

University of Michigan Capitalization Guidelines

Background:

The University of Michigan records within its Asset Management system the following capital assets: land, land improvements, infrastructure, buildings, leasehold improvements, equipment (including software development), and library materials. Assets are recorded including related ancillary charges, which are costs directly attributable to asset acquisition such as site prep and professional fees that are necessary to place an asset into service, at cost. All purchased land with or without accompanying buildings is capitalized. Land improvements, infrastructure, building renovations, leasehold improvement projects, and both internal software development and external software purchases are capitalized if they have a cost (or projected budget) of greater than \$500,000. For projects that affect multiple buildings, the cost must be greater than \$500,000 per building to be capitalized. Movable equipment, which is defined as equipment not fixed to a building, is capitalized if it has a cost greater than \$5,000 and a useful life of at least one year. Freight and transportation charges, if billed separately, are excluded from the cost of the asset. Donated capital assets and their related ancillary costs are recorded at their estimated fair market value at time of acquisition.

Questions as to the application of this policy should be directed to Accounting Operations at Plant.Fund.Staff@umich.edu or calling the Plant Fund Supervisor at (734) 647-3778.

Construction & Renovation Projects:

Construction and renovation activities include the acquisition, renewal and replacement of long lived assets for institutional purposes and are recorded in the plant fund 80000 (construction campus) or 80500 (construction hospital) on a unique Project/Grant. Expenditures must be correctly identified by the use of account codes to indicate whether or not the expense should be capitalized or expensed. A capital expenditure is incurred when resources are expended to buy, repair, or increase the usefulness of an asset. A noncapital expense would be considered an expense necessary to complete the project but one which does not increase the value or usefulness of an asset. See Appendix A for a list of accounts commonly used for construction projects.

Units setting aside money for future construction projects should typically do so in either their Departmental Equipment Fund (82XXX) or their Maintenance Reserve Fund (83000) depending on which they use. The Construction Fund (80XXX) should be used to reflect money for a construction project which is currently underway, as well as expendable gifts received for construction purposes.

Construction projects are to be funded up-front when they are established. An end date is required for all construction projects, and should be in line with the expected time period to complete the project. For any project extensions beyond the expected end date, all units should contact Accounting Operations to have the end date updated appropriately.

Project Management & Approvals:

Under Standard Practice Guide 507.01, section II – Procurement Authority, under the list of [Restricted Commodities and Special Approvals](#), the Executive Director of the office of Architecture Engineering and Construction (AEC) must approve all requests for external architectural and related engineering services for all three campuses. Contact [Facilities Procurement](#) for assistance. For approval and procedures within University of Michigan Hospital and Health Centers contact [UMHHC Facilities Services](#).

Construction and Renovation Projects require the following approvals per the April 2007 Regents meeting (approved May 17, 2007).

"It is the Board of Regents' policy that all new construction and renovation projects which exceed \$3,000,000 shall be submitted to the Board of Regents for approval prior to entering into the project except in emergency situations. All such projects which fall between \$500,000 and \$3,000,000 shall be submitted in an Item for Information to the Board of Regents on a quarterly basis."

It is recommended that Projects \$3,000,000 or greater be managed by AEC. All projects which require the use of an external architect or engineering services must be managed by AEC. Generally departments have the discretion to manage their own building projects if the above conditions do not apply. Questions regarding the proper accounting treatment for non-capital projects (repairs, cosmetic upgrades, and general maintenance) should be directed to Accounting Operations.

For General Fund units on the Ann Arbor campus, the Provost's Office has developed Capital Project Guidelines to use when considering a project. The Capital Project Guidelines provide detailed information on the process of preparing and submitting a capital project request to the Office of the Provost.

Land:

The Real Estate office is responsible for the purchase and sale of all University real estate. All expenses made to acquire land and prepare it for use are capitalized as part of the land cost through the land procurement chartfields (Fund 80000/DeptID 688155/Program 10000/Project/Grant C833160). When land has been acquired for the purpose of constructing a new building, all of the costs incurred to prepare it for that purpose are capitalized as part of the cost of the land (such as clearing, grading, and backfilling). Standard Practice Guide 601.23 relates to real estate transactions.

