles;
- Apply charges consistently;
- Establish and maintain an effective billing/invoice process; and
- Comply with applicable regulations and policies.

Establishing a New Research Service Center
Before a research service center is established, a need for the proposed operation must be demonstrated and validated. The following criteria must be considered:
1. The activity complies with the definition and intent of a research service center.
2. A demand exists within the University community for the goods and/or services to be provided.
3. A significant volume of services, both in dollar amount and number of transactions, will occur annually justifying the need for the research service center.
4. The proposed research service center is related to the instructional, research, or public service mission of the University.
5. Goods and/or services are provided on a regular, recurring basis for a fee.
6. Goods and/or services are measurable.

A written request to establish a research service center must be submitted to the Financial Services Cost Analyst via the Service Center Application/Renewal Form. Before submitting the application, it is highly recommended that the unit proposing to establish a research service center meet with the Cost Analyst to discuss the process and assess the feasibility of the proposed research service center.

The Service Center Application/Renewal Form includes general information, billable services information, annual costs and rate development, approval signatures/acceptance of operating
and financial responsibility. The following documentation must accompany the Service Center
Application/Renewal Form:

- Business Plan
- List of all capital assets to be used in the research service center operations, including tag
  number and physical location, and percentage of usage for billable services
- Rate Development Workbook

After the Service Center Application/Renewal Form has been reviewed and approved by all
appropriate parties, including the Financial Services Cost Analyst, the Cost Analyst will assist with
establishing an appropriate fund for the research service center financial activity.

**Annual Renewal of Research Service Center Rates**
Existing research service centers must complete and submit the Service Center
Application/Renewal Form to the Financial Services Cost Analyst annually by May 31st. The
appropriate approvals must be documented prior to submission to the Cost Analyst. Along with
the Service Center Application/Renewal Form, the following must also be submitted:

- Any changes in the Business Plan since the implementation of the research service center or
  the last annual renewal;
- An updated list of all capital assets used in the research service center operations, including
tag number and physical location, and percentage of usage for billable services;
- Rate Development Workbook.

**Operating Fund**
All research service centers must have a designated and unique Organizational Code to
account for operational financial activity. The financial activity includes (1) generated revenue
from the research service center charges to users, and (2) disbursements of research service
center expenses. Commingling of research service center revenue and expenses with other non-
related activity is prohibited. After Financial Services review of the research service center’s
business plan and financial activity, it will be determined whether the designated fund used will
be an institutional trust fund or a state fund.

When a state fund is used by a research service center for its operational financial activity, the
research service center must comply with University Budget Office requirements regarding fiscal
year-end carryforward requests. Fiscal year-end carryforward actions are at the discretion of the
NC Office of State Budget and Management and the requests are not guaranteed for
approval. Prior to fiscal year-end, research service center administrators must monitor the
operational financial activity and identify the potential occurrence of a year-end deficit and
work with its cognizant administrator to resolve the deficit. Fiscal year-end deficits may not
occur when using a state fund.

**Billing**
Research service centers must bill all users for the goods and/or services provided. Details of
billing procedures are found in section X. Billing Procedures. Generally, (1) billing practices must
be consistent and accurate, (2) advanced billing for services or products is prohibited, and (3)
non-federal external users may be billed at a higher rate than internal users.

**Audit**
The records, operations, rates, and practices of all research service centers are subject to audit
by the federal government, external auditors, and the University internal auditors.
VI. DEFINITION OF INTERNAL AND EXTERNAL USERS

Internal Users:
Internal users are the primary customers for research service centers. Sales to internal users are represented by charges to accounts over which the University has fiduciary responsibility. Internal users include University departments, colleges, sponsored projects and awards and are normally charged via Interdepartmental Transfer (IDT).

External Users:
External users are entities or persons over whom ECU has no fiduciary responsibility or have no association with the University’s academic mission. Examples of external users include but are not limited to: commercial entities, such as a drug company or other for-profit companies; affiliated entities, such as a consortium of which the University is a member; non-affiliated entities, such as hospitals, other universities, or government agencies; and students, faculty, or staff acting in a personal capacity. External users should not be the primary users of a research service center. Faculty, staff, and students will be charged the external rate for any usage related to external professional activities for pay.

VII. RATE COMPONENTS

When developing internal user rates, research service centers must comply with federal Uniform Guidance 2 CFR 200 Subpart E Cost Principles § 200.420 - § 200.475 regarding allowable and unallowable costs.

Costs Included in Internal Rate Calculation
Internal user rates include allowable costs directly related to the operations of the research service center. Allowable costs, as defined in federal Uniform Guidance 2 CFR 200 Subpart E Cost Principles, must be reasonable, allocable, allowable, and consistently treated.

