



## Service Centers Accounting & Compliance Policy

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**NOTE:** Appendices A, B, and C were created by the School of Medicine and are standard operating procedures for the School of Medicine Core Facilities. There are sections within these guidelines that pertain to the School of Medicine's specific preferences for doing business. Please feel free to adopt or amend these guidelines which will be used in conjunction with the Policy (Page 1-6) and Federal regulations.

## 2 CFR PART 200

CWRU shall comply with 2 CFR Parts 200.468 and University guidelines for all specialized service centers. Below is the CFR definition and general guidelines for the treatment of service centers.

### **§200.468 Specialized Service Facilities**

- a. The costs of services provided by highly complex or specialized facilities operated by the non-Federal entity, such as computing facilities, wind tunnels, and reactors are allowable, provided the charges for the services meet the conditions of either paragraphs (b) or (c) of this section, and, in addition, take into account any items of income or Federal financing that qualify as applicable credits under subsection §200.406 Applicable credits.
- b. The costs of such services, when material, must be charged directly to applicable awards based on actual usage of the services on the basis of a schedule of rates or established methodology that:
  - (1) Does not discriminate between activities under Federal awards and other activities of the non-Federal entity, including usage by the non-Federal entity for internal purposes,
  - (2) Is designed to recover only the aggregate costs of the services. The costs of each service must consist normally of both its direct costs and its allocable share of all indirect (F&A) costs. Rates shall be adjusted at least biennially, and must take into consideration over/under applied costs of the previous period(s).
- c. Where the costs incurred for a service are not material, they may be allocated as indirect (F&A) costs.
- d. Under some extraordinary circumstances, where it is in the best interest of the Federal Government and the non-Federal entity to establish alternative costing arrangements, such arrangements may be worked out with the Federal cognizant agency for indirect cost.

### **§200.413 Direct Cost**

(b) *Application to Federal awards.* Identification with the Federal award rather than the nature of the goods and services involved is the determining factor in distinguishing direct from indirect (F&A) costs of Federal awards. Typical costs charged directly to a Federal award are the compensation of employees who work on that award, their related fringe benefit costs, the costs of materials and other items of expense incurred for the Federal award. If directly related to a specific award, certain costs that otherwise would be treated as indirect costs may also include extraordinary utility consumption, the cost of materials supplied from stock or services rendered by specialized facilities or other institutional service operations.

## DEFINITIONS

**Service Center:** An activity that performs specific technical or administrative services, primarily for the internal operations of the University and charges users for its services. These centers are also known as:

- **Core Facilities:** Defined by NIH as being centralized shared resources that provide access to instruments, technologies, services, as well as expert consultation and other services to scientific and clinical investigators.
- **Recharge Center:** A service center with annual direct operating costs of less than \$100,000.
- **Cost Center:** A service center with annual direct operating costs between \$100,000 & 1,000,000. Also, all service centers that don't fall within the definition of a specialized service facility.
- **Specialized Service Facility:** A large service center that (a) provides services to a select group of users rather than to overall University operations, and (b) has combined annual direct operating costs of \$1,000,000 or more.

The staff at CWRU does not need to distinguish between the type of service center and can refer to them by any of terms listed above. For the purpose of this policy and future communication from the Controller's Office, they will be referred to as "Service Centers".

**Billing Rate:** The amount charged to a user for a unit of service. Billing rates are normally computed by dividing the total annual costs of a service by the total number of billing units for the period. Internal billing rates must be equal to or less than external rates.

**Billing Unit:** The unit of service provided by a service center. Examples of billing units include hours of service, animal care days, tests performed, machine time used, etc.

**Surplus:** The amount of revenue generated by a service which exceeds the costs providing the service in a fiscal year.

**Deficit:** The amount that the costs of providing a service exceeds the revenue generated by the service in a fiscal year.

**Direct Operating Costs:** All allowable costs that can be directly identified with a service provided by a service center. These costs may include salaries, wages and fringe benefits of University faculty, staff and students directly involved in providing the service; materials and supplies; purchased services; travel expenses; and equipment rental.

**Internal Service Center Overhead:** All costs that can be specifically identified to a service center, but not with a particular service provided by the center, such as the salary and fringe benefits of the center director.

**Institutional Indirect Costs:** The costs of administrative and supporting functions of the University such as operations and maintenance of buildings; building and equipment depreciation; and interest associated with financing of buildings.

**Unallowable Costs for Service Center Rate Calculation:** Costs that cannot be charged directly or indirectly to federally-sponsored programs can be considered unallowable. These costs are specified in 2 CFR PART 200. This would include all 599xx0 PeopleSoft account codes along with indirect costs that are already included in the University's F&A Rate Proposal. Some examples of indirect costs that ARE NOT allowable would be:

- Building and equipment depreciation, capital equipment, building interest expense, and operations & maintenance costs associated with the space (i.e. utilities, custodial, security) since CWRU included all these costs in its F&A rate.
- The non-Federal portion of the University's fringe benefits rate.
- Expenses such as entertainment, unallowable travel, and alcohol.
- Administration staff salaries not charged to a known service center's operating account during the most recent F&A Rate Proposal. A newly created position may qualify as allowable for staff that support a service center. This portion of the effort must be charged to the center(s) operating account.

## GENERAL POLICIES

1. Billing rates should be designed to recover the total allowable direct operating costs of providing the services on an annual basis. No costs other than the costs incurred in providing the services should be included in the billing rates when charging a federal grant. The costs charged to federal grants should exclude unallowable costs and be net of applicable credits. The computation of the billing rates charged to federal grants for service centers should NOT include the facility's allocable share of institutional indirect costs. ***Rates charged to non-federal and external users should be as high as the market will bear.***
2. Billing rates should be computed annually for the start of each fiscal year. Each rate needs to be approved annually by the service center's director and the management center, and biennially by the Controller's Office. The rates should be based on a reasonable estimate of the direct operating costs, and where applicable, indirect and other costs of providing the services for the year. These estimates can be determined through use of historical costs and billing units or projected costs and billing units. In some cases, the service center may charge a market price, so long as it recovers no more than cost by doing so ***when a federal grant is charged. Non-federal and external users can be charged "market" rates.***
3. All users should be charged for services during the fiscal year the service is rendered. Monthly or quarterly bills should be processed and charged to user DeptID's or ProjectID's. Any adjustments can be made in the subsequent billing period(s).
4. All billing rates must not discriminate between federally and non-federally supported users, inasmuch as the federal rate cannot be higher than any non-federal rates.
5. If Service Centers are utilizing SERV or OPR speedtypes the actual costs and revenues should be compared at the end of each University fiscal year. Deficits or surpluses will close as part of the schools fiscal year end. The balance at the end of the fiscal year will be added the life to date totals in the next fiscal year for monitoring purposes and to aid in complying with Federal requirements to breakeven over time. A service center that constantly under-recovers year after year may be required to submit a sound business plan on recovering prior year's shortfall to its management center.

## SERVICE CENTERS THAT PROVIDE MULTIPLE SERVICES

Where a service center provides different types of services to users, separate billing rates should be established for each service that represents a significant activity of the service center. The surplus from one service may be used to offset the deficit from another service only if the mix of users and level of services provided to each group of users is approximately the same.

## EQUIPMENT PURCHASES

Expenditures for capital equipment purchases should NOT be included in the costs used to establish service center billing rates. Some Universities, however, include depreciation of their non-Federal equipment. The inclusion of equipment depreciation in the billing rates can help generate funds that will enable service centers to purchase equipment needed in the future. Here at CWRU, all of the equipment depreciation is included in the University's F&A Rate Proposal and cannot be double counted by also charging the government for service center usage.

When a service center needs to purchase new equipment, the purchase must be coordinated with the department and management center in which the service center is based to ensure sufficient resources are available. The purchase of major equipment will have a negative (deficit) effect on the school's bottom line in the year in which it is purchased. For this reason, capital expenditure planning and budgeting is necessary for all service centers with capital equipment requirements. Examples of equipment funding sources include charging a premium for non-federal and external users, equipment grant funding and gifts.

## STANDARD BILLING RATES

All users within the University should be charged the approved rates for a service center's services. Pricing structures may be based on time-of-day, volume discounts, turn-around time, etc. are acceptable, provided that they are treated the same for all customers, and have a sound management basis,

## TRANSFERS OF FUNDS OUT OF SERVICE CENTERS

It is normally not appropriate to transfer funds out of a service center speedtype to the University's general funds or other DeptID's. The Controller's Office must approve all transfers out of service center DeptID's except for when transfers involve moving excess income from a SERV speedtype to the service center's parent OPR speedtype. This journal entry must include sufficient detail and/or billing logs to reconcile between total internal federal, internal non-federal, and external income.

## SUBSIDIZED SERVICE CENTERS

In some instances, the University, a school, or a department, may elect to subsidize the operations of a service center, either by charging billing rates that are intended to be lower than costs or by not making adjustments to future rates for a service center's deficits. Service center deficits caused by intentional subsidies cannot be carried forward as adjustments to future billing rates. Since subsidies can result in a loss of funds to the University, they should be provided only when there is a sound programmatic reason and approved by the School in which the service center resides.

## ESTABLISHMENT OF NEW SERVICE CENTERS

The establishment of new service centers must be reviewed and approved by the service center's management center. The process for approving new service centers is determined by the management center. Approval of a new service center by a management center must be provided to the Controller's Office who will review the service center's initial pricing structure. This should be completed PRIOR to any service center activity.

## REVIEW OF SERVICE CENTERS

The Controller's Office will conduct periodic reviews of the financial operations of service centers in collaboration with each management center. These reviews will focus on the development of billing rates, the handling of surpluses and deficits, and the adequacy of the service center's record keeping procedures. Any major problems or compliance issues which may arise as a result of these reviews will be referred to the Management Center or Finance Director of the school where the center resides for resolution.