Leasehold Improvements:

A leasehold improvement is an improvement made to a leased building/infrastructure asset by a department that has the right to use this leasehold improvement over the term of the lease, and the improvement will revert to the lessor (third party or another University department) at the expiration of the lease. The Real Estate office is responsible for negotiating and executing the leases entered into by the University. Financial Operations oversees the accounting for leases to ensure all transactions are recorded in accordance with US GAAP.

Indicators that expenses should be considered capitalizable by the lessee as leasehold improvements include, but are not limited to:

- The lessee is responsible for funding the improvement and has discretion in determining how the funds will be used.
- The improvement is specific to the needs of the lessee, and its useful life is not expected to extend beyond the lease term.
- The improvement is not integrated into the leased property (e.g. an elevator or plumbing).

Expenditures for leasehold improvements must be recorded in the construction funds (80000 or 80500) on a Project/Grant. Requests for a new Project/Grant can be made through the Shared Services Center (SSC) by completing a Project/Grant eform available on the SSC's website at <http://ssc.umich.edu/eForms>. Leasehold improvements should not include maintenance and repairs done in the normal course of business, as these items should be expensed as incurred. Further,

moveable equipment or office furniture that is not attached to the leased property is not considered a leasehold improvement.

The cost of a leasehold improvement should be capitalized if greater than \$500,000 and depreciated in its entirety (i.e. assume no residual value) over the shorter of (1) the remaining lease term, or (2) the estimated useful life of the improvement. If the lease contains an option to renew and the likelihood of renewal is uncertain, the leasehold improvement should be depreciated over the life of the initial lease term or estimated useful life of the improvement, whichever is shorter. Leasehold improvements made in lieu of rent obligations may require further evaluation and should be discussed directly with Financial Operations in order to determine the appropriate accounting treatment.

Land Improvements/Infrastructure:

Land improvements typically serve the use of a particular site or building, and include things such as pathways, parking lots, swimming pools, and fencing. Infrastructure assets are long lived capital assets that are generally stationary in nature, can be preserved for a significantly greater number of years than most capital assets, and typically serve the public or community as a whole. Examples of infrastructure assets include roads, bridges, tunnels, drainage systems, water and sewer systems, dams, and lighting systems.

Equipment:

Standard Practice Guide 520.01: Acquisition, Use and Disposition of Property (Exclusive of Real Property) provides guidance on the proper acquisition, management and disposal of equipment.

Equipment is capitalized and depreciated if it meets all of the following criteria on a per item basis:

- Cost at or exceeding \$5,000
- Useful life of one or more years
- Freight and transportation charges, if billed separately, are excluded from the cost of the asset.

To process equipment asset transfers between university departments, send an email to amtransfers@umich.edu and include the [asset transfer form](#) and an email between both Departments acknowledging the release and receipt of the equipment being transferred, which will provide Financial Operations the information needed to process the transfer in the Asset Management system.

Financial Operations' policy states that assets are not to be retired in Asset Management until one of the following criteria have been met:

- Item has been sold to an external entity,
- Item has been scrapped as no longer useful,
- Item has been transferred to another Institution or University,
- Item has been destroyed (i.e. theft, fire, flood, damaged, etc.)

Currently the University uses several account codes to categorize moveable equipment purchases; See appendix B for a list of the accounts with descriptions. Below is some additional information related to computer clusters and affiliate related assets.

Computer Clusters

Definition of a Computer Cluster: A computer cluster is comprised of a master unit and combined units (“nodes”) that function together as parallel computing units to serve a specific purpose. These nodes may individually cost less than \$5,000 but more than \$5,000 when aggregated.

