Section 22 Self-Supporting/Revenue Generating - Service and Storeroom Activities

Welcome to the Office of Business and Financial Services Open Comment Blog!

The University of Illinois System, Office of Business and Financial Services is opening comments on proposed policy and procedural changes for Section 22 Self -Supporting/ Revenue Generating -Service and Storeroom Activities Section.

The existing 'campus supplement' policies for services activities – 22.4, 22.4.1 & 22.4.2 – have been combined into one System-wide policy. This policy was designed to be consistent with the overarching Section 22 Self-Supporting/Revenue Generating Activities policy and federal requirements.

Please review the policy and provide feedback.

Policy Statement

Self-supporting funds are managed as businesslike operations with the objective of generating sufficient revenue from sales to finance all costs associated with the activities. A number of storerooms and service facilities have been established at the University of Illinois System to provide services and supplies to System units, including sponsored programs administered by the System. Many of these sponsored programs are federally sponsored; as a result, the System must comply with federal costing principles for service centers as outlined in the Code of Federal Regulations (Uniform Guidance). Service activities with no charges to federal projects are also subject to federal regulations, since they charge other System funds whose expenditures are part of the Facility & Administrative (F&A) rates charged to federal projects. In addition, as a major state-supported research university, state regulations as outlined in the state *Legislative Audit Commission University Guidelines* must be followed.

Each unit is responsible for the management of its service activities, including the establishment and documentation of each user fee or markup. Rates should be reviewed annually with a formal rate calculation performed at least once every two years. The majority of this policy outlines acceptable ways for determining costs, calculating allowable recharge rates, and maintaining appropriate adjusted fund balances in the associated service center funds.

Reason for the Policy

Proper oversight is essential to uphold the System's fiduciary responsibility to manage the funds in a consistent and compliant manner. This policy is designed to provide guidance to ensure the System complies with the requirements of the federal costing principles for service centers as outlined in the Code of Federal Regulations (Uniform Guidance) and state *Legislative*

Audit Commission University Guidelines. This policy outlines methods for service center managers to use when identifying costs, setting rates, and charging users.

Applicability of the Policy

Service activities (centers, facilities and storerooms) are established primarily to meet the programmatic needs of the academic community, and usually provide goods or services to multiple internal University customers. In certain situations, state of Illinois agencies and organizations affiliated with the System may also be customers of these service activities. They are associated with entity codes 3100 (Communications and Computing Services) and 3110 (Plant and Service Operations), and are distinguished from auxiliary operations (fund types 3J and 3M) that provide services to students, faculty and staff and departmental activity funds (fund type 3Q) that provide services primarily to non-System users.

This policy applies to Storeroom and Service Fund Type 3E, summarizing these regulations and outlining methods service center managers should use when identifying costs, setting rates, and charging users.

Rate Setting Cost Principles

In general, the following costing principles are to be followed for service and storeroom activities:

- Rates must be established to recover no more than the allowable costs of providing the service or good.
- Rates must be established for each individual service or good, unless the usage basis for a group of related services/goods are the same.
- Rate calculations must be based on actual costs (or projected costs in the first year of operations). Costs included in the rate calculation are operating costs of the service activity, equipment depreciation expense, inventory-related costs (cost of goods sold), and in rare circumstances, the facility/building depreciation (see below for approval requirements). In addition, adjustments for accumulated adjusted fund balance amounts that are over or under the 60-day working capital limits must be included as part of the rate calculation.
- Federal costing principles allow service centers to maintain Adjusted Fund Balances of no more than 60 days of operating expenses at year end. Balances in excess of this amount should be eliminated over a period of time, normally 2 years.
- The usage basis for the service or good is based on actual usage (or projected usage in the first year of operations) including all users of the service or good, regardless of whether or not a free or discounted rate will be applied.
- The resulting rate (total costs divided by total users) is the maximum rate to be charged to internal users.

- External users may be charged more than the fully-costed rate, but external users should be a minimal component of the user population. Note that Sponsored Projects are considered internal users.
- Rates should be reviewed annually by the unit with a formal rate calculation performed at least once every two years. Rate calculations and supporting documentation must be maintained on-file by the unit and are subject to periodic review by university administrators, as well as university, state, and federal auditors.

This policy is intended to provide as much information as possible to assist service center managers with rate calculations and related accounting procedures. However, since it is not possible for a policy to address every potential situation or nuance, service center managers are encouraged to contact the Office of Government Costing for guidance and assistance with rate calculations. In addition, this office has developed worksheets and reports for service center managers to use (see the *Resources* section of this policy for more detail).