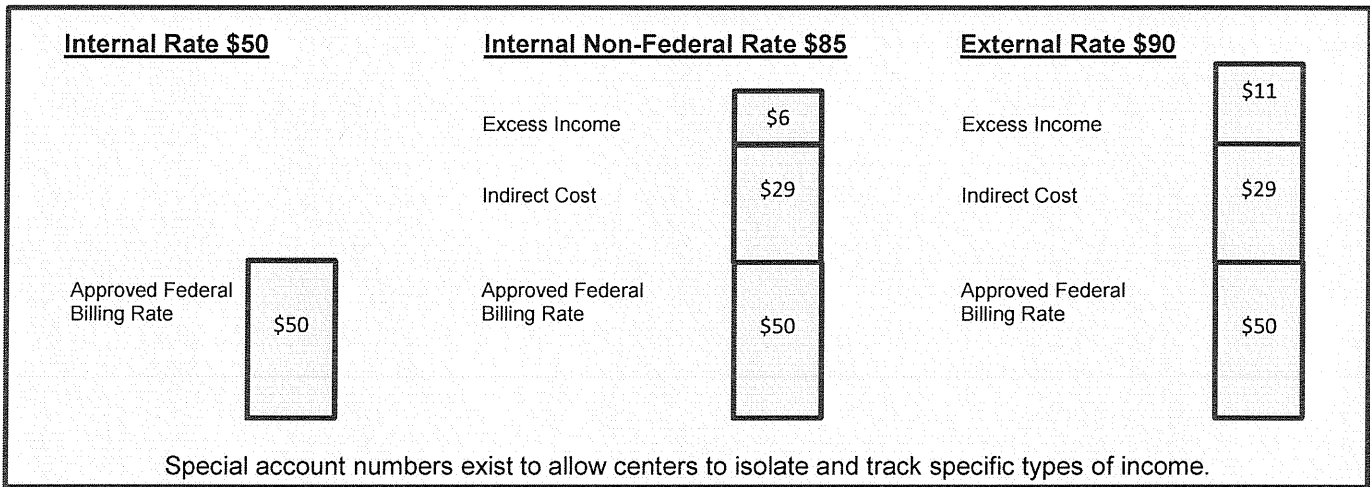
## SETTING UP A NEW "SERV" SERVICE CENTER SPEEDTYPE

1. Service Centers may request a SERV speedtype after obtaining approval from their management center.
2. Speedtype requests should be submitted to the Controller's Office and include documentation of approval by the management center.
3. The following information should be included in the email request.
  - i. Formal name of the center.
  - ii. Contact person at the center (user id and phone if possible).
  - iii. Department that it rolls up to.
  - iv. Building & room number(s) for where the center is located.
  - v. Approved fee structure.
  - vi. Budget of expenditures and income for the current year in which the rate(s) will be applied.
  - vii. A brief summary of what the service(s) are and who the customers will be (internal/external Federal/Non Federal)
4. The Controller's Office will review the request and submit the request to General Accounting to create an SERV speedtype.
5. General Accounting will notify the requestor and IDC Accounting Office when the new speedtype is set up.  
*(The SERV is ready to use at this point)*

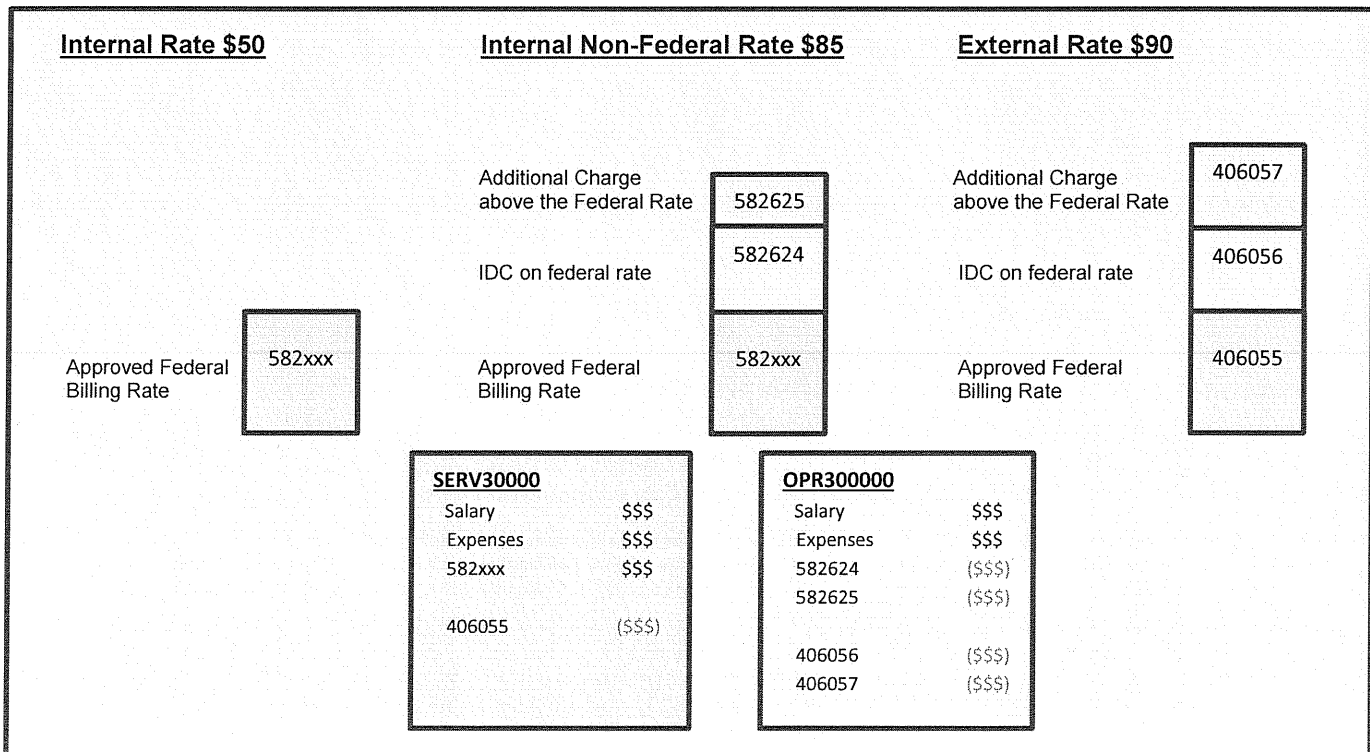
**SERVICES PROVIDED TO EXTERNAL AND INTERNAL NON-FEDERAL USERS**

If a service center provides services to individuals or organizations outside of the University, the billing rates may include institutional indirect costs even though these costs are not included in the rates for internal federal University users. Additionally, outside users may be charged an initial higher rate than that charged to internal users. The same is true for charging internal non-federal users. The additional amounts charged in excess of the approved federal rate can be excluded from the computation of a service center's surpluses and deficits for purposes of making carry-forward adjustments to future billing rates.

*This example illustrates how a service centers may structure rates differently for various customers.*



*This example illustrates how each area of income may be separated using negotiated combinations.*





CHOOSING THE CORRECT ACCOUNT NUMBER TO USE

Separate SERVxxxxx ProjectID's should be established in the University's accounting system to record the actual direct operating costs of the service center, revenues from billings and surpluses or deficits. Documentation to support units of service, billings and rate calculations should also be maintained.

- 1. INTERNAL BILLING: Service centers shall create journal entries to bill internal users for goods and services. The journal source code must be changed to XBL when submitting a journal. The account numbers 532xxx (internal services) is the only account number that should be used when charging a customer. The SERV will only be credited using the account number range 582xxx. The internal account number 582625 will be used for credits from non-federal sources in excess of the federal rate.

Table showing journal entries for Internal Billing with columns for Example, Debit, Account Number, Amount, Credit, and Amount. Includes entries for OPRxxxxx, RESxxxxx, VSNxxxxx, and SERVxxxxx with various amounts and notes like '(For payments received up to and equal to the Federal Rate)'

- 2. EXTERNAL BILLING: Service centers should deposit checks using account 406055 - 406057 depending on how the center wishes to track income. The portions up to the Federal rate will always go to the SERV under account 406055. The remaining income may be placed in the SERV's parent OPR under 406056 - 406057.

Table showing journal entries for External Billing with columns for Example, Debit, Account Number, Amount, Credit, and Amount. Includes entries for Cash, SERVxxxxx, and OPRxxxxx with amounts and notes like '(For payments received up to and equal to the Federal Rate)'

- 3. SUBSIDIZING A SERVICE CENTER: A journal entry may be created any time to subsidize an under-recovery.

Table showing journal entries for Subsidizing a Service Center with columns for Example, Debit, Account Number, Amount, Credit, Account Number, Amount, Fund #, and Amount. Includes entries for XXXxxxxx and SERVxxxxx with amounts and notes like '(For payments in excess of the Federal billing rate)'

TECHNICAL ASSISTANCE

The Controller's Office is available to provide technical assistance and advice on the financial management of service centers. This assistance may be requested in connection with the development of billing rates, cost allocation procedures, handling of surpluses and deficits, equipment purchases, record keeping, etc. Please contact the following for assistance:

Nick DeGeorge PH: 216.368.1044
Director, Indirect Cost Accounting nxd6@case.edu
CWRU - Controller's Office
BioEnterprise Bldg. Rm 344

POLICY REVISION

Any changes to this Standard Policy must be approved by the Finance Division and Office of the Vice President for Research.

APPROVAL

This policy is hereby approved.

Signature of John F. Sideras, Senior VP and CFO, dated 5/15/2015

## CWRU Service Center Best Practices Handbook

### Establishment of Service Center User Fees

Rates should be designed to recover the direct operating costs of providing services when charging federal awards. Indirect costs, depreciation and other costs can be recovered when charged to non-federal or external users. It is suggested that at least two separate rates be developed, one for internal users charging federal awards and one for external users or internal users not charging federal awards. The rate used to charge internal federal awards must be the lowest rate charged. An external user may not pay less than an internal user. All rates should be reviewed on an annual basis.

#### **Cost accounting standards – establishing the basis of how user fees are developed**

When charging federal users, all service centers at Case Western Reserve University must conform to the Cost Accounting Standards (CAS) that are applicable to educational institutions as defined in 2 CFR PART 200 , Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. The CFR establishes principles for determining costs applicable to awards and other agreements with educational institutions. The principles are designed to provide that the Federal government bear its fair share of the total costs involved with doing research, determined in accordance with generally accepted accounting principles.

Costs charged directly to federal awards must adhere to four fundamental principles. Specifically, costs must be allowable, allocable, reasonable, and treated consistently in like circumstances.

- Allowable – refers to whether or not the type of charge is allowable and can be made as either a direct or indirect cost – e.g. laboratory supplies are allowable and a direct cost, major equipment is allowable by way of annual depreciation but only as an indirect cost, alcoholic beverages, marketing and membership costs are not allowed.
- Allocable – the charge incurred must be solely to advance the work of the award, or benefit multiple awards in a proportion that can be reasonably documented.
- Reasonable – the charge incurred is the result of an action that a prudent person would have taken under the circumstances prevailing at the time of the decision – e.g. if a reliable service can be provided at a cost of \$50, paying \$500 for the exact same service would be considered unreasonable.
- Treated consistently in like circumstances – all costs incurred for the same purpose, in like circumstances, are either direct costs only or indirect (F&A) costs only. If a charge is a direct cost on one award, it cannot be an indirect cost on another award, unless there are special or unlike circumstances – e.g. administrative support for federally sponsored awards are generally considered to be a part of the indirect cost pool, however, if a major component of the award is dependent on administrative support, the charge can be budgeted as a direct cost provided that the funding agency approves.



**Setting User Fees for a Service Centers Using the Cost Accounting Standards as a Guide**

Setting user fees for service centers involves applying the following formula for each product and/or service offered:  $Rate = (Expenses\ Incurred\ and\ Allowable) / (Measurement\ of\ Actual\ Usage)$

**Expenses incurred and allowable includes the following:**

- 1) Salary and fringe of service center personnel
- 2) Consumable supplies and minor equipment (<\$5000)
- 3) Annual depreciation expense on capital equipment – ***not currently used when charging federal awards as it is currently in the University IDC calculation, but may be used when charging non-federal and external users***
- 4) Equipment service contracts and maintenance
- 5) Services costs related to operating the center: e.g. internal services, shipping, travel – provided they are allowable as a direct cost
- 6) Surplus or deficit amounts from the prior year of operation

1) **Salary and fringe** – the fringe rate used in the expenses incurred calculation may **not** be the non-Federal rate. In some instances the service centers are being operated out of federal awards and will be charged the federal fringe similar to all other federally sponsored awards. For non-Federal awards and speedtypes, the non-Federal portion of the fringe rate **must be removed** from all rate calculations and considered a built in operating loss.