In order to capitalize a computer cluster, all of the following criteria must be met:

1. One computer unit will be designated as the master unit and added to asset management as a parent asset. That unit will be assigned a tag number, which will be affixed to it;
2. The nodes are interconnected and work together to serve a specific purpose, with the expectation that all nodes in the combined unit remain with the master unit and are not to be interchanged with other clusters;
3. The nodes of a cluster are physically located together in a single location, rather than distributed within a building or multiple buildings (See point 2 above);
4. A clear reason for the use and acquisition of the cluster exists. If a cluster is being purchased on a sponsored project, the reason for the use and acquisition must be documented in the grant proposal budget justification. If funds are being re-budgeted after an award has been made to purchase the cluster, the reason for use and acquisition must be documented either in a re-budgeting request to the funding agency or in the grant file maintained with the department and Sponsored Programs;
5. The intent of the computer cluster is to operate for a minimum of 5 years (the current useful life of computers);
6. The title to the equipment must vest with the University of Michigan. Sponsor titled equipment is not tracked within the universities asset management system.
7. Units are required to provide Property Control with the serial numbers of the master unit as well as all nodes.

Upgrades to Computer Clusters: Once a computer cluster has been established, additional nodes and related components can be added to the existing cluster. This does not include replacing a computer that already exists within the cluster. These additional nodes will be added costs to the existing cluster as a child asset to the parent asset of the main cluster if all of the following criteria are met:

1. Cost of the upgrade is at least \$5,000 per unit (current equipment upgrade threshold);
2. Addition contains at least one node;
3. Addition meets the original cluster criteria;
4. Relationship to master unit or parent asset is identified on the Purchase Order (PO).
5. Units are responsible to inform Property Control of serial numbers of the master unit as well as all nodes.

The upgrades will be assigned non-tag numbers in the asset management system as a child asset of the master unit or parent asset for tracking purposes only.

Library Materials:

The University has various libraries across campus and the library materials purchased for these libraries are capitalized. The account codes used to purchase library materials are only used by the Library departments within the University. In May 2007, a combo edit rule was put in place that stops the usage of a library account codes from being used on a Department ID that is not one of the Library Departments within the University. There currently is no threshold for library material purchases, all items are deemed capital.

The account codes used to categorize library materials are referenced in Appendix C.

Other Capital Asset Issues:

Asbestos –If asbestos removal is the sole purpose of a stand-alone project, it must meet the cost criteria of \$500,000 per project in order to be capitalized. If AEC designates another funding source for the asbestos charges on what is considered a capital project, and then subsequently transfers those costs to a different project, the costs associated with the asbestos removal will be capitalized.

Environmental Issues (i.e. Underground Tanks) – AEC projects that deal with environmental issues (such as soil remediation) are capitalized if they exceed the cost criteria of \$500,000. These projects are typically capitalized under the land improvement category.

Repairs & Maintenance costs – If repair or maintenance costs lengthen or add additional functionality/safety not currently included then the costs can be capitalized if greater than the \$500,000 threshold. If the costs ultimately are to put the asset back in a state of normal or expected operations then the costs are considered non-capital in nature and expensed as incurred.

Furnishings – Furnishings are excluded from capitalization and should be expensed at the furniture account code 610875.

Programming – Programming work that does not lead into a construction project should not be capitalized. Programming is defined as a statement prepared for an owner, with or without an architect’s assistance, setting forth the conditions and objectives for a building project including its general purpose and detailed requirements, such as a complete listing of the rooms required, their sizes, special facilities, etc.

Hosting and Travel Charges – Hosting and travel charges might be appropriate for various projects; however, they should not be capitalized.

Capitalized Interest –Interest costs incurred during the construction period (which is defined as the time from the debt being borrowed up until the date the project is determined to be substantially complete) that result from the borrowing of external debt of \$20M or more per project are capitalized.

Demolition Costs – Demolition costs should be capitalized as building costs if the demolition was necessary in order to construct/renovate a facility. Demolition costs that are incurred to leave land vacant should be capitalized under the land improvement category when hardscape is included as part of the demolition project otherwise they should be expensed.

Federally Funded Construction Projects – Construction projects that receive federal funding are handled in the same fashion as any other University funded project.