Federal and State Requirements

Federal Uniform Guidance, 2 CFR 200.468 (formerly OMB Circular A-21, *Section J. 47*) outlines the federal requirements for calculating service center rates. The requirements include the following:

- Rates should consist of both direct costs and, if appropriate, an allocable share of indirect costs;
- Rates should be charged based on actual use of the services;
- Rates should be designed to recover not more than the aggregate cost of the services over a long-term period;
- Rates must not discriminate against federally-supported activities of the institution (i.e., federal users cannot subsidize non-federal users);
- Rates must be calculated at least biennially; and Rates must take into consideration over/under applied costs of the previous period(s).

The State Finance Act restricts the use of these funds to the support, maintenance, and development of the activity generating the revenue in the fund. In other words, expenditures are restricted to those necessary to fund the service or storeroom facilities that generate the revenue. The state Legislative Audit Commission University Guidelines allows partial support from state funds for storeroom and service activities, but the costs supported by state funds cannot be recovered in the recharge rate.

Although some differences between federal and state guidelines related to service centers exist, the differences can be managed by utilizing the costing and fund balance maintenance principles outlined in this policy. Federal guidelines outline that, typically, no more than two months' working capital can be accumulated as a "surplus," while the state allows a cash balance sufficient to meet the entity's working capital needs, which simply stated is the entity's high month or average monthly expenditures. In addition, federal regulations do not permit the cost of capital asset expenditures as an allowable cost to be included in the rate calculations; instead, only equipment depreciation expense may be included in recharge rates.

Basic Costing Principles for Service Activities

In general, rates must be established to recover no more than the allowable and related costs of providing the good or service. Costs typically include:

- Operating costs of the service activity
- Equipment depreciation expense
- Inventory-related costs (cost of goods sold)
- Adjustments for over/under recovery of costs

More detail on each of these categories of cost is included in the next section.

Total allowable costs are divided by the estimated number of users in order to determine the maximum recharge rate for System customers. Typically, established rates must be uniformly charged to all System users. Where preferential rates or free services are provided to some users, rate calculations are based on billing at the full cost, and the resulting under recovery must be subsidized by unit funds and not otherwise recovered through increased rates.

Service centers should operate under the break-even principle. Variances beyond break even limitations within a two-year period must be reviewed and resolved as prescribed in the Federal and State Requirements section of this policy. Costs and users must be segregated by service or product line, so that the revenues related to one activity are not subsidizing another activity. Costs and revenues as well as adjusted fund balances should be analyzed on a per-service basis.

Units should review and adjust rates as necessary on an annual basis. Biennial formal rate calculation documentation of user fee or markup calculations must be available for review upon request by university administrators, as well as university, state, and federal auditors.

Any exceptions must be approved in advance by the Senior Associate Vice President for Business and Finance and the relevant responsible administrator under whose jurisdiction the service activity operates.

Related Policies and Procedures

Fund Management
Identifying Costs
Setting Rates
Adjusted Fund Balances and Over/Under Recoveries
Billings
Documentation Requirements
Reviews & Approvals

Resources

The Office of Government Costing provides Business Objects reports, Excel spreadsheet templates, job aids, and a web-based Service Activity Basics Certification Training Course to assist with rate calculations and determining adjusted fund balances and their allowable limits, in addition to over/under recoveries.

Business Objects reports and Excel templates:

- "Equipment Depreciation.wid"
- "Expenditures and Transfers.wid"
- "Fund Balance.wid"
- "Salaries and Wages.wid"
- "Service Activity Rate Calculation Template.xlsx"
- "Storeroom Markup Rate Calculation Template.xlsx"

The job aids and other training materials are available at *Government Costing - Service Activities Resource Page.*

The web-based Service Activity Basics Certification Training Course is at *OBFS Certification Program page.*

Business Objects reports are available at *Government Costing - Service Activities*. In addition, the Business Objects reports and the Excel spreadsheet can be obtained by contacting the Office of Government Costing.

Fund Management

Establishing Banner Funds

Units are required to establish a Banner general ledger fund for each distinct service activity. One or more operating ledger program code(s) and/or activity code(s) may be established under each general ledger fund.

Units request a storeroom or service fund by submitting to the Office of Business and Financial Services, University Accounting and Financial Reporting the *Banner Fund, Program, Index Code Request Form.* Review the *Banner Fund, Program, Index Code Request Form-Example of a Self-Supporting Fund Request* for guidance.

