Columbia University

Fiscal Year 2018
Space Inventory and Functional Usage
Training
April 2018
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The 2018 Project Team includes:

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- ATTAIN
  - Mark Davis (Managing Partner)
  - Vickie Veley
- School and Departmental Support
  - CUMC
  - School of Engineering
  - Arts and Sciences
  - Earth Institute
Background
Survey Requirement

• The University is currently in the process of preparing for a Facilities and Administrative ("F&A") rate proposal based on fiscal year ("FY") 2018 activity.

• Preparation and submission of the proposal is a significant endeavor for the University which requires support from many areas throughout the University including the areas for which you are responsible.

• One component of the proposal process is for the University to conduct a survey to classify space into various categories as defined by federal regulations.

• The survey for the proposal will be conducted in the later part of FY 2019. Given the critical nature of this activity, in preparation for the FY 2019 submission, the University will be performing “Dry Runs” based on FY 2017 and FY 2018 data.
Background
Survey Timeline

• Formal Facilities and Administrative Rate Proposal
  • Base Year FY 2019
    • Space Survey – Spring 2019
    • Expense Analysis – Summer/Fall 2019
    • Proposal Due to Federal Negotiators – December 31, 2019

• Advance Preparation for the formal proposal
  • Based on FY 2017 data
    • Space Survey – August 2017
    • Data Collection – Completed 1/1/18
    • Data Analysis – Completed 2/15/18
    • Expense Analysis – Completed by 4/1/18
  • Based on FY 2018 data
    • CUMC/Morningside Departmental Training – April, 2018
    • Space Survey – Scheduled Start 4/16/2018
    • Data Collection – Completed by 6/1/2018
    • Data Analysis – Completed by 7/1/2018
    • Expense Analysis – Summer/Fall 2018
Federal Compliance as required by:

- Depreciation, Interest, and Operations of Facilities on buildings used for more than one function shall be allocated to the individual functions performed in each building on the basis of assignable square feet of space, excluding common areas such as hallways, stairwells, and restrooms.
- Space must be identified in specific percentage terms.
Space Survey Overview

Space Survey and Dry Run Space Survey Goals

- The current on-campus F&A rate for FY 2018 is 60%
  - Increases to 62% for grants awarded after July 1, 2018
- FY 2017 available F&A reimbursement was approximately $248M
- A one percent change in the rate is equal to approximately $3M
- Components of the F&A Rate:
  - Facilities-related costs
    - Account for more than half of the current 60% rate.
    - No limit to the maximum amount that can be recovered
  - Administrative costs
    - Account for the remainder of the current 60% rate
    - Limited to a maximum of 26% of the research costs
- The space study provides the statistics to allocate the facility related costs
Space Survey Overview

Space Survey and Dry Run Space Survey Goals

Space Survey Goal
• To document the functional usage statistics on a room by room basis in order to calculate the percentage of space dedicated to organized research. The functional space percentages are then used to allocate facilities costs to the research space

Dry Run Space Survey Goals
• Identify all activities performed in each room for reasonable costs allocations
• Develop preliminary proposal statistics
• Identify potential anomalies in advance of the full FY2019 space survey
• Use methodologies that comply with the Federal government requirements and that provide the best cost recoveries
• Establish baseline data utilizing the FY 2017 survey as starting point for FY 2018 & FY 2019 data collection
  • Anticipated to significantly improve accuracy and reduce departmental effort for FY 2018 and FY 2019 surveys
Space Survey Overview

Process

- **Software:** To facilitate this process, the University will be utilizing the *AttainSpace* tool.
- **Data:** The software tool has been pre-loaded with the following data:
  - Current space data - provided by the facilities organizations.
  - Payroll data
  - General Ledger data
  - Sponsored Project data
  - Graduate Student data
Objectives

Based on this information our objectives are to:

- Verify the accuracy of the room list for your department
- Provide information relating to the use of the rooms
- Identify occupants who used each room
- Provide the source of funding supporting the activities performed within each room.
The following data will be “rolled forward” for departments that were part of FY 2017 Space Survey:

- Cluster Name
- Associated service center data
- Responsible person(s)
- Paid occupant data – employed as of 6/30/17
- Functional percentages

For FY 2018, departments that were part of FY 2017 Dry Run will be required to:

- Validate data rolled forward
- Re-evaluate functional percentages
- Identify new occupants (paid/unpaid)
- Identify Projects that were conducted in the space

New data will be collected for the remaining research departments that were not part of FY 2017 Dry Run.

