

From A to Z: What can you recharge, and how do you do it?

Enterprise Financial Planning & Analysis
Presents...
Recharge Basics
2025

Outline

- * Recharge Basics
- * How to Set-up a Recharge Rate
- * Tracking Revenue & Expenses
- * Case Study
- * Contact Information



Recharge Basics

- * What does it mean to recharge?
- * When do you recharge?
- * What principles should I consider?
- * What is your recharge unit responsible for?
- * What does Financial Planning & Analysis do? Other units too?

What does it mean to recharge?

A recharge is a **charge** for **goods** or **services** provided by your unit to other internal users of that service.



When do you recharge?

Units may want to recharge for (or when)...

- * Providing specialized services
- * Demand is present
- * Use of expensive equipment

Ultimately, the decision rests with your department. But if you want to charge, you'll probably have to RECHARGE.



What principles should you consider?

- * Rates are based on *direct costs* only
- * Rates must be *consistently* applied to all internal users
- * Rates must be calculated with the intention of *breaking even*

Break-even achieved when...

$$\text{Revenue} - \text{Expenses} = \$0$$

Recharge Unit Responsibilities

- * Request recharge rate approval from Financial Planning & Analysis
- * Accumulate all costs and revenues in a single chartfield
- * Maintain financial records to document the recharge activity
- * All information should be fully auditable
- * Review results of activity at least quarterly (monthly recommended) and request rate revisions as required
- * Submit rate renewal before expiration date on approval letter
- * Bill customers monthly

Financial Planning & Analysis Responsibilities

- * Review and approve recharge rate requests
 - ❖ Ensure university and Uniform Guidance guideline compliance
- * Review rates at a minimum every two years
- * Coordinate rate terminations when services end
- * Initiate non-compliance procedures when necessary
- * One rate approval extension may be granted
 - ❖ Caveat - if rates aren't received before that period expires then the recharge supplier ID will be inactivated to prevent further billing

Other Units' Responsibilities

Shared Services Center

- * Establishes shortcodes and project grants
- * Creates supplier IDs
- * Provides Service Unit Billing (SUB) assistance and training

Office of Research and Sponsored Programs (ORSP)

- * Review requests for services provided to external organizations to ensure consistency with university policies and procedures

Tax Department

- * Review external (non-university) activity for potential unrelated business income tax (UBIT) liability

How to Set-up a Recharge Rate

- * How to request a new /updated rate
- * What funds are used?
- * What can be included?
- * What cannot be included?
- * How to estimate volume
- * When, what, and how to depreciate?

How to Request a New/Updated Rate

Complete the following forms:

- * Recharge Rate Request Summary Form
- * Detail Cost Composition
- * Equipment Exclusive to Recharge (if applicable)
- * Space Exclusive to Recharge (if applicable)
- * Request for a recharge supplier ID (new rates only)



Forms and instructions are located:

<https://finance.umich.edu/analysis/recharge-rates/procedure>

Submit to recharge@umich.edu

What funds are used?

- * Auxiliary Internal Services Fund (52000) – Used for recharge activity related to internal customers
- * Designated Fund (40000) – Used to cover an overdraft on the recharge or for revenue in excess of internal rate from recharge activity related to external customers
- * Sponsored Fund (25000) – Used when Office of Research and Sponsored Projects (ORSP) determines that an external service is related to the mission of the university and has a contractual agreement
- * Maintenance & Equipment Reserve (83000) – Used to collect the depreciation amount to recover the cost of recharge equipment

What can be included?

Units may ONLY include Direct Costs

- * Salary & benefit expense
 - Individuals must be appointed to the recharge chartfield
 - Minimal administrative time
- * Equipment maintenance
- * Equipment depreciation
- * Supplies used solely to provide service to customers
 - Ex. Test tubes, vials, slides

What cannot be included?

Units may NOT Include Indirect Costs

- * Certain salary expenses
 - General administrative compensation expenses
 - Tuition reimbursement
 - Unemployment
- * Space and utilities
- * Advertising
- * Travel, hosting, and general supplies
- * Recharges cannot be used to build surplus balances

How to estimate volume

Methods:

- * Survey potential users
- * Market analysis
- * % of proposal submissions and sum of those hours
- * Trending historical average

Impacting factors:

- * Expected budget increase or decrease of major funding agencies
- * Economic downturn



When, what, and how to depreciate?

