

Welcome to the:

ROOM TYPE CODING & ON-SITE OBSERVATIONS REVIEW SESSION

May 1st & 2nd, 2012



Cornell University

Introduction:

Mary-Lynn Cummings

Cornell University-Director of Space Planning

453 Day Hall

Ph. 607.255.2557

spaceplanning@cornell.edu



- Thank-you!
- Brief Introduction
- [http://www.dpb.cornell.edu/
IP SP Space Study.htm](http://www.dpb.cornell.edu/IP_SP_Space_Study.htm)

PAULIEN & ASSOCIATES, INC.



Mark Berthold, AIA-LEED AP
Paulien & Associates – Senior Associate
899 Logan Street
Suite 508
Denver, CO 80203
303.832.3272
mberthold@paulien.com

- **Field observations began January 2012**
- **Walked 7.0M ASF (12M GSF) of the Cornell University Ithaca campus buildings**
- **6 weeks spent on campus collecting data and verifying Room Type Codes**
- **Observations were noted to help update the CU facility inventory records**

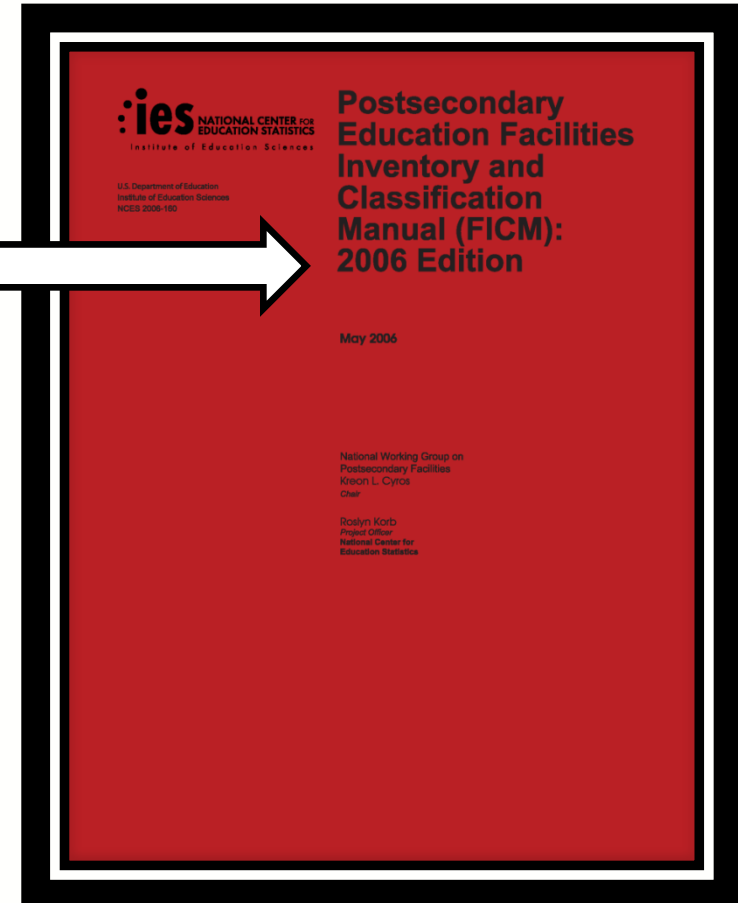
“We use our analytical skills to help Colleges and Universities make good decisions about how best to use their resources . . .”

- Planning Consultants for Institutions of Higher Education
- Established in 1979
- National and International Experience
- Over 500 Campuses in 45 States, District of Columbia, and Internationally
- Varied Expertise of Planning Staff:
 - *Educational Planning*
 - *Architecture - Programming*
 - *Construction Administration*
 - *Education Administration*
 - *IT / Systems Analyst / Computer Programming*

National Use of Facilities Standard

Postsecondary Education Facilities Inventory and Classification Manual

- ▶ National standards for definitions and parameters for describing & coding space
- ▶ Supports institutional facilities data
- ▶ First published in 1973
- ▶ Updated in 1992, 2006 by NCES