Fund Administration

Business administrators/managers (or those holding similar positions) are responsible for:

- Working knowledge of service activity policies, regulations, and procedures necessary to run a service activity operation and compile compliant rate calculations.
- Exercising sound business practices necessary to run a breakeven service activity operation.
- Preparation of an annual budget
- Preparation of year-end fact sheet *Fact Sheet Requirements*
- Calculation of user fees or markups at the operating ledger (OL) level and justification for interim rate adjustments, if any
- Maintenance of current Banner Fixed Assets records of equipment used in service activities, in accordance with *12 Property Accounting*
- Review and reconciliation of monthly Banner financial statements
- Physical inventory of merchandise for resale and any adjusting entries made to Banner in accordance with *5 Receivables*
- Timely billings are recommended on a monthly basis, with adequate documentation
- Maintenance of records (See the *Detailed Requirements* section of this policy)

Identifying Costs

Overview

Costs recovered by a service activity may include only those costs which are directly related and allocable to the activity, allowable under applicable regulations, and reasonable in relation to the service performed. These costs must be expenditures of the service activity fund, except for equipment and subsidies as explained below. Note that costs must be segregated by individual service provided, and cannot be aggregated.

Typical costs include:

- Salaries and wages of individuals providing the service, or those administering the service center
- Materials and supplies used in providing the service, or in administering the service center
- Maintenance and repair of equipment assigned to the service activity
- Equipment depreciation expense
- Over- or under-recovery of the previous year's costs

Other costs may include:

- Cost of goods sold
- Other inventory-related costs

- Improvements such as site preparation for equipment installation which are not capitalized in the Banner Fixed Assets system. See *12 Property Accounting* for additional details.

All of these categories of cost are explained in more detail below.

Operating Expenses

(Salaries, supplies and other direct expenses) personnel-related expenses, such as salaries and wages, are included for those individuals directly providing the service (e.g., equipment operators), or those individuals who are involved in administering the service (e.g., service center managers). As with other service center costs, the expense must be allocable to each individual service line or product, and not aggregated across a group of services or products. For those individuals involved in the administration of the service or multiple services, the costs can be determined through methods such as reasonable and documented estimates of effort associated with administering each service line. Salaries and wages related to the service activity but paid on other institutional funds may only be included in service rates charged to customers external to the System.

Likewise, materials and supplies must be directly identified with each service line or product, or easily allocated based on a reasonable, documentable method.

University of Illinois at Chicago Only: Any purchase(s) that result in a Banner fund balance deficit greater than $10,000 requires prior approval from the Associate Chancellor for Budget and Financial Administration or their delegate. In the absence of prior approval, units with Banner deficit fund balances greater than $10,000 may be required to complete formal deficit reduction plan.

Equipment Depreciation Expenses

General Federal regulations prohibit the inclusion of capital equipment purchase expense in recharge rates.

The full cost of capital equipment purchases may not be included in service rate calculations. Instead, capitalized equipment purchased with non-federal funds may be recovered by including a depreciation component in the internal billing rate. In addition, equipment depreciation expense may be included as a cost in the rate calculation. In order to be consistent with university accounting records, equipment depreciation expense used in service center rate calculations must be based upon amounts in the Banner Fixed Asset system. This reflects the cost of the equipment allocated over its estimated useful life. Depreciation included in the internal billing rates may not be included in the F&A rate calculation.

Service activity equipment is non-expendable, non-consumable, tangible property with an estimated useful life of more than one year and a cost of $5,000 or more, purchased through the funding sources listed below. Equipment and upgrades with an acquisition cost of less than $5,000 is expensed in the year of acquisition.

Equipment also includes additions, improvements, or modifications to existing equipment which increase the productivity or useful life of such equipment and cost $5,000 or more. Replacement parts which do not extend the useful life of the equipment and upgrades that cost less than $5,000 are defined as operational expenses, and are not capitalized. The equipment must benefit multiple users. Otherwise, it is to be funded by the individual user, and not included in a recharge rate calculation. If a piece of equipment is used by more than one service facility, its acquisition cost and related depreciation is allocated to the various service facilities based upon usage.

Funding Service Center Equipment Acquisitions

The following sources of funds may be used for acquisition of service activity equipment when an entity code has been assigned to the asset:

Fund Source	Fund Types
State appropriations	1A through 1Y
Institutional funds	2A through 2E
Gift funds	2G, 4M
Non-federal external funds	4C, 4E, 4G
Service activity funds	3E
Non-federal plant funds*	8A through 8N
Donations of equipment	Not funded

***NOTE:** Plant fund type 8C may include federal funds and may not be used for equipment acquisitions.

University of Illinois at Chicago Only: Equipment purchase(s) that result in a Banner fund balance deficit greater than $10,000 are required to obtain prior approval from the Associate Chancellor for Budget and Financial Administration or their delegate. Prior approval is still required even if the adjusted fund balance calculation is positive. In the absence of this prior approval, units with Banner deficit fund balances greater than $10,000 may be required to complete formal deficit reduction plan.