Pre-Purchased Light Fixtures – Stand-alone projects created for pre-purchased light fixtures are capitalized as infrastructure if they exceed the cost criteria of \$500,000.

Capital Outlay Appropriations (SBA Projects):

Capital Outlay Appropriations are funds received from the State of Michigan to assist with funding a capital project on campus. The University will provide the State Building Authority (SBA) at the State of

Michigan project requests asking the State to provide monetary assistance with a proposed capital project at the University. The projects could be on any of the three University campuses.

The State Budget Office reviews the capital outlay requests, and if approved, includes the request in a planning authorization bill or legislative initiative. If approved the University is required to perform certain tasks laid out in the State of Michigan – Capital Outlay Manual to ensure funding from the State in the future.

The University is required to incur a certain level of costs up-front before submitting reimbursement requests to the State based on the project budget and approved Capital Outlay Appropriations. Each project has its own specific spending outline.

Guidelines Related to Purchased and Internally Developed Software

Purchased Software:

Software will be capitalized whenever it is purchased at the appropriate account code depending on cost.

Costs less than \$500,000 – should be expensed using account 612100 (Computer Software), which is used to record costs of computer software, computer licenses, and mobile applications.

Cost greater than or equal to \$500,000 – should be expensed using account 614050 (Software > \$500,000). These costs will be capitalized.

Internally Developed Software:

In general, internally developed software is considered to be capitalizable when the end product clearly adds future value to the organization for at least one year and the costs to develop exceed \$500,000. A change to an existing IT system is considered capitalizable when the changes enhance the functionality of the product, including a situation where current software is replaced with a new release or upgraded programming language.

Software maintenance should be treated as part of normal operations, and expensed as incurred at the appropriate account code. Hardware components should follow the equipment capitalization policy.

Below are tables illustrating costs that are capitalizable and non-capitalizable:

Capitalizable Costs and Examples	
Capitalizable Costs	Examples
External direct costs of materials	<ul style="list-style-type: none"> • Costs of producing product masters
Payroll & payroll related costs for employees working directly on the project (including coding, testing and software setup)	<ul style="list-style-type: none"> • Salaries • Benefits (exclude meals, alcohol, and morale related expenses)
Upgrades and enhancements that increase functionality of existing internal-use software, including major revisions of third party products	<ul style="list-style-type: none"> • Cost of software upgrade resulting in additional functionality • Installation costs as described for new software

Data conversion	<ul style="list-style-type: none"> Costs to develop or obtain software that allows for access or conversion of old data by new systems
System hardware	<ul style="list-style-type: none"> Capitalize separately as equipment

Non-Capitalizable Costs and Examples	
Non-Capitalizable Costs (Expense)	Examples
Research and development	<ul style="list-style-type: none"> Purchased or leased computer software used in research & development (R&D)
Conceptual formulation of alternatives, Determination of existence of needed technology, final selection of alternatives	<ul style="list-style-type: none"> Decision whether to develop a new system or to correct problems of existing system
Evaluation of alternatives	<ul style="list-style-type: none"> Functions to be performed by software
Training costs	<ul style="list-style-type: none"> End-user training salaries Materials
General and administrative costs	<ul style="list-style-type: none"> Space Utilities Overhead costs Supplies Equipment (desktop support) Support staff salaries (non-dedicated)
Implementation costs	<ul style="list-style-type: none"> Customer support efforts Help desk Internal and external training Maintenance costs
Data conversion costs	<ul style="list-style-type: none"> Purging / cleaning existing data Reconciliation / balancing of old data and data in the new system
Upgrades & enhancements	<ul style="list-style-type: none"> Internal costs External costs incurred under agreements related to specific upgrades and enhancements that do not increase functionality, i.e., those costs which merely extend the useful life are considered maintenance activities
Maintenance	<ul style="list-style-type: none"> Portion of software contracts attributable to maintenance contracts Direct expenses Correction of errors Minor updates to keep software current Unspecified upgrades

Phases of Computer Software Development as Relates to Capitalization:

There are instances when the University of Michigan decides to replace or upgrade existing technology, which may include purchasing or developing software to fit the needs of specific users. In connection with this process, the University of Michigan ensures that the activities generally fall under the guidelines of GASB Statement No. 51: Accounting and Financial Reporting for Intangible Assets (GASB 51).