Allowable costs include:

- Salaries, wages, and fringe benefits of personnel who directly support the research service center activity. If an individual performs more than one activity within the research service center, the costs associated with that individual should be allocated to the activities based on the proportional benefit to each. This proportion may be determined and allocated by effort reporting or by a special time study.
- Materials and supplies (consumables) needed to operate a research service center.
- Other costs such as purchases of non-capital equipment, equipment service contracts, equipment operating leases, equipment repairs and maintenance, communication fees, mailings, and other support costs
- Surplus or deficit from prior year
- F&A costs (for specialized service facilities only)

Costs Excluded from Internal Rate Calculation
The following are classified as unallowable costs in federal Uniform Guidance 2 CFR 200 Subpart E Cost Principles and must be excluded from the internal user rate calculation:

- Certain advertising costs
- Entertainment/alcoholic beverages
- Alumni and fundraising activities
- Public relations and marketing cost
- Donated materials and supplies
- Building depreciation or space rental
- Bad debt expense
- Fines or penalties
- Equipment purchases > $5,000
• Commencement and convocation costs
• Provision for contingencies
• Value of donated services
• Lobbying costs
• Goods/services for personal use
• Interest expense
• Membership dues
• Losses on disposition of equipment
• Scholarships and student aid costs

VIII. RATE DEVELOPMENT
User rate development procedures involve the following steps:
1. Determine all services to be provided. A separate rate should be calculated for each service.
2. Determine the allowable direct costs.
3. Identify the indirect costs and determine if these costs need to be included in the rate. Indirect costs (F&A) are applied to external user rates and specialized service facility rates.
4. Develop a reasonable method to allocate allowable costs to each type of service provided.
5. Identify and segregate unallowable costs.
6. Estimate annual usage for each service.
7. Identify subsidized costs and prior year deficit or surplus that will be adjustments in the rate calculation.
8. Calculate an internal user rate for each service to be provided.
9. Determine the rate to be charged to external users, if any.

Internal Rate Calculation
Internal user rates must be designed to (1) recover the direct allowable operating costs of providing the goods and/or services on an annual basis and (2) ensure that the research service center breaks even over time, preferably each fiscal year. User rates must be calculated annually and based on a reasonable estimate of the direct operating costs of providing the services for the year and the projected number of billing units for the year. Annually, the research service center administrator is required to submit to the Financial Services Cost Analyst a Service Center Application/Renewal Form and Rate Development Workbook. These forms document the rate calculation in accordance with instructions provided by Financial Services.

To calculate this rate, the following equation should be used:

\[ \text{Rate} = \frac{\text{Total annual expected expenses} \pm \text{prior year surplus or deficit}}{\text{Total expected annual usage}} \]

Key cost accounting principles for internal user rates:
• A rate must be calculated for each service provided by the research service center.
• Rates must be based on estimated direct costs. Rates cannot be derived from the market or a historical rate that cannot be documented.
• In the numerator of the equation, annual expected expenses cannot include unallowable costs.
• The denominator of the equation must be based on expected annual usage.

Multiple Rates
When a research service center provides multiple services, separate rates should be established for each service. The direct operating costs, recoveries, surpluses, and deficits should also be
separately identified for each service. If direct operating costs cannot be segregated, the costs related to each service must be separately identified through a cost allocation process. When cost allocations are necessary, they must be made on an equitable basis reflecting the relative benefits each activity receives from the cost. For example, if an employee is involved in providing multiple services, an equitable distribution of his/her salary among the services can usually be accomplished by using the proportional amount of time the employee spends on each service.

Surpluses and deficits should be identified for each service. A surplus that has occurred from providing one service cannot be used to offset the deficit that has occurred from providing another service.

**Non-discriminatory Rates**

**Internal User Rates**
The calculation of internal user rates must be based upon direct and allowable costs. A research service center must charge all internal users at the same rate for the same level of goods or services purchased under the same circumstances. Rates should not differentiate among internal users.

**External User Rates**
External users should be charged for the full direct and allowable costs of the research service center operations, as well as the University’s indirect cost rate (F&A). Where applicable, sales tax must also be charged to external users. Any amounts charged to external users in excess of the internal user rate must be excluded from the computation of a research service center’s surpluses and deficits for purposes of making carry-forward adjustments to future user rates. Services provided to external users may incur unrelated business income tax (UBIT) obligations as well.

