

21 and 22 Account User's Guide

The purpose of this user's guide is to provide guidance to campus on setting up new 21 (Recharge) and 22 (General Operations) accounts. Your campus service representative can answer any questions you might have or provide further assistance if required.

Definitions:

Recharge Center (21): The purpose of the Recharge account is to provide goods or services to multiple users, both internal and external, which are in alignment with the mission of Colorado State University. Recharge Centers should be revenue neutral, meaning the revenues should not exceed the costs of the center. The user fees charged for use or services provided by the center, must be based on actual costs. The charges can only be for direct costs. Revenue in these accounts should be coded to internal revenue object codes (48xx-49xx). Up to a two-month working capital balance is allowed within the account. Any surplus/(deficits) should be taken into consideration in future rates. All deficits are the responsibility of the department and can be subsidized by another account. If the recharge account needs to purchase equipment that will put the account in deficit, the Controller can approve the account to be in deficit over the life of the equipment as the account will recoup the cost through its billing rates. Contact your Campus Services representative for more information.

General Operations (22): The General Operation accounts are for goods and services provided to the external community that are created as a result of operations of a self-supporting nature and are substantially related to the University's mission of instruction, research and public service. General Operations accounts can never charge a sponsored (53) account. This type of account can have both direct and indirect costs. Revenue in these accounts should be coded to external revenue object codes (43xx-44xx). Deficits should not exist, but if one does, it should be covered by fiscal year end. A deficit can be subsidized by another account, but the subsidy must first be approved by Campus Services. A deficit that is not planned to be covered at fiscal year end needs Controller approval. Contact your Campus Services representative for more information.

New Account Requests

Before submitting the business plan, billing rates, three-year projection and fund budget request, the department should first assess the viability of the activity. There must be reasonable assurance that the internal or external business venture will generate the necessary revenue required to cover the operating costs. The anticipated revenue should also be \$5,000 or more.

New account requests need to include a business plan, billing rates, three-year projection and a fund budget request, with appropriate signatures. If a 22 GENOP account is being created, also include a market analysis comparing billing rates to external competition within the area. Once all documentation is approved by the department, the documents should be emailed to Campus Services for approval. New Recharge Accounts need to be approved by Campus Services, the Controller and in cases where 53 accounts will be billed, Sponsored Programs. New General Operations Accounts need to be approved by Campus Services, the Controller and Tax Manager. Campus Services will route the document to the appropriate approvers based on the account type requested.

After final approval, Campus Services will send an email to the requestor to inform them the account has been approved and the Kualu Account document can be created. The business plan, billing rates, three year projection, fund budget request and approval email need to be attached to the Kualu Account document. All documentation should be attached in PDF format.

Review of 21 and 22 Accounts

Campus Services reviews the balances in 21 and 22 accounts on a monthly basis to ensure the account is not in deficit and to ensure a 21 account does not have a surplus larger than 2 months' working capital. If the account is in deficit or has a surplus larger than 2 months, Campus Services will contact the Fiscal Officer on the account for an explanation on the deficit or surplus. If an account deficit is substantial or recurring, a revised business plan and re-approval may be required.

Any 21 account that bills 53 accounts (Sponsored Accounts), is subject to a review at least every 5 years. This review is completed by Campus Services in conjunction with Sponsored Programs. During this review, the invoices are reviewed and compared to the business plan and billing rates. If an invoice does not match the business plan and billing rates, this will result in a finding requiring a response and correction as necessary. Depending on the severity of the finding, Campus Services will conduct the 21 billing 53 review the following year, or within 2 years instead of 5 years. If during the next review the finding is not resolved, a meeting will be scheduled with the Department, Business and Financial Services and Sponsored Programs to discuss solutions to resolve the issue. If recommendations are made, the account will be reviewed the following year, and if the corrections are not made, further action will be considered. To avoid a finding make sure to send business plans and billing rates to Campus Services for review and approval.

Business Plan

A business plan offers a means of communicating plans to others and provides the basis for cost recovery. The process of putting a plan together encourages the fiscal officer to take an objective and critical look at the business as a whole. A business plan becomes an operating tool to help manage the business and make it successful.