Computer software development generally has three main stages, which are outlined below. Only costs included in the Application Development Stage (section 2 below) are able to be capitalized. Costs to be capitalized would begin when the project is approved and would end when testing is complete and the software is ready to be used. If it is determined that the project will not be completed the costs should be expensed.

Below are the three stages of development.

1. Preliminary Project Stage (not capitalizable)

For research and development of internal-use software

- Conceptual formulation of alternatives
- Evaluation of alternatives
- Determination of existence of needed technology
- Final selection of alternatives

2. Application Development Stage (capitalizable)

Project has been approved, funding sources identified, and stage one is complete

- Design of selected software, including software configuration and software interface
- Coding
- Installation of software
- Quality assurance testing

3. Post-Implementation / Operation Stage (not capitalizable)

All testing is substantially completed and software is ready for intended use

- Data conversion costs
- Training
- Application maintenance (over the maintenance period)
- General & administrative costs
- Overhead allocation

Questions concerning the application of GASB 51 to internal software development costs incurred by the University should be directed to Financial Operations.

Appendix A (Construction Account Codes)

A limited number of capital and noncapital expenditure accounts are available for use. The following accounts are most commonly used:

Capital	Noncapital
610000 (Bldgs - General Contracts)	610775 (Plant Noncapital Items)
610450 (Bldgs - Fees)	610875 (Furniture - Noncapital)
610600 (Bldgs - Umtel Charges)	610885 (Noncapital ITCOM Charges)
621450 (Rebilled - Natural Gas)	610890 (Noncapital Fees)
621540 (Rebilled - Water & Sewer)	614000 (Equipment)
621630 (Rebilled - Electricity)	614210 (Equip - Upgrade Existing Equip)
622230 (CPP - Steam Distribution)	614390 (Computers - Under \$5,000)
622290 (CPP - Electric Distribution)	
622320 (N Campus - Electric Dist)	

A complete list of valid accounts in the Construction funds is available via the [Valid Account Listing](#) on the Financial Operations website.

Appendix B (Equipment Account Codes)

Account	Account Description
614000 – Equipment – greater than \$5,000	To record assets that cost \$5,000 or more with a useful life exceeding two years.
614020 – Prefabricated Structures	Account to track the expenses for prefabricated structures.
614030 – Equipment Cost Distribution	To record the cost of equipment purchased by two or more separate chartfields. The chartfields contributing the greatest share towards the purchase price of the equipment is charged for the entire cost of the asset at an equipment account other than 614030, usually account 614000. The same chartfields are credited at 614030 for the amount of all other contributions by all other chartfields. The other chartfields are debited at 614030 to record their share of the cost of the purchase. If there is a Federal Project/Grant involved the entire cost must be charged to the Federal Grant and cost shared from there.
614050 – Software > \$500,000	To record cost of software that is greater than \$500,000, to be capitalized. If software is developed internally the costs should be recorded in the fund 81000 (Construction – Info Tech) or 81500 (Construction – Hospital IT) using the proper accounts for capital versus non-capital. Further discussion on internally developed software is provided in a separate document.
614060 – Equip Fabrication-Spon Only	To record the non-labor cost of fabrications that is estimated to exceed \$5,000. Upon completion of the fabrication, the total cost should be re-accounted to 614000 to be capitalized and included in the equipment inventory. A set of separate chartfields is established to accumulate all non-labor costs. This account is generally used in Sponsored Funds but can be used in the Current Funds with consultation from Financial Operations. Fabrications are not allowed for equipment upgrades.
614210 – Equip – Upgrade Existing Equip	To record cost of upgrades that increases the value and performance of a piece of equipment. This will be added to the original cost of equip >\$5K. Minimum threshold of \$5,000.
614240 – Equip – Federal Accountability	To record equipment, whose title may revert under some named condition to an outside sponsor, usually a federal agency.
614300 – Sponsor Owned Equipment	To record costs of equipment purchased by the University, but title will rest with a sponsor. Use of the equipment will remain with the intended project until the sponsor calls for it. Items will not be added to the UM Asset Management System but will be monitored by Property Control
614320 – Third Party Owned Equipment	To record costs of equipment owned by a third party, purchased on federal projects. Title will rest with a third party upon completion of the project.
614330 – Sponsor Owned Equip – Fab	To record cost of a component that is added to the original piece of equipment or is a component of the original equipment owned by the sponsor.
615570 – Musical Instruments > than \$5k	To record musical instrument purchases that cost \$5,000 or more per unit, with a useful life exceeding two years.

