

# Service Center Procedure Manual

New Mexico Tech Business Office Last modified May 27, 2016

The purpose of this narrative is to establish a comprehensive procedure which governs service center operations in order to ensure compliance with government regulations. Service center activities result in charges, either directly or indirectly, to federally sponsored grants and contracts. Therefore, service center practices must comply with government regulatory costing principles such as those contained in the Code of Federal Regulations Title 2: Grants and Agreements Part 200 Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards

This document is continually being updated. We would appreciate any information and/or insight that would help us develop stronger policies for NMIMT's research community.

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#### I. Introduction

#### A. Purpose

The purpose of this narrative is to establish a comprehensive procedure which governs service center operations in order to **ensure compliance with government regulations**. Service center activities result in charges, either directly or indirectly, to federally sponsored grants and contracts. Therefore, service center practices must comply with government regulatory costing principles such as those contained in the Code of Federal Regulations Title 2: Grants and Agreements Part 200 Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (hereinafter, Uniform Guidance or UG)

Instances of non-compliance with federal regulations may result in refunds to the government as well as adverse publicity which could impact future sponsored funding. With the wide variation in size, complexity, and services provided, common administrative practices such as billing rate development are critical to maintaining compliance with regulations applicable to service centers.

Throughout this manual, New Mexico Institute of Mining and Technology will be referred to as NMIMT. For definition or directive within this manual, "department" can also mean research center or functional unit. The Sponsored Projects Administration Department/Cost Accounting Office will be abbreviated as SPA/CAO, respectively. Service Center Manager will be abbreviated as SCM.

## **B.** Authority

The Vice President of Administration and Finance, the Director of Finance, and the Director of Sponsored Projects have approved this manual as procedure for NMIMT service centers.

## C. Compliance

Uniform Guidance is the federal regulation which provides guidance to all universities on issues concerning cost allowance for direct and indirect costs. This is also referred to as Code of Federal Regulations Title 2: Grants and Agreements Part 200 Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards.

*Cost Accounting Standards Board Disclosure Statement* (*CASB DS-2*) Part III, item 3.2.0 defines service centers as "Departments or functional units which perform specific technical or administrative services for the benefit of other units within a reporting unit."

Uniform Guidance Section 200.468(b)(2), states the following, " $\dots$  rates are designed to recover only the aggregate costs of the services  $\dots$ . Rates must be adjusted at least biennially and must take into consideration over/under applied costs of the previous period(s)  $\dots$ "

Cost accounting standards for educational institutions are set forth in Part 9905 – Cost Accounting Standards for Education Institutions of Title 48 of the *Federal Acquisition Regulation System*, Chapter 99 – Cost Accounting Standards Board, Office of Federal Procurement Policy, and Office of Management and Budget. These standards are incorporated into the Uniform Guidance at Section 200.419 and must be followed.

All NMIMT policies and procedures must be followed as well.

## **D.** Definitions

#### a. Service Center

A **service center** is an operational unit within a department or research center of NMIMT that performs specific technical or administrative services primarily for the internal operations of NMIMT. They sell a well-defined product and/or service and recover the cost of operations through charges to users. They must have published rates and charge all users the same amount for the same service under the same circumstances.

External users must pay the service center rate **plus** overhead. This assures that the **total cost** of the service for an external user is not less than the **total cost** of the same service for a grant or contract. Total cost for an award is the sum of the internal user rate directly charged by the service center to the award fund number via a JV plus the negotiated indirect cost rate for the grant or contract set by the terms and conditions of the award and invoiced by the Sponsored Projects Administration to the awarding agency.

Service centers, when providing service to external users, may not unfairly compete with the private sector. When the market price for a service provided by an NMIMT service center exceeds total cost for the service provided, the price must be adjusted up to market price. This adjustment is referred to as a fair market value (FMV) adjustment. In some circumstances, governmental gross receipts tax must be charged.

Service centers must cover their operating costs through the rates they charge to the users of their services. By contrast, research centers receive state appropriation for some or all of their operating costs.

There are three types of services centers–recharge centers, specialized service facilities, and service facility–that are **expected to meet the standards of consistency and allowance in rate development set forth in this manual**.

## 1. Recharge Center

A **recharge center (RC)** is a form of service center with annual direct operating costs normally less than \$100,000. An RC does not have to submit an annual rate proposal as described in Chapter 5: Monitoring Performance, but it is required to supply the Cost Accounting Office (CAO) with a completed service center form and copy of posted rates for review and approval of transactions. It is the responsibility of the Service Center Manager (SCM) to monitor compliance with Service Center policy. The SCM may request review or assistance from the SPA/CAO when needed. Examples include department owned and operated vehicles, copiers, or other equipment for which the department/research center charges users in order to recover costs.

#### 2. Specialized Service Facility

A specialized service facility (SSF) is a large service center that:

- Provides specialized services to a select group of users rather than for overall NMIMT operations.
- Has combined annual direct operating costs and internal overhead costs of \$1,000,000 or more.

Examples of SSFs are Energetic Materials Research and Testing Center (EMRTC) field operations; Playas Training and Research Center; and the Magdalena Ridge Observatory 2.4m Telescope.

#### 3. Service Facility

A **service facility (SF)** includes all service centers that do not fall within the definition of a recharge center or a specialized service facility. An example of a service facility is the Information Technology and Communications department.

**Auxiliary services are not included** in the compliance requirements outlined in this manual. An auxiliary service is a self-supporting entity that exists principally to furnish goods or services to students, alumni, or faculty and staff acting in a personal capacity, and charges a fee for the use of goods or services. Auxiliary services generally do not support departments or research centers. The general public may be served incidentally. Examples of auxiliary services include Macey Conference Center, residence halls, food services, intercollegiate athletics, college unions, college stores, alumni travel, parking, and shuttle services.

Pricing for auxiliary services may be based on market rates, except when charging for services provided to federal awards. When charging to sponsored projects, only the cost of service may be recovered. The federal rate for service must always be the lowest rate offered for the services provided.

## b. Billing Rate

A billing rate is an amount established to charge for specific services or products. All users within NMIMT should be charged the same rate for a particular service provided under the same circumstances. Pricing structures based on time-of-day, volume discounts, turn-around time, etc. are acceptable, provided they have a sound management basis, do not result in recovering more than the costs of providing the services, and are made equally available to all users. See Uniform Guidance Section 200.468 or CFR *Cost Accounting Standards* 9905 for details on cost.

**Billing rates may not be based on what others charge for similar services except when dealing with an external user**. Anticipate that an auditor will want to see how proposed costs or cost centers/pools for a specific year track to proposed rates in sufficient detail to form a basis for comparison to actual costs for the same year and the rates that result. The variance in amount between the two is the basis for carry-forward adjustments to future rates.

The billing rate(s) shall be determined by dividing the costs of a particular service/product by the billing unit. Rates established by service centers must be non-discriminatory, and all users of the facility must be billed for services. Non-discriminatory means all internal users must be charged the same rate(s) for the same level of services or products purchased.

External customers of a service center may not be charged a billing rate less than that charged to internal users. However, they may be charged at a higher billing rate in an effort to promote full costing and in order not to unfairly compete with private enterprise and to ensure compliance with the anti-donation clause. Billings to external users should include facilities and administrative costs (F&A costs, formerly indirect costs) using the current on-campus research rate. The current rate is posted on the Sponsored Projects Administration (SPA) website or can be obtained by contacting SPA. The rates change each fiscal year. SPA/CAO publishes the new rates on the NMIMT website once the rate agreement has been fully executed by NMIMT and the Office of Naval Research.

Departments/research centers providing cost share in the form of service center support will either transfer funds into the cost share companion fund or into the sponsored project fund in accordance with the NMIMT Cost Share Policy. This allows the service center to receive its full cost in order to avoid reflecting false deficits or surpluses and inadvertently causing subsidies between users (e.g., the federal government cannot subsidize non-federal users). See Section K - Imputed Revenue for more detail.

In some instances users may receive service at no cost to them provided the service is paid for from a designated NMIMT source. An example would be use of a service center by a qualifying academic student. See Section M - Student Use of Service Centers.

# c. Billing Unit

A **billing unit** is the basis on which services/products are offered (i.e., labor hours, unit price, machine time, number of users, number of samples, number of units processed, etc.).

# d. Break-even Period

The **break-even period** is a reasonable time-period over which cumulative revenue for a service or product equals cumulative expenses.