What:

- * ONLY capital equipment being used exclusively by the recharge
 - Cost is \$5,000 or more
 - Useful life of > 5 years



\$10,000 / 5 yrs. = \$2,000 per yr.

When:

- * Purchased with non-research or non-recharge funds
 - (ex: 10000, 40000, 82000, 83000)

How:

- * Based on information in the Asset Management System

How to record depreciation

- * Transfer annual depreciation amount from recharge to 83000 fund reserve account
- * Sample depreciation journal entry:

							Journal Line		
Account	Fund	DeptID	Program	Class	Project/Grant	Monetary Amount	Reference	Line Description	Stat Amount
1	624850	52000	XXXXXX	RCHRG	73000	XXXXXX	10,000.00 <Optional>	TS (period) Depr'n Expense	
2	421100	83000	XXXXXX	RCHRG	73000	XXXXXX	(10,000.00) <Optional>	TS (period) Depr'n Expense	
		A	B		C		D	E	F

A Enter the department ID for the recharge where the depreciation is included

B Enter the program for the recharge where the depreciation is included

C Enter the project/grant for the recharge where the depreciation is included

D Enter the depreciation expense amount being transferred to the recharge chartfield as a debit, with a credit for the exact amount in account 421100

E Optional field

F Enter the journal description. The above is only a sample, this text should be whatever is useful to your department.

Note: Items in blue are to be completed by department
Account, fund, and class are fixed chartfield items and should not be changed.

Tracking Revenue and Expenses

- * How do I track and charge staff time?
- * How do I track usage
- * How and when do I bill?
- * Managing external users
- * Does Uniform Guidance play a role?
- * What! This activity can be audited?

How do I track and charge staff time?

- * Determine the amount of time staff spend working on the recharge activity
- * Appoint staff directly to recharge
- * When calculating an hourly labor rate, you must use billable hours

Billable Hours Calculation

Annual Hours	2,080
Vacation and Sick	(200)
Holidays	(88)
Season Days	(32)
Billable Hours Total	1,760

How do I track usage?

* Keeping a log is important for tracking, reporting, and auditing

- When? (start-end)
- Where?
- Which project?

* Recording options:

- Manually
- Excel
- Database

Depends on Volume of Use

Functional MRI Laboratory								Page
UM FMRI GE Signa (1) UTILIZATION LOG								<i>Please Write Neatly</i>
#	TECH (e.g. Keith)	DATE (e.g. 09/22/12)	INVESTIGATOR (e.g. Peltier)	START (10:00 AM)	SUBJECT ID	PROCESS	DVD	NICKNAME (e.g. ALS)
				END (10:00 AM)	SCAN ID (e.g. 13084)			SCAN TYPE (e.g. Phantom, Development)
1								
2								
3								
4								
5								
6								

Database Benefits:

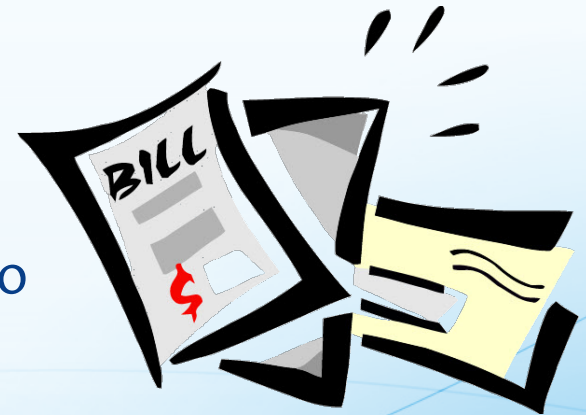
- Calculate Use
- Reporting
- Queries

Date	Start_Time	End_Time	Total Time (hr)	Total Time (#)	Scan_ID	Location of
5/8/2013	3:00 PM	3:45 PM	0.03125	0.75	900	2-Scanner 2 (GE Disc
5/8/2013	9:00 AM	9:15 AM	0.0104166666666667	0.25	955	2-Scanner 2 (GE Disc
5/8/2013	10:00 AM	10:15 AM	0.0104166666666666	0.25	956	2-Scanner 2 (GE Disc
5/8/2013	12:15 PM	1:30 PM	0.0520833333333334	1.25	957	2-Scanner 2 (GE Discov
5/8/2013	3:30 PM	4:40 PM	0.0486111111111111	1.25	958	2-Scanner 2 (GE Discovery)
5/8/2013	5:40 PM	6:50 PM	0.0486111111111111	1.25	959	2-Scanner 2 (GE Discovery)

How frequently do I bill?

