



Rate Setting for Service Centers – The Basics

Caroline Beeman

August 14, 2018



MAXIMUS Higher Education Practice

- Serves more than 150 colleges, universities and university hospitals in 49 states plus Puerto Rico and the U.S. Virgin Islands
 - 90 of top 100 research institutions
 - Ranging from <\$1M to >\$1B in research
- Headquartered in Northbrook, Illinois
 - Satellite offices in: Denver and Colorado Springs, Colorado | Lexington, Kentucky | Columbus, Ohio | Phoenix, Arizona
Charlottesville, Virginia | Bluffton, South Carolina
- MAXIMUS is a leading provider of government services worldwide with more than 20,000 employees and >\$2.0 billion annual revenue
 - Gives our practice unparalleled financial stability and the resources to invest in developing expertise in federal regulations and guidance, e.g. 2 CFR Part 200

A CPE credit certificate (for 1 hour CPE) is available for a small administrative fee of \$20

F&A and Other Rate Consulting Services

- F&A Cost Rate Proposal Preparation (Long and Short Form) and Negotiation (DHHS-CAS & ONR/DCAA)
- Space Surveys/Reviews
- Fringe Benefit Rates
- Federal Disclosure Statement (DS-2) and Direct Costing Policy
- Service Centers and/or Recharge Centers Rates and Policies

F&A Software

- Comprehensive Rate Information System (CRIS®)
 - 150+ universities use CRIS
- WebSpace® – Space Utilization Software
 - 50+ universities use WebSpace

The logo for CRIS (Comprehensive Rate Information System) features the letters "CRIS" in a bold, blue, sans-serif font. The letter "C" is stylized with a white outline and a blue shadow.

WebSpace

MAXIMUS Higher Education Products & Services

- Grant Management Compliance and Internal Controls
- Effort Reporting Consulting and Software
- Uniform Guidance Diagnostic – High Level Review
- Federal Compliance/Risk Assessment (C/RA) – In-depth Review
- Grant Management Help Desk Services
- Online Grant Management and Onsite Faculty Training
- Learning Management and Continuing Education Software
- Research Operational Reviews – Business Process Review and Improvement
- Policy and Procedure Assistance
- Transition Staffing
- Audit Response Assistance
- Export Control Compliance
- And more

Agenda

- Terminology
- Basic Rate Setting Principles
- Rates for External Users
- Determine the Base (Usage)
- Subsidies
- Federal and Non-Federal Rates
- Calculate the Over (Under) Recovery
- Reserve Accounts
- Sample Rate Template with Over (Under) Recovery

Terminology

Each University has its own terminology

- Service center – means SSF in some schools
- Recharge center
- Core – same as recharge center in some schools
- Internal service provider
- Auxiliary – in Florida, includes recharge centers and SSF

Basic Rate Setting Principles

- Actual cost is the most the rate is allowed to recover
- Only allowable cost can be included in federal rate
- Retain documentation of the rate calculation
- Rates must be reviewed and approved on a regular basis
 - “Regular basis” means no less than every other year, i.e. biennially
- Rates must be adjusted when incoming funds exceed expenses (surplus balance) or else refunds must be issued

- Guidance is different for external users

Rates for External Users

- Different rules than for Federal and Internal Users
- The use of market prices may be appropriate
- Charges may include F&A plus “fee in excess of costs”
- This additional income is not used in the calculation of surplus/deficit balance
- Caution – Recoveries in excess of full cost might be Program Income

Rate Calculation

$$\text{Annual Rate} = \frac{\text{Annual Costs}}{\text{Total Annual Usage}}$$

Define Good or Service to Sell

- Microscope Lab – Use of Microscope
- Zebra Fish Facility – Fish
- Super Computing Facility – Excess CPU
- Technical Rate – Rack Space; 24 Hour Service; Connectivity Charge; Technical Labor
- Stores Facility – Chemicals, Lab Supplies & Purchasing Services

Goal in Determining the Proper Unit

Use the measurement which allocates costs equitably among all users

- For example, a center that performs tests on samples has two possible units of measure; it could charge per test, or per hour. If some tests take twice as long as others, and labor is a large portion of the cost of performing a test it is not equitable to charge each user on a per test basis. In such circumstances, the user rate will be on a per hour basis.