# e. Capital Usage Factor

The **capital usage factor** is the annual cost of capital equipment. This includes depreciation and lease/rental costs. If the equipment is purchased with federal funds or is part of NMIMT's indirect cost calculation, that purchase and/or any relevant depreciation must be excluded from the service center rate. See Section III, Chapter 2(f) Capital Usage Factor.

# f. Carry Forward

**Carry forward** is the over- or under-recovery of current operating costs resulting from billing rates that vary from actual cost (generally calculated on a fiscal year basis). The carry forward is an allowable cost adjustment to subsequent year rate computations and promotes break-even within the break-even period. When determining fund balances, service centers must impute revenue (not received within the period or discounted) as if it were collected at the normal rate to avoid reflecting false deficits or surpluses. This is critical to avoid subsidies between users (e.g., the federal government cannot subsidize non-federal users). See Section K - Imputed Revenue.

# g. Cost

**Cost** includes actual expenditures incurred for salaries and wages, employee related expense, operations, travel, capital usage, and associated administrative service charges.

# h. Cost Centers/Pools

Cost centers and cost pools are units of activity or areas of responsibility into which a service center is divided for accountability purposes and to which costs are allocated or directly assigned (e.g., garage/vehicles, security within EMRTC). See Section III Chapter 2(g) Cost Centers/Pools.

# i. Current Operating Costs

**Current operating costs** represent allowable salaries and wages, employee related expenses, operations, travel, capital usage factor (if applicable) for the operation of a service center and intended to be recovered through the billing process. Current operating costs may include unallowable costs **only if billed to non-federal external users** (i.e., advertising costs to attract external users) and tracked in a way to assure exclusion from rates charged to internal users.

## j. External Users

An **external user** is an entity or person for whom NMIMT has no direct affiliation or fiduciary responsibility as in sponsored projects. The person or company is an outside party **external to NMIMT's mission**, but wishes to purchase a service/product because the service center has unique equipment and/or staff expertise. The following may apply:

# 1. Gross Receipts Tax (Sales Tax)

New Mexico does not have a sales tax. It has a gross receipts tax instead. As a state university, NMIMT is not subject to ordinary gross receipts tax. However, **Governmental Gross Receipts Tax (GGRT)** applies to NMIMT transactions when selling to external users (general public) under the following circumstances.

# TAXABLE GOVERNMENTAL TRANSACTION

The governmental gross receipts tax applies to the receipts of the state of New Mexico and any of its agencies, institutions, instrumentalities and political subdivisions from:

- **Sale of tangible personal property** other than water from facilities open to the general public [unless selling to 501c(3) organizations (7-9-60)].
- **Performance of or admission to** recreational, athletic or entertainment services or events open to the general public.
- **Refuse collection or disposal or both**—receipts of a government from performing refuse collection or disposal are governmental gross receipts regardless of how or for whom they are performed.
- **Sewage services**—receipts of a government from supplying sewage services are governmental gross receipts regardless of how or for whom they are performed.
- **Sale of water** by a utility owned or operated by a county, municipality or other political subdivision of the state.
- **Rental** of parking, docking or tie-down spaces or the granting of permission to park vehicles, tether aircraft or dock boats.

Unless the receipts are from one of the above activities, they are not governmental gross receipts and are not taxable either as regular gross receipts or as governmental gross receipts (7-9-3.2 Gross Receipts and Compensating Tax Act). For additional information contact the Business Office Accounts Payable Supervisor in Wells Hall, Room 109 or phone number (575) 835-5845.

# 2. Unrelated Business Income Tax

If goods or services are charged to external users **at more than cost**, NMIMT may have a liability for **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 – this includes universities.

- The activity must be conducted regularly this includes service center activities.
- The activity must <u>not</u> be substantially related to the institution's exempt educational or scientific/research purposes (unrelated activity to external user).

For further information about UBIT, please contact the Budget and Analysis office in Brown Hall, Room 100 or phone number (575) 835-5295.

#### k. Imputed Revenue

**Imputed revenue** is the process of determining service center revenue without regard of discounts (cost share) and/or surcharges. Departments providing cost share in the form of service center support will either transfer funds into the cost share companion fund or into the sponsored project fund in accordance with the NMIMT Cost Share Policy. The service center manager would then charge the normal rate for use to the companion or project fund. This is important to avoid reflecting false deficits or surpluses and inadvertently causing subsidies between users (e.g., the federal government cannot subsidize non-federal users). It is not recommended that service centers be used for cost share because there is no real benefit and it creates unnecessary confusion. NMIMT still ends up funding the cost share.

I. Internal User

An Internal User will always have a Banner fund number. They are part of the mission of NMIMT, i.e., Instruction and Research. Even though Sponsored Projects are awarded by entities external to NMIMT, they are internal to the research mission of NMIMT. They are given a fund number and NMIMT has a contractual responsibility for tracking and maintaining the terms and conditions of the award.

## m. Inventory Funds for Products Held for Sale

If a service center sells products and has a significant amount of stock on hand, inventory records must be maintained. If the value of the inventory is expected to exceed \$50,000 at any point in the year, a formal inventory fund should be established. If the inventory is not expected to exceed \$50,000, internal inventory records may be used in lieu of a formal fund. A physical inventory should be taken at least annually at the end of the fiscal year and be reconciled to the inventory records. Weighted average should be used as the inventory valuation method. **Charges to users must be for inventory used, not inventory orders that include excess not used**.

## n. Student Use of Service Centers

It is allowable for **enrolled students** showing proper identification to use a service center for **academic purposes** without a charge to the student. A request for student service center use should be submitted to the financial administrator for Academic Affairs.

The process consists of the following:

- 1. The internal service center rate for the service used by the student should be charged to **Index 103022** using a Journal Voucher (JV). The JV supporting documentation should be consistent with documentation attached for any other internal user using the same service under the same circumstances.
- 2. The JV must additionally reference the students name and nine digit student ID number.
  - The service center manager may contact the Registrar's Office with the **nine digit student ID number** for verification that the student is currently enrolled.
  - If the student is not currently enrolled for academic or research purposes related to academics, the charge will not be approved.
- 3. If a student's use of the service center is part of the required scope of work for a sponsored project, then the sponsored project must be charged for the service center use. Index 103022 cannot be used to subsidize a sponsored project (i.e., grant or contract or internally funded university research such as GRC).

A sample JV is available from the Cost Accounting Office or on their website. Either the JV or the supporting document attached to the JV must be signed by both the student and the Service Center Manager before being processed. See Sample JV for Internal Users.

## o. Unallowable Costs

An **unallowable cost** is an expense specifically unallowable for reimbursement purposes under NMIMT policy or the Uniform Guidance. Failure to mention a particular item is not intended to imply it is allowable. Refer to Section 200.420-200.475 in the Uniform Guidance for comprehensive list of unallowable costs. See discussion on Allowable and Unallowable Costs in Rate Calculation.

Any questions regarding allowability of expenses to a service center may be addressed to the Sponsored Projects Administration /Cost Accounting Office.

Note: Unallowable costs must be subtracted from operating costs in order to arrive at a billing rate. Consequently, there is no recovery mechanism available if an unallowable cost is charged to a service center FUND.

# p. Working Capital

Service centers can retain on an ongoing basis a maximum of 60 days of current expenditures as working capital in their operating fund with advance approval. The request should be directed to the Sponsored Projects Administration Department/Cost Accounting Office.

- 1. Funds or transfers from non-federal sources or an existing fund balance can be used to acquire the working capital amount.
- 2. Cost to accumulate working capital cannot be included in internal or federal user rates.

#### II. Chapter 1: Creation of Service Centers

#### A. Planning for Service Centers

The goal of NMIMT service centers should be consistent—providing service and recovering costs while achieving break-even. Realizing these goals requires careful planning and preparation on the part of research or academic administrators and faculty. One way to accomplish this is to address issues such as those listed below:

- 1. Determine whether there is a current and continuing need for the type of service center being contemplated.
- 2. Determine if the service is available elsewhere at NMIMT or external to NMIMT.
- 3. Determine whether the service center will be in competition with local outside vendors.

If, after having considered these and other relevant issues, the department/research center plans to initiate a new service center, the information explained in the following section should be provided to the Sponsored Projects Administration Department/Cost Accounting Office prior to the commencement of any operation.

A person must be designated to serve as the Service Center Manager (SCM). The responsibility of SCM can be added to an existing position or may be a person working exclusively for the service center. As appropriate, the level of effort must be charged to the service center.