2) **Consumable supplies and minor equipment (<\$5000)** – supplies and minor equipment are any items such as glassware, plastic-ware, consumable reagents, kits, microfuges, pipetman, etc. Supplies used in the actual operation of the service center during a fiscal year are allowed in expenses incurred, however, building up supplies for use in future years is not allowed as a part of the rate calculation. For example, purchasing 10 cases of gloves on June 28, 2014 would not be considered an allowable expense for the time period of 7/1/13-6/30/14. When starting up a service center, there is often a large expense incurred for everyday use items. This will be discussed in Appendix C.

3) **Annual depreciation expense on capital equipment** – Currently, this should not be a component of user fees charged to federal awards as depreciation is currently captured centrally and is part of the University's IDC rate. For non-federal and external users the following example applies:

Example:      Equipment Purchase Price: \$50,000  
                  Expected Useful Life of Equipment: 5 years  
                  Equipment use by the service center: 25%  
                  Annual depreciation expense built into the center's non-Federal rate \$2,500

4) **Equipment service contracts and maintenance** – To the extent that a piece of equipment is used by a service center, the amount of the annual service contracts and/or maintenance fees is allowable as an expense incurred.

Example:      Ultracentrifuge used by the center has a \$4,000 annual service contract  
                  Ultracentrifuge logs show 30% usage by the center  
                  Allowable expense incurred = \$4,000 \* 30% = \$1,200

- 5) **Service costs related to operating the center** – This category is reserved for items such as internal services, shipping and travel. These costs are allowable as incurred expenses as long as they would also be allowable as a direct cost on a federal award.
- 6) **Surplus or deficit amounts from prior operating years** – As a rule, the annual goal of a service center is to breakeven in that total revenues = total expenses. A surplus or deficit must be taken into account when establishing rates from one year to the next.

### Measurement of Actual Usage

Going back to the formula of **Rate = (Expenses Incurred and Allowable)/(Measurement of Usage)**, it is important to understand that the measurement of usage is an estimate. For a new center, the measurement of usage may be difficult to define. For example, if a center charges for machine time usage, the number of hours that the machine will be used during the first year of operation will merely be an estimate. It is important to have some idea of actual usage, however, because substantially overestimating usage will result in a rate that is too low, guaranteeing a deficit at the end of the year. Substantially underestimating usage, however, will result in a significant surplus, which is not allowed under federal guidelines. Following the first year of operation, it should be easier to establish a more accurate baseline of usage and demand for services.

For salary and fringe expenses, the measurement of usage is based on the number of hours that the person has at their disposal during the year to work specifically on the service center facility. This is different than the number of work hours in a year, which is 2080 for exempt employees and 1950 for non-exempt employees. As discussed below, a rule of thumb might be to establish 1500 hours as the total numbers of usable hours for a center's manager and 1750 total usable hours for a technician if the technician is exempt. If the technician is non-exempt, then the number of maximum billable hours will be closer to 1900 as the HVA pool is used for all vacation, sick and holiday hours.

### Detailed explanation on maximum billable salary hours available for service centers:

Setting the maximum billable hours to 2080 (52 weeks \* 40 hours per year) will always end up with a billing rate that will not cover the annual salary and fringe of employees that are 100% employed by a center because the established rate will be too low.

A typical exempt employee will have 16 vacation days and 11 University holidays. This equates to 27\*8 = 216 hours of time that are not available to be billed. Time spent on administrative duties, travel to conferences, and any sick time must also be taken into account and subtracted from the total. (Exempt employees earn an addition week of vacation after 5 years at the University, adding an addition 40 hours to the total.)

So, for a typical exempt technician, the total usable time can be calculated as:

$$2080 - 216 \text{ vacation/holiday} - 114 \text{ sick/travel/admin} = 1750 \text{ total hours.}$$

Since the center's director is often engaged in other administrative activities, another 250 hours could be assumed to be taken from this total to arrive at 1500 hours.

For non-exempt employees, sick, vacation and holiday time comes from the fringe benefits pool, and, therefore, those numbers, although not available as billable hours, must still be counted in the total pool of hours when calculating the hourly labor rate because they are in effect already covered.

*Non-exempt Example:* A research assistant 1 makes \$20,000 and gets 11 vacation days and 11 University holidays. The number of hours available to the non-exempt employee is 1950, with 165 of those hours covered by the vacation/holiday pool. Assuming that 50 hours per year are spent on non-billable tasks, the hourly rate to charge for this person would be:

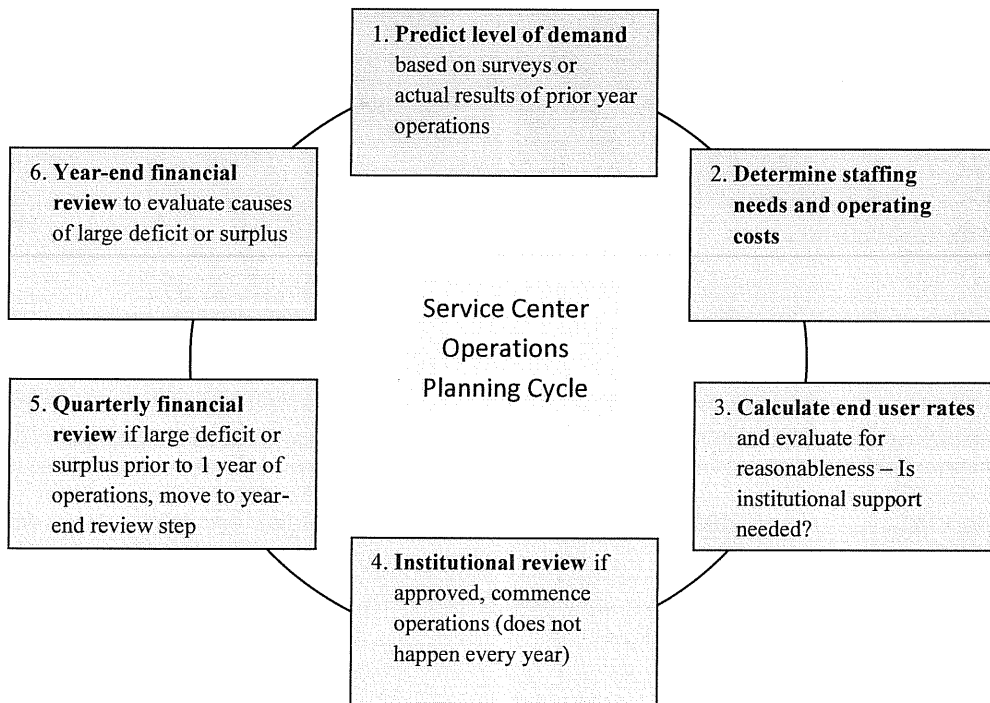
$\$28,000 / (1950 - 50) = \$14.74$  per hour keeping in mind that the maximum billable hours for this person will actually be:  $1950 - 165 - 50 = 1735$

During the year, 1735 hours are billed at  $\$14.74 = 25,574$  and 165 hours are charged to the fringe pool at  $\$28,000 / 1950 * 165 = \$2,369$  for a total of:  $25,574 + 2,369 = \$27,943$  (rounding errors will always result)

**How Setting Service Center Rates is a Part of the Service Center Operations Planning Cycle**

Setting rates is an ongoing and important process that can be considered a part of the service center operations planning cycle. Generally, the cycle occurs over the course of a fiscal year, however, the nature of the center and actual business results may dictate that the cycle occur over a shorter window.

When starting (or renewing) a center, determining the level of demand will be the key in deciding rates as well as to whether or not the service center is warranted based on the pricing of similar services both internal and external to the school (step 1). Search existing web sites such as the School of Medicine website for Core Facilities will be a good starting place to see whether or not a newly proposed service center is a duplicate of an existing center.



Once the center is determined to be warranted, evaluating the level of demand in year 1 could be pursued through the use of an end-user survey. Depending on the level of interest, it can either be structured as a departmental (narrower scope) or an institutional center (broad based service across multiple department/disciplines).

Regardless of the scope of the service center, the next step in the planning cycle is determining what level of staffing and operating costs will be required to meet the anticipated demand for services (step 2). Once this has been determined, the rates for the initial year of the center can be calculated (step 3). If the calculated rates are determined to be reasonable (refer to the Cost Accounting Standards), the next step (after institutional approvals have been issued) in the cycle is to commence operations (step 4).

**See Appendix D** for setting user fees.

**See Appendix E** for a sample Excel rate setting template that is available for all to use.

### **Managing Financial Operations of Service Centers**

The department or academic unit that administers each center is responsible for its fiscal management. Responsibilities include: budgeting and forecasting, assisting with the establishment of costing, invoicing, purchasing, reconciliation and record keeping and processing both internal and external billing.

#### **Invoicing Best Practices**

Invoicing of each service center should occur at monthly or quarterly intervals to provide for timely and accurate accounting and cost recovery. It is recommended that billing occur monthly and should include adequate detail in the form of an invoice or other documentation to adequately show what services were billed.

Monthly invoicing helps to ensure costs post to awards within budget and award periods and comply with the 90 day rule. It enables the center to accurately gauge its utilization and financial position.

All billing and cost recovery must be based on services provided (i.e., after service has been provided and expense has been incurred). Billing in advance of the work or receipt of pre-payment is not allowable. However, centers may choose to divide the work into smaller billable units in order to appropriately recover incremental costs for long-term project work on a timely basis. For example, if a center needs to purchase specialized reagents or supplies to perform work for a specific project, these expenses may be charged to the user once the purchase has been made, with separate charges for completion of later work.

#### **Recommended Invoice Detail**

The purpose of the invoice is to provide detail regarding the service conducted so that PI and his/her administrator have knowledge of the service that was provided.

The following items should be included on both internal and external invoices.

- Name of center providing research service
- Date(s) of service
- Name of project
- Name and contact information for PI who the service was conducted for
- Sufficient detail about the service conducted (hours spent, samples run, process utilized, instrument utilized, and person conducting the research.)



Additional Items to consider for invoice:

- Billing Address
- Name of contact person from service center.

## Process for Internal Billing

Internal billing is processed in the CWRU PeopleSoft financial system. Each bill is conducted through the utilization of the General Ledger Journal Function. All internal cross bills must use the XBL journal source. For each journal the Long Description should be completed. It is recommended that the long description include the name of the service center.

When completing the lines tab of a journal entry, the following is recommended:

1. The account code for the speedtype being charged is usually 532900 (Internal Billing). Other 532xxx account numbers are sometimes used in the non-scientific centers.
2. The 532xxx journal line description should include the name of the center that provided the service and the month of the billing.
3. The amount charged to the speedtype is a positive number.
4. The account codes for the center that conducted the work and is receiving payment are as follows:

582500	Service Center Supplies (Typically used for stockrooms)
582600	Service Center Services
582624	Service Center IDC*
582625	Service Center Premium*

\* Accounts 582624 and 582625 exist to allow isolating income in excess to the federal rate when charging non-federal sources.
5. The 532xxx must offset with the 582xxx.
6. The AGY speedtype requires the charges to go to 203290. This line must be offset with an income account 406055 - 406057.
7. The journal line description should include the name of the user that the research was conducted for and possibly an invoice number.
8. If a center is trying to isolate IDC or excess income above the federal rate, then 2 or 3 credits is okay by also using (582624 and/or 582625).
9. Service center should also try to only submit one journal that contains all the billing activity for that center's billing cycle. Sometimes privacy issues create a need to submit multiple journal for each user or group of users of a center.