Because of competitive pricing levels, a research service center may be able to, or need to, charge what the market will bear. Market prices may be charged to external users only. The research service center must be able to justify the rationale for charging market rates and is required to provide documentation to support the rate charged. At no time should an external user be charged less than the federal government and internal users for the same service. The federal government must always be treated as the most favored user.

External users are required to complete a Fixed Price Agreement or External Sales Agreement prior to the provision of services by the research service center.

**Breakeven Concept**
Research service center rates are calculated based on budgeted projections of operating expenses and projected volume of the services or products to be provided. The goal of the research service center is to calculate a rate which will ensure that revenues reasonably offset expenses. Operating at breakeven means there is no significant surplus or deficit (profit or loss) as a result of charging users for the services provided in any particular period, and no surplus or deficit over the long run.

If a research service center ends a given fiscal year with an operating surplus, a threshold of a 60-day working capital allowance can be used as guidance to determine the surplus amount that should be carried forward into the calculation of the next year’s rate[s]. The amount above the 60-day working capital allowance would be factored into the calculation for the next fiscal year.
Working Capital Reserve
The federal guidelines permit research service centers to maintain a 60-day working capital reserve, however, the research service center may be asked by the government to provide documentation to support that amount. Research service center administrators should routinely monitor its activity for excessive fund balances.

Research service centers must comply with federal Uniform Guidance Code of Federal Regulations Title 2, Chapter II, Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Appendix V, Section G.2: Charges by an internal service activity to provide for the establishment and maintenance of a reasonable level of working capital reserve, in addition to the full recovery of costs, are allowable. A working capital reserve as part of retained earnings of up to 60 calendar days’ cash expenses for normal operating purposes is considered reasonable. A working capital reserve exceeding 60 calendar days may be approved by the cognizant agency for indirect costs in exceptional cases.

Over- or Under- Recovery of Costs at Fiscal Year End
Although a research service center targets breakeven, it is not always possible to be exactly at zero. In the case of an over-recovery (surplus), if the amount is less than or equal to 60 days of working capital, the research service center may retain the amount in the research service center operating fund. Any amount greater than 60 days of working capital must be factored into the rate calculation for the following fiscal year.

Operating deficits must be reviewed prior to fiscal year-end. Research service centers must develop and address funding plans describing the measures that will be taken to reduce the deficit over a reasonable period of time.

Subsidized Rates
For various reasons, a department may wish to have its research service center charge its internal users less than fully costed rates, and may choose to subsidize research service center operations with other funding. Research service centers may choose to provide subsidized rates for various reasons:
• Calculated rates are too high to be competitive;
• Rates cannot support all direct costs;
• Support new or junior faculty members;
• Provides benefit to faculty members in home department;
• Lower than anticipated demand.

In these circumstances, a research service center should first calculate a fully costed internal rate, then apply an adjustment factor to derive at the desired subsidized rate to be used throughout the year. Subsidized rates must be consistently charged to all internal users. External users should be charged the fully costed rate. Regardless of whether the rates are subsidized, the federal government must always receive the lowest rate.

Drawbacks of subsidies include: (1) billing rates do not accurately reflect the cost of providing goods/services, and (2) the burden of the subsidy typically falls on the home department/college.
Rate calculation for proposed research service centers
Development of internal user rates for a proposed research service center is based upon projections for the first year of operations using the following procedure:
- Identify the goods and/or services to be provided to users and prepare a Rate Schedule.
- Identify potential users including sponsored projects and awards.
- Determine the total annual expected expenses (all costs directly associated with providing the goods and/or services).
- Determine which, if any, costs will be subsidized.
- Determine the total expected annual usage (level of activity) for each service; billable units: labor hours, machine hours, number of samples, etc.
- Develop a reasonable methodology to assign the direct costs to each service.
- Develop rate using rate equation; Unit rate = Total annual expected expenses/total expected annual usage (level of activity).

Rate calculation process for existing research service centers
Development of internal user rates for existing research service centers is based upon historical costs and volume using the following procedure:
- Review all rates for the next fiscal year and update the Rate Schedule.
- Review previous year’s annual usage.
- Prepare a Revenue Analysis for the previous fiscal year, calculate total revenue per services provided, identifying all revenue received from federal users.
- Consider the prior fiscal year’s total direct costs and determine total annual expected expenses (all costs directly associated with providing the goods and/or services).
- Determine which, if any, rates will be subsidized.
- Include surplus or deficit from previous fiscal year.
- Evaluate prior methodology used to assign direct costs to each service and modify if necessary.
- Develop rate using rate equation; Unit rate = Total annual expected expenses/total expected annual usage (level of activity).