Please note similar to what is being done for the FY 2018 survey, data will be “rolled forward” to our base year (FY 2019)

- Accuracy and attention to detail is critical to the process
Space Survey Process
Survey Participant/Leadership Requirements and Federal Review

Survey Participant Requirements
• To ensure an accurate and efficient process the Space Survey should be completed by individuals having first hand knowledge of the activities performed in the rooms through close coordination with the room occupants.

Leadership Sign-Off
• All conclusions must be reviewed and approved by senior leadership

Federal Review
• Final allocations may be reviewed by the Federal negotiators. As a result, it is critical documentation be retained to support the University conclusions.
Space Survey Process
High-Level Survey Tasks

Initiate Project

- Gather system data load into AttainSpace
- Conduct training for each department

Complete Space Survey

- Validate Demographic Room Information
- Document Functional Usage
  - Central project team will provide whatever assistance as necessary to complete the survey
  - Functional definitions included in Appendix A

Validate Data

- Department will review survey results for reasonableness and notify central project team of inconsistencies
- Central project team will perform quality assurance review
Space Survey Process

Use of Survey Tool

- Survey information must be entered in the *AttainSpace* web-based application
- Room inventory report available on web site is populated with demographic information from the database maintained by Facilities
- The online Room Survey Form must be completed for each room assigned to the department
Complete Space Survey
Validate Room Demographic Information

For each room, determine functional usage as follows

- Review room list for accuracy and completeness
  - Rooms used by department during FY 2018 missing from list
  - Rooms on list not used by department during FY 2018
  - Rooms that do not exist
- Confirm that square footage is accurate
- Confirm that room type is accurate
  - Different survey process for certain room types
  - Room type definitions included in Appendix B
- Identify Responsible Person for Labs and Lab Service rooms
  - Individual in charge of the on-going operations conducted in the room. For research labs this is normally the PI/Lab Director responsible for the research projects in the lab.
  - If used by multiple PI’s, list all names
For each room, determine functional usage as follows (continued)

- Functional use percentages should reflect activity performed in the room for the fiscal period ended June 2018.
- Functions identified must be consistent with the functional use codes of the funding for the occupants in the room.
- Space used by occupants not paid by Columbia should be classified as “other institutional activities” (unpaid students, visiting scientists).
- Space used by faculty and staff paid directly by the Howard Hughes Medical Institute should also be classified as “other institutional activities”
- When space is occupied by multiple individuals, the frequency of their presence should be considered in determining the percentage of functional activity.
- System will not accept the entry as complete unless the functional usage totals 100%.
Complete Space Survey

Document Functional Usage

Rooms to Code as Joint Use

- Offices and multi-purpose rooms such as Office Service Rooms, Conference Rooms, Employee Lounges, Meeting Rooms, Study Rooms, Departmental Libraries, General (non-lab) Storage Areas

Requirements

- Verify that room type is accurate
- In *AttainSpace* select room, check Joint Use checkbox on room survey form under Room Attributes and Sign-Off.
- You’re done with these rooms!
Research Labs with Sponsored Activity

- List ALL personnel who occupied each room on a regular basis during Fiscal Year 2018 (e.g., Faculty, Research Staff, Post Docs, Technicians, Graduate Students, Undergraduate Students, Visiting Scientists)
  - \textit{AttainSpace} is prepopulated with all personnel paid by the University
    - Select and assign as appropriate
    - Occupants not paid by the University (e.g., unpaid students, visiting scientists)
      - Add to \textit{AttainSpace} as required
  - Identify ALL project numbers (sponsored and non-sponsored) for the work performed in each room during Fiscal Year 2018
    - \textit{AttainSpace} is prepopulated with funding sources for employees assigned to the room
      - Select as appropriate
Project Support
Technical and Survey Support

Our Team is available to assist you:

• Please complete the *AttainSpace* sign-up sheet detailing your access level (i.e., department, division)
• E-mail will be sent to you when your user name and password are active and you can begin the survey
• Call us when signing on for first time if help is needed with navigation
• When starting the survey, call us for additional one-on-one guidance, if needed
• Completion Due Date: June 1, 2018.
Project Support

Contact Information

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Questions
APPENDIX
Appendix A
Functional Definitions
Functional Definitions

Organized Research

- **Sponsored Research** – Research activities that are separately budgeted and accounted for and sponsored by federal and non-federal agencies and organizations (e.g., foundations, corporations, state agencies, etc.).