## **B.** Review and Approval of Service Center Funds

A proposal to establish a service center should be processed through the Sponsored Projects Administration/Cost Accounting Office 60 days prior to the requested commencement of operations so as to allow sufficient time for review, feedback, approval and fund creation. A Service Center Registration Form (Exhibit B) is available on <u>https://www.nmt.edu/cost-accounting-office</u> or in the Cost Accounting Office. The reasons that this process is required include:

- Providing direction and assistance as needed.
- Becoming familiar with the type of operation being proposed.
- Ensuring that all service centers have established adequately-documented rate structures, controls, and operating methodologies.

Once the SCM has discussed the logic and feasibility of the proposed service center with one of the cost accountants, the proposal will be routed in order to get all necessary approvals. Any questions or concerns arising out of the review process will be addressed either in a memo or email from the Cost Accounting Office to the originator of the request or, if necessary, via a meeting.

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A proposal to establish a new service center or amend/update an existing service center must contain the following information:

- 1. The Service Center Manager's contact information.
- 2. The service center name as it will appear on the financial reports.
- 3. A description of the product(s) or service(s) to be provided, and any potential users.
- 4. An explanation as to how the service center rate will be determined, including:
  - A detailed annual expense budget for the proposed service center.
  - A description of the activity base, its appropriateness, and the projected level of activity for the first year of operation.
  - The rate calculation using the proposed budget amount and the projected level of activity for the first year of operation.
- 5. A completed Fund Setup Form.

A new fund will be established by the Budget and Analysis office upon review and approval of the above documentation. If a line-item budget is desired, it should be requested prior to fund setup.

# C. Responsibilities of the Service Center Manager

Service center charges are subject to audit as long as grants or contracts, which they charge (either directly or indirectly), remain subject to audit requirements. Service centers are also subject to internal and external auditors to evaluate compliance with NMIMT policies and accounting practices. Therefore, service center activities should be adequately documented and records maintained to substantiate expenditures, billings, and cost transfers. **The audit may occur several years after the user is charged and the service center obtains cost recovery**.

Responsibilities of the Service Center Manager include:

- 1. Preparation and submission of annual budget with justifications.
- 2. Documentation as to how the charge rate(s) were calculated.
- 3. Retention of the Sponsored Projects Administration /Cost Accounting Office rate validation letter which confirms that the rates have been reviewed and validated as of a stated date. Any change in rates will require a new rate validation form as of a new stated date.
- 4. Maintenance of supporting documents related to incurred expenditures.
- 5. Maintenance of records supporting utilization.
- 6. Maintenance of records supporting the amount and basis of user billings (revenues).
- 7. Operation of the center at break-even over time and within budget.
- 8. Invoicing users on a monthly basis.
  - Use a Journal Voucher (JV) for internal users.

- Use an invoice for external users.
- Invoices for external users must include on-campus indirect cost rate in place at the time the service was provided and Government Gross Receipts Tax (GGRT) if applicable.
- Agreement to provide services for external entities may be evaluated by SPA/CAO and should be based on the contract template for such services.

# D. Responsibilities outside the Service Center

- 1. Establish and close service center funds **Budget and Analysis**.
- 2. Process accounting transactions Service Center Manager and General Accounting.
- 3. Review Service Center rates and route for necessary approvals **Sponsored Projects Administration /Cost Accounting Office**.
- 4. Monitor Service Center Financial Operations **Sponsored Projects Administration** /**Cost Accounting Office**.
- 5. Provide billing, accounting, and contact assistance for service centers **Sponsored Projects Administration /Cost Accounting Office**.

#### **III.** Chapter 2: Accounting, Budgeting, and Billing Considerations

#### A. Cost Accounting Guidelines

#### a. Accounting Practices

A service center must consistently follow sound cost accounting practices/standards, including rate setting methodology and invoicing practices. Cost accounting practices must not be changed merely for budgetary or administrative convenience.

#### b. Associative Concepts

In determining cost recovery, remember these three things:

- 1. You can only recover costs once.
- 2. You must recover all costs.
- 3. Charge more for less and less for more.

Note: "Charge more for less and less for more" applies to situations where rates are developed for full units and partial units such as Playas and their zones. For example, rates that are based on days need to charge less per hour for full days and more per hour for partial days. The reason is that selling the remaining partial day is difficult. If the rate for a half day is eighty percent of the rate for a full day, this will encourage a customer to purchase a full day. If they do not purchase the full day, the most you will lose if unable to sell the remaining partial day is 20 percent of cost recovery.

c. Basis for Direct Charges

The costs of a service/product will be charged directly to customers based on:

- 1. Actual consumption or use of the service/product multiplied by the billing unit.
- A schedule of billing rates that does not arbitrarily discriminate between types of users. Rates invoiced to external users must, at a minimum, include the direct-cost rate charged to internal users plus current on-campus indirect cost rate.
  - This basis is required in order not to use state facilities to unfairly compete with private enterprises.
  - It assures recovery of the total cost (both direct and indirect).
  - o It does not violate the state anti-donation clause.

Note: Service center use provided to a sponsored project is charged the direct cost charge from the service center via a JV and computer generated indirect cost when billed by SPA. If an external user is not invoiced both the direct and indirect cost when invoiced by the service center, then the external user is receiving the cost at a lower total cost than a sponsored project. This would arbitrarily discriminate between types of users.

#### d. Billing Rates

Billing rates should only include costs that are:

- 1. **Reasonable** costs are those necessary for the operation of a service center or cost center. This will usually include salaries, wages, other employee-related expenses, operations, travel, and associated administrative charges. Capital usage and surcharges may also be charged in the billing rate if appropriate. Contact a cost accountant for clarification.
- 2. Consistently applied according to generally accepted accounting principles.
- 3. **Properly allocable** to services/products in accordance with relative benefits received or other equitable relationship.
- 4. **Allowable**. Unallowable costs (see Unallowable Costs) cannot be included in billing rates charged to Institute funds or the federal government.

Note: Service centers should not incur unallowable costs unless no other sources of funds (for example, external users) are available to cover them.

#### e. Break-even Expectation

Service center billing rates should be designed to recover the aggregate cost of a service/product over a defined break-even period (i.e., revenues = expense). A few service centers are operated as long-term pricing or break-even centers. Because of their unique nature (initial large capital equipment outlays, volume fluctuations, or market limitations on annual rate increases) such centers require longer than one year to recover or spread out their operating costs. In this respect, carry-forward adjustments to future-year rates may need to be allocated over an extended period in order to accomplish breakeven in an equitable manner to users. An example would be the Playas Training and Research Center (PTRC).

## f. Capital Usage Factors

Billing rates cannot include the acquisition cost of capital expenditures at the time of purchase because this would skew results of operation for the period. Instead, costs are recovered through a **capital usage factor** related to the use of service center equipment over its expected useful life. This includes items such as depreciation, principal portion of debt repayment or lease costs associated with equipment. A capital reserve fund should be established to upgrade or replace equipment. The transfer will be equivalent to the amount included in the rate for depreciation.

# g. Cost Centers/Pools

Within a service center, only similar types of services/products should be grouped together in a unique cost center. Cost pools are used to group costs for allocation to benefiting functions within a service center.

# h. Credit Card Payments

If an external user wants to pay an invoiced amount with a credit card, the Service Center Manager (SCM) should ask the External User to contact the Cost Accounting Office (CAO). Make sure that the CAO has a copy of the invoice. The external user will give the credit card information to the CAO who will then code the invoice and take the invoice and credit card information to the cashier in Fidel. Once the information is processed, the CAO will shred the credit card information and notify the SCM that the payment has been posted.

# i. Disclosure Statement

All rate sheets and quotes should contain the following disclosure statement or one that is approved by the Cost Accounting Office in advance of using.

Service center rates are direct costs subject to change. Rates quoted for proposed work are an estimate based on the rates in place at the time the quote is presented. The rate in place at the time the service is provided will be the rate charged for the service. The rates are subject to change no less than annually. When rates change, they change for all users of the service.

# j. Established Price List

Each service center must maintain a published price list for internal purposes and identify all services provided. Any change or exception for extraordinary circumstances must be cleared by the Cost Accounting Office and once charged must be part of the rates offered to all users for the balance of your rate period. This will require an explanation memo and a new rate validation letter. This can be in the form of an email.

# k. Fiscal Year

NMIMT operates on a fiscal year that starts on July 1st and ends on June 30th. The reason for suggesting this timeframe for service center operations relates to the need to capture each fiscal year's operating results and to incorporate these results into annual financial statements. To maintain consistency with the NMIMT financial cycle, it is recommended that all NMIMT service centers account for operations during the same time period.