The business plan is in a narrative format and serves as a foundation document for reference as the business evolves. It provides a guide for monitoring how well the business is meeting its original objectives and helps identify any variances caused by changes in the business activity. A business plan should include five general categories: General Description, Market Analysis, Revenue and Expense Analysis, Additional Considerations, Billing Rate Calculation, and Three Year Projection.

A. General Description

This section should briefly describe the business activities by answering the following questions:

1. What is the service/product?
2. Who will use it (internal or external customers)?
3. What other products do you plan to develop?
4. How does this activity relate to the mission of the university, college, or department?
5. Who will oversee the operation (include position title)?

6. What assumptions are you making about the economy or other related factors that may impact your projections? Identifying and monitoring these factors will help anticipate needed changes in operations.
7. If this account is in deficit, what account would cover the shortfall?

B. Market Analysis

This section should include a comprehensive review of the target market and should assess whether the product/service demand warrants establishing a new activity or continuing an existing activity. Although this review is subjective, billings to customers must ultimately cover expenses incurred. Therefore, it is imperative to determine whether sufficient sales/revenue potential exists to ensure the ongoing viability of the activity.

For a 22 account, rates must be calculated to assure that they are fully costed (direct and indirect costs), not subsidized by general funds. Colorado's statute on competition with private enterprise (C.R.S. §24-113-104) requires that:

- Any good or service offered to anyone other than students, faculty, staff and invited guests of the University, if offered through a competitive bidding process, must offer a valuable educational or research experience for students as a part of their education or fulfill the public service mission of the institution; and
- Any bids by CSU shall include all direct and indirect costs of providing the good or service unless the agency receiving the bid requires all bidders to use a specific procedure or formula. Indirect costs can only relate to 22 accounts.

There are exceptions to these requirements for "facilities for recreational, cultural, and athletic events or facilities for food services and sales." Contact the Office of Policy and Compliance or the Office of General Counsel for assistance in applying these rules.

Analyze your market by answering the following questions:

1. What is the current client base?
2. How do you reach clients?
 - a. If internal clients (21 accounts), what free methods will be used to reach clients (referrals, emails, etc.)?
 - b. If external clients (22 accounts), will there be advertising expenses? What other methods will be used to reach clients (referrals, emails, etc.)?
3. For internal clients (21 accounts), what is the approximate number of accounts to be served? Will it serve 53 accounts?
4. How does your product/service meet the market need?
5. Could changes in your product/service better meet the market needs?
6. For external clients (22 accounts), who is your competition? How do your charges compare with the competition? A competition analysis should be included.
7. Is this cost-prohibitive (does it exceed revenue)?
 - a. If yes, you may want to reevaluate continuing the activity
 - b. If you believe this activity is imperative to the mission of the University and must continue, even if cost-prohibitive, explain your justification and reasons for this

- c. Explain any current subsidizing agreements that this account has and identify the accounts providing funding
- 8. Are there any patent or license issues related to the activity?
If this account is in deficit, what account would subsidize it? A 21 account cannot subsidize another 21 account or a 22 account.

C. Revenue and Expense Analysis

Identify all revenues including internal, external and other state agency customers. Identify all expenses required to deliver goods and services. These expenses include direct labor and operating expenses required to produce the goods or services. These revenues and expenses will be itemized on the Fund Budget Request form.

The following questions may help develop the revenue and expense analysis:

- Does this activity provide services/products for both internal and external customers? If yes, which of the following three methods is used to record revenues and expenses:
 - Operate out of a 21 account and bill the 22 account. Please identify the 21 or 22 account.
 - Split revenues and expenses between 21 and 22 accounts based on proportional sales that are internal versus external.
 - Operate out of one account where either external revenues in 21 accounts or internal revenues in 22 accounts are less than \$5,000. 22 accounts cannot bill 53 accounts, even if the amount is under \$5,000, to bill a 53 account a 21 account must be created or the 53 not charged
- Are the revenues and expenses evenly distributed over the fiscal year (July-June)?
 - If no, please explain (e.g., costs accumulate on a monthly basis, but sales occur only in March)
- Does this account generate billings to external customers?
 - If yes, do you use the Banner Commercial Accounts Receivable System?
 - If not using Banner, do you have an in-house system to maintain records of these billings?
 - Are you recording these as receivables on Quali Financial System? How often (i.e. monthly or quarterly)? At a minimum, book your receivables on a quarterly basis.
- Does this activity use equipment?
 - If yes, was the equipment purchased from this account?
 - If no, what account purchased the equipment?
 - Is the cost of the equipment included in the billing rate?
 - NOTE: For 21 accounts, equipment purchase costs (depreciation) cannot be included in the billing rate unless the equipment was purchased from the 21 account. When equipment is fully depreciated, depreciation expense should be eliminated from the billing rate.
 - Contact Property Accounting to ensure the proper accounting is done for the equipment (if greater than \$5,000)
- Does this activity have inventory?
 - If so, how often is the inventory counted to verify accuracy of records?

