COLORADO STATE UNIVERSITY
Financial Procedure Instructions
FPI 4-7

1. **Procedure Title:** Work in Progress: Fabrication of Equipment, Models/Prototypes, and Deliverables

2. **Procedure Purpose and Effect:** Procedures for any department or organization within the university regarding establishing and utilizing work-in-progress (SPWIP sub-fund or WIP) accounts. The purpose of the procedure is to outline the accounting treatment for the fabrication of equipment, models/prototypes, and deliverables. The university's Kuali Financial System (KFS) allows for the tracking of accumulated costs incurred during a fabrication to a work-in-progress account. Work-in-Progress accounts accumulate costs and, upon completion of the fabrication, transfer those costs to the account that the finished product will reside in and apply the appropriate capital or non-capital object code. These accounts may also be used for special projects for Telecommunications and Facilities Management upon approval from Business and Financial Services.

3. **Application of Procedure:** This procedure applies to those departments or organizations that fabricate equipment, models/prototypes, and deliverables or have special projects where revenues and expenses need to be tracked over an extended period. Refer to FPI 4-11 (Software and Internally Developed Software) regarding software fabrication and FPI 4-12 (Intangible Assets and Internally Generated Intangible Assets) regarding intangible asset fabrication.

4. **Exemptions:** Any exemptions to this procedure require approval by Business and Financial Services and/or Office of Sponsored Programs if required per a contract, grant, or agreement.

5. **Definitions:**

   A. **Betterment**: An enhancement, modification, upgrade, or other similar expenditure in connection with an existing asset, which significantly extends its useful life, increases its utility or efficiency, or otherwise adds to the benefits it can yield.

   B. **Capital Equipment**: Capital Equipment, also known as movable equipment, includes items which are not considered an integral part of a university building, are non-expendable, do not lose their identity through incorporation into a more complex unit, have a useful life of more than a year, and have an acquisition cost that meets or exceeds a set capital asset threshold amount.

   C. **Capital Equipment Fabrication:** The creation of an item of equipment or scientific instrument that is built or assembled from raw or semi-finished material using allowable direct labor performed by CSU personnel, including internal or external shop staff, and meets capital criteria.

   D. **Capital Models/Prototypes**: Capital models/prototypes are intended for continued use upon completion of the fabrication. The cost of the fabrication must meet or exceed the capitalization threshold and the asset must have a useful life of one year or more, even though they may be subjected to numerous modifications during their useful life.

   E. **Deliverable**: A tangible or intangible object that is created with the intent to be delivered to a customer upon completion of the project.

   F. **Enhancement:** An increase or improvement in quality, value, or extent.

G. **Fabrication:** A manufacturing process in which an item is made from raw or semi-finished material instead of being assembled from ready-made components or parts.

H. **Fabrication Completion Date:** When a fabrication is determined to be ready for use or testing (this is the not the same as the project end-date). The fabrication completion date should allow ample time for the equipment to be utilized on the project prior to the project end-date.

I. **Facilities and Administrative Costs (F&A)**: Facilities and Administrative costs are costs necessary to support research and other sponsored projects, but which cannot be readily assigned to individual projects (the indirect costs). F&A rates are negotiated with the U.S. Department of Health and Human Services. F&A rates are applied to modified total direct costs of a project (Sponsored Funds).

J. **Intangible Assets:** Intangible assets are capital assets having no physical existence. Their value is limited by the rights and expected benefits that possession confers to the university. Examples of intangible assets include easements, water rights, mineral rights, timber rights, copyrights, patents, trademarks, and computer software. Copyrights are included as examples of internally generated intangible assets in GASB Statement No. 51, Paragraph 45.

K. **Internally Developed Software**: Software developed in-house by CSU or by a third-party contractor on behalf of CSU. Commercially available software that is purchased or licensed by CSU and modified using more than minimal effort before being put into operation should also be considered internally generated software. Examples of more than minimal effort would include changing code or fields, adding special reporting capabilities, etc. No substantive plan exists or is being developed to market the software externally.

L. **Internally Generated Intangible Assets:** Intangible assets are considered internally generated if they are created or produced by the university, or if they are acquired from a third party but require more than minimal incremental effort on the part of the university to begin to achieve their expected level of service capacity. Examples of internally generated intangible assets include copyrights, patents, trademarks, and computer software.

M. **Material:** Property which may be incorporated into or attached to an end item to be delivered under a contract or which may be consumed in the performance of a contract. It includes, but is not limited to, raw and processed material, parts, components, assemblies, and small hand tools and supplies.