# I. Frequency of Billing Rate Calculations

Service centers should review billing rates annually (to coincide with NMIMT's fiscal year) and adjust them as necessary to achieve a break-even condition. At any time during the rate period that it becomes clear the rates in place are generating a large surplus or deficit, contact the Cost Accounting Office to propose amended rates for the balance of the rate period. All rate adjustments will start at the beginning of the month following the validated amendment to rates.

#### m. Transfers

Except for transfers to the equipment reserve fund, it is normally not appropriate to transfer funds out of a service center fund. Prior or current year surpluses require an adjustment to future rates which does not involve a transfer. Any transfers (other than those to the equipment reserve fund) must be approved in advance by the Director of Finance.

# **B. Budgeting for Service Centers**

Departments responsible for service centers may have the option of budgeting service center funds to facilitate greater ease in measuring actual operating performance. If requested by departments and upon validation of rate proposals, budgets for service center funds can be entered in detail sufficient to allow monitoring of performance throughout the fiscal year. This action will be taken by the Budget and Analysis Department. If a department wishes to modify a service center budget during the fiscal year, the request must be reviewed by the Cost Accounting Office first. Once the validation is completed, the service center manager may take the request to the Budget and Analysis Department for entry.

# C. Monthly Billings

## a. Internal Users

Billings to university departments, grants, or contracts are done regularly via a journal voucher (JV) or automatic entry (i.e., ISD charge). Such billings become part of the purchasing fund's Modified Total Direct Cost (MTDC) base for F&A (indirect cost) calculation purposes. Thus, service center charges draw their share of F&A as a part of the cost objective to which their service is rendered.

The following are the accounts that should be used to record revenue to a service center from an **internal user**. You will normally only use the first one – **560106 or in the case of specialized service facilities use 710301 (Expense Recovery)**.

**560106 - Internal sales of service** 560107 - Internal sales of materials 560108 - Internal sales GGRT (taxable sales)

# b. External Users

Billings to external users are done regularly via an invoice by the service center manager. See Sample Invoice for External Users for invoice example. Such billings should include facilities and administrative costs (F&A costs, formerly indirect costs) using the **current on-campus research rate**. Other charges normally automated via the BANNER system should also be included in invoices to external users. An example is the EMRTC facility support rate audited and approved by ONR/DCAA and automated via the BANNER system. Unlike indirect costs, the EMRTC facility support rate is a direct-cost rate subject to change as needed. In the future there may be other service centers that fit this description.

When applicable, Governmental Gross Receipts Tax (GGRT) must be charged.

External customers of a service center may not be charged a rate less than that charged to internal users. However, **external users may be charged at a higher rate in an effort to promote full costing and in order not to unfairly compete with private enterprise**.

The recovery in excess of direct cost (overhead, Fair Market Value [FMV] adjustment) will be moved out of the service center fund into another fund set up to provide discretionary funds or additional capital reserve funds for the service center. If charged, GGRT will be moved to the liability fund for payment to the State. The reason for this is to keep it possible to compare service center operational costs to operational income at the end of the rate period for determining deficit or surplus amounts to roll forward to the next rate period.

The following are the account codes that should be used to record revenue from an external user to a service center (SC). The one to use will depend on the source of the revenue.

560000 - External sales of service (direct cost recovery set by published rate)560001 - External sales of materials (not generally used)560002 - External sales GGRT (taxable sales)

560006 - External sales FMV adjusted (Private industry market price – SC cost) 560007 - External sales SC Overhead

- Index R56007-560007 for amount that goes to NMT
- Approved Fund # 560007 for SC share of overhead if authorized

## c. Match Revenue and Expense within the Period

To ensure that the revenues recorded in the accounting system are closely aligned with the timing of the expenditures incurred that generated the revenues, billings for goods and services should be processed monthly. At year end, billings for the month of June should be prioritized so that they are recorded on the accounting system by no later than the second closing for June.

Should a department not be able to meet this timeframe, a listing of unposted internal billings and unpaid external billings should be provided to the Cost Accounting Office to allow for the accrual of revenues in the same fiscal year in which they were earned. Only by matching all entries for each year's fiscal activity can a reasonable determination be made of the operating results for the service center. Care should be taken at the end of the next/new fiscal year to exclude the list of unposted internal billings and unpaid external billings from the past fiscal year that post in the new fiscal year from inclusion in the income and expense consideration at the end of the new fiscal year. Otherwise they will be considered twice. This cycle will repeat each year.

# **D. Documentation of Costs**

It is the responsibility of the service center manager to maintain and provide, as requested, all copies of documentation pertinent to the activities of service centers. Examples of situations where such documentation would be requested include:

- 1. In the event of questions arising from billed users, the department should provide copies of all records showing the time period for services rendered, calculation of relevant amounts, etc.
- 2. Under audit, copies of source documents (i.e., vendor invoices, purchase orders, etc.), internal and/or external billings, supporting calculations, depreciation schedules for equipment, etc. must be provided.
- 3. During rate reviews and subsequent fiscal year activities, copies of documentation which support current rates and operating results must be provided. See Annual Rate Validation Form.

#### **IV.** Chapter 3: Allowable and Unallowable Costs

Costs incurred by service centers should be in accordance with NMIMT policy, Cost Accounting Standards, and the Uniform Guidance. See Allowable and Unallowable Costs in Rate Calculation for illustration.

The following information should be considered by departments having service center responsibility prior to the incurrence of actual costs.

#### A. Salaries, Wages, and Fringe Benefits

- 1. The costs of salaries, wages, and fringe benefits of personnel directly involved with (i.e., devoting effort to) service center activities are allowable and **must be charged to the service center**. These costs should be included in the preparation of each rate proposal so that each individual's function, relationship to the service center, and estimated level of effort to be devoted are clearly stated. Significant variances will require adjustment of estimates in subsequent rate proposals. Fringe benefits should be charged in the same relative percentage as the level of effort and at NMIMT approved rates.
- 2. Institutions sometimes charge only the cost of the materials and supplies through the billing rate. The salaries of the personnel that operate the center or provide the service are not included in the billing rate. They are allocated to other functions like general or department administration. The government views this as a CAS 502 violation (similar costs in like circumstances are treated as both direct and indirect). This is <u>not</u> allowable.

## B. Materials, Services, and Supplies

Materials, services, and supplies necessary to carry on the business of service centers are allowable. Charges to users must be for supplies used to perform the service and not for "excess" not used.

#### **C. Equipment Depreciation**

- 1. **Non-depreciable Equipment** Equipment included in the institute's indirect cost rate (F&A) cannot be included in service center rate proposals.
- 2. Before a service center may develop rates that include equipment depreciation, they must first receive **prior approval from the Associate Vice President for Budget and Analysis**.
- 3. **Depreciable Equipment** If equipment is to be depreciated, it should be shown in rate proposals. Equipment used in service centers can have different useful lives than those in general institute operations, but a shorter life must be defended and approved.

## **D. Travel**

The costs of travel **related directly to and necessary for the operation of service centers** (i.e., conferences, meetings, and local travel) are allowable. Travel related to business development is not allowable and must be charged to a discretionary fund or external users.

## E. Other Direct Costs

Other direct costs not identified above are allowable to the extent that they relate directly to and are necessary for the operation of service centers and are not specifically unallowable under NMIMT policy, Cost Accounting Standards or the Uniform Guidance.

# F. Indirect Costs

Recovery of facilities and administrative costs (F&A costs, formerly referred to as indirect costs) at the current federally negotiated rate from external users of service centers is allowable. Indirect costs will be charged to Sponsored Projects (grants and contracts) based on the direct charge made to the restricted fund from the service center fund and applied according to the terms and conditions of the award.

## G. Unallowable Costs

The term **unallowable cost** does not mean that the charge is unlawful, improper, or even wrong. In the context of cost recovery as defined in the Uniform Guidance, it means that the federal government will not reimburse NMIMT either directly or indirectly for the cost. A service center may not charge an unallowable cost to an internal user. Even if the service center never charges a federal agreement directly, most internal funds become part of the indirect cost recovery process and thus are in some measure indirectly charged to the federal government. See Unallowable Costs, Monthly Billings, or Allowable and Unallowable Costs in Rate Calculation for more on this subject.

The principles for determining whether a given cost is allowable or unallowable are discussed in Sections 200.420-200.475 of the Uniform Guidance.