Appendix C (Library Account Codes)

Account	Account Description
615575 – Interlibrary Loans of Books	Non-capital account used to record cost of books on loan to/from other libraries by the University Library.
615580 – Single Use Access Databases	Non-capital account used to record cost of database access that is only available while a subscriber to the service.
615585 – Databases & Digital Media	Capital account used to record cost of database access & digital media that is perpetual in nature, allowing indefinite subscription to database. To be used by the University Library only.
615590 – Library Books	Capital account used to record costs of books and manuscripts that become part of the useable inventory of the University Library. This account code is to be used only the University Libraries.
615593 – Bibliographic Records	Capital account to record cost of bibliographic and authority records to track and catalog orders to provide patrons access to the collections. To be used only by the University Library.
615595 – Bookbinding for Library Books	Capital account to record cost of services to treat or preserve materials held in library archives. To be used only by the University Library.

Appendix D (Capital Guidelines Matrix)

Capital Guidelines Matrix			
Asset Type	Threshold for Capitalization	Capitalization Guidelines	Useful Life in Years (Range)
Land	All purchased land; no cost threshold	All purchased land, with or without accompanying buildings, will be capitalized. Costs incurred to acquire the land are capitalized as part of the cost of the land. There is no cost threshold. Examples of such costs include survey fees, closing costs and other professional fees directly attributed to purchase of land.	N/A
Land improvements	\$500,000	Costs incurred to support the use of a particular site or building will be capitalized as a separate asset if in aggregate such costs exceed \$500,000. Examples of such costs include pathways, parking lots, and fences.	5-100
Infrastructure	\$500,000	Costs incurred for long lived assets that serve the university community or public as a whole. Such costs would include roads, bridges, tunnels, drainage systems, water and sewer systems, dams and lighting systems.	12-30
Buildings			
Buildings	\$500,000	All identifiable construction costs associated with a building or renovation project incurred during the construction phase will be capitalized if upon substantial completion such costs exceed \$500,000.	5-100
Building Equipment	\$500,000	This category encompasses permanently attached fixtures and machinery that cannot be removed without cutting in to walls, ceilings or floors or otherwise damaging the building.	15
Leasehold Improvements	\$500,000	Improvements made to leased building assets are capitalized if the improvement is specific to the lessee and its useful life is expected to not exceed beyond the lease term.	Shorter of lease term remaining or estimated useful life of improvement
Equipment			
Moveable Equipment	\$5,000	Equipment not fixed to a building, with a cost greater than \$5,000 and a useful life of one year or greater, will be capitalized. Freight, transportation charges and installation costs, if billed separately are excluded from the cost of the asset.	3-25
IT Infrastructure	\$500,000	IT infrastructure refers to a collection of hardware, software, network resources and services, data centers and related equipment that together deliver information technology services to students, faculty and staff at the University. If a specific IT project entails costs in excess of \$500,000, these should be capitalized.	5
Software systems	\$500,000	Purchased or internally developed software with aggregate costs of greater than \$500,000 should be capitalized.	5
Library Acquisitions	No cost threshold	Library books are capitalized monthly as one total for each library department on campus.	10

