



SERVICE CENTER PROCEDURE

10/1/2021

SCOPE

This procedure describes the steps required to establish a service center and to develop a service center rate. It also discusses usage tracking, charging, and billing guidelines relevant to service centers in accordance with California Institute of Technology's (Caltech) Service Center Policy. The definitions of terms in the Service Center Policy also apply to this procedure.

PROCEDURE

New Service Centers

Divisions and/or Departments wanting to establish a new service center must work with the Office of Cost Studies to calculate their breakeven rates for each service they plan to provide. In addition, the methodology and procedures that the service center plans to follow for determining service center charges to internal and external users must be provided to the Office of Cost Studies for review to ensure they are compliant with Caltech policy and Federal guidance prior to authorization of the service center.

The following is an example of the method of calculating a breakeven service center rate for a new service center with a single service. When a service center is initially established, the rate will be based on budgeted/projected revenues, expenses, and usage.

An electron microscope costs approximately \$100,000 per year to operate (total allowable costs) and a projected usage of 1,500 hours per year. This results in a breakeven billing rate as follows:

$$\frac{\$100,000}{1,500 \text{ hours}} = \$67 \text{ per hour}$$

According to the tracking log, a researcher used the microscope for four hours on a sponsored project. His or her award should be charged \$268 (i.e. 4 x \$67).

On-Going Service Centers

In the years after a service center is initially set up, the rate should be reviewed biennially and should incorporate budgeted/projected, as well as actual revenues, expenses and usage. For example, the rates submitted for approval for fiscal year commencing October 1, 2017, would be based on FY 2017 projected volume and expenses plus/minus under/over recoveries carried forward from prior fiscal years.

Calculating the Breakeven Rate for Service Centers Offering a Single Service

Examples 1 and 2 below are both based on a budget of \$230,000 of revenues and 2,000 hours of projected usage for the year.

Example 1:

	FY2017 Actual		FY2019 Budgeted
Total Revenue	\$ 230,000	Budgeted Expenses	\$ 250,000
Less Total Expenses	<u>- 220,000</u>	Less Prior Year Surplus	<u>-10,000</u>
Surplus	\$ 10,000	Total Budgeted Expenses	\$ 240,000
		Projected Usage	2,000 hours

$$\frac{\$240,000}{2,000 \text{ hours}} = \$120 \text{ per hour}$$

According to the service center tracking log, a researcher used three units of service on his sponsored project. His or her sponsored award should be charged \$360 (i.e. 3 x \$120).

Example 2:

	FY2017 Actual		FY2019 Budgeted
Total Revenue	\$ 230,000	Budgeted Expenses	\$ 270,000
Less Total Expenses	<u>- 250,000</u>	Plus Prior Year Deficit	<u>20,000</u>
Deficit	\$ - 20,000	Total Budgeted Expenses	\$ 270,000
		Projected Usage	2,000 hours

$$\frac{\$270,000}{2,000 \text{ hours}} = \$135 \text{ per hour}$$

According to the service center tracking log, a researcher used three units of service on his sponsored project. His or her sponsored award should be charged \$405 (i.e. 3 x \$135).

Calculating Breakeven Rates for Service Centers Offering Multiple Services

When calculating breakeven billing rates for service centers that offer multiple services, it is necessary for the service center to have a breakout of the amount of operating resources (e.g., the quantity of labor and non-labor materials consumed and their associated cost) that was used to provide each of the different services. In addition, the center must know the quantity of each of the services provided during the year. Using this information, the breakeven rate can be determined.

The following schedule is an example of the distribution of operating costs across seven different services, volume of activity by service, and the resulting calculated breakeven rate for each service.

Services	% Total Labor Hours	Labor Cost	Non-Labor Cost	Prior Year Carry-Forward	Total Costs	Activity (Actual Quantity)	Calculated Break Even Rate
A	B	C	D	E	F=C+D+E	G	H=F/G
Service 1	28.60%	\$ 105,578	\$ 7,994	\$ (2,010)	\$ 111,562	892.00	\$ 125
Service 2	25.30%	\$ 93,395	\$ 7,071	\$ (1,778)	\$ 98,688	198.00	\$ 498
Service 3	15.84%	\$ 58,474	\$ 4,427	\$ (1,113)	\$ 61,788	21.00	\$ 2,942
Service 4	0.06%	\$ 221	\$ 17	\$ (4)	\$ 234	0.25	\$ 936
Service 5	13.60%	\$ 50,205	\$ 3,801	\$ (956)	\$ 53,050	13.00	\$ 4,081
Service 6	10.80%	\$ 39,869	\$ 3,019	\$ (759)	\$ 42,129	14.00	\$ 3,009
Service 7	5.80%	\$ 21,411	\$ 1,621	\$ (408)	\$ 22,624	25.00	\$ 905
Total Allowable Costs (Actuals)	100.00%	\$ 369,153	\$ 27,950	\$ (7,028)	\$ 390,075	1,163.25	