For each XBL journal back-up documentation must be provided. Best practice is to utilize invoices or copies of use log as back-up. A detailed summary spreadsheet could also be used. The spreadsheet should contain the following details: User Name, Date of Service, Brief Description of Service, Speedtype, Units, Cost Per Unit, Total Cost.



Below is a sample of what may be used as journal entry backup along with invoices or logs.

Microscope Facility								Inv Date
								10/31/2014
User Name	Description of Service	Date of Service	Units	Units	Rate	Amount	Speedtype	
Nate's Lab	Confocal Use	10/14/2014	Hrs	33.12	\$30.00	\$993.60	RES000001	
Nate's Lab	Training/Assistance	10/14/2014	Hrs	0.5	\$40.00	\$20.00	RES000001	
Helens Lab	Scanner Slides	10/16/2014	EA	154	\$10.00	\$1,540.00	RES000002	
Helens Lab	Training/Assistance	10/16/2014	Hrs	0.5	\$40.00	\$20.00	OSA000001	
						\$2,573.60		

### Process of External Billing

Service Centers may conduct service for entities outside the University. For these entities an invoice should be created following best practices listed above. Invoices may then be:

1. Directly delivered to the customer with an upload sent to the Controller's Office.
2. Sent to the Controller's Office for delivery to the customer.
3. Directly delivered to the customer and deposited by the center upon receipt.

Funds collected from external entities must be deposited into an income account of your Service Center's Speedtype.

- For OSA, SPC, and RES speedtypes, the income account is: **410010 (Sponsored Projects Revenue)**
- For OPR and SERV speedtypes the income account is: **406055 (Service Center Income), 406056 and 406057 (Service Center IDC and Excess Income)** may be for income from external users to aggregate rates collected above the federal rate.

### *1. Directly Delivered Invoices with an upload to the Controller's Office*

If you would like to receive credit for external invoices prior to receiving payment you may send a list of the invoices to the Controller's Office and they will credit your speedtype with the amount of the invoice. They will also send you an aging report to assist with following up with unpaid invoices.

- A. The center creates invoice and delivers it to the customer. Invoices should request payment be sent directly to the Controller's Office. Case Western Reserve University Controller's Office, 10900 Euclid Ave, Cleveland OH, 44106-7006.
- B. The center's administrator completes the External Billing Upload found under forms on the Controller's Website.
- C. The center will receive credit for the external invoice.  
See Instructions for External Billing Excel Upload for more information.

### *2. Controller's Office External Billing Process*

The Controller's Office can send invoices directly to the customer for you. For more information on this process please see Instructions for Department External Billing Request If you utilize the Controller's Office External Billing Process the center will be credited the amount of the bill. Additionally, the Controller's Office will send you an aging report to assist you with following up with customers who have not paid.

Note: If you utilize this process the Controller's Office must deposit checks received. If a check is mailed to your service center you must deliver it to the Controller's Office.

### *3. Direct Delivered Invoices to Customer*

- A. Service Center creates invoice and delivers it to the customer.
- B. Customer mails payment to center directly or payment may be part of a larger check. For example, UH sends one check with payment of many different invoices.
- C. For payments sent directly to the service center, administrator creates a deposit slip in PeopleSoft and hand delivers the check and deposit slip to the cashier's office.

For invoices directly delivered to customers it is recommended you develop a tracking mechanism to maintain an accurate list of outstanding invoices.

## **Other Best Practices**

### **Survey of Service Center Users**

In order to provide high quality service, service centers should be responsive to users. It is recommended that at least annually, the director should solicit faculty feedback via on-line surveys or other direct input strategies. This facilitates an ongoing dialog with users regarding the scientific direction of shared resources, and enables accurate assessment of the center as a resource. For service centers with advisory committees, feedback received should be presented in summary form to the center's advisory committee. This facilitates an ongoing dialog with users regarding the scientific direction of shared resources, and enables accurate assessment of the center as an institutional resource.

## School of Medicine Core Facilities Best Practices Guidelines

### Rationale / Justification

The purpose of this best practices guideline document is to provide a framework and establish mechanisms for the operations (fiscal and administrative) of Cores within the SOM to ensure compliance with university policies. This document should be used in combination with the CWRU Service Center Policy which emphasizes Government compliance and accounting rules. This guide will:

- Provide guidance to ensure cores comply with the university service center policy.
- Provide guidance to promote more consistent administrative and accounting practices across SOM Cores including institution, departmental and service cores.
- Provide a common terminology for discussions regarding core facilities across the School of Medicine.
- Enable investigators and administrative staff to budget for and monitor recharge center expenses and revenue.
- Provide detailed information to ensure compliance with University policies as enumerated in its Cost Disclosure Statement (DS- 2) as required by 2 CFR PART 200. In summary, these guidelines are necessary to assure that any fee for services or charge for *products* made by any unit of the University is based on actual costs and actual usage of the service or *product*.
- Ensure cores are compliant with federal regulations. Recipients of federal research funds must comply with regulations pertaining to the operation of Research Core Facilities. Requirements are set forth in the Code of Federal Regulations (2 CFR PART 200), as well as financial and grant management standards included and described in the NIH Grants Policy Statement.

### Overview and General Information

The Case Western Reserve University School of Medicine has a large number of Core Facilities that encompass a broad range of services, technology and expertise for the research community of the SOM, external institutions and industry. The purpose of cores is to prevent needless duplication of scientific resources within the SOM, federally funded research centers and program projects, enabling focused development of technology that serves all SOM research efforts across the spectrum of biomedical science. As a guiding principle, all SOM faculty, their trainees, and their staff may utilize these shared resources, regardless of department affiliation.

The SOM has several different types of core facilities to serve the research community: cores that are part of large NIH funded grant programs, institutional cores, departmental cores and service centers. SOM cores typically charge for research services however there are several who do not charge for services. Scientific services offered by cores to the research community typically include specialized products, expertise, state-of-the-art equipment and/or technology. By definition, institutional cores are not dedicated to the work of a single research group but should maintain equitable access to all investigators and be open for new business. Successful operation requires actively involved scientific and managing directors who interact with researchers and staff across a range of disciplines. Each core should also have dedicated space and personnel with offices and laboratories sufficient to provide defined research services.



### Definition of Core Facilities at the University

Federal Definition of Core Facility: A centralized shared resource that provides access to instruments, technologies, services, as well as expert consultation and other services to scientific and clinical investigators.

Service Center Definition: An activity that performs specific technical or administrative services, primarily for the internal operations of the University and charges user for its services. The university has categorized cores as a Recharge Center, Cost Center or Specialized Service facility.

SOM Core facilities conform to the university definition of Service Center. Additionally, each core in the SOM could be further defined as a Recharge Center, Cost Center or Specialized Service Facility.

### School of Medicine Core Facility Definitions

Institutional Research Core: An institutional unit that provides access to specialized technologies, services, and expertise that is necessary and important to the scientific mission of the institution, not easily available in an individual research laboratory, and servicing multiple departments, schools, and/or institutions. Institutional cores are open to all investigators wishing to utilize their services. Additionally, institutional cores may be affiliated with one or more federally funded grant programs. An Institutional Scientific Core Facility may be eligible for investment by the School based on criteria and metrics to be set forth by the Core Steering Committee, and Department and Center Administrators, and agreed to by the Vice Dean for Research.

#### Examples:

- Rodent Behavior Core
- Transgenic and Targeting Facility
- Center for Proteomics and Bioinformatics
- DNA and Next Generation Sequencing
- Imaging Research Core

NIH Funded Program Core: Established based upon the scientific need of a particular grant program or mechanism. Traditionally these cores are part of P30 Centers or Resources Centers. The research cores provide shared resources for essential services, techniques, or instrumentation to Center participants enabling them to conduct their funded individual research projects more efficiently and/or more effectively. Cores provide specialized technologies and expertise needed to accomplish the stated goals of the project or center. Each core normally provides services to multiple funded research projects. These cores may also be considered institutional cores if they are accessible to all SOM investigators.

#### Examples:

- Cystic Fibrosis Center: Inflammatory Mediator Core
- Visual Sciences Research Center Histology Core

#### Examples of NIH Funded Program Cores that are also Institutional Cores:

- Athymic Animal and Xenograft Core Facility – CCCC
- Cytometry and Imaging Microscopy Core Facility- CCCC
- Clinical Research Units – CTSC
- Clinical Services – CFAR
- Immune Function Core- CFAR

**Departmental Scientific Core:** A departmental resource that provides access to specialized technologies, services, and expertise that are necessary and important to the scientific mission of the department as well as researchers outside the department as appropriate. Access to departmental cores and investment are within the purview of departmental leadership.

**Service Centers:** Provide a discrete technical, engineering, or support service either to individual departments or school-wide that is typically transactional in nature. Examples of these would be the Scientific Instrument Repair Center, departmental centrifuge or tissue culture rooms, or vendor supply closets.

**Examples:**

- Design Fabrication Center
- Scientific Instrument Repair

### **Where to Find Core Facilities Information**

Information regarding core facilities can be found on the SOM Office of Research Administration webpage or directly accessed by going to [www.corefacilities.case.edu](http://www.corefacilities.case.edu). Additionally, large federally funded research programs such as the CTSC, CCCC and CFAR have web pages dedicated to research cores.

### **Oversight of Institutional Cores**

In the SOM there are many levels of oversight for cores. The SOM ORA, PI of Center Grants, Core Directors, Department Administrators, SOM Office of Finance and Planning, OSPA, and the Controller's Office.

### **Core Steering Committee**

The Core Steering Committee was established in the fall of 2013 after the first annual Core Facilities Retreat. The committee made up of an appointed Director, the SOM Research Compliance and Core Specialist, Core Cluster Leaders and Center/Department Administrators. In order to facilitate activities of the CSC, cores have been grouped into Clusters based upon the scientific goals and technologies. A Core Cluster Leader was chosen for each Cluster to be on the CSC. The current clusters are:

- Animal Cores
- Clinical Cores
- Histopath and Analysis Cores
- Omics and Sequencing
- Imaging and Microscopy
- Statistics and Analytics
- Structural Biology and Protein Biophysics

The goals of the committee include:

- i. Establishing common metrics for Institutional Scientific Core Facilities
- ii. Sharing best practices
- iii. Communicating between cores
- iv. Representing cores in policy planning

- v. Conducting periodic core reviews
- vi. Reviewing/recommending new core requests
- vii. Developing tracking metrics

The CSC meets quarterly to facilitate the goals listed above. Additionally the CSC has two subcommittees Billing & Reporting and Visibility and Access. The Billing and Reporting subcommittee is responsible to investigating and implementing common billing and reporting practices across the cores to improve efficiencies. The Visibility and Access subcommittee is responsible for promoting the cores through development and maintenance of an improved website, publication of a newsletter and collaboration with Central Research Administration.

In order to comply with the University Service Centers Policy rates of cores must be adjusted at least biennially. The CSC will review the fee structure of each core biennially and will share the fee structure and rationale behind it to the Controller's Office.

### SOM Research Administration

- Administer the Core Facilities Steering Committee
- Facilitate the Annual Core Retreat
- Review and route requests for new cores as well as the renewal current cores that are not affiliated with a center grant (ie have an RES number)

### University Controller's Office

- Review the pricing structure of each core biennially.
- Advise the Core Steering Committee regarding compliance and costing issues.
- Assist cores in developing pricing structures.