Rate Development Workbook
The Rate Development Workbook is an electronic tool that is available to research service center administrators to streamline the rate calculation process and identify allowable and unallowable costs. The Financial Services Cost Analyst will assist with completion of the Rate Development Workbook in the initial fiscal year and thereafter as requested. Some research service centers may provide only one service; therefore, the total annual expected expenses will be allocated to that service only, resulting in one calculated user rate. However, if the research service center provides multiple services, the total annual expected expenses should be allocated to each service provided, resulting in multiple user rates. Once the rates have been calculated and approved, the research service center must maintain a published list of those rates.

Example of internal user rate calculation
Expected annual expenses:
- 4 Technicians salaries and fringe benefits $ 200,000
- Lab supplies 50,000
- Equipment maintenance contracts 50,000
- 300,000
Less:
- Subsidy (1 Tech. salary and fringe benefits (20,000)
- Surplus from previous fiscal year (5,000)
- (25,000)
- Total expected annual expenses $ 275,000
Total expected annual usage (level of activity) 2,000

Rate per unit: $138

Discounted Rates
Federal cost principles require that rates be developed in a consistent manner and applied uniformly to federal and non-federal activities of the University. The intention is to avoid billing practices that would charge federal users more than non-federal users. Although discounts are not prohibited, by providing discounts, the University will trigger increased scrutiny during any audit to ensure that these cost principles have not been violated.

Discounts are any differential pricing practice which deviates from the standard user rate. This may include discounts for volume, for use during off-peak hours, for users who provide subsidies to or purchase equipment for the research service center, for users associated with the research service center’s department, free service, etc. For sheer efficiency and reduced risk during an audit, it is recommended that research service centers charge users a uniform rate at all times. If any differential pricing is given, the research service center should be prepared to defend the practice by showing quantitatively that the research service center’s costs are indeed less for the users receiving discounts. Other requirements include ensuring the discounts cannot be construed to discriminate against federal users, are widely known, available to all users, and disclosed to and approved by Financial Services.

IX. RESPONSIBILITIES & INTERNAL CONTROLS
The successful establishment and maintenance of research service centers is dependent upon many individuals with compliance and managerial responsibilities. For internal control purposes, the responsibilities and separation of duties are described below.

Research Service Center Departmental Administrator
This title, with its related responsibility, is assigned by the Department Chair of the unit with responsibility for a research service center and should be part of the description of the duties assigned to the relevant employee, and carries with it at least the following responsibilities:
• Contact Financial Services for initiating development of a research service center. Submit request to establish a fund to account for the revenues and expenditures of the research service center.
• Meet with Financial Services for assistance with user rate development and subsequent review and approval on a routine basis and thereafter, at least annually, and any time a material event occurs that will create a material deficit or surplus in funds expended on behalf of or generated by the research service center.
• Use the Research Service Center Standard Operating Procedures Manual for the fiscal operations and compliance with sound accounting principles and governmental regulations.

Department Chair and Dean or Associate Dean, and Vice Chancellor or Associate Vice Chancellor
• The initiation of a new research service center by a faculty member requires appropriate approval in accordance with the unit’s hierarchy. Approval of the unit’s supervising Vice Chancellor or, if delegated by the Vice Chancellor, an Associate Vice Chancellor is required prior to submission to Financial Services of an initial request for research service center designation.
• Designation of each research service center must be renewed annually through an application process. This requires annual review and approval from Financial Services. Prior
to submission to Financial Services, Department Chairs and Deans or Associate Deans must review and approve new rates and any rate changes.

**Financial Services Cost Analyst**
- Provide oversight of existing research service centers regarding rate calculations and financial operations related to providing goods and/or services to users.
- Review and if application meets applicable stands, approve all requests to establish new research service centers.
- Maintain an inventory of services and rates for each research service center.
- Review and approve rate forms submitted by research service centers, confirming compliance with *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*.

**Business Plan**
Units wishing to establish a research service center must submit a business plan to their cognizant administrator and present a clear and compelling argument for its implementation. The business plan should include, but is not limited to:
- The business case for establishing a research service center.
- The physical location of the research service center.
- Description of how the research service center meets the needs of the institution. Are the goods and/or services already being offered by another area within the University?
- Description of the goods and/or services to be provided to users.
- Description of the customer base. Who will be the primary users?
- Description of the internal users; i.e. departments, sponsored projects and awards.
- Description of the external users; i.e. private industry, faculty, staff, and students conducting personal research, nonprofit entity, federal, state or local government entity.
- A market study as it relates to the goods and/or services to be provided.
- Projection of annual revenue and direct costs to be recovered in the initial year of operations and following four years.
- Identification of needed financial support (subsidy) to operate the research service center.
- Description of the equipment to be used in the research service center.
- Identification of administrative and technical roles and responsibilities.