A list of Fund Types and descriptions is available *Fund Type Descriptions.*

Capital Lease Equipment Acquisitions

Units may acquire equipment through a capital lease arrangement if processed in accordance with *7.2 Purchase of Goods and Services.* For the interest on the capital lease contract to be a component of the rate, both the following conditions must be met:

- The cost of equipment (lease payments less imputed interest) is $10,000 or more
- In the event the capital lease involves Federal funds, prior written approval is obtained from the Federal Government through; OVCR - Grants and Contracts (UIC), Office of Research and Sponsored Programs-Post Award (UIS), or Sponsored Programs Administration Post-Award (UIUC).

Equipment and the Banner Fixed Asset System

The System's Banner Fixed Asset system maintains both asset detail and depreciation for capitalized equipment.

The asset cost is the acquisition price plus net book value of traded-in equipment for purchased equipment. Interest paid in connection with equipment acquisition is charged to an interest expense account code, and is not included in the asset value of equipment. For donated equipment, cost is defined as the fair market value when received. For additional information concerning the determination of asset cost, see *12 Property Accounting.*

All service activity equipment included in recharge rates, regardless of funding source, must be identified by recording the "entity code" in the Banner Fixed Asset system. Failure to assign this code may result in improperly including the depreciation expense in the university's F&A Rate calculations. Each unit is responsible for contacting the University Property Accounting and Reporting office when entity codes need updating in the Fixed Asset system. See *12 Property Accounting* for additional information.

The condition codes for service activity equipment are recorded in the Banner Fixed Asset system and updated as necessary by each unit. Depreciation expense must be supported by Banner Fixed Asset records with condition codes which document that the equipment is usable, in use, and needed.

Equipment Depreciation

Equipment depreciation is maintained in the Banner Fixed Asset system. Depreciation is calculated in fixed assets only once a year during the year-end close process.

Fund Type 3E: Service centers may include equipment depreciation for equipment purchased with **Fund Type 3E funds** in their recharge rate calculations. Equipment purchased with 3E funds are automatically assigned an entity code by the University Property Accounting and Reporting office.

Non-Fund Type 3E: Depreciation expense for equipment purchased with ***funds other than Fund Type 3E*** can also be part of the operating costs of a facility and included in recharge rates if **"the equipment is used in support of the service activity," and "an entity code has been assigned to the asset."**

Entity Code: Units are required to review and report entity codes in the Banner Fixed Asset records associated with all equipment used in self-supporting activities, regardless of the source of funds used to purchase the item to University Property Accounting & Reporting (UPAR). If the service center wants to include non-fund type 3E assets in their service activities re-charge rate, they must first contact UPAR. This can be done by completing the "Entity Code Change Request Form" and submitting it to UPAR. To obtain this form see *12 Property Accounting*.

If service centers want to include depreciation in their recharge rate for an "established" asset that **does not already have an entity code assigned to it,** they are required to complete the "Entity Code Change Request Form" located in *12 Property Accounting*. The form must then be sent to University Property Accounting and Reporting and the Office of Government Costing. This is critical because depreciation expense is included in the F&A Rate Calculations. The F&A Rate is generally a set rate established for a four year period. In order to ensure the System is not double charging the federal government, service centers must coordinate the inclusion of this depreciation expense in their recharge rates with the Office of Government Costing.

Commodity Code/Useful Life: The assignment of a commodity code to an asset by University Property Accounting and Reporting classifies the asset into various categories (e.g., trucks, incinerators, computers, etc.) and determines the useful life for depreciation purposes. Service centers are required to use the same depreciation calculations based on the assigned useful lives.

For assistance in obtaining depreciation information from the Banner Fixed Asset system, units may contact the Office of Government Costing. The Office of Government Costing has made available a Business Objects report for use in compiling depreciation information for rate calculations. The Equipment Depreciation (Webi) Report compiles fixed asset details of moveable equipment or software by "responsible organization" code.

Disposition or Transfers of Equipment

Net asset value, if any, at time of disposal is considered depreciation in the year of disposition unless it is a trade-in. The net book value of a traded asset is reflected in the new asset.

Any transfer of equipment involving service activities must be reported to University Property Accounting and Reporting to assure that appropriate Banner updates are made.

Plant Fund Reserve Establishment

Units that elect to establish a plant fund reserve (Type 8N with a level three hierarchy of 7650 or 7651) for service activity equipment replacement must submit a request to *UAFR* to create a plant fund, see *13 Accounting - Transfer to Plant Funds*. This request will be reviewed by the Director of University Accounting Services (UAS), who acts as the delegate of the Controller, and the unit will be notified of the decision. Units may create plant funds to establish reserves for future equipment acquisitions and replacements. The funds retain their identity as associated with the storeroom and service fund that originated the funding for the reserve. No storeroom or service operating activity may be charged to these funds.