D. Additional Considerations

The following questions may be helpful in developing this section:

- Do the activities produce or use hazardous materials? If so, Environmental Health Services should also review your Business Plan. Include a description of any hazardous waste that will be produced, and any hazardous materials to be used?

Billing Rates

Billing rates are calculated to ensure cost recovery. Review billing rates annually and adjust for any changes. Updates to the billing rates need to be sent to Campus Services for review and approval prior to using. Billing rates are developed using one-year financial and operating data. Normally this period is the University's fiscal year (July 1 – June 30), but the activity may require another appropriate period. When considering another base period, please explain why the alternative is necessary. It is the fiscal officer's responsibility to retain schedules of current and past billing rate calculations. Billing rates should also include more than just a list of numbers. It needs to be evident how those numbers were calculated.

For example, if an employee working on the account has a salary of \$50,000 and we want to get their hourly rate to charge we would divide it by 2,080 hours. That gives us \$24.04 an hour. So, in the billing rate calculation we would show the salary and how we got to the hourly rate as stated in this example.

A department may choose to update billing rates annually using percentage increases (e.g., billing rates are increasing by 3%). This approach should only be used when an increase is minor (0%-3%). Justification will be required on how the percentage was calculated and should consider the below criteria:

- Salary changes
- Expected/proposed fringe benefit rate changes
- Market analysis and how it will impact growth
- Other factors that may impact expenses

Identification and recording of all applicable expenses incurred by the activity are the responsibility of the fiscal officer. For billing rate calculation purposes, expenses are categorized as either direct costs or indirect costs. Direct costs are those expenses that can be identified and charged directly to the job, such as labor plus employee fringe, equipment, and/or materials used directly on the job. Indirect costs are those expenses that cannot be identified with a specific job, and therefore, are prorated to all jobs. Indirect costs are not allowable on a 21 account. All expenses charged for the activity need to be included either as direct or indirect costs.

KFS can be used to calculate updated billing rates. KFS allows a user to look at the account on a summary, object code, or transaction level detail. This should be included to support the rate. If this is a new account request with no history, details of the numbers that make up the billing rates are required as support.

A. General Billing Rate Calculation and Explanation

The following general format is recommended for determining the amount billed to customers. Descriptions of each component follow the format example. Detail behind each line item should be provided in the calculation (e.g., who makes up the direct labor along with the hourly cost, what materials are involved, etc.).

Direct Labor ((hours x rate) + total fringe)	
Employee A	\$xx
Employee B	\$xx
Materials (quantity x unit cost)	
Material xxx	\$xx
Material xxx	\$xx
Material xxx	\$xx
Other Direct Costs (i.e. postage)	
Postage	\$xx
Other Direct Item xxx	\$xx
Total Direct Costs	\$xx
Indirect Costs (22 accounts only)	
Indirect Item xxx	\$xx
Indirect Item xxx	\$xx
Total Cost to be Billed	<u>\$xx</u>

Component Descriptions:

Direct Labor – Labor costs for workers directly involved in the production of products or performance of services. Cost of applicable fringe benefit rates is included. The 2 workers involved have a salary of \$xx and \$xx, and this was divided by 2080 hours (total hours of full-time employee) less holidays and anticipated vacation/sick leave to get their hourly rates. This was then multiplied by hours worked.

Direct Material – Raw materials that can be specifically identified with this product or service. Materials are charged at actual cost. Costs of materials may be treated as indirect costs when the value is small in relation to overall account operation. If this is a lump sum for materials, then another document should also be attached showing the materials that make up the amount, their unit cost and their quantity. It should agree with the materials number.