The business plan must be submitted to the Financial Services Cost Analyst along with the initial *Service Center Application/Renewal Form*. If the business plan changes thereafter, it should be updated and resubmitted to the Financial Services Cost Analyst.

**Interim Reviews**
Research service center administrators should evaluate their financial position and rates periodically to assess their position with respect to their breakeven goals. To evaluate the research service center’s activity each month and the accuracy of billings, the *Revenue Analysis Form* should be used to document all billings and collections throughout the fiscal year. The Financial Services Cost Analyst will perform a cursory review of research service center revenue and expenses at least quarterly throughout the fiscal year.

**Year-End Rate Review**
Rates can remain the same year after year. However, all research service centers must perform an annual review to determine if the rates in place are resulting in under or over recovery of costs. Research service centers are required to annually submit to the Financial Services Cost Analyst the *Service Center Application/Renewal Form*, along with the *Rate Development*
Workbook by May 31st. Even if the research service center is not changing its rate(s), these forms must be submitted for the upcoming fiscal year.

Research service centers should inform principal investigators with a multi-year sponsored project or award that the quoted user rates may change due to inflationary and other reasons. Potential rate increases should be incorporated into their budgets.

X. BILLING PROCEDURES

Request for Services

All user requests for services should be documented by the completion of a Request for Services Form. No services should be provided until this form has been completed and submitted to the research service center.

The Request for Services Form includes user and billing information required for the research service center to fulfill the request.

- User information includes date of request, name of contact, department, contact address, phone, fax, email, and administrative contact.
- Billing information for internal users includes FOAP to be charged, source of funding, and whether services are being provided for a sponsored project or award.
- Billing information for external users includes the method of payment and identification of a federal agency.
- Certifications include the signature of the person requesting the services and the signature of the Department Head verifying that no conflict of interest or external professional activity for pay was identified.
- Services requested includes the description of the service, requested date of completion, quantity, applicable rate to be charged, and the total charge.

The research service center should use the Service Center Log to record all information documented on the Request for Services Form. This log should always be current and up-to-date and available at all times for review by the Financial Services Cost Analyst and also be available for possible review by internal and external auditors.

Billing for goods and/or services

A user should not be billed until the service has been provided (based on actual usage); that is, prepayments are not allowed. All billings should be processed on a timely basis and users will be charged at approved rates. It is recommended that billings be completed within 30 days from completion of service. The support for the charges, including documentation of expenses and usage, should be retained by the research service center to answer any user inquiries or in case of an audit.

Internal users must be presented with an acceptable invoice and charged via the standard Interdepartmental Transaction Form (IDT) and using rule class J51 Internal Sales and Services. External users must be presented with an acceptable invoice and fixed price agreement or external service agreement. All invoices must provide the following information:

- The nature of the goods and/or services rendered
- The number of units
- The amount charged per unit
- The extended total
- Payment terms, net 30 days

Accuracy and consistency in the preparation of the IDT forms is critical. The IDT form must include a credit to account 50711 Other Supporting Revenue in the research service center’s
fund.org and a debit to account 73097 Service Center Charges in the user’s fund.org. Revenue from goods and/or services provided should never be recorded as an expense reimbursement (credit to expense account). Such treatment would misstate both revenues and expenses and offset the calculation of research service center rates in the following periods. Credits for expenses are only used to record amounts received for returned goods and other expense related adjustments.

Research service centers should handle each year-end billing consistently to ensure that 12 months of cost recovery are associated with 12 months of incurred costs, and thereby provide a more accurate breakeven calculation at fiscal year-end.

At the end of each month, research service center administrators are responsible for monitoring all revenue recorded in Banner account 50711, Other Supporting Revenue. Revenue recorded in Banner for goods/services provided should be compared to entries on the Service Center Log to ensure that all requests for services have been properly billed to users timely, 30 days from completion of service. Research service center administrators must also update the Revenue Analysis Form and provide to the Financial Services Cost Analyst upon request.

**Rate Adjustments**

If there will be a substantial difference in the fiscal year-end breakeven goal due to unusual service patterns or other occurrences, a request to change the rate(s) should be initiated. Such requests should be routed to the Financial Services Cost Analyst for review and approval before the new rate is used. A request for a rate change must include a revised projection of annual expenses, an estimate of the level of activity anticipated, and an explanation of the reason(s) for the changes in the rate. If the rate revision results from a prospective change in either services provided or operations, then the rate change may be prospective only. Otherwise, the rate change should be retroactive to the beginning of the fiscal year to ensure that each individual research service center user is only charged his fair proportionate share for the total research service center usage during the year.