Purchases of Goods for Resale

General

Service centers (e.g., storerooms) that sell products to users are responsible for determining an accurate Purchases of Goods for Resale amount, which includes not only the accurate cost of the product itself, but any associated inventory costs such as freight and inventory adjustments.

Inventory Management

Storeroom managers must maintain perpetual inventory records of each item of merchandise for resale, in order to compute the value of the inventory. Efficient management of the inventory of merchandise for resale to maximize resources is the unit's responsibility. When deciding upon the appropriate level of inventory, the following and/or other items appropriate to the operation should be considered:

- Cost of storage
- Cost of shortages (including operational shutdowns because of lack of inventory, additional shipping expense resulting from expediting orders)
- Lead time (time between order and receipt of item)
- Obsolescence or shelf life
- Opportunity cost of capital (investment income which could be realized if cost of inventory were invested)
- Quantity discounts available

State purchasing regulations require that no more than one year's inventory be on hand, except for lifesaving medications, mechanical spare parts, and items for which the supplier stipulates a minimum order.

The service center manager is responsible for ensuring that physical inventory is properly performed, and inventory records are adequately maintained and adjusted. More detailed requirements are outlined in *5 Receivables*. Inventory of merchandise for resale should be costed in accordance with acceptable accounting practices consistently followed by the service center. The unit may not change inventory valuation procedures from one year to the next without approval from University Accounting and Financial Reporting. Moving average or "First In First Out" (FIFO) is recommended for valuing inventory of merchandise for resale. See *5 Receivables* for an explanation of moving average inventory valuation calculations.

Inventory Accounting

Activities that purchase merchandise for resale generally record purchases as a debit to purchase of goods for resale (OL account code 187100). Periodically these purchases should be debited to Inventory for Resale (GL account code 55000) and credited to Purchase of Goods for Resale (OL account code 187100).

These adjustments should be made at least annually, preferably monthly for high volume activities. The entries may be made manually, by an automated billing system (if one exists), by the Banner Allocation and Assessments (ALAS) application, or by a combination of these methods. Service activities should consult with University Accounting and Financial Reporting to determine which method is best for their activity.

Facilities Costs

Depreciation of buildings is not generally allowed except under rare circumstances when the facility funding is from fund type 3E operations. Any inclusion of facility depreciation in rate calculations must be approved by the Office of Government Costing.

Unallowable Costs

Units are prohibited from charging the following costs to their self-supporting funds: (1) unallowable under University policy and state law; (2) unallowable by *2 CFR 200.420-.475* such as entertainment, bad debt, alcohol, and public relations (3) do not benefit any of the products/services of the service activity or the purpose of the individual fund they are in; or (4) costs included in the University F&A Rate Calculation, and are, therefore, not allowed in the development service activity recharge rates.

Costs not allocable to service activities, such as the State paid salaries of administrative staff (e.g., department business office) and Operations and Maintenance Division expenses paid by the System, may not be recovered as a component of the user fee or markup charged to internal users because these costs are recovered as a component of the University's F&A rate.

Setting Rates

Service center managers must determine the total cost of the individual service line or product (numerator) and the appropriate base (denominator) to be utilized when calculating rates. For new activities in their first year of service, projections can be used to estimate the service center's operating costs and anticipated utilization. For continuing activities, costs and usage should be based on actual historical data, adjusted as appropriate only for **significant** anticipated changes in cost or utilization. Any anticipated changes in cost or utilization incorporated in service rates must be significant and reasonable, well substantiated, and documented accordingly. Routine fluctuation in costs and utilization should not be included in projections. Prior year(s) surplus or deficits must also be considered when resetting annual rates. All users, including those who pay a discounted rate (or not charged), must be included in the base. Total costs (numerator) divided by total users (base/denominator) equates to the maximum rate that can be charged to University users (including sponsored grants and contracts).

Service center managers must ensure that there is no cross-subsidization between user groups. Combining the results of various services is not acceptable if the mix of users of each service is different. The center must use the measurement which considers the cost/benefit of the product or service being provided, in other words, use the measurable units which allocate costs equitably among all customers or usage base.

Subsidies

Service Centers can choose one of two methods to subsidize service activity operations. It is important to remember that subsidies cannot be charged to sponsored funds nor can a deficit or surplus be transferred to another service activity.

The first method for subsidizing is for the service center to use unrestricted funds (e.g. ICR or gift) to fund a portion of the service center's operating expenses that would normally be incurred on the service fund. Using this method, the subsidies cannot be recovered in the internal user fee or internal storeroom markup assessed by the service activity.