- **Sponsored Research Training** - Activities involving the training of individuals in research techniques, which are sponsored by federal and non-federal agencies and organizations and are performed in the same facilities as other research activities. Examples include NIH research training grants, fellowship programs, and career development awards (commonly classified as “K”, “T-32”, and “F-32” awards).

- **Institutional Research** – Research activities that are separately budgeted and accounted for on a specific project basis under an internal application of funds (e.g., the Provost’s Strategic Research Fund; Executive VP for Research Fund).
Functional Definitions

*Instruction/Department Research*

- **Instruction** - The teaching and training activities of the institution. Funding source is normally the department’s operating budget.
- **Departmental Research** - Research and development activities that are not separately budgeted and accounted for by Columbia. Funding source is normally the department operating budget or other University sources.
- **Other Sponsored Training** - Instructional or training activities (not research training) established by grant, contract, or other cooperative agreement.
Other Sponsored Activities

- Programs and projects sponsored by federal and non-federal agencies and not for profit organizations that involve public service activities. This also includes travel grants, Intergovernmental Personnel Act (“IPA”), seminars and conferences, public health projects.
- This category also includes activities devoted to the Clinical and Translational Research awards.

Clinical Trials

- Activities for testing of drugs. Generally sponsored by “For Profit” pharmaceutical companies and some Federal agencies.
- Federal Clinical Trials should be coded as organized research.
Functional Definitions

*Departmental Administration*

- Administrative support services that benefit common or joint activities in academic departments, divisions, and research centers. Examples include:
  - General departmental administrative and clerical functions and services, as performed by the department chair and administrative staff
  - Administrative effort related to sponsored projects that is not directly funded by the projects
  - Preparation of grant applications and proposals
Functional Definitions
Specialized Service Facilities

- Activities that provide specialized services to sponsored and non-sponsored programs and bill for their services.
- Specialized Service Facilities have annual operating costs of $1 million or more
- The Institute of Comparative Medicine is the only SSF at Columbia
Functional Definitions
Service/Recharge Operations

- Activities that provide services to sponsored and non-sponsored programs and bill for their services.
- Examples include: NMR facilities, electronics shops, and glass washing facilities, etc.
- Service/Recharge space will be distributed centrally.
Functional Definitions

Faculty Practice Office

• Activities associated with the operations of the faculty practice offices. Includes all space that is rented to a private practice office (e.g., patient care, office space, storage rooms) within the University.
Functional Definitions

Other Institutional Activities

- Includes all activities other than those previously defined. This category includes:
  - Operations of residence halls, dining halls, book stores, alumni relations, development offices, external affairs, and any other auxiliary enterprise not specifically defined by any other functional usage category.
  - Space rented to third parties, including the areas used by the Howard Hughes Medical Institute (HHMI) investigators.
  - Includes space associated with visiting scientists.
Appendix B

Guidelines for Select Room Types
Guidelines for Select Room Types
Research Laboratories

- % of functional activity must be supported with project and occupant information
- If a single PI uses multiple labs and his/her research personnel are working on awards throughout labs, and it’s impossible to differentiate their activities between the labs, it is acceptable to code the labs identically
Guidelines for Select Room Types
Research Lab Service Rooms

- Research Lab Service Rooms include equipment rooms, cold rooms, microscope rooms, and dark rooms
- Code lab service rooms the same as the average functional usage of the labs these rooms supported during FY 2017
- *AttainSpace* functionality – click appropriate Radio button in the functional usage calculation section of the Room Survey Form
  - Manual coding: Enter functional percentages based on the lab(s) supported and include a note in the “comments” section indicating the related lab areas (e.g., PI, a floor, or the entire department)
  - Automatic coding: Select lab(s) supported during FY 2017. *AttainSpace* will calculate average of functional usage for rooms selected.
Guidelines for Select Room Types

Recharge Center/Support Area

- Examples include NMR facilities, electronics shops, and glass washing facilities, etc.
- In *AttainSpace*, identify room(s) that should be assigned to a recharge center by clicking the Service Center checkbox in the Room Attributes section of the Room Survey Form and selecting the corresponding recharge center name from the drop-down list.
- Space will be assigned to functions based on charges to users.
Guidelines for Select Room Types
Offices, Conference Rooms & Multi-Purpose Rooms