N. **Models/Prototypes**: Models or prototypes are similar to equipment but are used and sometimes consumed or destroyed during testing. Examples of Models/Prototypes include: a model of a structure that will be placed in a wind tunnel or shaker table for structural integrity testing which is then destroyed during the testing, or a scale model of a bridge or dam built to test set specifications or functional characteristics.

O. **Modification:** A minor change, adjustment or alteration of an asset resulting from external influences, and not inheritable.

P. **Non-Capital Fabrication:** A fabrication that does not meet capital criteria and will be expensed.

Q. **Non-Capital Models/Prototypes**: A model or prototype that has a useful life of less than one year, regardless of cost.

R. Project End Date: For sponsored programs, the end date of a contract, grant, or agreement. This date may be extended.

S. Project Start Date: For sponsored programs, the start date of a contract, grant, or agreement.

T. Prorate: Determining the daily amount of a monthly charge based upon dividing the monthly charged amount by the number of days in the cycle (30 is normally used). To divide, distribute, or calculate proportionately.

U. Software Enhancements and Upgrades: Includes modifications to existing internal use software that result in additional functionality; modifications to enable the software to perform tasks that it was previously incapable of performing.

V. Sponsored Work-in-Progress (SPWIP) Account: The funding source of a SPWIP sub-fund account is a sponsored project fund (53) account.

W. Upgrade: Raising to a higher standard, in particular improve an asset by either adding or replacing components.

X. Work-in-Progress (WIP) Account: The source of a WIP account is any university fund account other than a sponsored project fund (53) account.

6. Procedure Statement: A fabrication takes place when the university makes or builds a piece of equipment, developed software, model/prototype, or deliverable. Equipment, models/prototypes, or deliverables that are fabricated or based on the specification set forth by a researcher may or may not result in capital equipment. The most important consideration for in-house fabrications is the capacity and expertise of organization staff and the facilities and tools required. When a department has identified the need to capture costs for a fabrication, a work-in-progress (SPWIP sub-fund or WIP) account must be set up.

A. Work-in Progress (SPWIP sub-fund [88] and WIP [89]) Accounts). Sponsored Project Work-in-Progress (SPWIP sub-fund) and Work-in-Progress (WIP) accounts are Project-To-Date accounts, which means you can track revenues and expenses across multiple years. The funding source of a SPWIP sub-fund account is a sponsored project fund (53) account and will be administered by Sponsored Programs. The funding source of a WIP account is any other university fund account and will be administered by the Cost Accountant in Business and Financial Services. Departments will need to submit a request to set up a work-in-progress account.

1. **SPWIP sub-fund (88) Accounts:** For all sponsored project fund (53) accounts, a Work-in-Progress Account Request Form (found on the Sponsored Programs website) should be completed and submitted to Sponsored Programs in order for them to set up an 88 SPWIP sub-fund account. The Financial Research Accountant will handle prorating for 88 SPWIP sub-fund accounts.

2. **WIP (89) Accounts:** For WIP accounts not on sponsored project funds, an 89 Account Create document should be submitted to the Cost Accountant in Business and Financial Services. The fabrication's start and end date, estimated budget, and funding account need to be provided. Once approved, the department can set up a sub account if multiple different fabrications are on

the same funding account. The Business and Financial Services Cost Accountant will then handle prorating for 89 WIP accounts.

Fabrications that meet capital criteria will prorate to 1823 Equipment in Progress. If the asset does not meet capital criteria or is considered a deliverable, the costs will not be prorating to 1823 and the costs will be moved to an appropriate expense object code. Monthly AJV entries (by either the Office of Sponsored Programs or the Cost Accountant in Business and Financial Services) will be created that will book the expenses to 1823. For 89 WIP accounts the expenses will be moved to 7720000-1823 and offset the expenses that occur in the 89 WIP account.
Upon completion of the fabrication, the accumulated costs are transferred from the SPWIP sub-fund or WIP account to the account where the expenses for creating the finished product will reside, and the appropriate capital or expense object code will need to be applied.
For all completed SPWIP sub-fund (53 fund) fabrications, upon request from the department, OSP will provide the accumulated amount to the department. For capital SPWIP sub-fund fabrications, the department will submit a Kuali Distribution of Income and Expense (DI) document to move the final cost from 53xxxxx-6xxx to 53xxxxx-8xxx to create the capital asset. Capital equipment fabrications using sponsored project funds (53) are exempt from F&A charges. For non-capital SPWIP sub-fund fabrications or deliverables, the department will need to notify the OSP Accountant that the fabrication is complete and the SPWIP will be closed. The fabrication will be subject to F&A costs.
For all completed WIP (any other university fund account) capital fabrications, the Cost Accountant in Business and Financial Services will move the accumulated expenses in 1823 to the appropriate 8xxx asset object code using a Kuali Distribution of Income and Expense (DI) document. This will generate the 18xx financial object code for the asset. This generates the capitalization entry and creates the asset record, so depreciation can begin.