The second method for subsidizing is for the service center to incur all operating expenses on the service fund to calculate a service rate. In this instance, the customer is charged a portion of the rate and the remainder (subsidy) must be charged to departmental unrestricted funds (e.g. ICR or gift) and offset with a credit to revenue on the service fund.

In both of these instances the subsidies need to be separately identifiable in Banner. A best practice is to utilize a separate program code with an attribute code of "SNS" (Stores and Services) assigned by the Office of Government Costing. This is necessary to allow for proper treatment in the F&A Rate Calculation.

Units may elect to include subsidies in differential (higher) rates for "external" non-System users; this can be accomplished with appropriate accounting procedures and assistance from the Office of Government Costing.

Internal and External Customers

Internal users of service centers are those users whose ultimate source of funds are internal to the System. These include academic, research, administrative, and auxiliary areas which purchase services to support their work at the System. Federal grants and contracts administered by the universities are considered internal customers.

External users are organizations or individuals whose ultimate source of funds is outside of the System. External users include students and any members of faculty or staff acting in a personal capacity. Affiliated hospitals or other universities are considered external users unless the System has subcontracted with them as part of a grant or contract or the System has entered into a formal written agreement (i.e. testing agreements, facilities use agreements, etc.). Although service activities are established principally to serve the internal users, services are occasionally requested by external entities.

Service centers should recognize that their primary purpose is to provide services or goods for the System; therefore, sales to external entities should not be a primary focus and should remain a minimal proportion of total sales.

The rate to be charged to external users is the rate that approximates the comparable commercial rate, or the fully-costed rate (increased by the indirect cost rate appropriate to the activity), whichever is higher.

Where the external party is another educational institution, the service may be provided if doing so does not disadvantage System users of the facility. The university rate may be charged. However, when the university rate is charged it must be increased by the indirect cost rate appropriate to the activity.

Where the external party is foreign or commercial, the System cannot provide services unless the services are not readily available from a commercial firm in the region, and the services can be provided without disadvantage to the System users of the facility. Sales should be processed in accordance with *5 Receivables*.

Adjusted Fund Balances and Over/Under Recoveries

Service center managers must calculate and monitor their "Adjusted Fund Balances," which factors asset value and equipment depreciation into the calculation. The Adjusted Fund Balance must then be compared to the 60 Day Working Capital Reserve Limitation to calculate and monitor Over Recoveries. The Office of Government Costing is available to assist service centers with these calculations. Please see the *Resources* section of this policy for more detail.

Adjusted Fund Balance

The Banner Fixed Assets system does not directly interface with the General Ledger and Operating Ledger. In addition, depreciation is only calculated and booked in the General Ledger at a highly summarized level during the year end close process. Therefore, to reflect "correct" fund balances, the "Adjusted" Fund Balance must be calculated and used in calculating and monitoring fund balances and over/under recoveries. This is accomplished by completing the following adjustments:

- For assets purchased with services unit 3E funds, the "net asset value" must be calculated. Since the net asset value is normally a debit balance, the fund balance will be "credited" or increased to arrive at the adjusted fund balance.
- Adjust for items that should be considered when determining the financial position of the service unit (e.g. Non-3E Equipment, Termination Payouts, and External Revenue). Contact the Office of Government Costing for assistance with this calculation.

Working Capital Reserve Limitation

Working capital reserve is specifically defined in the Federal Uniform Guidance, 2 CFR 200 Appendix V Section G.2 which states that, "A working capital reserve as part of retained earnings of up to 60 days cash expenses for normal operating purposes is considered reasonable." Unusual transactions/variances should be excluded from normal operating expenses for purposes of the limitation calculation. The 60-Day Working Capital Reserve Limitation is calculated by taking the last 12 months of cash expenditures divided by 6. This limitation is then compared to the service center's adjusted fund balance to calculate and monitor over recoveries. The adjusted fund balance of individual service activities must meet these limitations, unless an exception has been granted by the Senior Associate Vice President for Business and Finance or delegate. See the *Calculations* section of this policy.

Over Recovery of Costs

Service activities that accumulate an adjusted fund balance surplus in excess of specified limits (60 days of average cash operating expenses) must adjust future rates in order to meet the Federal break even requirements over a reasonable period of time. See the *Calculations* section of this policy for a sample analysis of over recovery of costs.

Under Recovery of Costs

Service activities that accumulate an adjusted fund balance deficit must adjust future rates in order to meet the federal break even requirements over a reasonable period of time. See the *Calculations* section of this policy for a sample analysis of under recovery of costs.

