

UMD Service Center Operations Manual

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Purpose

Service Centers are a source of significant direct charging to externally sponsored awards. Service Centers must also be appropriately treated in the University's Facilities and Administrative cost rate calculation. As such, Service Centers involve significant compliance risk to the institution and therefore require considerable oversight and accounting unique to these operations. The purpose of this document is to guide administrators of Service Centers and Specialized Service Facilities (SSF) by detailing how to properly establish, maintain, and account for these operations in accordance with federal regulations and University policies.

Guidance for this document comes from many sources. Service centers are primarily regulated by the Uniform Guidance (2 CFR 200), specifically section 200.468. Prior regulations, OMB Circular A-21 (unchanged regarding Service Centers/SSFs) was interpreted by a 1994 report issued by the Department of Health and Human Services Office of Inspector General entitled "Summary Report of Audits of Service Centers at 12 Universities." Additionally, Service Centers may generate activity regulated by the IRS rules on Unrelated Business Income Tax (UBIT) and state sales tax. Also, all things must be accounted for according to Generally Accepted Accounting Principles, and, as a state institution, we must abide by state budget regulations and controls.

Overview

Service Centers and Specialized Service Facilities are units or activities that provide goods and services primarily to our sponsored awards and other users, including external users, and charge the users for these services. Academic and administrative offices may directly sell goods and services to external users *only* when those goods or services are directly and substantially related to the mission of the University, as referenced in USM policy IV-1.00.

The University of Maryland, College Park differentiates between its Service Centers and Specialized Service Facility as follows:

- **Specialized Service Facility (SSF):** centers with total annual revenues over \$1,000,000
- **Service Center:** centers with annual revenues between \$50,000 and \$1,000,000

The guidelines included in this manual only apply to Service Centers and Specialized Service Facilities. This manual **does not apply** to non-sponsored revenue-generating activities or cost transfer activities. This means most of the revenues generated from these units' services must come from sponsored awards. **In cases where the majority of revenues in the Service Center are from non-sponsored sources**, please contact the Controller's office (controller@umd.edu) for guidance on non-service center revenue-generating activities.

Organizational units or activities whose annual revenues are less than \$50,000 are not covered by this manual and **will not be set up** as Service Center accounts. Units under this threshold must directly charge their services to the users without using rates when possible. If more guidance is needed, please speak with the SPAC-Cost team (spac.cost@umd.edu).

In general, units under the threshold should:

- Bill according to the actual usage of their services.
- Bill to recover no more than the cost of the goods or services provided.
- Bill all users of their services equally.
- Bill all users of their service after the service is performed.
- Maintain logs to document these cost allocations (billings).

However, if these units project that their operations will grow to exceed the \$50,000 revenue threshold, they must submit a Service Center proposal to the SPAC-Cost team. In the following sections, "Service Center" refers to both SSF and service centers unless otherwise noted.

Internal vs. External Customers

Service Centers are established to provide goods and services primarily to internal customers. However, Service Centers may sell to external customers if resources are available and when those goods or services are directly and substantially related to the mission of the University. For purposes of this policy, internal and external customers are defined as follows:

Internal Customer – Any customer who pays with a UMD account.

External Customer – Any customer not using a UMD account for payment.

These internal customers include, but are not limited to:

- Researchers with or without sponsored funding
- Graduate students working on their thesis
- Students working on coursework
- Users in the home department of the service center
- Users in other university departments/schools
- Users internal to the university
- Users associated with the service center (service center director, staff)

Establishing a Service Center

Service Centers are established for operations that intend to function for no less than two years and recover no more than their cost of operation over this period. Given the possible financial risk and considerable compliance concerns associated with Service Centers, a detailed proposal and approval process is required. This proposal will justify the business need for the service, document the resources necessary to establish the Service Center, and describe the plan for a compliant operation of this Service Center. This section explains what should be included in the proposal and the approval and setup process.

The production of a service center proposal is meant to be a collaborative and iterative process between departments/colleges and Sponsored Projects Accounting and Compliance (SPAC). **Before developing the proposal**, units should contact the SPAC-Cost team to discuss whether the activity should be a service center and how to proceed with developing rates per University Policy and Generally Accepted Accounting Principles.

The units are responsible for overall monitoring of financial compliance and risk factors over service centers in terms of safety, training, insurance requirements, repairs, and financial operations. If applicable, the units should reach out to the specific central offices of IACUC, IRB, ESSR, Export Compliance, etc. for any additional compliance reviews related to the activities of the service center.

Proposal Content

All proposals for the establishment of a Service Center account must contain the following items. See Appendix A for an **example** of a Service Center proposal.

1. Service Center Cover Sheet

- Title of the Service Center
- Department Name

- Organization Code (KFS unit #)
- Name and contact information for the Service Center Director
- Name and contact details of an administrative contact person
- Compliance checks (Some examples are human subjects, animal research, and chemicals)
- Signatures (Signature authority is dependent on institutional and divisional policy)

2. Narrative Description of the Goods/Services to Be Provided

Describe the goods or service(s) that the Service Center will provide. Indicate the basis for billing for this service (e.g., per test, labor hour, time, and materials). See the Establishment of Rates section of this manual for guidance on determining the basis for billing. This section should also describe the programmatic oversight of this operation. For example, describe any advisory committee.

3. Market Analysis

This section should identify whether this service or similar service is available elsewhere, either within or outside the University. This market analysis should include the pricing of the service from other providers. If the Service Center cannot provide the service at a comparable cost, please describe the benefit to the University for providing this service in this Service Center instead of procuring the service from the outside vendor.

4. 5-Year Service Volume Projections

Provide a 5-year projection of expected service volumes.

5. Narrative Support for Service Volume Projections

To support your 5-year projections of service volumes, provide a narrative description of your projection methodology. If possible, include a listing of potential customers and a description of their current and potential funding sources for this service. Please indicate if any external users are anticipated.

6. 5-Year Cost Projections

Provide a 5-year cost projection for this Service Center. These projections should be based on the accounting methodologies outlined in this manual.

7. Narrative Support for the Cost Projections

To support your 5-year cost projection, provide a narrative description of your projection methodology. Indicate how you estimated staffing needs, salary levels, salary increases, and demonstrate how you calculated the cost of supplies and other support items.

8. Space Needs

Provide a description of the space the Service Center will require and whether this will exist in space already assigned to the unit or if new space is needed. If the space has already been identified, note the location.

9. Initial Rate Calculation

Provide an initial rate calculation sheet. See the Establishment of Rates section for guidance on developing a rate.

10. Description of Billing Procedures

Describe the process that will take place for users to request service, how and at what frequency UMD accounts will be billed once services have been performed, and the activity logs that will be kept to support the Service Center billings. In addition, you must note that upon completion of proposed services and approval by PI/lead faculty member, Service Center staff will initiate a billing document and send it to the financial contact at the unit acquiring the services.