The following represent examples of common unallowable costs:

- 1. Marketing/Business Development.
- 2. Advertising of Services/Products.
- 3. Alcoholic Beverages.
- 4. Bad Debts.
- 5. Donations and Contributions to Organizations/Individuals.
- 6. Entertainment or Anything Remotely Connected.
- 7. Fines and Penalties.
- 8. Goods, Services, or Travel Not Related to the Service Center.
- 9. Housing and Personal Expenses.
- 10. Interest Expense.
- 11. Memberships of Professional or Other Organizations.
- 12. Profits and Losses on Disposition of Plant Equipment or Other Capital Assets.
- 13. Scholarships and Student Aid.

#### V. Chapter 4: Rate Development

#### A. The Basic Equation

A **service center rate** may be defined as the cost per unit of output to recover the expenses of the service center and achieve a break-even financial position. In its most basic form, a service center rate may be expressed, as follows:

#### Budgeted Expenses +/- Prior Year Over- or Under-recovery Budgeted Level of Activity (Usage Base)

The budgeted usage base can be further defined as the volume of activity estimated to be performed or produced, expressed in terms of units. Examples are labor hours, machine hours, or any other unit of measurement appropriate to the type of activity. The resulting rate is then charged to users of the service center based upon actual services performed and/or products delivered.

For example, a computer costs approximately \$120,000 per year to operate and has an estimated usage (activity level) of 1,500 hours during the year. The resulting hourly rate would be calculated as \$120,000/1,500 hours = \$80 per hour. A researcher using the computer for 4 hours would then be charged \$320, or 4 x \$80. See Financial Management of Service Centers for more detail.

While many service centers have rates that are more complicated by virtue of offering multiple services, having pricing that is contingent upon types and/or levels of usage, etc., most rates can be reduced to a simple equation such as the one illustrated above.

## **B.** Types of Usage Bases

The usage base, or activity level, is used to arrive at a billing rate which, when applied to actual usage, reasonably allocates service center costs in proportion to those service center customers receiving its benefits. Selection of an appropriate usage base is essential to ensuring that users are charged only their fair share of the actual costs of operating the service center.

Two approaches to rate development are available to determine an appropriate usage base: consumption and output. Both distribute costs based on a unit of measurement, such as hours.

The consumption approach is used when expenses are directly proportional to how much of a unit of measurement is consumed. The output approach is used when expenses are related to the number of units produced in a year. Examples of both approaches are explained and illustrated in Sample Rate Calculations.

# C. Treatment of Over- or Under-Recoveries

It normally is not possible to predict exactly what rate(s) will result in having achieved a breakeven financial position at the end of the fiscal year. For this reason, it is necessary to account for over-recoveries (surpluses) and under-recoveries (deficits) annually so that they may be factored into any new rates. See Financial Management of Service Centers.

Any over- or under-recovery for a given fiscal year should be considered as a separate line item in subsequent year budgets submitted as a part of the annual rate proposal process.

# **D. Pricing of Multiple Services**

Departments with service centers offering multiple services should calculate rates appropriate for each service (cost center). Where the calculation of separate rates for multiple services is not feasible, an average rate may be calculated, provided that the user base of the different services is approximately the same and the basis for rate setting is equitable. In other words, one user may not be charged more than another user for the same service.

Providing more than one service may sometimes make a surplus on some services and a loss on others. Service centers must ensure that there is no cross-subsidization between user groups. Combining the results of various services is not acceptable if the mix of users of each service is different; that is, if higher prices charged to one set of users are subsidizing losses charged to a different group of users.

#### VI. Chapter 5: Monitoring Performance

#### A. Annual Rate Proposal and Review Process

**Research centers** with annual direct operating costs of less than \$100,000 are not required to perform a formal cost study. **They are required to supply the Cost Accounting Office (CAO)** with a completed service center form and a copy of their posted rates for review and approval of transactions. The CAO should be notified of any change in practice or rates. All other service centers must follow the steps for accomplishing the rate proposal and review process as follows:

- 1. All service center operation cycles should begin on July 1<sup>st</sup> and end on June 30<sup>th</sup> with the second closing of the institute's books.
- 2. Once the initial rate structure of a service center has received approval, rate proposal information for all subsequent fiscal years should be submitted as soon after the close of the fiscal year as possible, but normally no later than August 30<sup>th</sup>. It should include the following:
  - The annual financial operating report for the year just ended.
  - The proposed rate structure for the current year. If rate(s) are based upon calculations previously validated by the CAO and there have been no changes in methods, only a listing of proposed rates is required.
  - A revenue and expense budget incorporating the final surplus/deficit for the year that just ended, if any (recommended, not required).
  - A description of any changes in methods from those previously validated by the CAO. If there have been any changes in methods used in calculating rates, a new rate proposal may be requested by the CAO.
- 3. The CAO will review all rate proposals, including those that are based upon previously approved rate structures and will notify departments when completed. Rate proposals normally will be reviewed by the CAO in the order received.
- 4. A mid-year review of service center operations may be conducted by the Service Center Manager (SCM) based upon the first six months of fiscal year operations. If a service center experiences an exceptional operating surplus/deficit as of this date, the SCM should contact the CAO and request an adjustment of rates to be charged during the second half of the fiscal year.

For all proposed new service centers, rates should be submitted at least 60 days prior to the start of the fiscal year, as specified in Chapter 1: Creation of Service Centers. The above steps will become effective after the first complete year of operation under a CAO-approved rate structure.

# **B.** Annual Financial Operating Reports

It is essential in any operation that a periodic assessment of performance be conducted. To facilitate this review and provide a format for summarizing revenues earned and expenditures incurred, a financial operating report should be prepared. As stated above, an annual financial operating report is required as part of the rate proposal and review process. The results of operation will be used to determine, among other things, that service centers are operating at or near breakeven, and that expenses are allowable and properly allocated to service center funds.

Exhibit F entitled Operating Report – Blank shows the recommended format that may be used when preparing annual financial operating reports. If a new Service Center Manager has been assigned, identify as part of the annual operating report. While departments are free to select alternative formats, the following key elements should be contained in all reports submitted to the Cost Accounting Office for rate review purposes:

- 1. Statement of the time period for which the report is being prepared. Normally, this period will coincide with institute's fiscal year from July 1<sup>st</sup> to June 30<sup>th</sup>.
- 2. Breakdown of revenues by source. At a minimum, the breakdown should include revenues from external and internal billings. It also is recommended that usage for instructional purposes be segregated from usage for research purposes.
- 3. Breakdown of expenditures by cost element. This section of the report should include at least the type of expenses shown on Allowable and Unallowable Costs in Rate Calculation.
- 4. Totals for revenue and expenses and a total showing the result of subtracting expenses from revenues to yield net surplus/deficit from operations.
- 5. The amount of any institute or other subsidy.
- 6. All financial operating reports should state clearly the name of the service center, responsible department, operating fund number, reserve fund number(if any), and contact person's name, telephone number, and e-mail address.
- 7. Service center rates are validated periodically to ensure that charge rates were at or below cost during the prior period(s). This validation work is scheduled and managed by the Sponsored Projects Administration /Cost Accounting Office with significant assistance from the responsible center or Unit Financial Administrator. Accurate tracking and reporting (including detailed supporting documentation) for expenses and revenue entries is critical to the timely performance of service center rate validations.
- 8. Existing (previously approved) service center billing rates where a significant amount of charges were posted to sponsored projects will be suspended if this validation process is not completed in a timely fashion. The Sponsored Projects Administration /Cost Accounting Office will notify the responsible Institute, School, Center, and Unit contacts at least 30 days prior to this action.

Note: Due to the administrative requirements for managing service and recharge centers, there should always be a clear business case for establishing separate service/recharge center charge rates. Center rates that are not documented, supported, and validated as described above may not be charged to externally-funded sponsored projects.

Any questions regarding the preparation of annual financial operating reports may be addressed to the Sponsored Projects Administration /Cost Accounting Office in Wells Hall, room 4.

Senior Accounting Manager 575-835-5781 Wells Hall, room 4

#### VII. Chapter 6: Post-Operation Requirements

#### A. Record Retention

Department copies of source documents for revenues and expenditures of service centers should be maintained by departments for a period of no less than five years following the end of each fiscal year. Other documentation, such as original time logs which are the basis for determining amounts to be billed, should be maintained for at least seven years, in accordance with Internal Revenue Service (IRS) requirements.