Biennial Service Center Rate Reviews

All centers are expected to comply with service center regulations and Caltech policy and are subject to the biennial service center rate review process. Low risk service centers are subject to a high level review and high risk service centers are subject to a more detailed formal review. The Office of Cost Studies will work with existing Service Center Directors to conduct the required review and verification process and determine if the billing rates need to be adjusted.

The Cost Studies Office rate reviews for all service centers will include the following: 1) cost recovery analysis; 2) income analysis; 3) carry-forward analysis; 4) verification of allowable costs; 5) review of operational, business, accounting, and financial management practices; 6) management of year-end balances; (7) identification of subsidies; and (8) reasonableness of the applied billing rate(s). Billing rate analysis will also be completed for high risk service centers by the Cost Studies Office which includes but is not limited to the following items: 1) Review of center's financial profile and 2) Break-even rate analysis.

Part of the rate review includes the preparation of the service center financial profile and break even rate analysis. The financial profile is used to verify that all annual operating costs, income, subsidies, carry-forward amounts, and cost recoveries have been identified and included and accounted for in the billing rate analysis. The schedule below demonstrates that each of the cost components making up the annual operating costs in the previous schedule have been included in the breakeven rate calculations.

Service Center Rate Review		
Financial Profile Name of Service Center: Service Center XYZ Manager or Contact Person: Dr. ABC PTAs: ABC.000001-1-OARCHG.00001 Period: FY2018 Location (Building and Room (s) Nos.): None 215		
Financial Data: (Exclude Unallowable Expenses)	Calculations	FY2018 Actuals
Allowable Expenses:		
Labor with Staff Benefits	A	\$ 369,153
Materials & Supplies	B	\$ 27,950
Other Non-Labor	C	
Equipment Depreciation (if applicable)	D	
Prior Year Carryforwards (CFW) (if applicable)	E	\$ (7,029)
Net Allowable Operating Expenses	F=sum(A:E)	\$ 390,074
Unallowable (see reference attachment 4)		
Total Operating Expenses	H=F+G	\$ 390,074
Total Revenues	I	\$ 384,488
Year End Balance (next year CFW)	J = F - I	\$ 5,587
Cost Recovery Rate	K = I / F	99%
Subsidy Amount	L	\$ 5,587
FY2018 Breakeven Rates & Activity Levels		
Services	Activity (Annual Users)	Rate (\$/Year per User)
Service 1	892.00	\$ 125
Service 2	198.00	\$ 498
Service 3	21.00	\$ 2,942
Service 4	0.25	\$ 936
Service 5	13.00	\$ 4,081
Service 6	14.00	\$ 3,009
Service 7	25.00	\$ 905

Documentation and Record Retention

Service Centers have the responsibility for retaining work papers supporting rate calculations, pricing decisions, and documentation of rate approvals. In addition, other supporting records that should be retained may include but are not limited to time records and chargebacks. If service center personnel are charging time to multiple categories of service, timesheets and payroll distribution confirmation reports should be maintained to document the allocation of the employee's salaries and wages, even if these reports are also filed centrally. Billing and usage logs or records should also be maintained to identify the service provided to each user, total units of service provided, and the cost per unit.

The service center should ensure that adequate information is available and can be provided to the Cost Studies Office to support the determination of breakeven costs associated with each service provided and each billing rate charged to service center customers. Adequate information includes but is not limited to the following:

- Description of each service provided.
- Quantity of each service provided during the year, along with the associated billing rate applied for each service, and the amount charged.
- Verification that that users within the same user group were charged the same billing rates for the same services provided during the same period.

- Cost basis for determination of applied rates.
- Detail information to allow the Cost Studies Office to split any user charges that are combined together in a single transaction in the ORACLE system into discretely identifiable individual transactions. The individual transactions need to include the amount charged, quantity of service provided, and the billing rate for each service within the single transaction.
- Reconciliation of service center financial information to information recorded in the ORACLE Financial System for every income transaction incurred during the year.