## **Establishment of New Cores**

In order to establish a new core facility or in order to renew an existing core, the Core Director and Department Administrator for the core will need to follow the procedures listed below which includes the completion of an online Core Proposal/Renewal form [LINKED HERE](#) that requests information regarding Core rational, funding and operations. The purpose of gathering this information is to provide the Steering Committee and SOM Administration with information required to evaluate the need for the core and determine if a core is Institutional or Departmental. Note: Cores affiliated with P30 and other large program project grants will not go through this process. These cores will be established and given speedtypes based upon the grant program requirements. Review process and information is described in detail below:

**Review Steps for Establishment of New Core or Renewal of Existing Core**

<ol style="list-style-type: none"> <li>1. Core Director and Department Administrator complete the Core Proposal/Renewal Form and send it to som-resadmin@case.edu.</li> <li>2. Form is reviewed by SOM:ORA Research Compliance and Core Facilities Specialist (RCCFS) for completeness. Further information/clarification may be requested.</li> <li>3. RCCFS will assess the scope of the proposal and the financial records of prior years where applicable with regard to the core facility definitions above and determine the type of core facility being presented. When applicable advice from the Vice Dean for Research, The Assistant Vice Dean for Research, the CFC Chair, and SOM Office of Finance and Planning can be sought at this step as well.</li> </ol>	
<p><b>Determination that the proposed core is an Institutional Core Facility</b></p>	<p><b>Determination that the proposed Core is Departmental/Project Specific</b></p>
<p>A. RCCFS forms an ad hoc committee composed of:</p> <ol style="list-style-type: none"> <li>a. at least 2 subject area experts from the CSC (chosen by RCCFS and CFC Chair)</li> <li>b. at least 2 business plan reviewers:             <ol style="list-style-type: none"> <li>i. 1 member of the billing and reporting subcommittee (chosen by subcommittee chair)</li> <li>ii. 1 member of SOM Finance and planning</li> </ol> </li> </ol>	<p><u>New Facility</u></p> <ol style="list-style-type: none"> <li>A. RCCFS will review the form and make a recommendation to the Vice Dean for Research</li> <li>B. Vice Dean for Research will review application and recommendation from RCCFS and:             <ol style="list-style-type: none"> <li>a. Establish facility for up to 2 years.</li> <li>b. Request more information from RCCFS or applicant.</li> <li>c. Decline application</li> </ol> </li> </ol> <p>Note: Declined cores may work with the CCFS to improve request and then resubmit request for establishment or renewal.</p>
<p>B. The ad hoc committee may request an interview with the Facility Director and Department Administrator to seek further clarification of core operations.</p>	<p><u>Renewing Facility</u></p> <ol style="list-style-type: none"> <li>A. RCCFS will review application and previous year's financial records and make recommendations to the Vice Dean for Research.</li> <li>B. Vice Dean for Research will review renewal application and:             <ol style="list-style-type: none"> <li>a. Renew facility for up to 3 years.</li> <li>b. Request more information from RCCFS or applicant.</li> <li>c. Decline renewal.</li> </ol> </li> </ol> <p>Note: Declined cores may work with the CCFS to improve request and then resubmit request for establishment or renewal.</p>
<p>C. The ad hoc committee will issue a recommendation to the Vice Dean for Research on if the facility should be established/renewed, along with any recommendations for the oversight and operations of the facility.</p>	
<p>D. Vice Dean for Research reviews the proposal/renewal, based on their review and the recommendations of the ad hoc committee will:</p> <ol style="list-style-type: none"> <li>a. Issue authority to establish/renew for up to 3 yrs.</li> <li>b. Request more information from CSC or applicant.</li> <li>c. Decline application.</li> </ol> <p>Note: Declined cores may work with the CCFS to improve request and then resubmit for establishment or renewal.</p>	
<p>4. When the applying director indicates that a proposed/renewing Core facility should be eligible for CTSC Pilot Funding, RCCFS will refer the proposal/renewal to the CTSC Research Concierge.</p>	
<p>5. All applications and their determinations will be reported to the CSC by RCCFS at the ensuing CSC meeting.</p>	
<p>6. RCCFS will refer applications to all Research Compliance questions answered in the affirmative to the appropriate review board/office. Those offices may require further steps and procedures independent of this process.</p>	
<p>7. The RCCFS will provide the approved Core Facilities Application to the Controller's Office for review. The Controller's Office will be reviewing the proposed rates of the core and either approving them or suggest changes to rates to ensure compliance.</p>	



## Core Facility Proposal/Renewal Information

In order to facilitate the completion of the Core Facility Proposal/Renewal form questions included on the form and required responses are described below. The Core Facility Proposal/Renewal Form is [LINKED HERE](#).

### Initial Information

#### Preparer

- Name and contact information for the person preparing the form, as they may often times not be the core facility director or manager

#### New or Renewing Core Request

- We capture if this is a new core facility being proposed, or if this is an established facility looking to be renewed, for renewing facilities we also ask what year this facility was established, as that is one of the evaluation criteria for renewal

#### Title

- Renewing Core Facilities must give their current name, and note if they would like to change it and the rationale for changing it. For new proposed core facilities, the core facilities website should be consulted and a name selected that is not similar to an already existing facility.

### Personnel, Space, Marketing, and Visibly

#### *Director name and contact information*

- This is typically a faculty member who makes the strategic and leadership level decisions about the facility. This is the person potential collaborators will contact for assistance with experimental design, grant language, interpretation of core facility data, and long-term cost calculation for funding proposals.

#### *Department Administrator Name and contact information*

- Top level department administrator/administrative assistant who will be responsible for keeping the financial records, invoicing, billing, reporting, etc. This is the person clients will typically contact with questions regarding costs and charge mechanisms. This is usually the most senior administrative assistant in a given department or center.

#### *Technical Manager Name and contact information (Main Point of Contact)*

- Typically core facilities have a staff-level individual who handles the day to day operations of the core facility, performing the technical work, ensuring the facility has all the assorted sundries required for operation. This is typically the individual clients will contact when services need to be arranged within the facility.

#### *Website URL*

- Core facilities need to have a website.

#### *Short Description and Keywords*

- This will be used on the SOM Core Facility website and other promotional literature. Key words will be used to optimize search engines to make discovery of the resource easier.

#### *Physical location*

- Please provide the physical location of the laboratory space (building name, room#) or in the case of non-equipment core facilities, the office where services will be rendered. ORA requires this information, however if compelling reasons exist why this information cannot/shouldn't be published publically please be sure to list those reasons here as well.

### Rationale and Duplication

#### *Scientific Rationale*

- Briefly describe the scientific need for this Facility, highlighting aspects like emerging technologies and highlight any mission statements if they exist.



*Overlap and Duplication*

- Describe any overlap and duplication the proposed shared resource would bring to the Cleveland area, CWRU, and The School of Medicine. Justify any duplication or overlap.
  - Examples of justified duplication:
    - Existing equipment is time saturated
    - Necessity of equipment to be in proximity of another specialized resource
- Individuals looking to bill for use of shared instrumentation or expertise are expected to rigorously explore the currently utility level of the proposed core facility in SOM, CWRU at large, and at the partner institutions. The uniqueness of a proposed facility should also be highlighted here.

*Business Plan*

- As Core Facilities are as a general rule expected to be as self-sustaining as possible, developing a business plan is a crucial first step in launching a new core. This will be one of the most highly scrutinized sections of the proposal/renewal. In the course of preparing your business plan you will (a) delineate how your core will operate in terms of services offered, (b) determine the administrative and technical structure of your core and outline roles and responsibilities of individuals (by institutional job title, not name), (c) create a long-term budget strategy. Include Expected annual costs; Expected capital equipment requirements, Expected annual usage fees, Expected users (list depts., schools, institutions), Revenue sources, and methodology for establishing the fee structure.

*List of Services*

- Provide a list of ALL the services that will be/are currently offered by the proposed/renewing shared resource facility. Provide SERVICE NAME - SERVICE DEFINITION, one service per line please

*Administrative and Technical Structure*

- Outline roles and responsibilities of individuals (by name and current job title).

*Long Term Budget Strategy*

- Describe in detail the long term budget strategy of the Core. Include Expected annual costs; Expected sources for capital renewal; Expected annual usage fees, Expected users (list depts., schools, institutions), Revenue sources.

*Fee Structure*

- The NIH requires that all entities billing NIH grants have a metric for establishing their user fees "designed to recover only the aggregate costs of the services. The costs charged for providing each service from a core facility generally consist of its direct costs only."
- See **Core Facility User Fees** section below for the proper method for calculating user fees.
- Explain the fee structure and methodology used for establishing the fee structure

*User Base*

*General User Base Description*

- Provide a narrative establishing if the shared resource will be open to the whole of the Cleveland area, CWRU at large, SOM only, a department, investigators on a specific funded project or center, or a small cohort of collaborators.

*Current Users*

- This is mandatory for renewing core facilities and optional for proposed facilities.
- List of all current users by NAME - INSTITUTION - DEPARTMENT - one name per line please - for a new core, enter N/A if there isn't a current user base.

*Potential Users*



- This section is optional, however strong consideration will be given to proposing/renewing facilities that can establish an in place list of specific users who have expressed interest in using the services if created/renewed.

Major Equipment

- List all major equipment owned by the shared resource. INSTRUMENT TYPE - MAKE AND MODEL AND PURCHASE YEAR - CWRU INVENTORY TAG# - One Item per line (Equipment with a replacement retail cost >\$5000 or specialize equipment found in only 2 or fewer locations in the Cleveland area) (Answer N/A if your shared resource does not utilized specialized equipment)

Center Affiliation

*Administrative Department*

- Please name the Department that will be responsible for billing, reporting, publishing, ordering, and balancing financials.
- *Major Center Affiliation*  
List major centers in the School of Medicine from which this core facility CURRENTLY receives funding.

*Other Centers*

- List all of the other Centers in the School of Medicine from which this core facility CURRENTLY receives funding.

CTSC Pilot Grant Eligibility

- The Clinical and Translational Science Collaborative (CTSC) provides a multitude of funding opportunities ([Follow this link for a summary of those programs](#)) for translation scientific projects that partner with eligible core facilities ([Follow this link for a list of the current facilities eligible for partnerships in CTSC pilot funding](#)).
- Proposed/renewing facilities can use this section to apply for consideration to be an eligible partner for investigators seeking CTSC Pilot Funding. You will need to illustrate a connection between the potential work provided by your facility and translational research, as well as list what regional healthcare facilities could potentially be supported by the facility.
  - Examples of translational research connections:
    - Work with primary human clinical tissue
    - Work with pluripotent human cells

Recent Work

- List recent publications or collaborative projects (Student theses, Proof of concept pilots that went into a grant proposal).
- This section, while optional can greatly strengthen a renewing or proposed facility's form by showing a proven track record of scientific utility to the research population at CWRU.

Research Compliance

- Describe research compliance concerns that could arise from work in the facility, requiring only a yes/no response.



### General University Policies

All university general policies published in the Service Center's policy will be adhered to.

The SOM's method of applying the policy is incorporated into this best practices handbook.

### Establishment of Core Facility User Fees

Refer to the CWRU Service Center Best Practices Manual for information regarding:

- the establishment of fees
- suggested core life cycle
- billing guidelines

### Definition of Internal Users

CWRU faculty and researchers from our affiliates: Cleveland Clinic, Metro and the VA.