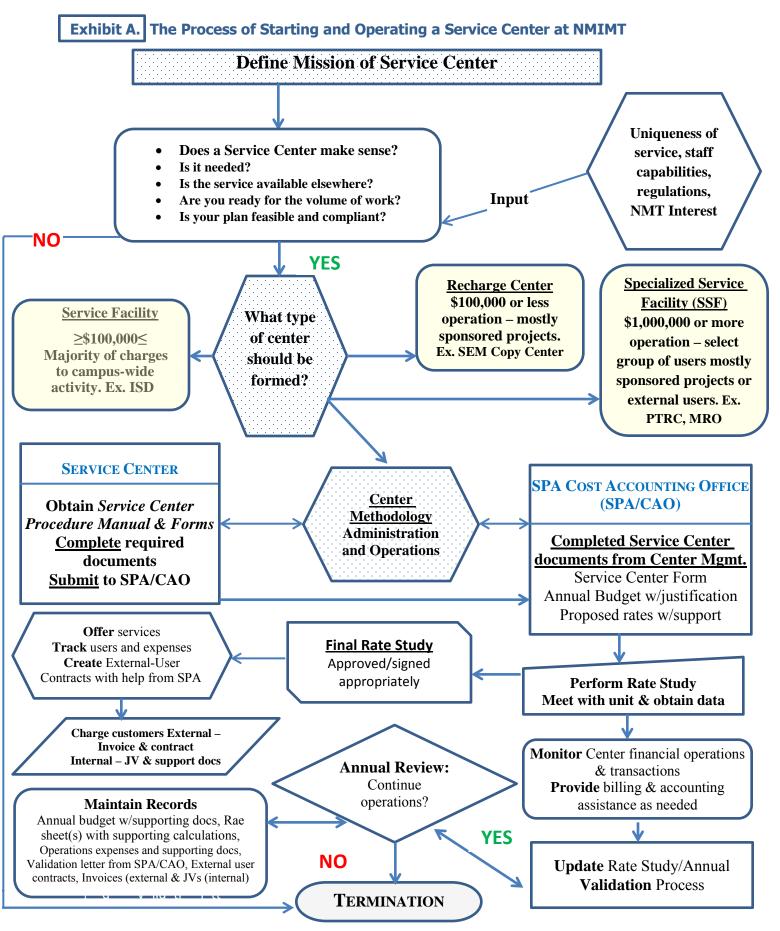
#### **B.** Audits

Audits of NMIMT may require participation by departments responsible for service center operations when the scope of these audits warrants it. In such cases, the Service Center Manager will be contacted as far in advance as possible by the Cost Accounting Office. An appropriate staff member will assist service center personnel in identifying any documents selected for audit that cannot be located.

## VIII. List of Exhibits

- A. The Process of Starting and Operating a Service Center at NMIMT
- B. Service Center Registration Form
- C. Financial Management of Service Centers
- D. Sample Rate Calculations
  - D1 Estimating Labor Hours (Consumption)
  - D2 Estimating Unit Cost (Output Approach)
- E. Allowable and Unallowable Costs in Rate Calculation
- F. Operating Report BlankF1 Operating Report Example
- G. Sample JV for Internal Users G1 – JV Example
- H. Sample Invoice for External Users
- I. Annual Rate Validation Form

All exhibits and various other templates for rate development are available in electronic format upon request from the Sponsored Projects Administration /Cost Accounting Office.



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Exhi	bit B.	Service Cent	ter Registration Fo	orm		
		ORED PROJECTS A SERVICE C	TITUTE OF MINING & TECH DMINISTRATION /COST AC ENTER REGISTRATION FO	COUNTING OFFI		
	· ·	formation and return th	is form to Cost Accounting C	Mice in Wells Hall	Room 4)	
	Service Center Name:					
	Initiating Department:			SC Fund No:		
	Service Center Manager	Title	E-mail address	Phone	Bldg/Room#	
	Attach a separate sheet, if ne Description of Activity, including			ternal vs. external)		
	Describe the usage base to be machine time, number of users,		-	•	ed,	
	Describe how records of usage	will be accumulated ar	nd maintained:			
	Identify equipment to be used &	method of recovery:				
	Before submitting this comp (example provided) for a full op were calculated (If it is propor provide a proposal and budget regarding the completion of inf Accounting Office, Wells Hall, copy and returns a copy to	erating fiscal year of the psed that the service of for the part of the year primation on this form of Room 4, 835-5781. <b>C</b>	ne service center <b>and</b> an illus enter begin operations on a d in which the service center or on the required attachment <b>cost Accounting Office reta</b>	stration of <b>how pro</b> date other than Jul will be operating.) s may be address	oposed rates y 1, please also Any question ed to the Cost	
	Approval Signatures:					
	Service Center Manager			Date:		
	Department Director/Chair			Date:		
	Cost Accountant/SPA			_ Date: _		_
	Director of Finance			Date:		_
	Assoc. VP Budget & Analysis_			Date:		_
	Cognizant VP or Director			Date: _		_

## Exhibit C. Financial Management of Service Centers

#### SPONSORED PROJECTS ADMINISTRATION/COST ACCOUNTING OFFICE FINANCIAL MANAGEMENT OF SERVICE CENTERS

#### **BILLING RATE COMPUTATION**

A service center rate is the cost per unit of output. Output is the basis used to recover the expenses of the service center. To compute the rate, service centers should use the following equation:

#### Budgeted Expenses +/- Prior Year Under- or Over-Recoveries Budgeted Usage Base

Budgeted usage base is the volume of work expected to be performed, expressed in units.

The two most commonly used methods to measure activity are:

**Consumption Base** - This type base is used when expenses are directly proportional to how much of a unit of measurement is consumed. For example, if labor and equipment usage costs can be accurately identified as being consumed on an hourly basis, the service center would base its charges on the number of hours of service provided.

**Output Base** - This type of base is used when the costs of the center are most accurately identified by the number of units produced per year. For example, a machine used to test samples where each test requires approximately the same amount of labor might base its charges on number of samples tested.

**Example**: a computer costs approximately \$120,000 per year to operate (total allowable costs) and has an estimated activity level of 1,500 hours per year. This results in a rate of 120,000 / 1,500 hours = \$80 per hour. If a researcher uses the computer for four hours for a sponsored project, his or her award is charged 4 hours X \$80/hour or \$320. Once the direct cost of \$320 is charged (using a Journal Voucher) to the sponsored project, the cost is subject to the indirect cost terms of the sponsored project. If the indirect cost rate for the sponsored project is 30%, then the total cost of the 4 hours of computer time is \$416 to the awarding agency. [(\$320 X 30% = \$96) (\$320 + 96 = \$416)]. The service center receives \$320.

A service center must develop rates so that revenues offset expenses over a reasonable period of time. A service center's surplus or deficit for a given fiscal year should not exceed 10% of annual operating expenses. Any service center with a surplus or deficit greater than 10% of annual expenses at the end of the fiscal year must submit a balance liquidation plan to the Cost Accounting Office. Excess balances should be liquidated within two years.

To the extent that a surplus or deficit is within the break-even range of +/- 10%, that surplus or deficit must be carried forward and the rates adjusted in the following period.

#### EXHIBIT C continued

Page 2 of 2

For example, the rates submitted for approval for fiscal year ending June 30, 2008 would be based on the 2008 projected volume and expenses plus/minus under/over recoveries carried forward from the fiscal year ending June 30, 2007.

#### Example 1: Service Center with a Surplus at year end

\$80/hour was charged for 1,600 hours of actual use in FY2007 resulting in revenue of \$128,000. Total expenses were \$120,000 resulting in a surplus of \$8,000. In FY 2008, costs are anticipated to increase by 5% resulting in a budgeted expense of \$126,000. After subtracting the surplus from FY 2007, the basis for recovery for FY 2008 is

	FY 2007 Actual		FY 2008 Budgeted
Total Revenue	\$ 128,000	Budgeted Expense	\$ 126,000
Total Expenses	(120,000)	Less Prior Year Surplus	(8,000)
Surplus	\$ 8,000	Total Budgeted Expense	\$ 118,000

Since the surplus for FY 2007 is within +/- 10% ((128,000-120,000)/120,000=6.67%), it will be subtracted from budgeted expenses in FY 2008, thereby reducing the rate. Assuming the hours of use are the same for FY 2008 as they were for FY 2007, then the new rate for FY 2008 should be \$73.75 per billable hour. (\$118,000/1600 hours)

#### Example 2: Service Center with a Deficit at year end

\$80/hour was charged for 1,600 hours of actual use in FY 2007 resulting in revenue of \$128,000. Total expenses were \$136,000 resulting in a deficit of \$8,000. In FY 2008, costs are anticipated to increase by 4% resulting in a budgeted expense of \$142,800. After adding the deficit amount from FY 2007, the basis for recovery for FY 2008 is \$150,800.