• Must be classified as Joint Use
• Confirm room type, click Joint Use checkbox in the Room Attributes section of the Room Survey Form, and then Sign Off
Guidelines for Select Room Types
Classrooms & Teaching Laboratories

• Typically classified as Instruction
• If research is conducted or research results are presented in these areas, a percentage of the room can be allocated to either Departmental Research or Organized Research
  • Must be clearly documented with occupants and funding sources
Guidelines for Select Room Types

Library Space

• Departmental libraries maintained with departmental budgets should be classified as “Joint Use” not “LIBRARY”

• The Library function code is exclusively for space devoted to the operation and administration of the main Columbia libraries and branches of the main libraries
Appendix C

Frequently Asked Questions
How do we account for Graduate and Undergraduate Students and Post-Doctoral Fellows that occupy laboratories where Organized Research is performed?

- If the Students or Post Docs are paid with organized research funds, the functional usage is Organized Research.
- If the Students or Post Docs are paid with research training funds, the functional usage is Sponsored Research Training.
- If the Students or Post Docs are paid with sponsored training funds, general institutional funds or are unpaid, the functional usage is Instruction.
Frequently Asked Questions

How do we code Laboratory Service Rooms such as cold rooms, dark rooms, equipment rooms, etc.?

- If the room supports one specific Principal Investigator (PI), the space should be coded the same as the PI’s lab(s).
- If the room supports more than one PI, a floor, or the entire department, the coding should be allocated to functions based on the average functional usage of the rooms being supported. For example: a research equipment room supporting two (2) PI’s should be functionalized based on an average of the two PI’s lab areas.
  - *AttainSpace* functionality – click Automatic Radio button in the functional usage calculation section of the Room Survey Form and select lab(s) supported during FY 2017. *AttainSpace* will calculate average of functional usage for rooms selected.
- Indicate in the comments box how you determined the coding.
How do we functionalize multi-purpose rooms?

- Multi-purpose rooms include offices, conference rooms, employee lounges, meeting rooms, departmental libraries and general supplies storage areas.
- For these rooms click on the Joint Use box and save the room.
Frequently Asked Questions

How do we code teaching labs?
• Teaching labs are typically classified as instruction
Frequently Asked Questions

Can a room be coded as 100% Organized Research?

• Federal Government negotiators pay particular attention to rooms coded as 100% Organized Research. However, if a room is dedicated 100% to organized research it should be coded 100% to Organized Research.

• If any of the following apply, the room should not be coded 100% Organized Research:
  • There are unpaid students or students paid from general institution accounts who use the room.
  • There are undergrad students working on projects for academic credit or research experience (e.g., senior projects, honors thesis, summer high school students)
  • The room is occupied by visiting scientists who are not paid by Columbia University or any other occupants not paid from organized research funds for their work conducted in the room.
  • There are non-research activities performed in the room (e.g. lab tests performed for hospital or clinic).
Frequently Asked Questions

Can we block code all the labs or offices in a department the same percentage (e.g., 90/10, 80/20, 70/30, etc.)?

• Normally not for research labs; you must code each room individually based on how the room is used. Federal negotiators pay particular attention to rooms that appear to be block coded arbitrarily.
  • If a single PI uses multiple labs and his/her research personnel are working on awards among labs, and it is impossible to differentiate their activities between the labs, it is acceptable to code the labs identically.
  • *AttainSpace* has functionality to quickly facilitate the process (“Cluster” function).

• However, there may be instances where it may be acceptable. For example, administrative offices or instructional rooms. The *AttainSpace* system allows for block coding.

• Avoid assigning rooms arbitrarily without careful consideration of the actual activities and functions being performed.
What is considered Library Space and how do we code Library Space?

- Library space refers to space devoted to the operation and administration of the Columbia Library System.
- Departmental libraries are considered multiuse rooms. The joint use box should be checked and the room saved. The room will be coded based on salaries and wages.
Frequently Asked Questions

How do we functionalize Vacant and Inactive Areas?

- A room should be coded inactive only if it has been under renovation or vacant for a full 12 month period. (FY 2018).
- If occupied for any portion of the 12 months, functionalize the room based on the activities performed during the period of use.
- It is rare to find rooms vacant or inactive for the entire 12 months of a fiscal year.
What is a Computational Research Lab?