### Annual Reporting

SOM core facilities have a wide range of reporting requirements based upon type of core, funding and affiliation. Cores that part of or affiliated with the CTSC, CCCC, CFAR and other P30 or Resource Center programs are required to provide documentation regarding core research and operations annually. Reporting requirements differ by funding agency. Additionally the CSC is going to be requesting annual reports from each institutional core to review core accomplishments and assist with the systematic evaluation of each core.

In order to facilitate the production of an annual report for the SOM or as required by the CTSC, CCCC, CFAR or other large grant program the following information should be collected and be readily available.

1. Basic financial information:
  - a. Annual Revenue
  - b. Annual Expenses broken down into the following categories:
    - i. salary and fringe
    - ii. general lab supplies
    - iii. maintenance contracts
  - c. List of personnel supported by core broken down by effort.
    - i. Effort on core
    - ii. Effort on research grants
    - iii. Effort on other funds described in detail
  - d. Financial support summary - % from user fees, % from center grant support, % from institutional funds.
2. List of publications resulting from core services. The publications must include PMCID's. Please see <http://publicaccess.nih.gov/> for more information on NIH Publication and Access Policy. All researcher utilizing cores that have grant support must acknowledge that grant support in their publications.
  - a. CTSC citation: This publication was made possible by the Clinical and Translational Science Collaborative of Cleveland, UL1TR000439 from the National Center for Advancing





Translational Sciences (NCATS) component of the National Institutes of Health and NIH roadmap for Medical Research. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the NIH.

- b. CCCC citation: Research reported in this publication was supported by National Cancer Institute of the National Institutes of Health under award number P30CA043703. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.
- c. CFAR citation: Research reported in this publication was supported by National Institute of Allergy and Infectious Diseases of the National Institutes of Health under award number P30AI036219. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

- 3. List of core users that includes:
  - a. PI Name
  - b. Grant information (grant title and number)
  - c. Information about core utilization: this will be determined by type of core facility.
    - i. Examples: analytics cores- number of hours spent on data analysis
    - ii. Samples run, images processed.
- 4. Scientific and research highlights/ value add of core research
- 5. Grant submission resulting from core utilization
- 6. CTSC Pilots Awarded
- 7. Rate Sheet



## Core Facility Scenarios to Assist in Setting User Fees

The following pages will provide various core facility scenarios that will hopefully be helpful in establishing user fees and rates for both departmental and institutional cores. The scenarios are presented in order from basic to complex and assume the rates developed will be charged to federal and non- federal funding sources of internal users.

Scenario	Scenario Description
1	Core is a supply room that takes up 10% of a staff member's time
2	Core is based on machine usage only – per scan and requires initial training
2 Variation	Core is based on machine usage only on a time used basis
3	Core is based primarily on analyses performed for a fee – all support derived from user fees
3 Variation	Core is based primarily on analyses for a fee – core personnel have some grant coverage
4	Core involves a sophisticated service such as library or sample preparation
5	Recouping institutional non-capital startup costs over a 2-3 year period through smoothing

### Scenario 1: Core is a supply room that takes up 10% of a staff member's time

This example is simply a pass-through where the presence of the stockroom allows end users to get their products and reagents quicker than is processed through the standard procurement process. There is no value added and no processing other than the time spent re-ordering and re-stocking. In most cases, the vendor is providing a discount to the department that totals the amount of salary and fringe expended by University personnel on running the stockroom. A major advantage to users of a stockroom is that in most instances the vendor will waive all shipping costs, which can be substantial over time.

#### Year 1 of operation

A department assistant making \$26,000 will spend approximately 10% of his/her time on the mechanics of running a reagent stockroom. Using a simple calculation, and the federal fringe rate, the amount of salary/fringe support that will need to be generated is:

$$\$26,000 * 0.10 * 1.285 = \$3341*$$

The vendor is proposing a 5% discount on normal University pricing to compensate for the salary/fringe component of the University employee. Products taken from the room will be charged at the normal non-discounted price.

To cover the salary/fringe component, the amount of annual sales would need to be:  $\$3341/0.05 = \$66,820$

*\*This example does not take into consideration the built-in deficit due to the fringe differential between the federal and non-federal rates. This will be discussed in subsequent scenarios.*

#### Year 2 of operation

At the end of year 1, the stockroom recorded \$90,000 in sales. The financial results will be as follows:

$$\text{Cost of goods sold} = 90000 * 0.95 = \$85,500$$

$$\text{Revenue} = \$90,000 \text{ goods sold at normal price}$$

$$\text{Expenses} = \$85,500 + \$3341 = \$88,841$$

A surplus of  $\$90000 - 88841 = \$1,159$  was generated in year 1. Since the stockroom is not allowed to make money, one of the following should occur in year 2:

a) An non-capital investment in the stockroom (e.g. the purchase of a \$1000 freezer in order to stock additional items)

or

b) A slight reduction in the discount rate from the vendor

The same analysis will be done at the end of year 2. In the case of a deficit, a slight increase in the discount rate from the vendor should be negotiated as the School of Medicine cannot subsidize the storeroom.

**Scenario 2: Based on machine usage only - per scan & requires initial training**

**Year 1 of operation**

A new core will allow users to perform imaging analysis. Training will be required by a research assistant who normally works in another laboratory but has been assigned this responsibility. If the research assistant is non-exempt, the actual number of hours worked during the month for the core will be charged directly to the core. If he/she is exempt, the percentage of time during the month worked for the core will be charged directly to the core. As discussed in the section on Measurement of Actual Usage, the exempt employee will have 1750 billable hours and the non-exempt will have 1900.

Calculating the initial rates for this core would proceed as follows:

Given: Annual instrument service contract cost = \$25,000  
 Specialized printer paper for images = \$1.00 per scan (box of 100 = \$100)  
 Salary of research assistant = \$30,000 and training takes 1 hour of time

Expense for each hour of training =  $(\$30,000 \times \text{current non-federal fringe rate}) / 1900$  or 1750 hours  
 $= (30000 \times 1.315) / 1900$  or 1750 = \$20.76 or \$22.54 per hour

Allowable expense for training =  $(\$30,000 \times \text{current federal fringe rate}) / 1900$  hours  
 $= (30000 \times 1.285) / 1900$  or 1750 = \$20.29 or \$22.03 per hour

The remainder of this example will assume that the research assistant is exempt and use 1750 work hours per year.

The hardest part of the pricing exercise will be to determine how many scans will occur during the year. This could be determined by performing a survey of potential users in advance, and then using that number as a baseline. In this example, we are using 5000 scans per year as the number of estimated scans.

Operating cost per scan =  $\$25,000$  service contract cost / 5000 scans per year + consumable supplies used  
 $(\$25,000 / 5000) + \$1$  for print out = \$6 per scan

First usage allowable charge = training hour + per charge scan =  $\$22.03 + \$6 = \$28.03$

**Year 2 and subsequent years of operation**

4000 scans were performed during the year along with the equivalent of 100 users trained. Financial results should be as follows:

Expenses =  $\$25,000$  service contract +  $\$4000$  paper +  $\$2254$  training = \$31,254

Revenue =  $(4000 \times \$6/\text{scan}) + (22.03 \times 100 \text{ hours of training}) = \$26,203$

The core experienced a loss of  $\$31,254 - \$26,203 = \$5,051$  - the fringe differential must be removed from this loss

Fringe differential =  $\$22.54 - 22.03 = \$0.51$  per hour = \$51

Actual allowable loss = \$5,000

For year 2, the training rate will still be calculated based on the research technician's current salary, and we will assume it remains the same for this example, however the per scan rate will need to be adjusted to include the \$5000 loss as follows, now using 4000 annual scans as the baseline:

Per scan rate =  $(\$25,000/4000 \text{ scans}) + (\$9000 \text{ loss}/4000 \text{ scans}) + \$1 \text{ paper} = \$9.50 \text{ per scan}$

**Proving that the new rate results in breaking even at the end of year 2**

Assuming 4000 actual scan hours occurred in year 2, and holding training constant, the results of year 2 would be as follows:

Expenses = \$25,000 service contract + \$4000 paper + \$9000 loss = \$38,000

Revenue =  $\$9.50 \text{ per scan} * 4000 \text{ scans} = \$38,000$

**Scenario 2 Variation: Core is based on machine usage only (time used basis)**

In this scenario, an assumption must be made on the number of hours that the machine will be used during the first year. We will assume the training hour component is still there, but will only focus on costs related to the hourly usage.

**Year 1 of operation**

Given: Annual instrument service contract cost = \$25,000

Specialized printer paper for images = \$1.00 per scan (box of 100 = \$100)

Paper is charged at cost and is considered a wash for the rest of this example

A survey has been taken, and it is estimated that the machines will be used for 6000 hours total in year 1.

Operating cost per hour =  $\$25,000 \text{ service contract cost} / 6000 \text{ hours per year} + \text{consumable supplies used}$   
 $= (\$25,000/6000) = \$4.17 \text{ per hour (+ cost of paper used)}$

**Year 2 of operation**

7000 hours of machine usage were logged and billed in year 1. The financial results should be as follows:

Expenses = \$25,000 service contract = \$25,000

Revenue =  $(\$4.17 * 7000 \text{ hours}) = \$29,190$

Surplus from year 1 =  $\$29,190 - \$25,000 = \$4,190^*$

The surplus must be included as a reduction in the year 2 hourly rate and 7000 usage hours will be the new baseline:

New rate =  $(\$25,000 \text{ service contract } 7000) - (\$7500 \text{ surplus}/7000) = \$2.50 \text{ per hour (+ cost of paper used)}$

*\*While not shown here, the Scenario 3 Variation will explain how the fringe differential needs to be added back to the any surplus when setting the rates for the upcoming year.*

**Proving that the new rate results in breaking even at the end of year 2**

Assuming that 7000 actual hours of usage occurred in year 2, the financial results should be as follows:

Expenses = \$25,000 service contract -\$7,500 surplus = \$17,500

Revenue = \$2.50 per hour \* 7000 hours = \$17,500

**Scenario 3: Core is based primarily on analyses performed for a fee – all support derived from user fees**

A new bioinformatics core is being launched that will perform data analysis on the raw data generated by various sequencing platforms. It is assumed that the core director will have 1500 possible billable hours per year and that the data analysts will each have 1750 possible billable hours per year.

**Year 1 of operation**

The annual expenses are as follows, assuming all personnel are non-exempt:

a) Salary and Fringe – as seen below, the built in fringe loss is \$78,750 - \$71,250 = \$7,500

Personnel	Salaries	Billable Hours	Fringe allowed	Fringe incurred	Hourly rate
Core Director	100,000	1,500	28,500	31,500	--
Data analyst	75,000	1,750	21,375	23,625	--
Data analyst	75,000	1,750	21,375	23,625	--
Totals	250,000	5,000	71,250	78,750	64.25 core rate

b) The Core Director and Data Analysts each attend 2 meetings per year for additional training at a total cost of \$20,000 per year.