3. **Costs:** There are restrictions on the costs that can and cannot be charged to a SPWIP sub-fund account or WIP. Allowable direct costs can be charged to the SPWIP sub-fund or WIP. Unallowable costs should be recorded in the funding or source account.

   Costs that **may** be charged to a SPWIP sub-fund account or WIP include:
   - **a.** Materials and supplies needed to fabricate equipment or models,
   - **b.** software purchased as part of the implementation or development,
   - **c.** services needed to fabricate equipment, models, or develop software,
   - **d.** salaries of technicians performing the actual hands-on labor to assemble the fabricated equipment or employees directly associated with the software project for configuration, developing interfaces, installation of hardware, and testing, and,
   - **e.** any other costs that can be specifically identified as directly related to the equipment fabrication.

   Costs that **may not** be charged to a SPWIP sub-fund account or WIP include:
   - **a.** Academic personnel labor costs (e.g., salaries for principal investigators, faculty, graduate research assistants, postdocs, research associates, administrative personnel, etc.),
   - **b.** maintenance,
   - **c.** training,
   - **d.** travel related to costs that may not be charged to a SPWIP sub-fund account or WIP,
   - **e.** indirect costs (charged to funding source if applicable),
   - **f.** salaries of clerical support staff,
   - **g.** facilities rental,

h. capital equipment (stand-alone items that meet capital criteria on their own and do not lose their identity through incorporation into a more complex unit), and any other costs that cannot be specifically identified as directly related to the equipment or model (i.e.: postage).

B. Movable Equipment, Model/Prototype, and Deliverable Fabrications.

The term “Fabrication” is used in conjunction with movable equipment and models/prototypes and should not be confused with building construction projects or deliverables. Movable fabricated equipment and models/prototypes are assets created (built) by a university organization. A fabrication is not something commercially available or something that can be configured using commercially available components that are customarily assembled at a store or by the organization producing a common system.

1. **Characteristics.** Fabricated equipment and models/prototypes can be distinguished by any one of the following characteristics:
   - **a. Original Development.** The fabrication construction creates a one-of-a-kind piece of equipment or model/prototype that is built and assembled from individual parts for use within the university.
   - **b. Original Components.** Original components bear no relationship to the finished equipment and should be attached to, or internal to the finished equipment. Original components should not include equipment that can be used independently of the fabricated asset.

2. **Criteria.** To be considered Capital Equipment or a Capital Model/Prototype, all of the following criteria must be met. The fabricated equipment or instrument:
   - **a.** Meets unique specifications (typically as outlined in a research proposal or award),
   - **b.** has a total cost that meets or exceeds a set capital asset threshold amount. The capital asset threshold for CSU accounts is $10,000 or more for equipment and for sponsor project fund (53) accounts, $5,000 or more for equipment; unless the contract grant, or agreement stipulates a different amount.
   - **c.** has a useful life of 1 year or more from the date of capitalization and, for SPWIP sub-fund accounts, be put into use for a significant period of time prior to the end of the project.
   - **d.** when completed, will not be affixed permanently to a building or structure,
   - **e.** is tangible and capable of specific identification and continuous control through tagging and periodic physical inventory for the entirety of its useful life, and
   - **f.** is not considered a deliverable (delivered to the requestor upon completion of the project).

C. MOVABLE CAPITAL EQUIPMENT FABRICATIONS: Movable capital equipment must meet all listed capital fabrication criteria. Purchased components must work together to create an original asset to perform a specific purpose, and each component is necessary for the asset to function (i.e., removal of any part would result in the asset not operating at capacity or for its intended purpose). Software that is integral to the control and operation of the fabricated asset (i.e., without the software, the fabricated asset will not function for its intended use) can be included as a fabricated component. Materials and direct labor used in the construction of the asset can be included in the cost of the fabrication. Direct labor for fabrications is defined as all hands-on assembly labor of the fabricated equipment. Labor associated with research and the design of a fabricated asset and labor costs that are impossible or impractical to trace to a specific fabrication cannot be included in the cost of the fabrication. The cost of individual components may be less than the capitalization threshold; however, if the finished tangible asset meets capital criteria, it will be capitalized.

Stand-alone items not directly integrated into the fabricated asset will be expensed or capitalized on their own merits (i.e., a computer, a power supply unit, etc.) and should not be purchased using fabrication funds but purchased directly on the account.