Evaluate Customer Base

Internal

- University Sponsored Program Areas
- University Departments

External

- Those who do not have a University account number
- Industry
- Students, faculty or staff acting in a personal capacity

Estimate How Many Customers (Rate is a function of the Operating Costs/Users (Use) of the Service)

Estimating Usage

- In order to estimate usage, prior year(s) numbers can be used as a starting point and adjusted for anticipated changes.
- Centers without sufficient usage history can use available units as a starting point and adjust for downtime and other intervening factors.

Subsidies: NIH + University Funds Support a Core

Total Allowable Direct Cost	\$110,000
NIH Direct Funding to Core	- \$ 60,000
Institution's Funding to Core	- <u>\$ 10,000</u>
Net Recoverable Cost	\$ 40,000
Number of service units	<u>÷ 1,000</u>
Net cost/unit	\$40 (Federal Rate)
100 External User units	$\$110,000 \div 1,000 = \110
plus F&A at 50%	$\$110 \times 50\% = \55
External User rate	\$165

Federal Rate

	Service Unit One	Service Unit Two	Service Unit Three	Total Costs
Salaries				
John Smith @ 100% (Federal)	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$150,000.00
Tim Brown @ 50%	\$ 25,000.00	\$ -	\$ 25,000.00	\$50,000.00
Jack Jump @ 25%	\$ 5,000.00	\$ 7,000.00	\$ 3,000.00	\$15,000.00
Sally Red @ 100%	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$30,000.00
Sub-total	\$ 90,000.00	\$ 67,000.00	\$ 88,000.00	\$245,000.00
FB @ 25%	\$ 22,500.00	\$ 16,750.00	\$ 22,000.00	\$61,250.00
Total Personnel Costs	\$ 112,500.00	\$ 83,750.00	\$ 110,000.00	\$ 306,250.00
Postage				
Postage	\$ 250.00	\$ 250.00	\$ 250.00	\$750.00
Office supplies				
Office supplies	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$3,000.00
Bad debt reserve				
Bad debt reserve	\$ 200.00	\$ 200.00	\$ 200.00	\$600.00
Travel				
Travel	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$3,000.00
Equipment repair				
Equipment repair	\$ 5,000.00	\$ 3,000.00	\$ 3,000.00	\$11,000.00
Insurance				
Insurance	\$ 500.00	\$ 500.00	\$ 500.00	\$1,500.00
Operating supplies				
Operating supplies	\$ 2,000.00	\$ 2,500.00	\$ 550.00	\$5,050.00
Equipment service contracts (1 & 2 are Federal)				
Equipment service contracts (1 & 2 are Federal)	\$ 4,500.00	\$ 4,500.00	\$ 5,000.00	\$14,000.00
Equipment replacement reserve				
Equipment replacement reserve	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$15,000.00
Equipment purchases				
Equipment purchases	\$ 50,000.00	\$ -	\$ -	\$50,000.00
Total Non Salary	\$ 69,450.00	\$ 17,950.00	\$ 16,500.00	\$103,900.00
Total Operating Costs (Non burdened)				
Total Operating Costs (Non burdened)	\$ 181,950.00	\$ 101,700.00	\$ 126,500.00	\$ 410,150.00
Less Unallowable Costs				
Bad debt reserve	\$ (200.00)	\$ (200.00)	\$ (200.00)	-\$600.00
Equipment purchases	\$ (50,000.00)	\$ -	\$ -	-\$50,000.00
Equipment service contracts (Federal)	\$ (4,500.00)	\$ (4,500.00)	\$ -	-\$9,000.00
Equipment reserve	\$ (5,000.00)	\$ (5,000.00)	\$ (5,000.00)	-\$15,000.00
Federal funded salary	\$ (50,000.00)	\$ (50,000.00)	\$ (50,000.00)	-\$150,000.00
Federal funded FB @25%	\$ (12,500.00)	\$ (12,500.00)	\$ (12,500.00)	-\$37,500.00
Add				
New equipment depreciation @ 10 year life	\$ 5,000.00	\$ -	\$ -	\$5,000.00
Old equipment depreciation (non Federal)	\$ 2,000.00	\$ 3,750.00	\$ 1,000.00	\$6,750.00
Total Allowable Operating Costs	\$ 66,750.00	\$ 33,250.00	\$ 59,800.00	\$ 159,800.00
Estimated units of service				
Estimated units of service	1500	850	2000	
Federal Non Burdened Unit Charge				
Federal Non Burdened Unit Charge	\$ 44.50	\$ 39.12	\$ 29.90	