Conference/seminar rate component = \$20,000/5000 = \$4 per hour

c) Annual software maintenance cost for analysis software = \$25,000

Software maintenance rate component = \$25,000/5000 = \$5 per hour

d) Annual backup cost for user data is \$5000

Data backup rate component = \$5000/5000 = \$1 per hour

The year 1 per hour rate for core services = \$64.25+4+5+1 = \$74.25

**Year 2 of operation**

During year 1, there were 4,850 actual hours billed for services. Expenses and revenues for the year were as follows:

Expenses:	Salary and fringe	\$328,750
	Travel/conference	20,000
	Software maintenance	25,000
	Data backup	5,000
	<b>Total expenses</b>	<b>\$378,750</b>

Revenue:  $\$74.25 * 4,850 \text{ hours} = \$360,113$

The core experienced a loss of  $\$378,750 - 360,113 = \$18,637$  of which the fringe differential component is \$7,500, for a total allowable loss of  $\$18,637 - \$7,500 = \$11,137$

Assuming everything else is constant (a bad year for salary increases), then the new rate for year 2 is determined as follows, using 4850 total billable hours as the estimate of usage:

Total salaries and allowed fringe =  $\$250,000 + 71,250 = \$321,250 / 4850 \text{ billable hours} = \$66.24 \text{ per hour}$

Other non-salary components from year 1:

Conference/travel component =  $\$20,000 / 4850 = \$4.12/\text{hour}$

Software maintenance =  $\$25,000 / 4850 = \$5.16/\text{hour}$

Data backup component =  $\$5000 / 4850 = \$1.03/\text{hour}$

Recovery from deficit component =  $\$11,887 / 4850 = \$2.45/\text{hour}$

Year 2 hourly rate =  $\$66.24 + 4.12 + 5.16 + 1.03 + 2.45 = \$79.00/\text{hour}$

**Proving that the new rate results in breaking even at the end of year 2**

Assuming predictions for 4850 billable hours in year 2 were correct, then the financial results should be as follows:

Expenses:  $\$328,570 \text{ (s\&f)} + \$20,000 \text{ travel} + \$25,000 \text{ software maint.} + \$5000 \text{ backup} + 11,887 \text{ carry-over loss} = \$390,637$

Revenue =  $\$79.00 * 4850 \text{ hours} = \$383,150 + \$7,500 \text{ built-in fringe deficit} = \$390,650$



**Scenario 3 Variation: Based primarily on analyses for a fee – core personnel have some grant coverage**

In this variation of scenario 2, we'll assume that all non-salary expenses total \$100,000 and that the annual depreciation expense is \$40,000. The core personnel will all have levels of grant coverage, which cannot be used in establishing the hourly core rate. The total billable core hours will be assumed to start at 5,000 hours, however this must be adjusted based on the total percentage of salaries that is on sponsored projects.

**Year 1 of operation**

Annual salary and fringe expenses are determined as follows:

Personnel	Salaries	Salary on grants	Core salary	Normal billable hours	Adjusted billable hours	Hourly rate calculation	Hourly rate salary only
Core Director	100,000	50,000	50,000	1,500	750	--	--
Data analyst	75,000	40,000	35,000	1,750	817	--	--
Data analyst	75,000	25,000	50,000	1,750	1,167	--	--
Totals	250,000	115,000	135,000	5,000	2,734	135,000/2,734	49.38

The adjusted billable hours is calculated by multiplying the percentage of salary on the core by the normal amount of billable hours.

The fringe allowed on the hourly rate for core salary is  $\$135,000 * 0.285 = \$38,475$

The fringe incurred on the non-federal rate is  $\$135,000 * 0.315 = \$42,525$

So, the built in deficit due to the fringe differential is  $\$42,525 - 38,475 = \$4,050$

Adding in the allowed fringe, gives a salary and fringe component of  $\$49.38 + 14.07 = \$63.45$  per hour

The non-salary rate component is  $\$140,000/2734 = \$51.21$  per hour

Total hourly rate for core services in year 1 =  $\$63.45 + 51.21 = \$114.66$  per hour

**Year 2 of operation**

Assuming that 2900 hours of time were billed in year 1, the year end financial results should look like this:

Expenses =  $\$135,000$  salary +  $\$42,525$  fringe +  $\$140,000$  non-salary =  $\$317,525$

Revenue =  $2900 * \$114.66 = \$332,514$





The core experienced a surplus of  $\$332,514 - \$317,525 = \$14,989$ , which needs to be adjust upward by the  $\$4,050$  fringe differential, for a total surplus of  $\$14,989 + 4,050 = \$19,039$ .

Salary coverage for year 2 looks like this, with the grant coverage levels changed from year 1:

Personnel	Salaries	Salary on grants	Core salary	Normal billable hours	Adjusted billable hours	Hourly rate calculation	Hourly rate salary only
Core Director	100,000	40,000	60,000	1,500	900	--	--
Data analyst	75,000	50,000	25,000	1,750	583	--	--
Data analyst	75,000	30,000	45,000	1,750	1,050	--	--
Totals	250,000	120,000	130,000	5,000	2,533	130,000/2,533	51.32

The fringe allowed on the hourly rate for core salary is  $\$130,000 * 0.285 = \$37,050$

The fringe incurred on the non-federal rate is  $\$130,000 * 0.315 = \$40,950$

So, the built in deficit due to the fringe differential is  $\$40,950 - 37,050 = \$3,900$

Adding in the allowed fringe, gives a salary and fringe component of  $\$51.32 + 14.63 = \$65.95$  per hour

The non-salary rate component is  $\$140,000 / 2533 = \$55.27$  per hour

The surplus adjustment rate component is  $\$19,039 / 2533 = -\$7.52$  per hour

Total hourly rate for core services in year 2 =  $\$65.95 + 55.27 - 7.52 = \$113.70$  per hour

*Why was no adjustment made in total billable hours based on the actual year 1 hours billed?* - An argument could be made that an adjustment should also be made due to a greater number of hours being billed in year 1 than were originally expected. This would be straightforward if no changes in overall grant support had occurred during the year (meaning the total billable hours in year 1 is the same in year 2). However, as the grant support has changed, it is easier in this scenario to continue calculating the total billable hours using the method in year 1, using the surplus adjustment component.

Proving that the new rate results in breaking even at the end of year 2

Assuming 2533 hours were billed for services in year 2, the financial results at the end of year 2 should look like this:

Expenses =  $\$130,000 \text{ sal} + 40,950 \text{ fringe} + \$140,000 \text{ non-salary} - \$19,039 \text{ surplus} = \$291,911$

Revenue =  $2533 * \$113.70 = \$288,002$  with foregone fringe of  $\$3,900 = \$291,902$

As in prior scenarios, the core balance should have a positive balance to account for the recovered depreciation.



**Scenario 4: Core involves a sophisticated service such as library or sample preparation**

In this example, the core is involved with the creation of libraries that will be sequenced using next generation sequencing equipment. In the most complicated example, the end-user presents the core laboratory with raw materials; the core personnel perform the library creation and then process the libraries on the high-throughput sequencer. The resulting materials and sequencing data are passed along to the end-user.

**Year 1 of operations**

The annual operating expenses are determined as follows:

- a) Salary and fringe – assume no grant coverage, and also assume that the core manager also has 100 less hours available to bill each year due to additional administrative responsibilities:

Personnel	Salaries	Billable Hours	Fringe allowed	Fringe incurred	Hourly rate
Core Director	100,000	1,500	28,500	31,500	--
Core Manager	50,000	1,650	14,250	15,750	--
Research assistant	32,000	1,750	9,120	10,080	--
Totals	182,000	4,900	51,870	57,330	\$47.73 core rate

- b) The annual service contract for the sequencer is \$70,000. However, the sequencer service contract can only be recovered when the machine is actually used. In some cases, the libraries that have been prepared will not be placed on the sequencer. Therefore, the service contract rate component is based on how many anticipated libraries will be run on the instrument. For this example, assume that 4000 libraries will be run:

Service contract rate component =  $\$70,000/4000 \text{ runs} = \$17.50/\text{run}$

**Determination of project specific expenses- example**

The supplies and kits used on a specific project must be passed along as a separate cost component. As it would be quite difficult to count every glove, tip and tube used for each project, the core will establish a baseline charge for supplies for each type of procedure that is performed. For example, a typical library prep might consist of the following:

- 1) Gloves used = 28 pairs 1 box of 100 gloves = \$50, therefore cost for project =  $\$50 * (28/100) = \$14$
- 2) Reagents used = \$50
- 3) Library preparation kit = \$150 recover entire cost unless a portion can be used for another existing project
- 4) Microcentrifuge tubes used = 200, 1 box of 500 tubes = \$40, therefore cost for project =  $\$40 * (200/500) = \$16$

Assuming these are the only supplies used, the cost to this prep is  $\$14 + 50 + 150 + 16 = \$230$

In addition, a **consumable waste factor** needs included to account for things such as spills, accidents (dropping a sterile box of pipet tips), etc. A rule of thumb is to use 5% for this, so applying this to the above example yields:

$$(\$14*1.05) + (\$50*1.05)+\$150 \text{ (kit is considered a whole unit and charged at cost)}+(\$16*1.05) = \$234$$

In addition, the core has indicated that a typical library preparation should take 3 hours of time, so the labor component is 3 hours \* \$47.73 = \$143.19 labor

$$\text{Total cost for library prep portion of project} = \$234 \text{ supplies} + \$143.19 \text{ labor} = \$377.19$$

***Incremental costs associated with doing more than one library prep – fixed vs. variable costs – volume discounts***

If a lab technician is engaged in a protocol to prepare one library, it makes sense that the cost of each additional library for the same customer constructed at the same time is lower than the cost of the first library. For example, if a kit that allows 5 libraries to be made has been purchased at a cost of \$150 for a particular protocol, the entire cost of the kit is charged as fixed cost for making up to 5 libraries. The cost of each additional library, up to 5, has already been recovered in making library 1. Likewise, the same number of gloves will also be used whether 1 library or 10 libraries are being made.

In addition, the amount of time required to pipet, microfuge, etc. is an incremental component of the entire project if one library prep is already in progress. That is, there is a fixed time component for the set-up of every library prep and a variable component based on how many libraries are being prepared. It is up to the core director to determine just how much more additional time is required per additional library prepared.

In the case of this example, assume that the customer has ordered 4 libraries, and that each additional library beyond 1 adds about 20 minutes of time on top of the standard 3 hours for one library:

- 1) Gloves used = 28 pairs 1 box of 100 gloves = \$50, therefore cost for project =  $\$50 * (28/100) = \$14$
- 2) Reagents used =  $\$50 * 4 = \$200$
- 3) Library prep kit = \$150 (5 can be done with one kit, so cost remains at \$150)
- 4) Microcentrifuge tubes used =  $200*4$ , 1 box of 500 tubes = \$40, therefore cost for project =  $\$40*(800/500) = \$64$

$$\text{Total materials cost} = (\$14+\$200+\$64)*\text{waste factor} + \$150 \text{ kit} = (\$278*1.05)+\$150 = \$441.90$$

$$\text{Labor cost} = 3 \text{ hours} + 20 \text{ minutes} * 3 \text{ additional} = 4 \text{ hours} * \$47.73 = \$190.92$$

$$\text{Cost for 4 libraries} = \$441.90+\$190.92 = \$632.82 \text{ (vs. } \$377.19 \text{ for 1 library)}$$

*In effect, there is a volume discount for having additional libraries made, however, this is allowable only to the extent that the discount is based on the fixed costs that have already been recovered as a part of the charge for one library.*



After libraries are prepared, they are normally run on a next generation sequencer. The labor component must be calculated, which is left as an exercise to the reader, and the assumption can be made that there are economies of scale involved in this as well (i.e. setting up 1 run is a base amount of time, whereas each additional library run adds an incremental amount of time to the job.)

Removing the labor component, for one library run, the cost is \$17.50 (plus any supplies used).