**Fiscal Year-end Close**

Research service center responsibilities - Complete 12th month billing timely in order to most appropriately match costs with revenues. This will ensure that 12 months of expenses are matched with 12 months of revenue.

Financial Services Cost Analyst responsibilities – Perform a review of research service center annual financial activity. The review encompasses examination of revenues, expenses, and fund balances to determine whether research service centers achieved a breakeven goal. If problems are identified, the Cost Analyst will notify the research service center administrator to address the issue(s).

**Documentation of User Charges**

Documentation of research service center user charges is necessary for monitoring purposes and should be available for review by internal and external auditors. The billing invoices, Service Center Log, and Revenue Analysis Form will contain the pertinent information to substantiate charges to users.

**Accounts Receivable**

The University must comply with the North Carolina Office of the State Controller’s Policy 200 and North Carolina General Statutes §147-86.20 - §147-86.26 regarding accounts receivable collection. Accounts receivable should be reported to Financial Services on a quarterly basis and at fiscal year-end.
XI. RECORDS RETENTION
Research service centers must retain complete records related to and supporting rate calculations, rate approvals, expenditures, and billing invoices. The period for which record retention is required is controlled by the life of each federal award charged for research service center goods and/or services, not the date of the transaction with the research service center. Research service center charges are subject to audit as long as the grants or contracts that they charge remain subject to audit requirements. Research service centers are also subject to periodic review by the University’s Office of Internal Audit and Management Advisory Services, NC State Auditor’s Office, and federal auditors.

Research service centers charging federal awards are subject to the record retention policies under Code of Federal Regulations Title 2, Chapter II, Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, §200.333: Financial records, supporting documents, statistical records, and all other non-Federal entity records pertinent to a federal award must be retained for a period of three (3) years from the date of submission of the final expenditure report, or financial report, respectively, as reported to the Federal awarding agency or pass-through entity in the case of a sub-recipient.

At a minimum, research service centers must retain the following:
- Documentation of the business plan and approval of a new research service center.
- Documentation of rate calculations.
- Documentation of approval of rates by designated personnel.
- Supporting documentation related to expenses incurred.
- Records supporting the amount and basis of user billings (revenues).
- Records supporting utilization (level of activity) each fiscal year.

XII. SALES TAX AND UNRELATED BUSINESS INCOME TAX
If research service centers provide goods and/or services to external users, such transactions may be subject to (1) North Carolina sales and use tax, and/or (2) unrelated business income tax (UBIT). An activity must meet all three of the following tests to be classified as unrelated business income subject to tax:
- The activity must be a trade or business,
- The activity must be conducted regularly, and
- The activity must not be substantially related to the institution exempt educational or scientific purposes.

XIII. EQUIPMENT
Capital equipment is defined in North Carolina Office of the State Controller Policy 102.1 as an item with a purchase price of $5,000 or more and a useful life of at least 2 or more years. Federal guidelines do not allow the purchase cost of a capital item to be recovered through research service center user rates. Equipment or supplies that are not capitalized (purchase price under $5,000) may be treated as an operating expense in calculating rates. Furthermore, research service center rates cannot be structured to build “reserves” for anticipated equipment purchases or replacements. It is not appropriate to charge current users with costs associated with future periods.

**Equipment purchased with federal funding**
Applicable guidance for use of equipment purchased with federal funds (generally grant activity) is in Office of Management and Budget (OMB) Code of Federal Regulations Title 2, Chapter II, Part 200 Uniform Administrative Requirements, Cost Principles, and Audit
Requirements for Federal Awards §200.313. The University follows a methodology that ensures the following about federally-purchased equipment in research service centers:

1) Before allowing usage in the research service center, the original grant for which the equipment was included has termed (closed) and the federal uniform guidelines have been followed, and

2) If the equipment is used after the grant is termed (closed) and disposition followed, then the federal government must always receive the lowest rate.

Equipment purchased with state funding
In general, equipment purchased with state appropriated funds may be used by a state research service center fund, and may not be used by a trust research service center fund. However, under certain conditions, state equipment may be used by a trust research service center if:

1. The state equipment is fully depreciated*, and the trust research service center reimburses the state fund for maintenance and operating costs of the equipment. Also, usage of the state equipment by the trust fund does not interfere with the state’s intended purpose of the equipment.
   *(Fully depreciated equipment means that the net book value of the equipment is equal to, or less than, the salvage value of the equipment. Salvage value is based upon the original useful life of the equipment)

2. The usage of state equipment is incidental to the state’s primary purpose of the equipment. Incidental use means utilization by the trust research service center is equivalent to 5% or less of the cost of the equipment, or 5% or less of the original useful life of the equipment.