	FY 2007 Actual		FY 2008 Budgeted
Total Revenue	\$ 128,000	Budgeted Expense	\$ 142,800
Total Expenses	(136,000)	Plus Prior Year Deficit	8,000
Deficit	\$ (8,000)	Total Budgeted Expense	\$ 150,800

Since the deficit for FY 2007 is within +/- 10% [(128,000-136,000)/136,000=6%], it will be added to budgeted expenses in FY 2008, thereby increasing the rate. Assuming the hours of use are the same for FY 2008 as they were for FY 2007, then the new rate for FY 2008 should be \$94.25 per billable hour. (\$150,800/1,600 hours)

#### **Exhibit D. Sample Rate Calculations**

#### EXHIBIT D NEW MEXICO TECH SPONSORED PROJECTS ADMINISTRATION /COST ACCOUNTING OFFICE SAMPLE RATE CALCULATIONS

The following examples provide a general overview of two common approaches to calculating service center rates. The "**consumption**" approach should be used in more labor intensive situations, while the "**output**" approach is used to equitably distribute costs of a common measurable product. It is important that the selected activity base relate directly with the elements of the operation that drive costs (i.e. labor or output) to keep rate calculations as simple as possible while yielding reasonable and consistent results.

#### EXAMPLE 1: ESTIMATING LABOR HOURS (CONSUMPTION)

A machine shop estimates that total expenses for the next year will be \$225,000. Given that there are 2 full time and 1 half time employees working in this service center and that the operations run Monday through Friday during normal University business hours, the following method could be used to develop a reasonable rate to be charged, based upon the "consumption" of the machinists' time:

1. Calculate estimated production hours per person @ 100% time:

	37.5 hours/week * 38 academic weeks 35.0 hours/week * 14 non-academic weeks				
Subtotal		1,915 hours			
Less:	Vacation (22 days * 7.37 hours/day) Holidays (10 days * 7.37 hours/day) Estimated contingency for sick and	162 hours 74 hours			
	down time (10 days * 7.37 hours/day)	74 hours			
Total estim	1,605				

2. Multiply times the number of employees:

Number of employees = 2.5 \* 1,605 hours/year 4,013 billable hours

3. Divide total estimated annual costs of operation by the number of billable hours to arrive at an hourly rate:

Consumption Rate =  $\frac{$225,000}{4,013}$  Total Costs 56.07 per hour

#### **EXAMPLE 2: ESTIMATING UNIT COST (OUTPUT APPROACH)**

A department/research center with several copiers determines that the total cost of operating the machines for a year is \$72,000 and that 1.2 million copies are made by various users. The method below may be used to determine a unit cost per copy to charge users:

EXHIBIT D1 Fund 270555 - Machine Shop Proposed Budget & Rates FY 2010									
User	machine hours		Cost of Operations	I	Cost per Base Hour	Indirect Cost (IDC)	Charge Per Machine Hour		
Base - Internal User	4,014	\$	225,000.00	\$	56.06	\$-	\$ 56.06		
Base + IDC Plus FMV Adj. External User Cost				\$	56.06	\$ 22.03	\$ 78.09 11.91 <b>\$ 90.00</b>		
Production Hours			<u>Hours</u>			<u>Pe ople</u>			
37.5 hours/week * 38 academ 35.0 hours/week * 14 non-aca			1,425 490						
Subtotal			1,915						
Less: Vacation (22 day Holidays (10 day Estimated conting down time (10 d		162 74 74							
Estimated production hours	s/person		1,605		times	2.5	4,013.65		
Costs of Operation:									
Student labor - routine paperwo	rk/support (100 hrs *	\$7.5	/hr = \$750+2%FE	5)\$	765.00				
Labor (2 full-time and 1 half-tin	me machinests) + fri	nge	benefits		99,235.00				
Materials					30,000.00				
Maintenance & Repairs					50,000.00				
Travel & training					15,000.00				
Depreciation					30,000.00				
Total proposed operatin	g costs for FY2010			\$	225,000.00	-			
* <b>FMV</b> = Fair Market Value									
# External user is one who ca	n not supply a NMT	inde	x/fund number to	char	ge for the trans	action.			

EXHIBIT D2 Fund 270555 - By-the-Page Service Center Proposed Budget & Rates FY 2010												
	User	# of pages		sistant Cost	M	aterials Cost		Cost covery		ndirect ost (IDC)		ost per ample
	Internal Unassisted	600,000	\$	-		\$0.04	\$24	4,525.00			\$	0.04
	Internal Assisted	590,000	\$	0.04	\$	0.04	\$46	6,683.75			\$	0.08
*	External Assisted Plus FMV Adj. External User Cost	10,000	\$	0.04	\$	0.04	\$	791.25	\$	214.43	\$ \$ <b>\$</b>	0.10 0.05 <b>0.15</b>
	Est. annual samples:	1,200,000					\$72	2,000.00				
	Assisted Jobs Two students (3000 hrs * \$7 All jobs (including assisted Routine labor (1600 hrs * \$ Paper (\$5/reem of 500 Software upgrades ISD Charges [(14 + 24) X	\$	22,95( 21,120 12,000 900 1,368		<u>r Type</u> Assisted		<u>#</u> 600,000		<u>Cost</u> 0.038			
	ISD long distance					2,500						
	Copier leases					11,162						
					\$	49,050	Un	assisted	1,:	200,000 \$		0.041
	Average per sample exclu (not used as rate - check		FM\	/	\$	72,000	Ave	erage	1,	200,000 \$		0.06
*	<b>FMV</b> = Fair Market Value	9										
#	External user is one who	o can not sup	oply	a NMT i	inde	x/fund nur	nber t	to charge	for t	he transad	ctior	I.

EXHIBIT E		EW MEX		-		
SPONSORED PROJE	ECTS	s admin	IISTI	RATION/C	OST ACCOUN	ITING
OFFICE ALLOWABL	.E &	UNALLC	WA	BLE COST	S IN RATE	
		CALCUL	ATIO	ON		
	_					005
Salaries	± \$	<b>External</b> 45,000	\$	Federal 45,000	Recharge	SSF and
	φ	,	φ	43,000 13,500		
Fringe Benefits		13,500		,	4	4
Materials & Supplies		4,050		4,050	1	1
Travel		2,250		2,250		0
Insurance		300		300		2
Rental or service contracts		500		500		
Other Expenses - Allowable		400		400		
Operations & Maintenance		1,000		1,000		2
Equipment repair		1,550		1,550		
Equipment depreciation		2,500		2,500	3	3
Allocation of related space		-		-		2 and 4
Sub Total	\$	71,050	\$	71,050		
Add						
Sales tax if/when applicable		500		-	6	6
Amt. Invoiced/JV'ed	\$	71,550	\$	71,050		
Less						
Unallowable Expenses				(10,000)	5	5
Sales tax if/when applicable		(500)			6	6
Cost of Operation		71,050		61,050		
		4 550	-	4 550		
Estimated units of service		1,550		1,550	7	7
External User Billing Rate	\$	46			(Cost of Opera	tion divided
Internal/Federal Billing Rate	•		\$	39	by Units of Ser	vice)

#### Exhibit E: Allowable and Unallowable Costs in Rate Calculation

Indirect Cost:

> Indirect cost is generated at the time the restricted fund burdens MTDC.

> For External Users, call the Cost Accounting Office to find out what rate to use.

#### Notes:

- 1 Materials & supplies used, not "excess"
- 2 University-wide service facilities & specialized service facilities only
- 3 Equipment purchased with federal funds or included in NMIMT's indirect cost calculation must be excluded from the service center rate. If the equipment is recovered through the service center, Capital Reserve funds will be established for future replacement or upgrade of equipment. The transfer will be equivalent to the amount included in the rate for depreciation/usage.
- **4** When burdening the SSF with space related costs, identify square feet occupied by the SSF. If SSF space is not identified to the SSF, the SSF space should be assigned to OIA.
- **5** Unallowable expenses include advertising of services/products, alcoholic beverages, bad debts, entertainment, fines and penalties, goods or services not related to the service center.
- 6 When applicable, gross receipts (sales) tax must be charged to outside parties. Also, revenue from outside parties may have Unrelated Business Income Tax (UBIT) implications. These charges are included on the invoice, but excluded for rate determination.
- **7** Typical units: machine time, hours of labor, number of users, number of samples pieces of glassware, pages, etc.