Information provided to the Cost Studies Office should be in the form of a simple spreadsheet (e.g., Microsoft Excel file) that can be manipulated to perform financial analyses.

ROLES AND RESPONSIBILITIES

Office of Cost Studies

- Assists new Service Center Directors in calculating breakeven rates.
- Completes biennial service center reviews consistent with the Service Center policy and provides the results of the reviews and major issues of concern to the Service Center Director and Division Operations Officer.
- Provides guidance and advice on any service center practice identified during the biennial review process that may be considered non-compliant with Caltech policy, Federal regulation, or viewed as being “high risk.”

Service Center Director, Principal Investigator, and/or Division Administration

- Coordinates the rate review process with the Office of Cost Studies and provides all necessary information in a timely manner in a format that can be easily used to perform cost analyses.
- Establishes acceptable methodologies and processes for the service center to document the work activities and usage of operating resources associated with each of the customer billing transactions. The process utilized by the service center must be able to identify the amount of relevant activities and operating resources that support the customer charges recorded in the ORACLE Financial System.
- **Manages Year-end Balances:** Properly manage the service center account to maintain the inception-to-date (ITD) year-end balance at or close to zero dollars. ITD unrecovered operating expenses that are subsidized by Institute funding sources should include the appropriate Fund Transfer accounting entries to provide visibility in the service center account that the unrecovered operating expenses are paid for by the subsidizing funding source. The amount of subsidizing Fund Transfer into the service center PTA should not exceed the amount of operating expenses that have not been recovered through customer billings at the time. If the ITD ending balance is showing cost over-recoveries (recoveries above 100%), then the service center should be adjusting the billing rates to liquidate the cost over-recoveries over the next 1 to 2 years. It is unacceptable to maintain year-end balances that are consistently accumulating additional unrecovered operating expenses or cost over-recoveries over multiple years without

any attempts to reduce the balance either through recording subsidies via Fund Transfers, or by adjusting the billing rates.

- Ensures that adequate information is available and can be provided to the Cost Studies Office to support the determination of breakeven costs associated with each service provided and billing rate charged to service center customers.
- Ensure that the Cost Studies Office is provided the appropriate information supporting any changes in the billing rates and given the opportunity to verify that the proposed new billing rates are reasonable and complies with federal regulations and Institute Policy.

RELATED REFERENCES

Office of Management and Budget’s Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards 2 CFR, Part 200

Office of Management and Budget’s Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards 2 CFR, Part 200 §200.468, Specialized Service Facilities

Caltech’s Service Center Policy

Caltech’s Record Retention Policy

Caltech’s Record Retention Schedule

PROCEDURE ISSUED BY

This procedure is issued by the Office of Financial Services.

EFFECTIVE DATES AND UPDATES

Action Take	Effective Date	Description of Action
Original Procedure	10/01/2003	A portion of this procedure was incorporated into the original Service Center Policy as an appendix which was approved by Sharon Patterson, AVP Finance and Treasurer.
Revised Procedure	09/30/2016	Revised to separate the procedures from policy and to incorporate changes needed to original procedure to provide more guidance for the service centers. Reviewed and revised by the Office of Financial Services. Approved by the Office of Financial Services.

Action Take	Effective Date	Description of Action
Revised Procedure	06/01/2019	<p>Revised due to implementation of a risk based approach to the biennial service center review process. Service centers scheduled for review will be reviewed as part of a risk assessment and identified as high risk or low risk using relevant information. High level biennial reviews will be conducted for service centers considered low risk and detailed reviews will be conducted for service centers considered high risk.</p> <p>Reviewed and revised by the Office of Financial Services.</p> <p>Approved by the Office of Financial Services.</p>
Revised Procedure	10/01/2020	<p>Revised to implement changes to the risk based approach for the biennial service center review process.</p> <p>Reviewed and revised by the Office of Financial Services.</p> <p>Approved by the Office of Financial Services.</p>
Revised Procedure	10/01/2020	<p>Revised to reflect changes that are more consistent with the Service Center Policy that was in effect beginning on 10/1/2020 and approved on 10/1/2021.</p> <p>Reviewed and revised by the Office of Financial Services.</p> <p>Approved by the Office of Financial Services on 10/1/2021.</p>