Non-Federal Rate

	Service Unit One	Service Unit Two	Service Unit Three	Total Costs
Salaries				
John Smith @ 100% (Federal)	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$150,000.00
Tim Brown @ 50%	\$ 25,000.00	\$ -	\$ 25,000.00	\$50,000.00
Jack Jump @25%	\$ 5,000.00	\$ 7,000.00	\$ 3,000.00	\$15,000.00
Sally Red @ 100%	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$30,000.00
Sub-total	\$ 90,000.00	\$ 67,000.00	\$ 88,000.00	\$245,000.00
FB @ 25%	\$ 22,500.00	\$ 16,750.00	\$ 22,000.00	\$61,250.00
Total Personnel Costs	\$ 112,500.00	\$ 83,750.00	\$ 110,000.00	\$ 306,250.00
Postage				
	\$ 250.00	\$ 250.00	\$ 250.00	\$750.00
Office supplies				
	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$3,000.00
Bad debt reserve				
	\$ 200.00	\$ 200.00	\$ 200.00	\$600.00
Travel				
	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$3,000.00
Equipment repair				
	\$ 5,000.00	\$ 3,000.00	\$ 3,000.00	\$11,000.00
Insurance				
	\$ 500.00	\$ 500.00	\$ 500.00	\$1,500.00
Operating supplies				
	\$ 2,000.00	\$ 2,500.00	\$ 550.00	\$5,050.00
Equipment service contracts (1 & 2 are Federal)				
	\$ 4,500.00	\$ 4,500.00	\$ 5,000.00	\$14,000.00
Equipment replacement reserve				
	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$15,000.00
Equipment purchases				
	\$ 50,000.00	\$ -	\$ -	\$50,000.00
Total Non Salary	\$ 69,450.00	\$ 17,950.00	\$ 16,500.00	\$103,900.00
Total Operating Costs	\$ 181,950.00	\$ 101,700.00	\$ 126,500.00	\$ 410,150.00
Less Unallowable Costs				
Bad debt reserve	\$ -	\$ -	\$ -	\$0.00
Equipment purchases	\$ (50,000.00)	\$ -	\$ -	-\$50,000.00
Equipment service contracts (Federal)	\$ -	\$ -	\$ -	\$0.00
Equipment reserve	\$ -	\$ -	\$ -	\$0.00
Federal funded salary	\$ -	\$ -	\$ -	\$0.00
Federal funded FB @25%	\$ -	\$ -	\$ -	\$0.00
Add				
New equipment depreciation @ 10 year life	\$ 5,000.00	\$ -	\$ -	\$5,000.00
Old equipment depreciation (non Federal)	\$ 2,000.00	\$ 3,750.00	\$ 1,000.00	\$6,750.00
Total Allowable Operating Costs	\$ 138,950.00	\$ 105,450.00	\$ 127,500.00	\$ 371,900.00
Estimated units of service				
	1500	850	2000	
Non Federal Non Burdened Unit Charge	\$ 92.63	\$ 124.06	\$ 63.75	

Calculate the Over (Under) Recovery

Fund Balance - Over (Under) Recovery	
Fund Balance - Surplus - End of Year	\$ 77,700
Cash Expenditures, excludes depreciation	166,000
60 Day Working Capital Limit	60
Working Capital Allowance	27,667
Fund Balance - Over (Under) Recovery	\$ 50,033