So, the total cost for the one library project is:

\$244 supplies + \$143.19 labor + \$17.50 sequencing run = \$404.69 (plus any supplies for sequencing)

Total cost for 4 library project is:

\$411.90 supplies + \$190.92 labor + (\$17.5\*5 sequencing runs) = \$690.32 (plus sequencing supplies)

In the example above, if the average user has 4 libraries prepared and then sequenced on the sequencer, the core should break even. However, the possible range of scenarios will make it impossible to predict with any high degree certainty what the actual results will be. (need to add year 2 and beyond)

### **Scenario 5 - Recouping institutional non-capital startup costs over a 2-3 year period through smoothing**

In this scenario, the same core facility in **Scenario 4** has incurred \$150,000 of start-up costs (non-federal source of funding) for non-capital items (<\$5000) such as microcentrifuges, pipetman, stir plates, glassware, PCR machines, etc. So, in essence, the core is starting with a deficit of \$150,000. Rules allow for this investment to be recaptured over time through user fees.

In the previous example, the total billable labor hours was estimated to be 4900 hours in year 1. If the start-up costs are to be recovered over a 3 year period, the additional hourly rate component can be defined as follows:

$(\$150,000/3 \text{ years})/4900 \text{ hours} = \$10.20/\text{hour start-up cost recovery}$

As a general practice, as these funds are recovered, they could (and probably should) be used to replace the non-capital items as they are consumed by the core (i.e. pipetman break, glassware breaks, etc.)

## Quick Reference Guide

### Service Center Billing and Deposits

#### Journal Entries

Header	Lines	Errors	Approval	Backup Documentation
Unit: CASE1	Journal ID: 0000337088	Date: 12/17/2014		
*Long Description: <input type="text" value="1"/> nd - Approved Design Fabrication Center Cross Billing for December, 2014				
*Ledger Group: ACTUALS		<input type="checkbox"/> Auto Generate Lines		
Ledger: <input type="text"/>		Adjusting Entry: Non-Adjusting Entry ▼		
*Source: <input type="text" value="2"/> XBL		Fiscal Year: 2015		
Reference Number: <input type="text"/>		Period: <input type="text" value="6"/>		
SJE Type: <input type="text"/>		ADB Date: <input type="text" value="12/17/2014"/>		
Journal Class: <input type="text"/>		<input type="checkbox"/> Save Journal Incomplete Status		
Transaction Code: GENERAL				

#### 1. Journal Header Description

- Billing for (**center's name**) for (**period of time**)
- Example: Design Fabrication Center Cross Billing for December 2014
- The Controller's Office adds an approved message to the front of the header description

#### 2. Source Code

- XBL** - Use the XBL journal source code when creating an internal billing journal to other departments or speedtypes.
- The XBL source code should only be used by center's that have been assigned an SERV speedtype
- Use your defaulted journal source code (UGN, CSE, SOM, etc...) when transferring charges from a previously charged speedtype to another.
- Use your defaulted journal source code (UGN, CSE, SOM, etc...) when fixing an error from a prior x-bill journal.

Header		Lines	Errors	Approval	Backup Documentation			
Unit:	CASE1	Journal ID:	0000337088	Date:	12/17/2014	*Process:	Edit Journal	Process
Template List		Search Criteria		Errors Only		Line:	10	
▼ Lines								
Select	Line	Speed Type	Account	Journal Line Description	Amount	Project	Event	
<input type="checkbox"/>	1	RES506732	532900	DFC XBill December, 2014	65.00	RES506732		
<input type="checkbox"/>	2	OPR695812	582600	BStrowbridge Fee #21033	-65.00			
<input type="checkbox"/>	3	RES122099	532900	DFC XBill December, 2014	120.00	RES122099		
<input type="checkbox"/>	4	OPR695812	582600	JStelzer Fee #21038	-120.00			
<input type="checkbox"/>	5	RES507801	532900	DFC XBill December, 2014	612.00	RES507801		
<input type="checkbox"/>	6	OPR695812	582600	PGaston Fee #21035	-612.00			
<input type="checkbox"/>	7	OPR694082	532900	DFC XBill December, 2014	245.00			
<input type="checkbox"/>	8	OPR695812	582600	Fraser Moss Fee #21028	-245.00			
<input type="checkbox"/>	9	VSN630107	532900	DFC XBill December, 2014	325.00	VSN630107		
<input type="checkbox"/>	10	OPR695812	582600	Fraser Moss Fee #21027	-325.00			
▼ Totals								
Unit	Total Lines	Total Debits		Total Credits		Journal Status	Budget Status	
CASE1	10	1,367.00		1,367.00		P	V	

3. Account Number

- a. Account numbers have been established to isolate internal billing charges.
- b. Debits - **532xxx** (usually 532900 for scientific centers)
- c. Credits- **528500** (supplies), **582600** (service), **582624** (IDC) **582625** (NF prem.)
  - The 582624 & 582625 were created to separate the portion of the credit that is from billing a non-Federal project above the Federal rate.  
 Example: DR. VSN630107 532900 Design Fab 12/2014 JSmith \$90.00  
           CR. SERV11111 582600 Design Fab 12/2014 \$60.00  
           CR. SERV11111 582624 Design Fab 12/2014 \$20.00  
           CR. SERV11111 582625 Design Fab 12/2014 \$10.00
  - The credits from 582624 & 582625 are not required to be included in the rate calculation for the following year. This does not automatically mean that the non-Federal premiums or non-Federal IDC charges can be used at the discretion of the center. This should be discussed with the schools Management Center or Finance Director.
- d. Charges to AGY speedtype need to be offset with an income account(406050)

4. Journal Line Description

- a. Debit side of entry
  - **(center's name) & (Date or Invoice # or user)**
- b. Credit side of entry
  - If using multiple lines for the credit side of the entry
    - Your choice **(Center's Name, Date, Invoice #, PI/User)**
    - Example: Dec 2014 – Smith or Inv #12345 - JSmith
  - If using one line for the entire credit side of the entry
    - **(Center's Name) & (Billing Period)**
    - Example: Design Fab Cntr 06/2014

## Depositing a Check

**Case Deposit Entry** | Backup Documentation

Business Unit: CASE1    User ID: nx06     Void

Deposit Id: NEXT    Deposit Status: Pending

Deposit Date: 01/09/2015    Posted Status: Not Posted

---

**Deposit Summary**

Description	Cash	
SDLE Center Income	Check	7,000.00
Deposit Amount:		7,000.00

---

**Deposit Distribution**    Find    First    1 of 2    Last

Distribution Line: 1    + -

\*Description  Inv #140611 - University Hosp

Amount	*SpeedType	*Account	Event	Dept	Fund	Class	Project
5,000.00	SERV30020	<input type="text" value="2"/> 406055		392340	95500	10	SERV30020

**Deposit Distribution Detail**    Personalize | Find | View All |    First    1 of 1    Last

	*Amount	*Cash/Check	Item Information/Check Number
1	5,000.00	Check ▾	University Hospital Check #123456 12/26/14

---

Distribution Line: 2    + -

\*Description  Inv #140611 - University Hosp

Amount	*SpeedType	*Account	Event	Dept	Fund	Class	Project
2,000.00	SERV30020	<input type="text" value="2"/> 406057		392340	95500	10	SERV30020

**Deposit Distribution Detail**    Personalize | Find | View All |    First    1 of 1    Last

	*Amount	*Cash/Check	Item Information/Check Number
1	2,000.00	Check ▾	University Hospital Check #123456 12/26/14

1. Distribution Line Description
  - a. Invoice Number and Customer
  
2. Account Number
  - a. All income coming into the University should credit an income account (4xxxxx)
  - b. 406055 should be used for income receive up to the Federal rate. It may be used for all income if you do not wish to separate non-Federal income above the Federal rate.
  - c. 406056 may be used for non-Federal income received above the Federal rate.
  - d. 406057 may be used for any other non-Federal excess income above the Federal rate.

Name of the center: \_\_\_\_\_

Acronym \_\_\_\_\_

Contact person at the center: \_\_\_\_\_

Contact person department admin: \_\_\_\_\_

Department that it rolls up to: \_\_\_\_\_

Building & room number(s):  
 Bldg # \_\_\_\_\_  
 Bldg # \_\_\_\_\_  
 Bldg # \_\_\_\_\_

Current rates being used (or attach a separately)

Speedtype	_____
Speedtype	_____
User ID	_____
User ID	_____
User ID	_____
Dept #	_____
Room #	_____
Room #	_____
Room #	_____

**Summary information based on center's expense budget (tab 2) and the proposed rates (tab 3)**

Projected Expenses	1,324,645
Projected Income	(1,329,000)
<b>Balance</b>	<b>(4,355)</b> Under-Recovery to be carried over to next fiscal year (CANNOT BE A CREDIT BALANCE).
Unrestricted Income	(4,355) Income from external customers that is in excess of the Internal (Federal) rate.

**Approval Signature:**

Service Center Manager \_\_\_\_\_ Date \_\_\_\_\_

School's Finance Director \_\_\_\_\_ Date \_\_\_\_\_

Controller's Office \_\_\_\_\_ Date \_\_\_\_\_

**THIS IS A SAMPLE OF THE RATE DEVELOPMENT TEMPLATE. IT IS AVAILABLE IN EXCEL AND CAN BE CUSTOMIZED TO EACH CENTER'S RATE STRUCTURE.**



Income/Expense Category	Account	From SERV & OPR Prior Year Actual Total	Rate Year Projected Total	Budget w/o Equipment & Unallowable
Salary	511000	400,000.00	497,000.00	497,000.00
Fringe Benefits @ Federal rate	51Z000	114,000.00	141,645.00	141,645.00
Fringe Benefits @ non-Federal rate	51Z000	12,000.00	14,910.00	XXX
Supplies	531000	120,000.00	85,000.00	85,000.00
Internal Services	532000	11,000.00	26,000.00	26,000.00
Outside Services	533000	42,000.00	18,000.00	18,000.00
Travel	534000	18,000.00	25,000.00	25,000.00
Communications & Shipping	535000	3,000.00	3,000.00	3,000.00
Equipment (Unallowable)	536000	91,000.00	0.00	XXX
Maintenance & Repairs	54X000	427,000.00	466,000.00	466,000.00
Other (explain)		60,000.00	63,000.00	63,000.00
Other Unallowable (explain)		570,000.00	0.00	XXX
Unallowable		250.00	4,000.00	XXX
<b>Non-Salary Total</b>	599000	1,195,000.00	1,343,555.00	1,324,645.00
<b>INCOME (up to FED RATE)</b>				
Internal Billing at Federal approved rate	582500 & 582600	(460,000.00)		(111,000.00)
External Billing at Federal approved rate	406055	(320,000.00)		(444,000.00)
		(780,000.00)		(555,000.00)
(over) / under recovery		415,000.00		769,645.00
Prior year (over) / under recovery		100,000.00		0.00
		515,000.00		769,645.00
<b>Additional INCOME (above the FED RATE)</b>				
Internal Billing (additional non-Fed)	582624 - 582626	0.00		0.00
External Billing (additional non-Fed)	406056 - 406058	(600,000.00)		(774,000.00)
		(600,000.00)		(774,000.00)
Remaining Unrestricted Income		(85,000.00)		(4,355.00)
Over Recovery		0.00		0.00
Under Recovery		0.00		0.00
<b>Other expense explanation:</b>				
Other allowable expenses are licences and fees				
Other unallowable expenses are part of capital equipment and a career fair registration.				