Recommend monthly billing in order to...

- * Receive revenue before grant closes
- * Catch errors within federal 90-day / 120-day guidelines
- * Consistency for customer service
- * Consistency for billing staff
- * Comparability of utilization from month to month and year to year



How do I bill?

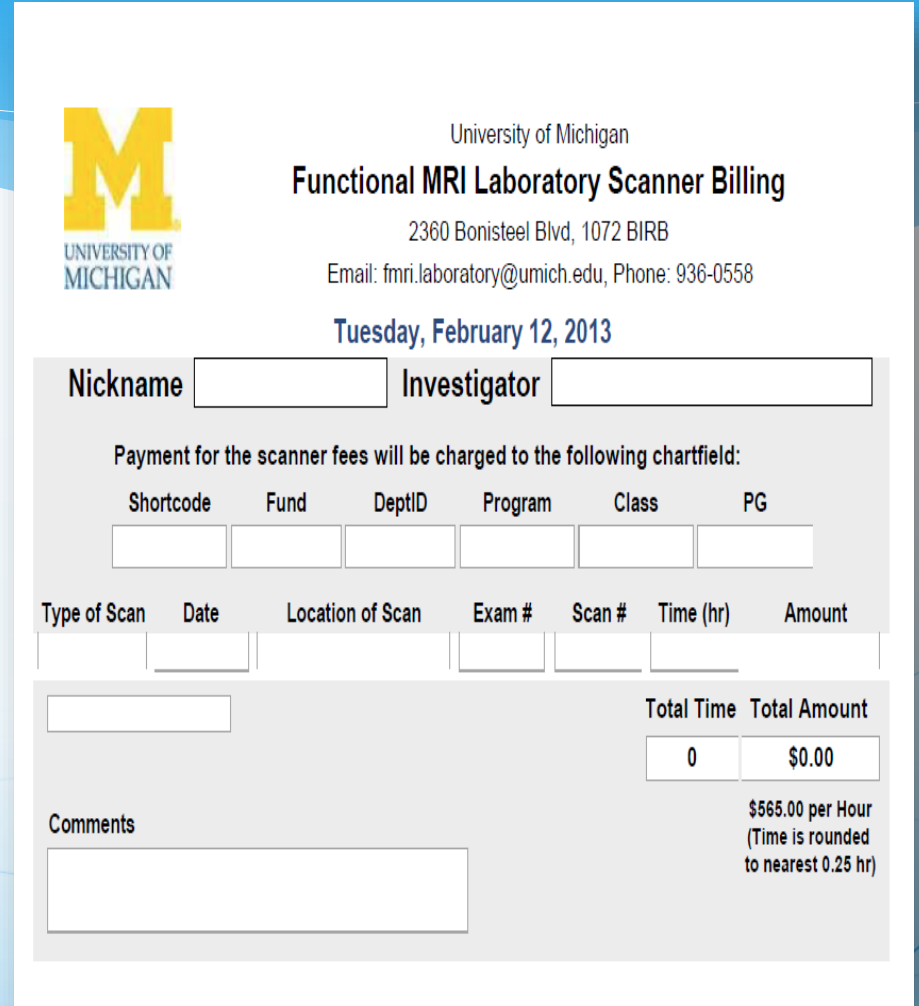
Required method for internal billing:

- * Service Unit Billing
- * Shared Services Center provides training and grants access