- A Computational Research Lab is a room used for work associated with very complex and sophisticated computer modeling projects involving definitive research protocols. Research is conducted via connection to specialized, centralized, stand-alone hardware/software developed exclusively for specific externally funded projects.
- Computational Research Laboratory Service is a room that directly serves one or more computational research laboratories as an extension of the activities in those rooms.
Appendix D

F&A Cost Proposal Overview
F&A Cost Proposal Overview

Background

Definition of Facilities & Administrative (F&A) Costs

• F&A costs, also known as indirect or overhead costs, are those costs associated with the sponsored activities of the Columbia research enterprise which cannot be readily assigned to an individual project.

• Facilities costs are defined as building and equipment depreciation, interest on debt associated with certain buildings, equipment and capital improvements, operation and maintenance expenses, and library expenses.

• Administration costs are defined as general administration, departmental administration, and sponsored projects administration expenses.
F&A Cost Proposal Overview
Allocation of Indirect Costs

Indirect Cost Pools
Facilities
• Building Depreciation
• Equipment Depreciation
• Operations and Maintenance
• Interest Expense
• Library

Administration**
• General Admin
• Departmental Admin
• Sponsored Projects Admin

**Components are Capped at 26%

Allocation Basis
• Square Footage
• Square Footage
• Square Footage
• Square Footage
• Student, Faculty, Staff FTE

Administration
• TDC
• MTDC
• MTDC
**F&A Cost Proposal Overview**

*Allocation of Indirect Costs*

**Indirect Costs**

- Overhead Costs Incurred to Support Research Activities
  - Depreciation of Buildings & Equipment
  - Operation & Maintenance Costs
  - Interest on Debt
  - Library Costs
  - Administrative Expenses

**Modified Total Direct Costs**

- Costs incurred in performing research activities
  - Salaries and Fringe Benefits
  - Supplies and Materials
  - Travel
  - Consultant Services

$192 million ➔ Indirect Costs ➔ Modified Total Direct Costs ➔ $320 million

**F & A Cost Rate = 60%**
Appendix E

System Overview - AttainSpace
System Overview - *AttainSpace*

*Survey Access*

Location of the web-based space study application:

www.attainspace.com/v2
System Overview - *AttainSpace*

*Survey Home Page*

- **Remaining** – Room record has not been updated and saved since import
- **In-Progress** – Room record has been updated and saved, but has not passed the validation rules
- **Signed-Off** – Room record has been updated and saved, has passed the validation tests, and has been signed off by user
  - *All rooms must be in the Signed-Off category for the survey to be complete, unless exceptions have been noted and approved*
System Overview - *AttainSpace*

**View Rooms Page**

- Filter options
- Click room hyperlink to access Room Survey Form
System Overview - *AttainSpace*

*Room Survey Form Page*

- Quality Assurance Warnings / Business Rules
- Room Description and Details
- Attributes
- Responsible Persons
- Occupants/Projects
- Functional Usage
- Comments
System Overview - *AttainSpace*

*System Quality Assurance Checks*

- Room functional usage must total 100%.
- All rooms with a percentage identified to OR or OSA (primarily labs and lab service areas) must have at least one occupant listed who is funded from a grant account/project that has a corresponding function code.
  - * Must satisfy all system quality assurance checks to move to “Signed Off” category.
  - * Signed Off rooms are subject to further quality assurance review procedures.
System Overview - *AttainSpace*

*Tools Page*

- Clusters
- Block Code
- Unassigned Sponsored Accounts
- Unassigned Sponsored People
System Overview - AttainSpace

Report/Exports Page

- Room Supporting Information
- Unassigned Accounts
- Unassigned People
- Account List
- Employee List
- Space Summary Report
System Overview - *AttainSpace*

**Helpful Checklist**

- **Print out the Room Supporting Information Report**
  - This will allow you to verify that all department rooms have been included.
- **Print out the Account Report**
  - This will help you place all of the projects related to your department.
- **Print out the Employee Report**
  - This will help you account for all of the employees and paid students that have been supported by your department.
- **Block Code all rooms that are Joint Use or Instructional in nature as well as any Vacant rooms**
  - This will reduce the workload and allow you to focus on Organized Research areas.
- **Use Cluster Function for Lab Suite Areas**