The above exceptions are not a blanket statement and is subject to review by Financial Services.

Depreciation in research service center rates
The full cost of equipment cannot be built into the research service center user rates; however, federal guidelines do allow for the recovery of depreciation associated with the asset. Equipment depreciation can be recovered either through the F&A rate or research service center billing rates, but not both. If equipment depreciation is included in research service center rate calculations, it must be excluded from the F&A rate proposal. There are two exceptions: (1) depreciation of equipment purchased on federal awards, whether or not title has reverted back to the University, cannot be included in user rates; (2) depreciation of equipment used as cost share cannot be included in user rates.

University policy does not allow for equipment depreciation to be included in the rate calculation.

Research service center equipment inventory
The Financial Services Cost Analyst will request a list of all equipment being used in the research service center. The Cost Analyst will identify all equipment and determine the funding source, location, and will conduct a physical inspection. After the initial year of operation, the research service center administrator must provide on an annual basis to the Cost Analyst any changes in the equipment inventory.

Equipment usage log
In compliance with federal Uniform Guidance, research service centers charge the costs of services directly to users based on (1) established billing rates which have been reviewed and
approved by Financial Services, and (2) the actual usage of the services. To comply with the actual usage requirement, the research service center must maintain an annual usage log for each piece of equipment used in providing billable services.

Donated equipment
An equipment donation is considered to be the equivalent economically of a cash donation which is subsequently used to purchase equipment. When a research service center receives an equipment donation, the research service center administrator must contact Materials Management Fixed Assets Office immediately for identification, tagging, and processing.

XIV. KEY COMPLIANCE AND INTERNAL CONTROL ISSUES
- Inadequate policies, procedures, or institutional oversight.
- User rates are not based on actual usage of services.
- User rates do not represent actual costs of providing services.
- User rates recovered more than/less than the cost of the goods or services.
- Research service centers do not break even over time.
- Federal users not charged the lowest user rate.
- Inappropriate use of a “flat user” fee (unrelated to cost or actual usage).
- Inappropriate inclusion of a surcharge in user rate.
- Duplication of costs in the rate calculation.
- Unallowable costs included in rates.
- Surpluses not used to reduce future rates.
- Surplus balances inappropriately used to fund unrelated activities.
- No published price list or schedule of rates.
- Inadequate research service center accounting records.
- Inadequate billing and collection of receivables.
- Insufficient monitoring of research service center revenue, expenses, and fund balances.
- Internal users are not the primary users served.
- Noncompliance with the record retention policy.

XV. TRAINING
Training for research service center departmental administrators and personnel is available through Cornerstone. The training includes all subject areas identified in the Standard Operating Procedures.

XVI. FREQUENTLY ASKED QUESTIONS
Q: Do I really have to comply with these Standard Operating Procedures?
A: Yes. If the objective is to recover costs of providing goods or services by charging users, then it is necessary to follow the research service center requirements. Charges are direct costs on sponsored projects and awards, and as such, they must conform to federal requirements for direct costs (in OMB Uniform Guidance). There are specific federal requirements related to how rates/fees are established and assessed to users. In the event of an audit, unsupported charges are likely to result in the University’s repayment of those amounts. Additionally, the negative publicity for the University could be detrimental to our research endeavors.

Q: Why do we have to adhere to these Standard Operating Procedures?
A: PRR (pending) in the University Policy Manual outlines the requirement for research service centers and compliance with federal regulation. Your research service center must comply with the PRR as well as the Standard Operating Procedures.
Q: Why is the federal Uniform Guidance so important?
A: If a research service center charges any federal grant or contract, then it must comply with the Uniform Guidance which states:
- Cost must be charged to federal projects based on actual usage
- The federal government must get the lowest rate
- Rates must be adjusted at least biennially
- Only a 60-day working capital balance is allowable

Q: Are rates calculated to breakeven?
A: Yes, the goal is to recover costs only, therefore no profit or residual should be purposefully generated. The research service center should adjust their rates if a surplus or deficit is expected. See section VIII. Rate Development.

Q: Are the rates reviewed before the end of the fiscal year?
A: Yes, rate reviews and adjustments can take place at any point during the fiscal year. Performing at least an informal review during the fiscal year will identify the need for rate adjustments early and help avoid large, year-end deficits or surpluses. Be aware that rate adjustments should be timed to allow your most active users to incorporate potential rate increases into their budgets.

Q: Is there a threshold for being defined as a research service center?
A: No. Assuming that your center meets the other research service center criteria, it does not matter whether you have $250,000 in revenue or $2,500, you are required to follow the Standard Operating Procedures.