11. Capital Equipment Listing

Provide a listing of all capital equipment, if any, to be used by the Service Center. Indicate the tag number of the piece of equipment, how it was funded, and where it is located (building and room). Capitalization and inventory control policies ensure compliance with generally accepted accounting principles and prudent financial management.

Please reach out to controller@umd.edu with any questions. The capital equipment policy can be found via [this link](#).

12. Summary of Start-Up Cost Funding

The initial volume of the Service Center may not be sufficient to cover the start-up and operational expenses incurred in the early stages of the Service Center operation. Therefore, securing start-up funds and identifying the funding sources may be necessary. This schedule should summarize all costs, including initial equipment purchases, and specify when these costs will be recovered through future rates. **The administering unit is solely responsible for collecting all approvals for start-up costs from participating departments.**

13. Rate Schedule

You must provide a rate schedule that can be used to post the approved rates on the internet. The schedule can be a Word, Excel, or PDF document. This document can include any marketing material you would like but should not have details on how the rates were calculated.

Approval Process

All Service Center proposals must go through the following approvals:

1. Director of the Facility (where applicable)
2. Unit Head of the Department/Center under which the Service Center will be administered (where applicable)
3. Dean or designee in the Dean's Office
4. VPR Office designee or AVP of SPAC
5. SPAC - Cost

Each College may establish an approval process for its Dean's approval. Please speak with your Dean's office about what approvals are necessary for your school. Approvals will be collected on the Service Center Cover Sheet. Once all approvals have been collected, the service center account is approved for setup in the accounting system to start recording revenues and expenses.

UMD Account Setup

Once the Service center has been approved, all accounts associated with Service centers should ensure the following attributes are completed:

Account Type: 82(SSF) or 83 (Regular SC)
KFS Account: 2xx-xxxx
Sub Fund: 403110 (E&G, Designated)
HEFC: TBD (Dept Designated)
Department: UMD Department indicated on the cover sheet
Title: Title indicated on the cover sheet

NOTE: Only accounts subject to this manual should be set up using the account type code 82/83 (Service Center).

1. All operating expenses and revenue should be on the service center account (ledger 2, acct type 83).
2. There will be no need to create a separate state account for personnel costs. The salaries and fringes that can be allocated to the service center will be directly charged to the established service center account (ledger 2, type 83).

Collection of Costs

All operating costs related to a Service Center must be charged directly to the Service Center account. This may include:

- Salaries and benefits of employees of the Service Center in proportion to their effort expended on Service Center activities
- Supplies and materials
- Purchased services (e.g., maintenance contracts, telephone services)
- Personnel training costs
- Software
- Minor equipment (<\$5,000)
- Equipment depreciation (see the following section)

All costs must be identified to the Service Center operation, even if the revenue generated will not be enough to cover the service's total cost. This may mean that the Service Center account has a deficit balance. See the section on Review Procedures for procedures on how deficits are funded.

Costs unrelated to the Service Center's operation cannot be charged to the Service Center account. In other words, Service Center billings cannot be used to fund expenses unrelated to the Service Center. Service Centers have the option of not including all costs in the rates. However, costs not included should be transferred off the Service Center operating account to a non-federal account, such as a reserve or departmental account.

Unallowable Costs

Since the costs associated with a Service Center are passed through to sponsored awards through the Service Center billings, all costs incurred must be allowable according to 2 CFR 200 Uniform Guidance (Subpart E).

Service Centers **must not** include these costs in their rates:

- Any unallowable cost as defined by the Uniform Guidance in § 200.403.
- Building depreciation, rent, operations, and maintenance are not paid by the Service Center. (These costs are usually covered by the University centrally and cannot be included in rates.)
- Cost of capital equipment [i.e., \$5,000, or greater (per item)].
- Any costs already reimbursed through the Facilities and Administrative (indirect) cost rate. **Please note that the university recovers equipment depreciation through our F&A rate. To avoid double-charging federal sponsors, you must seek approval from SPAC-Cost to include equipment depreciation in your rates.**

Note: All unallowable costs, as defined by Uniform Guidance, must be excluded from the rates charged to internal users or charged to the Service Center operating account. Service Center managers should pay close attention to entertainment, interest, alcohol, marketing, and bad debt expenditures.

Administrative Costs

When administrative costs are built into the service center rate proposal, administrative costs associated with the Service Center should be charged directly to the Service Center account. This would include telephone costs, salary costs of administrative personnel, postage, copies, and office supplies. These costs must be related to the administration of the Service Center (i.e., billing, preparing rate schedules). If a service center would change the administrative and clerical salaries split across the state budget line and the service center account, please contact SPAC-Cost for further guidance.

Specialized Service Facilities (SSF) Costs

Specialized Service Facilities (SSF) (service centers greater than \$1,000,000 in revenue) must recover the cost of the facilities they occupy through their billing rates. This is outlined in the University's approved Disclosure Statement (DS-2), which discloses our accounting practices to the federal government. Therefore, Specialized Service Facilities (SSF) will be charged an amount per square foot depending upon the building they occupy. The costs of these facilities include their allowable direct costs and their full allocable share of F&A costs. These facilities' full allocable share of F&A costs is excluded from the negotiated F&A rate.

Types of Rate Structures

The Service Center must propose a rate structure for SPAC - Cost as part of the initial proposal and the biennial review. This rate structure will depend on the type of goods and services the Service Center provides. There are three basic types of Service Center operations:

- Retail Operations
- Suppliers of Standardized Services
- Suppliers of Customized Services

Although most services should be able to be costed according to one of the above models, if these models do not work for your service, contact SPAC-Cost for assistance.

Retail Operations

Retail operations resell goods to internal users. Since the cost of each product identified for sale is known, the rate (i.e., sales price) is determined by adding a markup to the cost of the item. The markup should be set to recover no more than the cost of providing the goods and services over a reasonable period.

All internal users, defined by paying with a UMD account number, must be charged the same rate(s) for the same level of service or products under the same circumstances. If special circumstances exist due to sponsor requirements, please contact SPAC-cost.

- Volume discounts or unique pricing mechanisms must be preapproved and equally available to all users who meet the eligibility criteria.
- Internal user rates must be based upon actual costs.
- Rates of one service **cannot** be used to subsidize rates of another unrelated service.
- Should Program Income issues arise, contact SPAC. (Program Income is defined in 2 CFR 200.307)

The formula to calculate the markup based on the cost of goods sold:

$$\text{Markup \%} = \text{Estimated Operating Costs} / \text{Estimated Cost of Goods Sold}$$

The formula to calculate the markup based on the number of units sold:

$$\text{Markup per unit} = \text{Estimated Operating Costs} / \text{Estimated Number of Units Sold}$$

See Appendix B for an example of a rate schedule for retail operations.