Other Direct Costs – Other Direct Costs include items not listed in the other sections. A line item should be added for each additional direct cost. In the example above, we put postage as an additional direct cost.

Total Direct Costs – The total of expenses that can be specifically identified with this product or service.

Indirect Costs – Costs that cannot be identified with a specific product or service. These costs are prorated to all jobs. Examples are clerical costs, inventory operations, inventory adjustments and supervisory time. Applicable fringe benefit charges are included on any labor. Remember to attach support to your calculations, if necessary, for these expenses so they can be easily validated. Indirect costs are not allowed on 21 accounts.

All costs charged to the 22 account that are not direct costs are indirect costs. This is one of the reasons a 22 account cannot charge a 53 account.

The costs of using equipment or other assets may be either direct or indirect depending on the degree of identification to products or service.

Calculate the indirect cost rate based on either percent of total direct cost or as a percent of direct labor cost. The method used should be applied consistently.

Total anticipated indirect cost for the year is divided by the anticipated total direct cost or the anticipated total direct labor cost to arrive at the indirect cost rate.

Total Cost to be Billed – The total of the direct costs and indirect costs.

University G&A Overhead – Total costs of the items subject to university indirect costs. This is only applicable to 22 accounts. Currently this is a 22.5% G&A, calculated based on monthly expenses.

Total Costs for Non-University Clients – The total of the cost to be billed, university G&A overhead and profit margin.

Three Year Projection

Using a three-year time period gives the fiscal officer an opportunity to review and predict the account's status in the future. When completing a three-year projection for the first time, information is based on a sound estimate of production volumes and operating expenses. After the first year is completed (or close to completion), actual data can be used to assist with the ongoing projections. Updated projections do not need to be sent to Campus Services. They only need to review and approve updates to the business plan and/or billing rates, and the fund budget request form.

Projections are normally summarized by revenue and expense categories. Revenues should be split between product categories. Expenses are usually categorized as Salaries, Materials, Travel (if applicable), Supplies, Other Operating, and University G&A Overhead. These categories are similar to those used when entering budget information during the budget construction process. All these line items should provide necessary detail on what makes up those amounts (needed.g., salary information per individual, what materials are involved, travel anticipated, etc.).

The second and third year projections should be based on anticipated increases/decreases in revenues or expenses (e.g. employee raises). It may be necessary to calculate a new billing rate depending on the expected changes.

Budgets

Budget amounts are calculated by reviewing expected activities for the upcoming year. Prior year activities provide a guideline for current year budgets. Budgeted numbers are adjusted to reflect any changes in the activity such as additional staff.

The fund budget request form is divided into categories that coincide with the KFS Object Type Code Classifications. Various object codes are rolled into one object code for budget recording purposes. When completing the budget form, refer to activity billing rate calculation and the prior year KFS activity. 21 Accounts should not have a receivable on the account as that would imply external sales which should be in a 22 account. If external sales are planned to be \$5,000 or under and will post within the 21 account, a receivable can be recorded on that external revenue. If purchasing Promotional Items or Advertising/Publicity on the 21 account there needs to be good support behind this. A 21 account should use free advertising methods (email, word of mouth, etc.).

Revenue is the compensation received for the products or services provided. For external revenue received via cash, check, credit cards, or accounts receivable billings use object codes 43xx-44xx. For internal revenue received via internal order, internal billing, and distribution of income and expense documents use object codes 48xx-49xx.

Expenses are the costs, including salaries, associated with the products or services provided by the activity. Business Authorized Functions (object code 6649) are not allowed on 21 accounts.

21 and 22 Accounts Checklist

- Assess the viability of the activity.
- Does the activity fit with the mission?
- Is the activity a 21 (internal) or 22 (external) account?
- Write business plan.
- Create billing rate calculations.
- Create three year projection.
- Complete budget request form.
- Any concerns related to competition with private enterprise?
- Where is the activity currently taking place?
- If activity involves purchasing equipment, what account will fund the purchase?
- Does your department have TWARDUS access for billing through the University accounts receivable system?
- Does your fiscal officer or accounting tech have Quali access for processing deposits to the University's cashier's office?
- If a 22 account, will your department accept credit cards? If so, contact Banking Services to get the credit card terminal set up (if needed).