Card Type	Short Code	Account	Vendor ID	Invoice Date	Uniqname	Departmental Reference Number	Item Description	Quantity Vouchered	Unit of Measure	Unit Price	Merchandise Amount
1	123445	613260	111111111	2013/04/30	name	USER A / Faculty A	Mar'13 to Apr'13 Scans	1.5000	EA	565.00000	847.50
1	234567	613260	0000443366	2013/04/30	name	USER B / Faculty B	Mar'13 to Apr'13 Scans	1.5000	EA	565.00000	847.50
1	345678	613260	0000443366	2013/04/30	name	USER C / Faculty C	Mar'13 to Apr'13 Scans	2.0000	EA	565.00000	1,130.00
1	456789	613260	0000443366	2013/04/30	name	USER D / Faculty D	Mar'13 to Apr'13 Scans	6.0000	EA	565.00000	3,390.00
1	567890	613260	0000443366	2013/04/30	name	USER E / Faculty E	Mar'13 to Apr'13 Scans	3.0000	EA	565.00000	1,695.00

Managing External Users

- * A customer outside the university is an external user
- * This is revenue to the university
- * Contact ORSP
- * Contact the Tax Department
- * Work with Accounts Receivable to generate an external invoice



University of Michigan
Functional MRI Laboratory Scanner Billing
2360 Bonisteel Blvd, 1072 BIRB
Email: fmri.laboratory@umich.edu, Phone: 936-0558
Tuesday, February 12, 2013

Nickname Investigator

Payment for the scanner fees will be charged to the following chartfield:

Shortcode	Fund	DeptID	Program	Class	PG
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Type of Scan	Date	Location of Scan	Exam #	Scan #	Time (hr)	Amount
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Total Time	Total Amount
0	\$0.00

Comments

\$565.00 per Hour
(Time is rounded to nearest 0.25 hr)

Does Uniform Guidance play a role?

What is Uniform Guidance?

- * Federal guidelines on what can, and can't be charged to a grant
- * <https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200?toc=1>
- * Does it apply?
- * YES, YES, YES

Why?

- * Recharge may be utilized by a federal grant... but it doesn't matter whether units charge federal grants directly, all units must adhere to the same principles



What! My Recharge can be audited?

Yes, even recharge activity can be audited!

Record Retention:

- * Retain recharge records 7 years

Why?

- * Recharge may be utilized by a federal grant... but it doesn't matter whether units charge federal grants directly, all units must adhere to the same principles

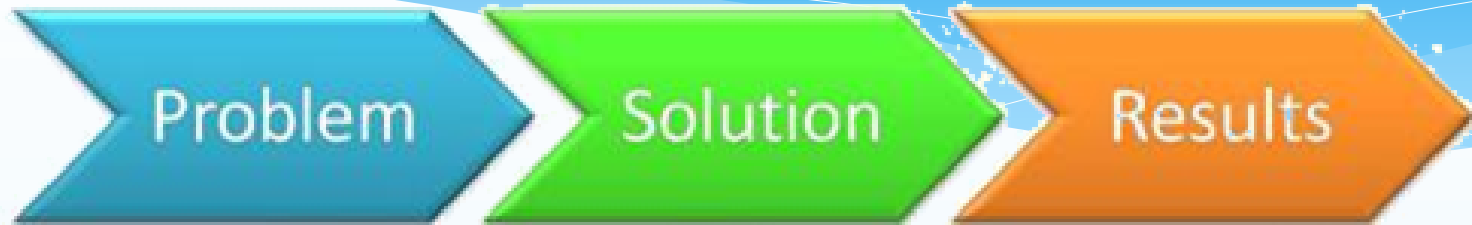


Internal Audit Concerns

Units should make every effort to avoid these common mistakes:

- * Billing without a recharge rate approved by Financial Planning & Analysis
- * Not charging all customers consistently
- * Publishing rates on a website that don't match rate approval letter from Financial Planning & Analysis
- * Not billing the correct amount
 - Billing at a rate other than the current approved rate
 - Miscalculation in billing amount
 - Missed or delayed billings
 - Forgot to update billing system for new rates
- * Unable to provide supporting documentation for costs/billings
- * Changing rates without notifying Financial Planning & Analysis

Case Study



Case Study – Prepare a Recharge Rate

Using the description and data provided, prepare a rate proposal that will be submitted to Financial Planning & Analysis for a new confocal microscope facility. The confocal microscopes will be used to take 3D pictures of cells for computer analysis. Only internal users are expected at this time.