Supplier of Standardized Services

Standardized services do not vary significantly from customer to customer. An example may be the scan done on an FMRI machine or a simple laboratory test. These services are more equitably and practically charged out based on a unit of service basis. In the previous examples, a unit of service would be a month of telephone service or a laboratory test. The basic formula to calculate rates for standardized services is:

$$\text{Rate per billing unit} = \text{Estimated Operating Costs} / \text{Estimated \# of units to be provided}$$

See Appendix C for an example of a rate schedule for standardized services.

Supplier of Customized Services (Billed Through Time and Materials)

Some services require varying levels of time (personnel or machine) and supplies to supply the service to different users. An example of this may be a machine shop that fabricates unique pieces of machinery for various users or provides repair services. Another example may be a highly complex laboratory test requiring varying configurations for each client.

These services are more equitably and practically charged based on a time and materials basis. In this type of billing, materials and supplies that can be identified for each job are charged to that job. The cost of personnel and other expenses that cannot be identified for a specific job is recovered through an hourly rate for personnel or machine time. See Appendix D for an example of a time and materials rate schedule.

Other

If the service your Service Center is providing does not fall into one of the categories mentioned earlier, please work with SPAC-Cost to develop an appropriate rate schedule.

Establishment of Billing Rates

Service Centers bill based on actual usage. The first step in establishing billing rates is determining the basis for the billings (billing unit). For example, a Service Center could be billed per test, per hour of use of a piece of equipment, and labor hour. A Service Center should choose a billing unit that directly relates to the service's cost. It should also be practical to track this billing unit to create bills and support rate calculations. The billing rate may be rounded to allow for easier billing calculations.

Service Center billing rates per billing unit should be set at a level designed to recover no more

than the cost of providing the service. Therefore, the rate calculation estimates the center's operating expenses, adjusted for any prior surpluses or deficits and subsidies, divided by an estimate of the number of billing units. **Basing rates on prevailing market rates, rates used at other institutions, or any other method not based on projected costs and volumes is not allowed.**

Estimating Operating Costs

For established Service Centers with a history of costs, operating cost estimates should be based on historical costs adjusted for inflation and expected growth or decline. Service Centers without a history should build an operating cost budget based on anticipated needs. The development of operating cost budgets should follow the policies outlined in this manual's "Collection of Costs" sections.

Estimating Usage (Volume)

For established Service Centers with a history of operations, usage estimates should be based on the Service Center’s previous experience adjusted for expected growth or decline. Significant projected increases or decreases in volumes should be explained.

Service Centers without a significant history on which to base usage projections should document their assumptions in determining the projected volume and include those assumptions in the rate proposal submitted to Cost Analysis. A common method would be to determine the maximum capacity of the Service Center and reduce that maximum volume for known non-productive time. For example:

A consulting cost center that was recently established charges users by the hour. They have one employee at 1.00 FTE working in the center. Available hours are used to calculate the usage in the following example:

| | | |
|--|--------------|--|
| Maximum hours available | 2080 | <i>40 hours/week x 52 weeks</i> |
| Less: Holidays | (88) | <i>11 days paid x 8 hours/day</i> |
| Less: Vacation & Sick | <u>(120)</u> | <i>10 hours/month x 12 months</i> |
| Available Hours | 1872 | |
| Less: Non-productive hours (downtime for machine setup) | <u>(390)</u> | <i>1.5 hrs./day x 5 days/wk. x 52 wks.</i> |
| Expected Usage | 1482 hours | |

Considering Prior Years’ Cumulative Surpluses/Deficits

After estimating your operating costs for the next year, the previous year's cumulative surplus or deficit needs to be considered, if you are updating the service center rates. Since Service Centers are designed to recover their costs over the long term, future rates should be increased to cover deficits, and future rates should be decreased to account for previous surpluses. After estimating operating costs, prior deficits should be added to operating expenses, and prior surpluses should be deducted from operating costs before calculating rates.

Service Centers can retain a surplus balance up to the value of 60 days of expenses to allow for

fluctuations in revenues and expenses that will happen in the ordinary course of business. Therefore, if the surplus balance in the Service Center account is less than the value of 60 days of expenses, no offset needs to be made in the rate calculation.

Large deficits may not be able to be absorbed by future rate increases. For the appropriate treatment of this situation, please see the section “Review Procedures”. If you have a large deficit that you need to recover over multiple years, please contact SPAC-Cost for more guidance.

Subsidies

Rate schedules that contain planned subsidies should quantify the expected subsidy. An example of the subsidy calculation is shown below.

$$\text{Expected subsidy} = \text{Expected Volume} \times (\text{Calculated Rate} - \text{Billing Rate}).$$

Rate packages with planned subsidies need to identify a non-sponsored funding source to fund the deficit created by the subsidy and include a letter of approval or pre-existing documents for the funding arrangement.

Final Rate Determination

If it is determined that the actual rate calculation is too high and cannot be supported by the current customer base, the Service Center may set a lower rate. This means that the Service Center is projected to run a deficit, and the operating unit must adjust their rates higher or clear the deficit from departmental funds. **Annual rate proposals submitted with the expectation of running a deficit must be approved by the unit head (or department chair) and the Dean’s Office.** For more information regarding the treatment of this situation, please see the section “Treatment of Deficits”.

Setting a rate higher than the calculated rate to build up a “reserve” is not appropriate. Rates can only be set to cover the expected service costs.

Setting Animal Care Facilities Rates

Per diem and service rates for centralized animal research facilities will be established under the direction of the Department of Laboratory Animal Resources (DLAR), following industry and University policies and guidelines. Please contact DLAR for information regarding animal care rates.

Providing Multiple, Related Services

Service Centers may provide a single service or several related services. Related services have similar customers, use similar techniques, or use similar equipment. When several services are performed, an allocation of the costs of the Service Center to the various services is required to calculate rates for each service. For each line of cost, there should be an allocation methodology employed to allocate that cost to the services with which it is associated. For example, salaries and benefits may be distributed based on an estimate of the percentage of effort each person will spend providing each service. Some costs may be identified explicitly to one particular service, and other costs may have more than one service. Once all estimated operating costs are allocated to each service, a separate rate calculation should be performed for each service.

It is not appropriate to subsidize one service with the revenues from another service. All services

should be priced according to their costs.

Unrelated services that do not share significant costs should be set up as separate Service Centers.

See Appendix E for an example of a rate schedule for a Service Center providing multiple related services.

Rate Approval and Review Process

A rate calculation package should be sent to SPAC Cost Team for approval on a biennial basis. This package should contain a rate calculation sheet and a final rate sheet that could be posted to advertise the new rates for the coming year. Rate calculations should be based on the prior fiscal year's (July 1 – June 30) results. SPAC-Cost will review the rate calculation to determine:

- If all costs included in the operating expenses are allowable.
- If prior period surpluses/deficits are taken into consideration.
- If depreciation expense was included in the rate calculation.
- If the projections of operating costs are reasonable.
- If the projections of billing volumes are reasonable.