D. **Model/Prototype Fabrications:** Fabricated models/ prototypes can either be capital or non-capital. Fabricated models or prototypes are built for testing and are usually consumed or destroyed during testing and/or intended for continued use and subject to numerous modifications during a project's start and end date. Models or prototypes must have a completion date, regardless of continued use or modifications, to be considered for capitalization. The completion date is when the asset is determined to be ready for use or testing. At this point, the fabrication needs to be capitalized or expensed. The one-year useful life requirement for capitalization starts upon the completion date of the fabrication and not from the beginning date of the fabrication. Models/Prototypes fabricated on sponsored project funds must be completed, capitalized, and put into use for a significant period of time prior to the end of the project.

    1. **Non-Capital Models/Prototypes:** Any fabricated model or prototype built to be consumed or destroyed within the first year or during the first year of testing following completed fabrication would not meet the one-year useful life capital criteria and needs to be expensed. Ongoing model or prototype fabrications without an end date are considered non-capital. New fabrications related to completed non-capital model/prototype fabrications are reviewed for capital criteria on their own merits. All non-capital models/ prototypes are recorded as an operating expense and are subject to F&A costs when sponsored project funding is used.

    2. **Capital Models/Prototypes:** Capital models/prototypes must meet all listed capital fabrication criteria. Capital models or prototypes are intended for continued use once the fabrication has been completed. Capital models/prototypes must have a one-year useful life after they are completed (capitalized), even though they may be subjected to numerous modifications during their useful life. Models or prototypes that meet capital criteria must have the costs moved from the WIP to the appropriate capital object code promptly upon the fabrication completion date. Costs qualifying as a capital model or prototype are the costs of the individual components and the assembly effort by internal or external shop staff and are exempt from F&A when sponsored project funding is used.

E. **Deliverables:** A deliverable is an item of equipment or scientific instrument created by CSU personnel, usually in connection with a grant or contract funding, in which CSU will be releasing the fabricated asset to the requestor upon its completion. The title of the deliverable vests with the sponsor per the terms of a grant, contract, or agreement to which the costs are charged. Deliverables are subject to F&A costs.

F. **Betterments:** Betterments will be capitalized according to the Business Rules for Modify Existing. See FPI 4-1 (Capitalization Thresholds).

G. **Internally Developed Software:** See FPI 4-11 (Software and Internally Developed Software).

H. **Internally Generated Intangible Assets:** See FPI 4-12 (Intangible Assets and Internally Generated Intangible Assets).

I. **Construction:** Contact the Financial Reporting and Analysis (FRA) Plant Fund Accountant in Business and Financial Services.

J. **Telecommunications:** Contact the Financial Reporting and Analysis (FRA) Plant Fund Accountant in Business and Financial Services.

7. Reference and Cross-References:

Financial Reporting and Analysis (FRA) website: http://busfin.colostate.edu/Depts/FRA.aspx

Governmental Accounting Standards Board (GASB) (Statement No. 20, Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities the use Proprietary Fund Accounting); (Statement No. 34, Basic Financial Statements-and Management's Discussion and Analysis-for State and Local Governments); (Statement No. 42, Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries); (Statement No. 51, Accounting and Financial Reporting for Intangible Assets); (Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements [Issued 12/10]); (Statement No. 87, Leases); and (Statement No. 96, Subscription-Based Information Technology Arrangements) home page: http://www.gasb.org

Office of Management and Budget (OMB) Uniform Guidance Code of Federal Regulations at 2 CFR Part 200 is the abbreviated title for Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (2 CFR part 200), which supersedes OMB Circulars A-21, A-87, A-89, A-102, A-110, A-122, and A-133, and the guidance in Circular A-50 on Audit Follow up home page: https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200
Office of Sponsored Programs (OSP) website: https://www.research.colostate.edu/osp/

Property Management website: http://busfin.colostate.edu/Depts/PropMgt.aspx

8. Forms and Tools:

Business and Financial Services Guides and Manuals are located at:
http://busfin.colostate.edu/Resources/Guides_Manuals.aspx

Capital Asset Management (CAM) Financial Documents Training (Completing Capital Asset Requisitions, General Ledger Transfer [GLT] documents, and Distribution of Income [DI] documents) is located at:
http://busfin.colostate.edu/Depts/PropMgt.aspx (Under the Training heading)

Kuali Financial System (KFS) User's Manual is located at:
http://busfin.colostate.edu/Resources/Guides_Manuals.aspx (Under the Manuals heading)

Office of Sponsored Programs (OSP) Work-in-Progress (WIP) Account Request form is located at:
Forms - Office of Sponsored Programs (colostate.edu) (Under Forms heading, Award sub-heading Work-in-Progress (WIP) Account Request)

Property Management Agency Account Request form is located at:
http://busfin.colostate.edu/Resources/Forms.aspx (Under Accounting Misc. tab)