Example that includes adjustment for (Over) Under Recovery

Service Center - Rate Calculation							
	Base Salaries	Projected Increase	Projected Salaries	% FTE on Service Center	Total Center Expenses	Staff Assist Rate	Machine Rate
Personnel Expenses:							
Salaries/Wages:							
Manager (at 100% of base salary)	\$ 60,000	3%	\$ 61,500	100%	\$ 61,500	54,546	6,954
Technician (at 60% of base salary)	\$ 50,000	3%	\$ 51,500	60%	\$ 30,900	28,804	2,096
Total Salaries & Wages	\$ 110,000		\$ 113,000		\$ 92,400	83,350	9,050
Fringe benefits (S&W Center Expenses at 34.0% Rate)				34%	31,416	28,339	3,077
Non-Personnel Expenses:							
Materials and Supplies					1,500		1,500
Maintenance contract					2,000		2,000
Equipment (non-capitalized)					9,000		9,000
Security software - licensing and software (non-capitalized)					30,000		5,000
Equipment depreciation					40,000		15,000
(Over) Under Recovery					(50,000)	(41,000)	(9,000)
Total Operating Expenses					\$ 156,316	\$ 70,689	\$ 35,627
Base:							
Billable Staff Assist Hours						2,547	
Billable Machine Hours							2,934
Internal Rates						\$ 27.75	\$ 12.14

Rate Templates Can Be Very Complex

BILLING RATE WORKSHEET TEMPLATE INSTRUCTIONS

This template is designed to assist with the development of charge back rates for Service Centers operating as Core Facilities. Please refer to UM Financial Policy B020 for additional details related to Service Centers.

NOTE: ONLY ENTER DATA ON ORANGE COLORED CELLS

[Select to Begin Worksheet](#)

Data Input

STEP 1

Enter basic information:

Core name, campus (select from drop-down list), department, location of lab(s) assigned to the core, operating account, sub-object code used for inter-department billing, type of core (select from drop-down list), and operating deficit (debit account balance) or surplus (credit account balance) from previous fiscal year.

STEP 2

Enter service information:

Service name, description of service, billing unit of service (i.e. enter "per sample", "per hour", etc.), hours needed to complete one unit of service, projected annual units of service, and proposed base rate.

STEP 3

Enter personnel information for each core staff:

- Name, title, category (select from drop-down list), Roles & Responsibilities in the core, building and room occupied, annual base salary, percent effort dedicated to core.

STEP 4

Enter personnel effort distribution

- Enter the percent effort each core staff member devotes to individual service lines. (Total must equal 100%)

STEP 5

Enter user type distribution

Instructions

Step 1

Step 2

Step 3

Step 4

Step 5

Step 6

Step 7

Step 8

Step 9

Billing Rate Calculation

+

:

◀

▶

Reserve Account

- A reserve account is used to hold balances and record transactions that don't directly affect the rate charged to recharge center customers.
- If recharge or cost centers want to include equipment depreciation in the recharge rates, they should have a reserve budget.

Example: Depreciation, Reserve, Subsidy, Y/E Balance (page 1)

- 1) Core/Service Center Name:
 Org Number and Org Name:
 Responsible Person - Name and Phone:
 Service Center Number:

Sample Testing Lab		
001	Cardiovascular	
John Smith	123-4567	
789456		

- 2) a. Period rate is effective:

From:	1/1/2015
To:	12/31/2015

- b. Fiscal Year: FY2017

Input a four-digit number ONLY

- 3) Projected Costs:

- a. Projected Salary and Fringe Benefit Costs (include all personnel by name or position number that will be charged to this center.)

Individual/Position	Salary Budget	Fringe Rate	Fringe Benefits	Total
1 Dr. Smith	\$10,000.00	25%	\$2,500.00	\$12,500.00
2 Res Tech	40,000.00	30%	12,000.00	52,000.00
3 Lab Asst	30,000.00	30%	9,000.00	39,000.00
Total Compensation	\$80,000.00		\$23,500.00	\$103,500.00

- b. Federal Allowable Non-compensation Costs, including supplies, services, maintenance contracts and miscellaneous expenditures (provide description of type of expense)

Expense Type	Price	Volume	Price x Volume	Amount
1 Supplies			0.00	\$2,500.00
2 Travel			0.00	2,000.00
3 Outside Services			0.00	5,000.00
4 Service Contracts			0.00	15,000.00
5 Depreciation of XYZ machine	Acquisition Cost 60,000.00	Life in Years 10	Annual Depreciation 6,000.00	6,000.00
Total Allowable Non-labor				\$30,500.00

- c. Federal Unallowable Non-labor Costs

1 Equipment Replacement Reserve	\$2,000.00
2 Entertainment	120.00
3 Bad Debt	1,000.00
Total Unallowable Cost	\$3,720.00

- 4) a. Subsidy from Central
 b. Other Subsidy

-	\$10,000.00
-	\$5,000.00

Example: Depreciation, Reserve, Subsidy, Y/E Balance (page 2)

5) Projected Number of Units Sold

Federal Sponsored
 Temple Internal Users
 External Users
 Total Units

a. Type of Unit

800	
70	
50	
<u>920</u>	Tests

6) Rate Calculations (cost per unit is determined by dividing the total expenses by total units).