All rate packages should be submitted to your Dean's Office no later than October 1st in the review year. The approved rate packages should be sent to SPAC-Cost no later than November 1st to allow for review and approval of the rates for the following calendar year. Rate packages should disclose any changes in the operation of the Service Center since the last submission to SPAC-Cost (i.e., billing procedures, new services, new location).

Initial Reviews and Biennial Reviews

SPAC-Cost reviews and approves the rate packages submitted by the Service Centers to establish rates for the coming year and biennially after that. The rate package should contain:

- A rate calculation based on projections for the coming year.
- A narrative describing the projection methodology for each big cost category and sales volume.
- A disclosure of any proposal items that have changed since the previous rate package submission.
- A rate sheet that can be posted to the web to advertise the rate(s).
- A listing of any equipment used by the Service Center that was not purchased on the equipment reserve account.
- A Routed Service Center Biennial Rate Review Sheet.

Service Center administrators and Service Center directors should review their accounts periodically to verify the activity on the account. The SPAC-Cost office will perform biennial reviews of all Service Center accounts.

Treatment of Deficits

A deficit can occur if any one or all of the following occur:

- Actual costs are greater than expected costs.
- Actual billing volumes are less than expected.

- There was a planned subsidy.

Large, ongoing deficits (other than planned subsidies) should be avoided and may indicate that the Service Center is not operating optimally. “Large” is generally quantified as 35% or more of the annual operating expense.

A Service Center may run a deficit balance of up to 60 days' worth of expenses without adjusting their rate schedule. When a Service Center incurs a deficit, the rate schedule should be adjusted to increase future billings to recover the deficit. If the deficit is too large to be funded from the following year's rate increase, the deficit must be funded from a non-sponsored account. Deficits may be funded from surplus balances in the equipment reserve fund. Designated Research Initiative Funds (DRIF) may also be used. Units without appropriate funding sources should work with their College to make funding arrangements.

If a Service Center needs more than one year of billings to recover a deficit, the rate review package should project costs, volumes, and rates for the entire period required to recover the deficit (i.e., deficit recovery plan). SPAC-Cost and the colleges will approve the deficit recovery plans on a case-by-case basis. Sometimes, a temporary funding entry may be needed when the deficit is significant and will not be recovered for several years.

Treatment of Surpluses

A Service Center may run a surplus balance of up to 60 days' worth of expenses without adjusting its rate schedule. When a Service Center incurs a surplus greater than 60 days' worth of costs, either the rate schedule should be adjusted to decrease future billing rates to reduce the surplus, or the subsidy should be adjusted. Surpluses may never be used or transferred to fund costs unrelated to the Service Center. Large surpluses should be avoided by adjusting rates appropriately. If a large surplus develops that cannot be reduced through rate decreases, SPAC-Cost will work with the Service Center to refund previous customers and funding agencies. Deviations from this practice can be discussed with SPAC-Cost.

Mid-Year Rate Changes

If circumstances (sales volumes or costs) change significantly or the estimates used to calculate the rates differ significantly from reality, the rates should be adjusted mid-year. A new rate calculation and rate sheet should be sent to the Dean's Office and then to SPAC - Cost Analysis for approval.

Billing Procedures

Service Center billings should be based on the actual usage of the Service Center at the approved rates. Billings for goods and services provided to UMD-sponsored projects should be charged to those corresponding sponsored project accounts. All other internal university users' billings should be charged to a non-sponsored account. All internal users of a Service Center must be billed at the same approved rates.

Internal billings must occur after the goods and services are provided. Pre-billing internal users are not allowed. The best practice of billing internal users is that all billings should **occur**

monthly. Service Centers having significant revenue are recommended to bill monthly. Untimely billings may result in attempts to charge sponsored agreements that have terminated, making recovery of the Service Center charge unlikely.

Per Uniform Guidance 2 CFR § 200.344(a), sub-recipients must submit closeout reports to the pass-through entity no later than 90 calendar days or an earlier agreed-upon date after the end of the period of performance. This means billings must be done in a timely manner to meet these guidelines. **If billings do not occur 90 days after the service was performed, then the home department of the Service Center will have to absorb these charges,** which may be deemed unallowable per Uniform Guidance.

External users may have surcharges or fees added to their billings. See the section below on sales to external parties for more detail.

Collecting Internal Billing Information

When the customer requests goods or services from the Service Center, the Service Center should have a mechanism to obtain billing information before providing services. For internal customers, this should include the UMD account and appropriate approvals.

Maintaining Supporting Documentation

As the goods and services are provided, a log should be kept by the person supplying the goods or delivering the service. These logs will be used to complete the billings, estimate volumes for future rate calculations, support audit requests, and provide documentation for the billings.

These logs should be retained by the Service Center for a period of at least five years. If the Service Center is under audit from an external source, this period will be extended until the audit is complete. Retention of the data generated because of the services performed is the responsibility of the Service Center.

Billing Entries in UMD – Internal Customers

Internal billings are entered into the accounting system using either an Internal Billing or Service Billing financial document type in KFS. This journal entry should be performed monthly for all goods and services provided in the previous month. This journal entry should be based on the usage logs and previously collected billing information.

Specialized Service Facilities (SSF) will have specific expense account codes established for their billings. Therefore, Specialized Service Facilities (SSF) billings should credit account 0699 – “Internal Services” in the Specialized Service Facilities (SSF) account and debit the customer account in the expense account code established for their operation. UMD p-cards must not be accepted as payment from internal customers.

Sales to External Parties

Sales to external parties have the inherent risk of nonpayment as well as the risk of tax liability from UBIT. Therefore, Service Centers need approval from their Dean’s Office to sell to external parties. Sales to non-federal, external users can be charged at rates more than the approved rate schedule. Charging an external user at a rate less than the approved rate is never appropriate. It is up to each Service Center to determine the surcharge it wishes to assess to its

non-federal external customers. The revenues generated from this surcharge may be used to:

- Offset the F&A costs that won't be otherwise reimbursed by the sponsored projects.
- Offset the costs of billing external customers (credit card fees, billing costs, bad debts).
- Offset the costs charged to internal users.
- Reserve for future equipment purchases.
- Build an operating reserve for the Service Center.

If the surcharge is to fund equipment purchases, these surcharges should be transferred to the reserve account. Surcharges used for other purposes should remain in the Service Center account.

To minimize the risk of bad debt, the Service Center should obtain one of the following before performing the service or delivering the goods:

- A purchase order was issued by the purchasing company.
- Advance payment in the form of cash or check

In order to accept credit card payments, authorization by the University of Maryland Payment Card Industry (PCI) Compliance Operations Committee is required. For more information, visit the PCI Compliance website, <https://finance.umd.edu/payment-card-industry-compliance> , and review UMD's Mandatory Payment Card Procedures.