Example Business Plan

Testing Laboratory

A. General Description:

The Testing Laboratory (Lab) was established to provide testing services for various internal and external users. The Lab concentrates on providing services to external customers. However, internal customers may use the services as needed. If the revenue from internal customers exceeds \$5,000 annually a 21 (RECHAR) account will be created for this activity. External activity (22 account) will not be charged to 53 accounts.

The Lab supports the mission of the University by providing an on-campus facility that specializes in and is an integral part of the research occurring on campus. Nearly every science and engineering department on campus uses the facilities of the Lab. In addition, graduate students are allowed to perform sample testing in the Lab, after proper training, in order to complete their degrees. In conclusion, the Lab not only provides testing services but also plays a major role in teaching, research and outreach programs for the people of Colorado.

The Lab's manager is a testing expert and oversees the daily operations and supervises all assistants. The manager reports to the head of Research Operations.

Several assumptions are made about the economy and related factors that may impact the Lab's operation:

- The need for specialized testing will be ongoing
- Based on location, the Lab will continue to draw users as the closest lab to also offer these services is based in Colorado Springs

B. Market Analysis:

The current client base is primarily external. New clients are obtained by referrals from other clients. The market's needs are met by providing testing at a reasonable costs to the client, but still at a competitive rate to the lab in Colorado Springs. Consultations are also provided to review the test results with the client to help in their decision making process. Changes in the services provided could better meet the market's needs. The changes would include an upgraded computerized testing program to speed up service to clients. In addition, networking the Lab could also save time.

Competition includes other laboratories in the geographic region with the closest being in Colorado Springs. The majority of our charges are similar, if not higher than private labs because of the smaller number of samples received; this causes the cost to be higher per sample. For pricing from the private lab please visit their website at www.privatelabpricingexample.com.

We plan to have the revenues slightly exceed the expenses. However, if there is a deficit in this account, there is a subsidizing agreement with account XXXXXXXX.

As the Lab costs increase, fees will be adjusted to cover the additional expenses. Similar fee increases have been reflected in the private sector.

C. Revenue and Expense Analysis:

Historically, revenues and expenses have been evenly distributed over the fiscal year. Slight increases in activity are anticipated in the summer months. However, the impact is minimal. External demand will cause revenues to exceed the \$5,000 University limitation of revenue necessary to open a recharge 22 account. External customers will be billed through the University Commercial Accounts Receivable system on a monthly basis and recorded in this account.

Equipment was originally purchased in the 13 E&G account, but will be moved to this account and the 13 account will be reimbursed the costs of the equipment.

Supplies are purchased as needed and expensed. We do not anticipate having inventory in this account.

D. Additional Considerations:

The Lab produces hazardous waste. Environmental Health Services was consulted when the Lab was established and has continued to review our activity. Hazardous waste disposal services must be purchased from EHS.

Billing records are retained at the Lab for a three-year period.

Financial 3-Year Projection Example:

	Year 1	Year 2	Year 3
Beginning Balance	-	23,352.02	47,167.37
Xxxxxx Revenue	250,380.00	262,302.85	274,793.18
Xxxxxx Revenue	57,555.00	60,295.71	63,166.93
Xxxxxx Revenue	85,503.00	90,511.44	95,804.88
Total Revenue	393,438.00	413,110.00	433,765.00
Expenses (Costs):			
Employee A	75,411.00	79,181.55	83,140.63
Employee B	70,500.00	74,025.00	77,726.25
Employee C	55,400.00	58,170.00	61,078.50
Employee D	82,300.00	86,415.00	90,735.75
Total Salaries, Wages	283,611.00	297,791.55	312,681.13
Supply xxx	1,575.00	2,000.00	2,500.00
Supply xxx	400.00	500.00	550.00
Supply xxx	2,200.00	2,500.00	2,800.00
Supply xxx	3,700.00	4,000.00	4,500.00
Total Supplies	7,875.00	9,000.00	10,350.00
Service xxx	4,250.00	4,500.00	4,800.00
Service xxx	6,375.00	6,500.00	6,900.00
Total Services	10,625.00	11,000.00	11,700.00
Total Expenses Prior to G&A	302,111.00	317,791.55	334,731.13
G&A 22.5%	67,974.98	71,503.10	75,314.50
Total Expenses Including G&A	370,085.98	389,294.65	410,045.63
Fund Balance as of June 30th	23,352.02	47,167.37	70,886.74

Billing Rate Calculation Example:

RATE WORKSHEET

Personnel costs associated with this instrument/service area. Cut and paste personnel information from the Salary Worksheet - insert additional lines as needed.