	Federal Sponsored	Divide by # of Units	Federal Sponsored Rate
a. Compensation	\$103,500.00		
b. Non-compensation	30,500.00		
c. Total Federal Allowable Cost	134,000.00	920	\$145.65
d. Less: Subsidy from Central	-10,000.00	870	-11.49
e. Less: Other Subsidy	-5,000.00	870	-5.75
f. (Subtract) surplus/ add deficit	4,344.03	920	4.72
g. Total Recoverable	<u>\$123,344.03</u>		<u>\$133.13</u>

	Temple Internal Users	Divide by # of Units	Temple Internal Users Rate
c. Total Federal Allowable Cost	\$134,000.00	920	\$145.65
d. Less: Subsidy from Central	-10,000.00	870	-11.49
e. Less: Other Subsidy	-5,000.00	870	-5.75
h. Federal Unallowable Costs	3,720.00	120	31.00
f. (Subtract) surplus/ add deficit	4,344.03	920	4.72
g. Total Recoverable	<u>\$127,064.03</u>		<u>\$164.13</u>

	External Users	Divide by # of Units	External Users Rate
c. Total Federal Allowable Cost	\$134,000.00	920	\$145.65
h. Federal Unallowable Costs	3,720.00	120	31.00
f. (Subtract) surplus/ add deficit	4,344.03	920	4.72
g. Total Recoverable	<u>\$142,064.03</u>		\$181.37
i. F&A rate <input type="text" value="55%"/>		Add: F&A Cost	\$99.76
j. Surcharge for External Users		Add: External Surcharge	11.21
		External Users Rate	<u>\$292.34</u>

Example: Depreciation, Reserve, Subsidy, Y/E Balance (page 3)

- 7) Rate Determination. Note: if operation provides multiple services, then multiple rates must be determined using the Multiple Rates Template.

	Cost per unit	Rate per unit
Federal Sponsored	\$133.13	\$ 127.00
Temple Internal Users	\$164.13	\$ 153.00
External Users	\$ 292.34	\$ 275.00

- 8) Estimated Revenue

Federal Sponsored	\$101,600.00
Temple Internal Users	10,710.00
External Users	13,750.00
Less: Federal Unallowable Cost	(3,720.00)
Less: F&A charged to External Users	(4,987.78)
Less: Surcharge for External Users	(560.50)
Total Projected Adjusted Revenue	<u><u>\$116,791.72</u></u>

- 9) Projected Surplus/(Deficit)

Beginning Surplus/(Deficit)	-\$4,344.03
Add: Projected Adjusted Revenue	116,791.72
Add: Imputed Revenue (Subsidies)	15,000.00
Less: Projected Federal Allowable Cost	(134,000.00)
Ending Surplus/(Deficit)	<u><u>(\$6,552.31)</u></u>

Rate Approvals:

Service Center _____

Controller _____

Summary of Key Compliance Issues

- Rates should recover no more than the cost of the good or service
- Rates must breakeven over time, reviewed and adjusted at least every two years
- Rates don't discriminate between users, especially those paying with federal funds
- Surpluses should not be used to fund unrelated activities
- Must maintain an official published price list after appropriate approvals have been obtained

Upcoming Webinars and Annual Meeting



- **Tricks and Tips for Reporting in CRIS®**
October 18 • 2:00 p.m. ET
- **Pre-award Costs and Responsible Stewardship**
November 6 • 2:00 p.m. ET
- **31st Annual MAXIMUS Higher Education Practice Meeting**
September 12-15
Hilton Clearwater Beach, Florida

thank
you

Slides should be available in link on survey when you exit webinar.

If not, email CarolineMBeeman@maximus.com