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

Q: What if the goods/services are being provided on a non-recurring basis?
A: If goods/services are provided on a one-time-only basis, then research service center requirements do not apply.

Q: Can a research service center provide a significant amount of services to external users; i.e. private sector, non-university affiliations?
A: No, State law and University policy restrict competition with the private sector. Because research service centers may be subsidized, and the University enjoys non-profit status, the University has a definite pricing advantage over a comparable private sector company. Consequently, to avoid allegations of competition from private sector companies, services provided to the private sector should generally be isolated and infrequent. Research service centers should be established for the benefit of University internal users. Significant business with external users can trigger an unrelated business tax. External users using the research service center should have a documented affiliation with the University or directly support the University’s mission.

Q: What if an existing fund reflects a mix of unrelated activities, only one of which is a research service center activity?
A: The preferred solution is to remove the research service center activity from the fund and open a separate and distinct fund for its operation.

Q: Is it allowable to charge different rates for equipment use during peak, no-peak, or late night non-standard hours?
A: Charging different rates based solely on the time the service is obtained is not appropriate. The costs incurred during the different time periods would have to be different in order to charge multiple rates.

Q: Can we adjust our rates mid-year, or do we have to make the change at the beginning of the fiscal year?
A: You can adjust your rates mid-year; they can be adjusted at any time throughout the fiscal year. At a minimum, rates must be reviewed annually, but can be reviewed more often if needed. Rates should be adjusted if expenses or volume vary significantly from budgeted estimates.

Q: Can a research service center allow pre-payment of services?
A: No. Federal cost principles require that costs charged to the federal government be based on actual use of the services. Therefore, users should not be billed for future services to be provided by the research service center.

Q: Can indirect costs (F&A type costs) be included in the internal user rates?
A: No, indirect costs should be excluded from the internal user rates developed, with the exception of specialized service centers such as an animal care facility. External user rates should include indirect costs.

Q: What is a specialized service facility (SSF)?
A: Office of Management and Budget (OMB) Code of Federal Regulations Title 2, Chapter II, Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards and Cost Accounting Standards (i.e., Uniform Guidance) §200.468 defines specialized service facilities. A specialized service facility can be distinguished by the following characteristics:
- Highly complex; limited customer base
- Large capital investment required
- Expenditures over one million dollars in a fiscal period
- Long term breakeven
If a research service center is determined to meet the requirements to be considered a SSF, then the full allocation of indirect costs may be applied to the SSF and can be included in calculating its user rates.

Q: Can the purchase of equipment be recovered through the user rate?
A: Federal cost principles require that research service centers recover the cost of capital equipment through depreciation of over the useful life of the equipment as opposed to charging the full cost of the equipment in the year acquired. However, it is the University’s policy that rates will not include a component for equipment depreciation.

Q: Can equipment that was purchased as part of a sponsored project or award be used in a research service center?
A: Yes, the equipment can be used only if the sponsored project or award has termed (closed).

Q: How does the research service center determine the total annual expected expenses in the rate calculation?
A: An existing research service center may use the prior year’s expenses as an estimate. Justification for an increase over prior year’s expenses must be documented. A new or yet-to-be established research service center will need to estimate the first year’s annual expected costs. Adjustments may be made during the year if needed.
Q: Which types of costs can the research service center recover through user rates?
A: Uniform Guidance 2 CFR 200 Subpart E Cost Principles specifically states which costs are allowable and unallowable. See section VII. Rate Components.

Q: Why does a research service center have to maintain a published rate schedule?
A: To help ensure that the research service center is used to its full extent, new and existing users need to be aware of all the services provided and be able to plan ahead in their budgets for any rate changes. Also, a published rate schedule will ensure consistency in the charges to users.

Q: If the research service center rate(s) remain the same as the previous year, is the Service Center Application/Renewal Form and the Rate Development Workbook required to be submitted to the Financial Services Cost Analyst?
A: Yes, research service centers are required to complete a Service Center Application/Renewal Form and the Rate Development Workbook each fiscal year. Adequate documentation of rate calculations is imperative in the event of an audit.

Q: The surplus from the prior fiscal year is large, does the entire surplus have to be carried forward into the calculated rate?
A: A large surplus need not be eliminated in its entirety within one year, however, an approved plan should be in place to reduce the surplus over a reasonable period of time.

Resources available:
Research Service Center Business Plan template
Research Service Center Application/Renewal Form
Rate Development Workbook
Rate Schedule
Request for Services Form
Research Service Center Log
Revenue Analysis Form