# Exhibit F: Operating Report – Blank

EXHIBIT F	New Mex	ico Teo	ch				
Service Cent	er Name:						
Responsible Dep							
Annual Operating Repo	ort: From:			_To:			
Income:							
External Billings							
Direct Cost	plus	+ \$		-			
Indirect Cost			minus	-			
GGRT			minus	-			
FRV	minus -			_			
	Total External	\$	-	_			
Internal Billings							
NMT Internal Departme	ents plus +	\$		-			
Federal Awards			plus	+			
Non-Federal Awards			plus	+			
Project Funds	plus +		-				
Subsidy (if appropriate)	plus		-				
	Total Internal	\$	-	_			
Tota	al Income				\$	-	
Expenses:							
Salaries	plus	+ \$		-			
Fringe Benefits	P	<u> </u>	plus	+			
Materials & Supplies			, plus	+			
Services			plus	+			
Travel	plus			+			
Other Direct	plus			+			
Other Direct		plus		+			
Subcontracts			plus	+			
External Rentals	•	olus		+			
Equipment (Depreciation Or	niy) pius +			_			
Total	Expenses				<u>\$</u>		
New Operating	(Surplus)Deficit	\$	_	=			
Service Center Fund:		Capita	al Reserv	e Fund	d:		
Contact Person:		Office	/Cell Tel	ephon	e:		
E-mail:		Locatio	on Addre	SS:			
Notes:							

EXHIBIT F1	New Me	xico Tech			
Service Center	Name: Biology	/ Research	<u>Lab</u>		
Responsible Department:	Biology Departr	nent			Annua
Operating Report:	From: <u>April 1,</u>	2010	To:		<u>April 30, 2010</u>
ncome:					
External Billings					
Direct Cost	plus +	<u>\$</u> 29	93.60		
Indirect Cost	minus -	()	7 <u>8.60)</u>		
GGRT	minus -	(	<u>10.00)</u>		
FRV	minus -		(5.00)		
Т	otal External	\$ 2	00.00		
Internal Billings					
NMT Internal Dep	artm plu	s+ <u>\$</u>	800.00		
Federal Awards	plus +	1			
Non-Federal Awards	plus +	1	,200.00		
Project Funds	plus +	2	00.00		
Subsidy (if appropriate)			-		
	Total Internal	\$ 3,20	00.00		
Total	Income			\$	3,400.00
Expenses:					
Salaries	plus +	<u>\$</u> 1	,500.00		
Fringe Benefits	plus +		345.00		
Materials & Supplies	plus +		800.00		
Services	plus +		100.00		
Travel	plus +		500.00		
Other Direct	plus +		20.00		
Other Direct	plus	+ _			
	Subcontrac	ts			
	plus +				
External Rentals	plus	+ _			
	Equipme	· ·	eciation		
Only)	plus +		<u> 5.00</u>		
Total Ex	penses			\$	3,330.00
New Operating (Se	urplus)Deficit	<u>\$ (</u> )	<u>70.00)</u>	_	
Contact Person: Dr. I.	C. Bugs	Office/Cell	Telephone:		555-5555
E-mail: <u>icbugs@n</u>	<u>mt.edu</u>	Location A	ddress:	Bi	o Bldg Rm 555
Notes: The suplus is minor so	there will be no (	change in ra	tes for FY11	We	anticipate
about the same level of users ar					

## **Exhibit G: Sample JV for Internal Users**

EXHIBIT G				Page 1 of 1		
Rule Code	JOURNAL	VOUCHER		Document Number J Transaction Date		
DESCRIPTION (30 CHAR	ACTERS AND SPAC	CES)				
ORIGINATED BY						
REQUESTED BY	UESTED BY			Entered		
INDEX	ACCT	DEBIT	CREDIT	DESCRIPTION		
DOCUMENT	TOTAL	0.00	0.00	0.00		
EXPLANATION				BUSINESS OFFICE AUTHORIZATIONS		

1			Page 1 of 1
			Document Number
JOURNAL	VOUCHER		Transaction Date
			05/13/10
			MO / DAY / YEAR
es for April 2010			
I ACTERS AND SPACE	ES)		
Dee Anay			
I. C. Bugs			Entered
АССТ	DEBIT	CREDIT	DESCRIPTION
710001*	80.00		1 - Unassisted
710001*	80.00		1 - Unassisted
710001*	220.00		1 - Assisted
710001*	160.00		2 - Unassisted
710001*	160.00		2 - Unassisted
710001*	160.00		2 - Unassisted
560106		860.00	
TOTAL	860.00	860.00	1,720.00
			BUSINESS OFFICE
April 2010 Internal User charges for			AUTHORIZATIONS
Thermal Analysis Service Center			
*may use account code 710003 if providing lab services			
	es for April 2010 ACTERS AND SPACE Dee Anay I. C. Bugs ACCT 710001* 710001* 710001* 710001* 710001* 0 0 0 0 0 0 0 0 0 0 0 0 0	ACTERS AND SPACES)  Dee Anay  I. C. Bugs  ACCT DEBIT 710001* 80.00 710001* 80.00 710001* 220.00 710001* 160.00 710001* 160.00 710001* 160.00 710001* 160.00 560106 560106 560106 560106 C. C	es for April 2010  ACTERS AND SPACES)  Dee Anay  I. C. Bugs  ACCT DEBIT CREDIT 710001* 80.00 710001* 80.00 710001* 160.00 710001* 160.00 710001* 160.00 710001* 160.00 710001* 160.00 710001* 160.00 710001 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0

# Exhibit H: Sample Invoice for External Users

N	NEW MEX	ICO TECH	I	Invo	oice# Date:		
SCIENCE · ENGINEERING · RESEARCH · UNIVERSIT			Service Center Manager:				
Service Center Na	me:						
Cu	stomer Billing Inform	nation:	Terms of Pa	yment: Due	eupon	receipt	
Name: Address: City/State/ZIP: Phone: Contact:	XYZ Industry Accounts Payab Albuquerque, N 505-555-5555 John Doe		Make payable to: <u>New Mexico Tech</u> Mail to: New Mexico Tech 801 Leroy Place Wells Hall Rom 44 – SPA/CAO Socorro, NM87801				
Service Date	ServiceDe	scription	Quantity	Price		Amount	
Please se	end a copy of invo	ice with payment.		Total Due	e	320.00	
		NMTDictaily	ution Purposes:	\$			
Credit Index-Acc 270555 - 560000		Credit Index-Acct R56007-560007	Amount 43.09	If Applicable GRTPAY - 2100	004	Total Distribution	
122XXX - 56000		122XXX - 560007	43.09	For Tangible Iter		\$ 320.00	

# Exhibit I: Annual Rate Validation Form

EXHIBIT I	Sponsored Projects Administration	on /Cost Accounting Office	9			
Service Center Annual Rate Validation Form - FY(Most recent Fiscal Year end)						
	(To be prepared annually for all ap					
		proved dervice deriters)	Fund #			
Service Center Name:						
Current Location/Building:						
Department:						
Financial Manager:						
E-Mail Address:						
Phone number:						
Date of Latest Rate Study	Date: (See attached	page for current rates)				
Type of Service Center						
To be	completed by Service Center Ma	inager	Amount			
FY Revenue Collections:	Revenue Account Code:					
	Revenue Account Code:					
	Revenue Account Code:					
	Revenue Account Code:					
	Total Revenues		-			
Fy Expenditures:	Expense Account Code:					
	Expense Account Code:					
	Expense Account Code:					
	Expense Account Code:					
	Expense Account Code:					
	Expense Account Code:					
	Expense Account Code:					
	Expense Account Code:					
	Expense Account Code:					
	Expense Account Code:					
	Total Expenditures		-			
	Results of Operation (Revenues - Ex	penditures)	-			
Description of changes:						
becomption of enaligee.						
Equipment Changes:						
Equipment onunges.						
Location Changes:						
Looalion Onanges.						
		L	1			
Submitted by:	Name:	Date:				
To bo	completed by Sponsored Preject	Admin (Cost Accounting	Office			
	To be completed by Sponsored Projects Admin./Cost Accounting Office					
Review Procedures:	Service Center Rates are Acceptable:		)			
	Service Center Rates must be revised		)			
	Service Center Rates to be cancelled:	Yes:( ) No:(	)			
	Other Comments:					
Reviewed By:	Name:	Date:				
Approved By:	Name:	Date:				