State Fund Balance Requirements

This policy is specific to federal fund balance requirements. However, the state reporting requirements outlined in *22 Self-Supporting/Revenue Generating Activities - Avoid a Build-Up of Excess Cash Balances* must also be considered. To comply with State regulations, self-supporting funds are reviewed annually by University Accounting and Financial Reporting to determine if excess funds exist. This review is completed at fiscal year-end by accounting entity, which is a classification of self-supporting funds into similar and related groups defined by the System. Excess cash in self-supporting funds cannot be retained by units and must be lapsed to the University Income Fund. A general guideline is that units may retain enough cash in their self-supporting fund to cover their average monthly expenditures; however, the excess funds calculation is done on an entity-wide basis so an individual fund may have excess funds, but the entity may not. No funds are lapsed to the University Income Fund if the entity does not have excess funds.

Documentation Requirements

The unit is responsible for maintaining the following documentation, which is to be available for review upon request. Paper copies or computer files may be used for documentation. General documentation must be maintained by the service facility as required by *22 Self-Supporting/Revenue Generating Activities - Keeping Self-Supporting Activities Records.*

General documentation includes:

- Documentation of calculation of user fees and markups (including any facilities or equipment depreciation)
- Documentation that the goods or services were provided (i.e., invoice, system tracking report, usage log, etc.) (see Recommended Documentation Procedures section below)
- Journal vouchers documenting the customers billed
- Calculation of over/under recovery of costs

Equipment documentation must be maintained for four years after disposition of the equipment item(s). This documentation includes:

- Banner P-tag Code (Property Control Tag number)
- Description
- Disposition Date and Method (traded-in, scrapped, or cannibalized for parts)
- Amount of gain or loss on disposition

The following information is recorded in Fixed Assets by the unit and should be kept current:

- Condition/code

- Responsible Organization code

Updates to the following attributes must be reported to University Property Accounting and Reporting for review and update:

- Entity code
- Disposal code

For further equipment documentation requirements see *12 Property Accounting.*

Recommended Documentation Procedures

An authorized requisition (or its equivalent) is recommended before providing goods or services. The requisition should include the goods or services provided, the date, the name of the user, the unit, and the accounting string charged. This documentation may be in the form of a paper or electronic work order, requisition, or stores/services voucher authorized by appropriate unit official, principal investigator, or delegate.

Goods should be issued upon one of the following:

- Submission of an authorized requisition (or equivalent) which includes the goods requested, the date, the name of the purchasing unit, and the accounting string charged.

  OR

- Signature or authorization of the user or messenger receiving the goods.

Either a form or a log may be used as documentation that the goods or services were provided. The form or log may be a hard copy or electronic media.

No signature is required by the seller on campus stores/services vouchers between units. In submitting stores or services transactions to OBFS, the selling unit is certifying that the goods or services have been delivered, the purchasing unit's approval to charge the accounting string is on file, and the source of funds charged is appropriate for the expense.

Review and Error Corrections

The unit receiving the goods or services is responsible for a timely review of the charge, including the amount and accounting string charged. The unit charged is responsible for notifying the storeroom or service facility of any billing errors in a timely manner. The storeroom or service facility is responsible for promptly providing the unit with copies of the documentation supporting the charge and promptly crediting any improperly billed amounts.

Calculations

Cost of Goods Sold

The cost of goods sold (CGS) is the cost of all merchandise sold in a storeroom. It is calculated as follows and is excluded from operating costs for storerooms in the markup calculation:

How to Calculate the Cost of Goods Sold	
+	Beginning inventory
+	Purchases for resale (net of purchase discounts and allowances)
+	Freight (if not included in purchase price of items for resale)
-	Items removed because of obsolescence, spoilage, etc.
-	Purchase returns
-	Ending inventory (net of any inventory)Overages (+) or shortages (-)
=	Cost of goods sold

Calculations of 60-Day Working Capital Reserve Limitation

The amount of adjusted fund balance should be compared to the 60-Day Working Capital Reserve limitation to determine if adjustments need be made to avoid an over recovery in excess of specified limits. See "**Working Capital Reserve Limitation**" section of the policy.

The following is an example of the limitation calculation:

How to Calculate 60-Day Working Capital Reserve Limitation		
	FYxx Cash Expenditures per service activity fund per operating ledger (12 months)	$66,000
=	60-Day Working Capital Reserve Limitation (Total YTD expenditures divided by 6)	$11,000

Calculations of Adjusted Fund Balance and Over/Under Recoveries

The amount of adjusted fund balance should be compared to the 60 Day Working Capital Reserve limitation to determine if adjustments need be made to avoid an over recovery in excess of specified limits. See the "**Working Capital Reserve Limitation**" section of the policy.