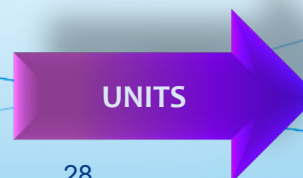
Potential Expenses

Category	Yearly Cost
Director (\$100,000 salary, 20% benefits)	\$120,000
Lab Technician (\$50,000 salary, 30% benefits –100% effort for recharge activity)	\$65,000
Administrator (\$30,000 salary, 30% benefits –10% effort for recharge activity)	\$3,300
Depreciation on first confocal microscope (purchased this year; cost was \$10,000; 10-year straight-line depreciation; purchased with Designated Funds; used 10% for recharge activity)	\$1,000
Depreciation on second confocal microscope (purchased this year; cost was \$10,000; 10-year straight-line depreciation; purchased with General Funds; used 100% for recharge activity)	\$1,000
Direct Supplies (includes light bulbs and camera parts)	\$1,650
Maintenance contract on first microscope (\$500 annual – 10% use)	\$50
Maintenance contract on second microscope	\$500



Estimated Yearly Usage (per awarded grant proposals)

Detail in Awarded Proposals	Yearly Hours	Yearly Scans
150-2 hour scans	300	150
100-4 hour scans	400	100
300-1 hour scans	300	300



Case Study – Consider These Questions

1. Can you include the director's salary and benefits?
 - a) Yes
 - b) No

2. Can you include depreciation from both microscopes?
 - a) Yes
 - b) No

3. Can you include the maintenance contracts on both microscopes?
 - a) Yes, on both
 - b) On second microscope only (general fund purchased microscope)
 - c) No

4. What units should you use to calculate the rate?
 - a) By total number of hours
 - b) By total number of scans
 - c) Either of the above

Case Study – Consider These Questions

1. Can you include the director's salary and benefits?
 - a) Yes
 - b) No

2. Can you include depreciation from both microscopes?
 - a) Yes
 - b) No

3. Can you include the maintenance contracts on both microscopes?
 - a) Yes, on both
 - b) On second microscope only (general fund purchased microscope)
 - c) No

4. What units should you use to calculate the rate?
 - a) By total number of hours
 - b) By total number of scans
 - c) Either of the above

Case Study – Calculate the Rate (Using Hours)

Allowable Expenses	Yearly Cost
Lab Technician (\$50,000 salary, 30% benefits –100% effort for recharge activity)	\$65,000
Administrator (\$30,000 salary, 30% benefits –10% effort for recharge activity)	\$3,300
Depreciation on second confocal microscope (purchased this year; cost was \$10,000; 10-year straight-line depreciation; purchased with General Funds; used 100% for recharge activity)	\$1,000
Direct Supplies (includes light bulbs and camera parts)	\$1,650
Maintenance contract on first microscope (\$500 annual at 10% use)	\$50
Maintenance contract on second microscope	\$500
Total Expenses	\$71,500

Estimated Hours	Yearly Hours
150-2 hour scans	300
100-4 hour scans	400
300-1 hour scans	300
Total Hours	1,000

Recharge Rate:
 $\$71,500 / 1,000 \text{ hours} =$
\$71.50 per hour

Case Study – Calculate the Rate (Using #Scans)

Allowable Expenses	Yearly Cost
Lab Technician (\$50,000 salary, 30% benefits –100% effort for recharge activity)	\$65,000
Administrator (\$30,000 salary, 30% benefits –10% effort for recharge activity)	\$3,300
Depreciation on second confocal microscope (purchased this year; cost was \$10,000; 10-year straight-line depreciation; purchased with General Funds; used 100% for recharge activity)	\$1,000
Direct Supplies (includes light bulbs and camera parts)	\$1,650
Maintenance contract on first microscope (\$500 annual at 10% use)	\$50
Maintenance contract on second microscope	\$500
Total Expenses	\$71,500

Estimated Scans	Yearly Scans
150-2 hour scans	150
100-4 hour scans	100
300-1 hour scans	300
Total Scans	550

Recharge Rate:

$\$71,500 / 550 \text{ scans} =$

\$130 per scan

Contact Information

Contact Enterprise Financial Planning & Analysis with any recharge related questions:

Generic e-mail = recharge@umich.edu

OR

Sheryl Bourlier- sbourlie@umich.edu; (734) 647-3431

Tracy Tamer – tracyaj@umich.edu; (734) 763-7735

Olivia Moore – odmoore@umich.edu; (734) 936-1843

Lori Hogan- lkhogan@umich.edu; (734) 936-2060