NOTE: Internal users should never be billed in advance or charged a surcharge.

Recording Cash and Credit Card Payments

Cash or checks received for payment in the service center should be deposited through the University's Student Financial Services Cashier's Office as soon as possible. A Service Center that wants to accept credit card payments must obtain authorization from UMD's PCI Compliance Operations Committee at pcicompliance@umd.edu. All deposits should be coded to the Service Center's account in the object code 0599 Service Revenue from Non-University Users.

Unrelated Business Income Tax (UBIT) Issues

UMD is a tax-exempt organization. If a tax-exempt organization regularly carries on a trade or business that is not substantially related to its exempt purpose, the organization is subject to tax on its income from that unrelated trade or business. If there is no profit from the activity, the University is still subject to unrelated business income tax reporting even though there may be no tax expense.

Therefore, a Service Center must notify the Controller's office (controller@umd.edu) before engaging in external sales or as soon as reasonably practicable. The Controller's office will determine if the services being provided are tax-exempt.

Sales Tax Issues

The sale of goods to external parties could also trigger the need to collect state sales tax. If a Service Center provides goods as opposed to services, the Service Center should work with

the Controller's office before selling to external parties.

External Service Center Sales vs. Sponsored Agreement

Normal Service Center sales to external parties do not require a contract approved by the Office of Research Administration (ORA). Normal Service Center sales include the performance of routine services or services that are customized based on customer requests. **However formal sponsored agreement, approved by ORA, should be negotiated if:**

- UMD faculty or staff is involved in the design of the tests being performed
- UMD faculty or staff will provide an analysis of the results*
- If UMD wants to retain ownership of the data
- If the work involves classified information
- If UMD wants to retain publication rights
- If there are potential intellectual property issues

*The exception to this requirement is when elementary, basic analyses are conducted for quality control purposes to ensure accuracy and usability of the raw data produced by a Service Center and is part of the basic services provided. This type of analysis does not involve detailed studies nor draw conclusions from the generated raw data. For example, in the case of DNA sequencing, raw data are analyzed to ensure accuracy. The same is true when microarray data are analyzed for quality control measures.

Intellectual Property Use in a Service Center

Service Centers do not have automatic rights to practice Intellectual Property (IP) owned by a third party. Intellectual Property includes a patentable invention, proprietary material, copyrightable subject matter, trademarks, or trade secrets. It also includes works of art and inventions or creations that might normally be developed on a proprietary basis. Please contact [UM Ventures](#) if you have questions.

Intellectual Property should be treated per the University of Maryland policy on Intellectual Property. Issues relating to incoming IP should be handled with the Office of General Counsel or the Office of Research Administration; outgoing IP should be handled with UM Ventures.

Inventories

Inventories of Goods for Resale

According to USM policy for Capitalization and Inventory Control (VIII-1.10), any functional unit involved in resale, either within the department or to other departments, institutions, or individuals, is required to maintain an inventory system appropriate to the value of items held for resale. The units involved in resale and the appropriate inventory system are to be determined by the institution.

Service Center operations that keep goods on hand should maintain an inventory system that will

allow them to know the purchase price of the item they are reselling to apply the markup to the appropriate base. The system should also allow them to value their inventory on hand. In order to minimize the risks of loss, theft, and obsolescence, inventory balances should be kept at a minimum.

The University requires resale service centers to perform a physical inventory of the goods for resale. Service centers must report the value of inventories to the Controller's office - General Accounting at the end of each fiscal year (by July 5th of the calendar year).

Supply Inventories

In the course of business, it may be necessary for the Service Center to maintain an inventory of supplies. In order to minimize the risks of loss, theft, and obsolescence, inventory balances should be kept at a minimum.

Designated Non-Capital Assets (DNCA)

Designated non-capital assets (DNCA) are devices that store and process data with a purchase price under \$5,000. DNCAs are at a higher risk for theft; therefore, these guidelines are established for loss prevention and data security. Purchases of any DNCA must follow these guidelines, even if the acquisition cost is minimal.

DNCA examples include the following:

- Computers
- Laptops
- PCI machines
- Tablets
- Cell phones

Asset information must be kept electronically by each unit. Spreadsheets are acceptable, with proper permissions assigned to maintain the integrity of the records.

The required data fields for all DNCAs are:

- Description
- Serial Number
- Make
- Model number
- DNCA tag numbers/ Asset Tag ID
- Location
- Responsible person
- Date in service
- Purchasing method (i.e., Shell shop, Terrapin Tech, P-card)

Closing Service Centers

When a Service Center's operation ends, steps must be taken to close the accounts in UMD, address account balances (fund deficits, refund surpluses), and dispose of equipment. Service Center administrators should work with SPAC-Cost and their College Budget Officer to close a Service Center. Employment issues due to closing a Service Center must be addressed with University Human Resources and Faculty Affairs.

Appendix A: Example of a Service Center Proposal

Proposal for the Establishment of ABC Testing Service Center

Description of Services to Be Provided

This Service Center will perform ABC tests on samples. As ABC tests are relatively standard across sample types, this service will be billed out per ABC test. Programmatically, this Service Center will be managed by the Director, Dr. Smith. There will also be oversight from the Department Chair, Dr. Jones.

Market Analysis

This service is currently available locally from two outside labs. Currently, their rates for this service are as follows:

Quality Testing Services \$360 per
test Superior Testing Services \$340 per
test

We believe that our current project price of \$350 per test is comparable with these external vendors and that having these testing services available on campus will significantly benefit the researchers on campus. Also, if volumes increase as projected, our prices will be less than what is available externally.

5-Year Service Volume Projections

We estimate that we will perform tests on 700 samples in the first year of operation. Based on the growth in this type of research, we expect that the demand for ABC tests will grow at a rate of 10% per year. A listing of some of our significant potential customers is as follows:

| Principal Investigator | Award | Awarded/Pending | Est. # of Tests |
|------------------------|-------------------------|------------------------|-----------------|
| Dr. Barry | NIH Program Project | Awarded | 200 |
| Dr. Colin | NHLBI R01 | Pending | 50 |
| Dr. Johnson | Various Clinical Trials | Awarded and Pending | 75 |
| Dr. Smith | Various R01s | Pending | 100 |
| Dr. Miller | Intramural Award | Awarded | 15 |

5-Year Cost Projections

Salaries and Benefits

To run 700+ ABC tests a year, we will need 1.5 FTEs of technicians. These technicians will run all 700+ tests and perform essential maintenance and quality control on the testing equipment. They will also maintain the activity logs for the Service Center.

| | |
|---|--------------|
| Total annual hours (52 weeks X 40 hours) | 2,080 |
| Less: Vacation, Sick, Holidays, personal days (54 days X 8 hours) | <u>(432)</u> |
| Total Working Hours | 1,648 |
| X 1.5 FTEs | <u>X 2</u> |
| Total Working Hours | 3,296 |
| Less: Maintenance hours (8 hours per week) | <u>(416)</u> |
| Total billable hours | 2,880 |

Since each test takes between 3-4 hours, it is estimated that 1.5 technicians could run 720-960 tests per year. These technicians earn approximately \$50,000 per year.