Personnel	Salary & Fringe	% effort expended by personnel on this instrument/Service area	Cost per fiscal year	Comments
Employee A	\$75,411.00	100.0%	\$75,411.00	
Employee B	\$70,500.00	100.0%	\$70,500.00	
Employee C	\$55,400.00	100.0%	\$55,400.00	
Employee D	\$82,300.00	100.0%	\$82,300.00	
			\$0.00	
Total:			\$283,611.00	

Service Contract and/or estimated cost for repair and maintenance - If service contracts are not used and repair costs are anticipated to occur at intervals longer than one year include the estimated amount/fiscal year.

Type (Service Contract or Other)	Cost per fiscal year	Comments
Service A	\$4,250.00	
Service B	\$6,375.00	
Total:	\$10,625.00	

Expenses specific to this instrumentation/service. Expenses in this section could include supplies, consumables (gloves, tips, gas, columns, reagents), computers, software, etc. that are only incurred due to this specific instrument/service area.

Expense Type	Cost per fiscal year	Comments
Supply A	\$1,575.00	
Supply B	\$400.00	
Supply C	\$2,200.00	
Supply D	\$3,700.00	
Total:	\$7,875.00	

TOTAL COST PER YEAR TO PROVIDE THIS SERVICE	\$302,111.00
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Calculate Hourly Rate for CSU users - What is the % of time that the instrument/service is unavailable due to: repairs, maintenance, broken and waiting for repair, replacement of parts, committed time to an outside lab or group, holidays, weekends, etc. This will NEVER be 0%

% of time instrument/service is <u>not</u> available	Hours instrument is available/year	Total	Comments
25%	6,570	CSU RATE/HOUR \$45.98	

Calculate Minimum Hourly Rate for External users - this cost *must not* include CSU subsidy and *must* include the University F&A applied to external recharge center accounts.

	Comments
MINIMUM EXTERNAL RATE/HOUR	\$56.33

Up-charge Adjustments for External Users: Traditionally non-allowable costs *can and should* be included in rates for external users. The amount of this up-charge is flexible but must be documented and consistent. Items to consider include: F&A, project management, regulatory burden, marketing and business development, contract negotiation, risk pool, student stipends, postage, official functions, adjustments for market value, etc.

User Type	upcharge %	upcharge \$	Rate/Hour	Items included in up-charge
External Academic, Government, Non-Profit	50.00%	\$28.16	\$84.49	
External Commercial	75.00%	\$42.25	\$98.58	

RATE SUMMARY			
Instrument or Service:		Testing Lab	
	User Type	Rate/Hour	Rate/Sample
	CSU	\$45.98	\$15.33
	External Academic/Government/Non-Profit	\$84.49	\$28.16
	External Commercial	\$98.58	\$32.86

In the above example, we determined:

Total Cost: \$302,111.00

Hours Instrument is Available/Year: 6,570

- 8,760 hours in 1 year
- 25% of the year the instrument will not be in use
- $8,760 - (8,760 \times .25) = 6,570$

Since our business plan and 3 year projection example relates to a 22 account, we are only concerned with the external (22 account) rate calculation in the above example. This calculates to a minimum of \$56.33.

- \$302,111.00 total cost
- 6,570 hours instrument is available/year
- 22.5% G&A rate needs built into billing rate
- $(\$302,111.00/6,570) \times 1.225 = \56.33

After this is calculated, the department can choose to calculate an upcharge to external customers and that upcharge may differ dependent on the external customer (External Academic, External Commercial, etc.). The external billing rate calculations based on an upcharge of 50% for External Academic and an upcharge of 75% of External Commercial would be:

	User Type	Rate/Hour	Rate/Sample
	External Academic/Government/Non-Profit	\$84.49	\$28.16
	External Commercial	\$98.58	\$32.86

Additional Resources:

Additional resources (including the rate calculation workbook) can be found under the 21 and 22 Account Resources section on the [Campus Services website](#).