The following is an example of over recovery:

How to Calculate Adjusted Fund Balance and Over Recoveries		
	Fund Balance, End of Year (or YTD) has a credit (surplus) balance	($41,200)
+	Net asset value of Fund Type 3E equipment/facilities -- a credit adjustment to fund balance* *For adjustments to Non-Fund Type 3E equipment, contact the Office of Government Costing	($12,000)
=	Adjusted fund balance (surplus)	($53,200)
	Compared to 60-Day Working Capital Reserve Limitation (see above calculation)	$11,000
	Over recovery (surplus)	($42,200)

The ($42,200) surplus balance should be considered in calculating the recharge rate.

The following is an example of under recovery:

How to Calculate Adjusted Fund Balance and Under Recoveries		
	Fund Balance, End of Year (or YTD) has a debit (deficit) balance	$20,000
+	Net asset value of Fund Type 3E equipment/facilities -- a credit adjustment to fund balance* *For adjustments to Non-Fund Type 3E equipment, contact the Office of Government Costing	($6,000)
=	Adjusted fund balance / Under recovery (deficit)	$14,000

The $14,000 deficit should be considered in calculating the recharge rate.

User Fees For Service Facilities

User fees are derived by dividing the aggregate total of estimated fiscal year operating expenses, equipment depreciation, and prior year over/under recovery by the expected user fee base:

How to Calculate User Fees		
Total costs	+	Estimated fiscal year operating expenses
	+	Annual depreciation expense for all equipment assigned and used by the service activity
	+/-	Prior year under/over recovery (within limit specified for level of revenue)

	=	Total costs
User Fee Base	=	Projected number of service units which result in a reasonable allocation of costs to the various users; for example, labor hours, machine hours, CPU time, and computer network connect fees
User Fee (or Recharge Rate)	=	Total costs / User Fee Base

Markup Percentage For Storerooms

The markup percentage is derived by dividing the aggregate total of estimated fiscal year operating expenses, equipment depreciation, and prior year over/under recovery by estimated cost of goods sold:

How to Calculate Storeroom Markups		
Total costs	+	Estimated fiscal year operating expenses
	+	Annual depreciation expense for all equipment assigned and used by the service activity
	+/-	Prior year under/over recovery (within limit specified for level of revenue)
	=	Total costs
Markup Percentage		Estimated "Total Costs" excluding cost of goods sold [a]
		Estimated cost of goods sold [b]
	=	Markup percentage [a] /[b] x 100%
Markup for storeroom merchandise	+	Unit cost of merchandise for resale
	x	Markup percentage
	=	Markup
Selling price for storeroom merchandise	+	Unit cost of merchandise for resale
	+	Markup
	=	Selling Price

Storeroom Inventory

The following chart shows accounting entries for recording storeroom inventory:

How to Record Storeroom Inventory		
Action	**Entry**	**Account Number**
To record storeroom purchases as inventory	Debit GL account code Credit OL account code	55000 - Inventories 187100 - Purchase of Goods for Resale
To adjust Banner inventory to physical inventory on the Fact Sheet	If physical inventory is greater than Banner Inventory: Debit GL account code Credit OL account code	55000 - Inventories 187100 – Purchase of Goods for Resale
	If physical inventory is less than Banner inventory: Debit OL account code Credit GL account code	187100 – Purchase of Goods for Resale 55000 - Inventories
To adjust Banner inventory to reflect removal of obsolete inventory	Debit OL account code Credit GL account code	187103 – Obsolete Inventory for Resale 55000 - Inventories

Billings

Billings should be issued to users as soon as the service is rendered or the goods delivered, recommended on a monthly basis. Income from user fees and storeroom sales are recorded using a revenue account code. The journal voucher or sales invoice is to indicate the service provided, date of service or sale, unit cost, and total dollars charged to the user. Any services provided to external users should be billed through the Banner Accounts Receivable System or obtain approval from the Senior Associate Vice President for Business and Finance; see *5 Receivables.*

For sponsored projects review *22 Self-Supporting/Revenue Generating Activities - Charge Self-Supporting Goods and Services to Sponsored Projects Funds* for requirements of timely billing.

Reviews & Approvals

In order to establish a fund for a service activity, departments are required to submit service activity information to OBFS University Accounting and Financial Reporting.

On an annual basis the Office of Government Costing identifies select service funds for rate reviews and approvals. Federal and University policies indicate that the department must perform a formal rate calculation at least once every two years. In addition, these rate calculations and supporting documentation must be maintained on-file by the department and made available for review upon request by University administrators, as well as University, state, and federal auditors.

To leave feedback, please use the "Add Comment" link below. On the next screen, choose the "Sign in with my NetID" option and log in with your University credentials. Comment moderation is enabled. Your comment will not appear until approved. You may also submit a comment without posting to the feedback board by contacting obfspolicies@uillinois.edu.