Dr. Smith will supervise these technicians. Dr. Smith will spend approximately 10% of her UMD effort supervising the ABC test lab. Dr. Smith earns \$150,000 per year.

Mr. Brown will perform all the purchasing, billing, and other administrative tasks related to this Service Center. He will spend 25% of his time performing these functions for the Service Center. Mr. Brown earns \$75,000 per year

All fringes are estimated at 26% per year. All salaries and fringes are projected to grow at 3% per year.

Supplies

Each test requires approximately \$20 of reagents. There are also other supplies (cleaning supplies, test tubes, swabs, etc.) that cannot be attributed directly to each test. These are estimated at \$500 a month.

Telephone and Postage

Telephone and postage are estimated at \$100 a month.

Travel

To keep up with the latest technologies and techniques, the technicians will be sent to training each year.

Maintenance contracts

The annual maintenance contract on the XYZ meter is \$25,000 per year. This will cover any repairs as well as a yearly maintenance service.

Other Initial Start-Up Costs

To initially set up the ABC test lab, we will need to purchase several pieces of non-capitalizable equipment. This is detailed as follows:

| | |
|-------------------------------|------------|
| Lab equipment (various parts) | \$15,000 |
| Computers (2) | 4,000 |
| Printers (2) | 1,000 |
| Telephone | <u>200</u> |
| | \$20,200 |

Also, it will take approximately 2 months to set up the lab (install and calibrate equipment, for example). During this time, no tests will be able to be performed.

Space Needs

This Service Center will exist in two labs in the Broadway Research Building currently assigned to our department, rooms 253 and 254.

Description of Billing Procedures

All potential customers will complete an order form describing the parameters of the tests that need to be performed and the number of samples to be tested. This form will also indicate the account that will pay for the test. See attached order form. Dr. Smith will review all orders for completeness and schedule the tests to be performed. The technicians will keep detailed logs of the samples they worked on and the order to which the samples belonged. Every month, Mr. Brown will reconcile the order forms completed with the activity log and bill the account provided on the order form using an online journal voucher.

Equipment Listing

Equipment Purchases:

| Item | FY of Purchase | Estimated Cost |
|-------------|----------------|----------------|
| XYZ meter | 2011 | 250,000 |
| LMN Machine | 2011 | 50,000 |
| New Freezer | 2013 | 5,000 |

Existing Equipment:

| Description | Tag Number | Original Funding Source |
|-------------|------------|-------------------------|
| Old Freezer | 00009586 | Departmental Funds |

ABC Testing Service Center
5-Year Projections of Volumes and Costs with Rate Calculation

| | 2011 | 2012 | 2013 | 2014 | 2015 | Total |
|------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|
| ABC Test Volume | 496 | 650 | 717 | 793 | 876 | 3,532 |
| Salaries | | | | | | - |
| 1.5 Technicians | 100,000 | 103,000 | 106,090 | 109,273 | 112,551 | 530,914 |
| Dr. Smith | 15,000 | 15,450 | 15,914 | 16,391 | 16,883 | 79,637 |
| Mr. Brown | 18,750 | 19,313 | 19,892 | 20,489 | 21,103 | 99,546 |
| Total | 133,750 | 137,763 | 141,895 | 146,152 | 150,537 | 710,097 |
| Fringes | 34,775 | 35,818 | 36,893 | 38,000 | 39,140 | 184,625 |
| Supplies | | | | | | |
| Reagents | 11,667 | 15,400 | 16,940 | 18,634 | 20,497 | 83,138 |
| Other Supplies | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 30,000 |
| Telephone and Postage | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 6,000 |
| Travel | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 15,000 |
| Maintenance Contract | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 125,000 |
| Other Initial Start-up Costs | 20,200 | | | | | 20,200 |
| Total Operating Costs | 235,592 | 224,181 | 230,928 | 237,986 | 245,374 | 1,174,061 |
| Calculated Cost per test | 475 | 345 | 322 | 300 | 280 | |
| Charging Rates | 350 | 350 | 350 | 350 | 325 | |
| Projected Revenues | 204,167 | 269,500 | 296,450 | 326,095 | 333,083 | 1,429,294 |
| Surplus/(Deficit) | (72,675) | 4,069 | 23,772 | 46,359 | 45,959 | 47,484 |
| Cumulative Surplus/(Deficit) | (72,675) | (68,606) | (44,834) | 1,525 | 47,484 | |

**ABC Testing Service Center
Summary of Start-up Costs and Funding Needs**

| | 2011 | 2012 | 2013 | 2014 | 2015 | Total |
|---|----------------|-----------------|-----------------|-------------|-------------|--------------|
| Operating Activity: | | | | | | |
| Annual Operating Surplus/(Deficit) | (72,675) | 4,069 | 23,772 | 46,359 | 45,959 | 47,484 |
| Cumulative Surplus/(Deficit) | (72,675) | (68,606) | (44,834) | 1,525 | 47,484 | |
| Equipment Reserve Account* Activity: | | | | | | |
| Equipment Purchases | | | | | | |
| XYZ meter | (250,000) | | | | | (250,000) |
| LMN machine | (50,000) | | | | | (50,000) |
| Freezer | | | (5,000) | | | (5,000) |
| Depreciation Recoveries | | | | | | |
| XYZ meter | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 156,250 |
| LMN machine | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 50,000 |
| Freezer | | | 500 | 500 | 500 | 1,500 |
| Funding Inflows/(Outflows) | <u>331,425</u> | <u>(45,319)</u> | <u>(27,356)</u> | | | |
| Annual Reserve Surplus/(Deficit) | 72,675 | (4,069) | 14,394 | 41,750 | 41,750 | 207,750 |
| Cumulative Surplus/Deficit | | 68,606 | 83,000 | 124,750 | 166,500 | 374,250 |

*NOTE: This is only an example of “start up cost and funding needs” only. SPAC-Cost must understand how the equipment reserve account will be funded. And best practice is to re-capture depreciation expenses through the university’s approved F&A rate and not in the service center’s billing rate..

Appendix B: Retail Operation Markup Percentage Calculation Example

This small stockroom operation keeps a small inventory of gasses, chemicals, and other lab supplies on hand for resale to researchers on campus.

Annual Budget

| | | |
|--------------------------|----------------|-----|
| Salaries | | |
| Joe Stockclerk | 20,000 | |
| Mary Sue Billing | 35,000 | |
| Benefits | 7,500 | |
| Packing Supplies | 15,000 | |
| Telephone | <u>300</u> | |
| Total Operating Budget | 77,800 | (A) |
| Cost of Goods to be Sold | <u>750,000</u> | (B) |
| Total Costs | 827,800 | |
| Markup % (A/B)* | 10.4% | |
| Prior Year Surplus | 47,000 | |

Calculation of Acceptable Surplus Balance:

| | |
|-----------------|---------|
| Annual Expenses | 827,800 |
| 90 days Expense | 206,950 |

Since \$206,950 is greater than \$47,000, no prior year's surplus adjustment is necessary.

*NOTE: The cost analyst will need a justification for the markup percentage. Also, retail operations may sell to external parties, but they must report all activity to General Accounting. Because doing so may violate the University's purchasing contracts with external vendors. Also, this activity will generate unrelated business income and possibly the need to apply sales tax. **Departments must inform General Accounting during the annual Unrelated Business Income Tax (UBIT) survey sent to units.** Rates to non-federal external users do not have to be capped at cost but can include any markup necessary for market rates for similar goods or services.

Appendix C: Standard Service Center Rate Calculation Example

This Service Center provides a standard analysis of blood samples for research purposes. Peg Faculty supervises the operation. John Technician runs the tests. Mary Sue Billing prepares the billings and rate calculations for the Service Center.

Annual Budget – 200B

| Salaries | % Effort | Annual Salary | |
|-----------------------------|-------------|---------------|------------------|
| Peg Faculty | 20% | 130,000 | 26,000 |
| John Technician | 100% | 40,000 | 40,000 |
| Mary Sue Billing | 10% | 45,000 | 4,500 |
| Benefits | | | 12,500 |
| Staff Training Costs | | | 2,500 |
| Supplies | | | <u>40,000</u> |
| Operating Costs | | | 125,500 |
| Prior Year Deficit | | | <u>35,000</u> |
| Total Costs to Recover | | | 160,500 (A) |
| Estimated # of Tests* | | | <u>1,100 (B)</u> |
| Billing Rate per Test (A/B) | | | 146 |

* The number of tests was estimated based on a 10% growth over 200A.

Appendix D: Time and Materials Rate Calculation Example

In this Service Center, Peg Faculty supervises three technicians who work with Principal Investigators to design specialized tests for their research. Each design requires different amounts of technician time and supplies. Supplies that can be easily traced to each test are billed to the customer at cost. All other expenses are billed according to the technician's direct time on the test's design and performance.

Annual Budget

Salaries

| | | | |
|------------------|------|---------|--------|
| Peg Faculty | 15% | 150,000 | 22,500 |
| Joe Technician | 100% | 50,000 | 50,000 |
| Sally Technician | 100% | 50,000 | 50,000 |
| Kim Technician | 100% | 50,000 | 50,000 |
| Mary Sue Billing | 10% | 40,000 | 4,000 |

| | |
|---|-----------------|
| Benefits | 20,000 |
| Supplies | 25,000 |
| Software | 30,000 |
| Equipment Maintenance Contract | <u>15,000</u> |
| Costs to be allocated through an hourly rate | 266,500 |
| Materials billed to customers | <u>100,000</u> |
| Total Cost of Operations | 366,500 |
| Total Costs to be recovered through billable hours: | |
| Costs to be allocated through an hourly rate | 266,500 |
| Reduction of prior years' surplus ** | <u>(23,083)</u> |
| Total Costs to be recovered through billable hours | 243,417 (A) |
| Total Billable Technician Hours* | 4,576 (B) |
| Rate per Billable Hour (A/B) | 53 |

Billable Technician Hours are computed as follows:

| | |
|--|--------------|
| Total Hours (52 wks. x 40 hrs./wks. x 3 techs) | 6,240 |
| Less: Holiday, Sick, Vacation (52 days each) | (1,248) |
| Less: Downtime (8 hrs. per week)* | <u>(416)</u> |
| Total Billable Technician Hours | 4,576 |

* Downtime consists of regular equipment maintenance, quality assurance, etc.

**Calculation of Allowable Surplus Balance:

| | |
|--------------------------------------|----------------|
| Annual expenses | 366,500 |
| Acceptable Surplus (90 days Expense) | 91,625 |
| Actual Fiscal Year End Surplus | <u>114,708</u> |
| Excess Surplus | 23,083 |

Appendix E: Multiple, Related Services Rate Calculation Example

This Service Center provides DNA Testing and Peptide Testing for departments within the University. Peg Faculty supervises the operation. Joe Technician and Kim Technician run both tests. DNA testing requires much more of Dr. Faculty's time to supervise. She estimates that she spends 80% of her time on Service Center activities on DNA testing and 20% on Peptide testing. It is estimated to take 3 hours of a technician's time to run a DNA test and 2 hours to run a peptide test. Each test requires a unique piece of equipment. However, both tests use the centrifuge for approximately an hour per test. Each test has supplies/reagents specific to that type of test, but the entire operation also uses many supplies (cleaning, gloves, test tubes). Mary Sue Billing prepares the billings and rate calculations for the Service Center.

| FTEs | Total Salary | % Effort | SC Salary | | | |
|------------------|--------------|----------|--------------|--|--|--|
| Peg Faculty | 150,000 | 15% | 22,500 | | | |
| Joe Technician | 50,000 | 100% | 50,000 | | | |
| Kim Technician | 50,000 | 100% | 50,000 | | | |
| Mary Sue Billing | 40,000 | 10% | <u>4,000</u> | | | |
| | | | 178,250 | | | |

| | Total | % DNA | DNA Costs | % Peptide | Peptide Costs | |
|------------------------------------|---------------|-------|---------------|-----------|---------------|---|
| Non-Administrative Salaries | | | | | | |
| Peg Faculty | 22,500 | 80% | 18,000 | 20% | 4,500 | A |
| Joe Technician | 50,000 | 34% | 16,767 | 66% | 33,233 | B |
| Kim Technician | <u>50,000</u> | 34% | <u>16,767</u> | 66% | <u>33,233</u> | B |
| <hr/> | | | | | | |
| Total Non-Administrative Salaries | 122,500 | | 51,535 | | 70,965 | |
| Non-Administrative Benefits | | | | | | |
| Peg Faculty | 5,000 | 80% | 4,000 | 20% | 1,000 | A |
| Joe Technician | 5,000 | 34% | 1,677 | 66% | 3,323 | B |
| Kim Technician | <u>5,000</u> | 34% | <u>1,677</u> | 66% | <u>3,323</u> | B |
| <hr/> | | | | | | |
| Total Non-Administrative Benefits | 15,000 | | 7,353 | | 7,647 | |
| Supplies | | | | | | |
| DNA Reagents | 230,000 | | 230,000 | | - | |
| Peptide Reagents | 75,000 | | - | | 75,000 | |
| General Supplies | <u>88,000</u> | 25% | <u>22,150</u> | 75% | <u>65,850</u> | C |
| <hr/> | | | | | | |

| | | | | | |
|---------------------------------|---------------|-----|---------------|-----|-----------------|
| Total Supplies | 393,000 | | 252,150 | | 140,850 |
| Maintenance Contracts | | | | | |
| Peptide Equipment | 30,000 | | - | | 30,000 |
| Centrifuge | <u>25,000</u> | 25% | <u>6,293</u> | 75% | <u>18,707</u> C |
| Total Maintenance Contracts | 55,000 | | 6,293 | | 48,707 |
| Direct Costs | | | | | |
| (the basis for D allocation %s) | 585,500 | 54% | 317,331 | 46% | 268,169 |
| Administrative Costs | | | | | |
| Mary Sue Billing Salary | 4,000 | 54% | 2,161 | 46% | 1,839 D |
| Mary Sue Billing Benefits | <u>5,000</u> | 54% | <u>2,701</u> | 46% | <u>2,299</u> D |
| Total Administrative Costs | 9,000 | | 4,862 | | 4,138 |
| Prior Year Deficit Balance | <u>43,000</u> | 54% | <u>23,230</u> | 46% | <u>19,770</u> D |
| Total Costs to be Recovered | 637,500 | | 345,423 | | 292,077 |
| # Tests | | | | | |
| (the basis for C allocation %s) | 3,675 | 25% | 925 | 75% | 2,750 |
| Rate per Test | | | 373 | | 106 |

A - Allocated based on Peg Faculty's estimation of her time spent on each test.

B - These costs were allocated based on the Technician's Time per test estimate.

Technician Time per Test:

| | | | |
|-----------------------|-------|-------|-------|
| # Tests | 3,675 | 925 | 2,750 |
| Hours per test | | 3 | 2 |
| Technician Hours | 8,275 | 2,775 | 5,500 |
| % of Technician Hours | | 34% | 66% |

C - Allocated based on the % of the # of total tests to be performed

D - Allocated based on the % of Direct Costs allocated to each test.

*NOTE: This is an example meant for illustrative purposes only. It is intended to give examples of possible costs, billing units, and allocation methodologies. Each Service Center is unique and should include all reasonable expenses related to its particular service, allocate those costs according to methods, and choose a billing unit appropriate for the services provided.

Glossary

Allocation Methodology - The basis used to allocate shared costs among services when a Service Center provides multiple related services.

Billable Units - The basis for billing a Service Center. Projected annual billable units are the denominator for the rate calculation. Examples of billing units are machine hours used, per test, or labor hours used.

Account - A grouping of individual UMD chart fields that, in combination with each other, represent a unique funding identifier where accounting/financial activity is recorded.

Copyright - Copyright protection is afforded to art, music, plays, movies, literature, and scholarly works. Copyright is automatic and requires no registration or other formality. Copyrights prevent others from copying the work. Copyright protection extends for the artist's or author's life plus 70 years.

Deficit - The fund balance in an account that occurs when expenditures are greater than revenue and beginning fund balance. Ordinarily, deficits should be incorporated into the next year's rate proposal.

DRIF - Designated Research Initiative Fund – A fund consisting of indirect cost recovery revenue which is dedicated to the development and enhancement of research activities.

Equipment - Any item not permanently affixed to buildings with a useful life greater than one year and a unit cost of \$5,000 or more, except for items predominantly composed of glass, rubber, cloth, and equipment held for resale.

Equipment Reserve Account - A companion UMD account to the Service Center account. Original equipment purchases are made and funded in the equipment reserve account. Depreciation journal entries credit the equipment reserve account and debit the Service Center account. The use of this account is for particular situations and must be approved by SPAC-Cost.

External Customer - Any customer not using a UMD account for payment. This includes other University of Maryland campuses, on-campus affiliates (e.g., University of Maryland Medical System, University Physicians, and Veterans Administration), students, and non-University residents of the BioPark.

Infringement - Infringement means the encroachment, breach, or violation of a right, law, regulation, or contract. The term is most frequently used in reference to the invasion of rights secured by copyright, patent, or trademark. The unauthorized manufacture, sale, or distribution of an item protected by copyright, patent, or trademark constitutes an infringement.

Internal Customer - Any customer who pays with a UMD account.

Instrumentation Grant - Externally funded grant that provides investigators the means to purchase or upgrade commercially available instruments.

Journal Entry - An UMD transaction that allows for the transfer of revenues or costs between accounts.

Patents - Patents give an inventor(s) the exclusive right to practice their invention. Others cannot freely practice a patented invention without permission from the patentee. Patents cover devices, formulas, tools, methods, and compounds, all of which must have a defined utility. A patent term extends for 20 years.

Retail Inventory - Merchandise on hand that is held for resale.

Sales Tax - State tax on sales to external users for sales of "tangible personal property."

Surcharge - An additional amount charged to external users in excess of the internal rate.

Supply Inventory - Supplies on hand awaiting use in the Service Center's operations

Subsidy - The funding from a non-sponsored source to cover the deficit created when a Service Center chooses to use a billing rate that will not cover normal operating costs.

Surplus - The fund balance of an account that occurs when revenues are greater than expenditures and the beginning fund balances. Ordinarily, surpluses should be factored into the next year's rate agreement.

Service Center - An organizational unit or activity that provides goods and services primarily to internal university operations and secondarily to external users. The revenues from these services' annual billings are between \$100,000 and \$1,000,000.

Service Center Director - The person responsible for the overall operation of the Service Center, both programmatically and administratively.

Specialized Service Facility - An organizational unit or activity that provides goods and services primarily to internal university operations and secondarily to external users and charges the users for these services whose annual billings are > \$1,000,000.

Start-up Costs – Costs incurred while establishing a Service Center will be recovered through future billings.

Trademark – A trademark is a word, phrase, or logo that identifies a product, a service, or the person or company that offers a product or service to the public. To prevent others from using a trademark, registration with the USPTO must be made. Trademark protection can be extended indefinitely, provided the trademark is used, and the registration is renewed every five years.

Unallowable Costs – Factors affecting allowability of costs are described in Uniform Guidance Subpart E and more specifically § 200.403. Expenses such as internally charged interest, alcoholic beverages, entertainment, unallowable travel, and other unallowable expenses listed in Subpart E cannot be included in user rates or charged to federal or federal pass-through awards.

Unrelated Business Income Tax (UBIT) - A tax to which the University may be subject to if a Service Center regularly carries on a trade or business with external customers that are not substantially related to the University's exempt purposes of education, patient care, or research.