Defining Rooms by Usage

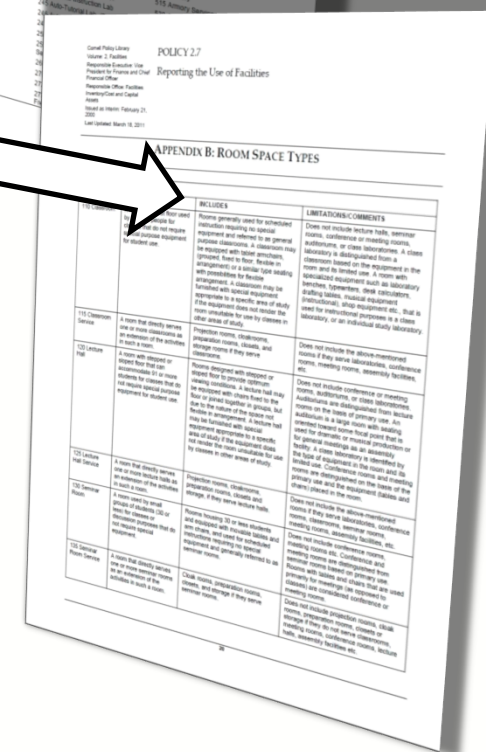
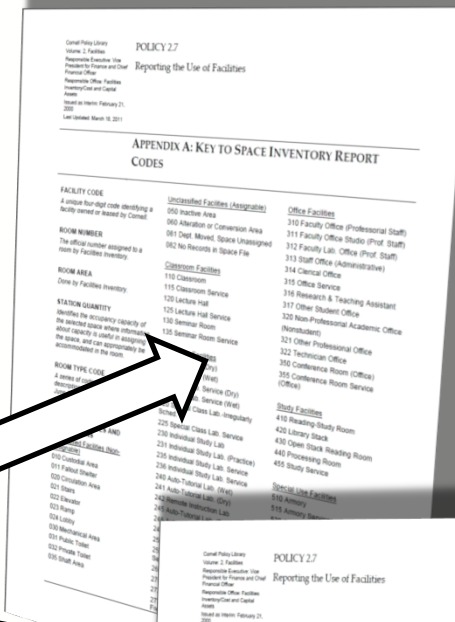
- ▶ Manual describes standard practices for conducting, **reporting, and maintaining** an institutional facilities inventory.
- ▶ Designed to be both **specialized and general** and applicable to institutions with sophisticated information needs as well as to those with more basic facilities information needs.
- ▶ It reflects that space is one of the **primary resources** of a postsecondary educational institution.
- ▶ It provides definitions for building area measurements, **space and room type codes**, and other data that are useful in a facilities inventory.
- ▶ It describes the basic principles for developing a facilities database and provides guidance on **required and optional data elements** for inclusion in a facilities inventory

Cornell - Use of Facilities Standard

Policy 2.7 Reporting the Use of Facilities

- ▶ Issued as Interim: Feb. 21, 2000
- ▶ Last Updated: March 18, 2011
- ▶ Appendix A: Key to Space Inventory Report Codes, pages 17 & 18
- ▶ Appendix B: Room Space Types pages, 20 thru 41
- ▶ Appendix C: Space Function Codes (was not part of this phase but is part of the study)

<http://www.dfa.cornell.edu/treasurer/policyoffice/policies/volumes/facilities/facilitiesreporting.cfm>



Walkthrough Clarification Notes

- Mark did not walk every assignable room; in particular, he did not visit the facilities of the Law School or the Johnson School, per agreement with the leadership in those Schools, due to on-going space studies already underway in both Schools.
- Mark coded each room on the day he saw it using his best judgment using the Cornell room type coding.
- Because Mark's coding was based on visual observation, each department or building may have internal knowledge that would lead to a different code.
- Mark used the FY11 inventory file.
- This presentation discussed room type codes and station quantity. It did not cover functional coding, as Mark was unable to evaluate functional coding. All functional code questions should be directed to Nancy Abbott in Cost & Capital Assets @ 5-9368.
- Field observations by Mark used the official floor plans for room numbering. If the numbering on the room differed from the floor plan, the floor plan was used.
- For room type coding, the use of the room during the normal schedulable day is what was considered, even though rooms are used outside of those hours.
- Cornell policy is to assign the room type code based on how the room existed at the close of the fiscal year. Room type coding is not averaged over the year.

Room Type Code Categories

000– Unclassified Room Space (assignable and non-assignable)

100 – Classrooms Facilities (instructional)

200 – Laboratory Facilities (instructional & research)

300 – Office Facilities

400 – Study Facilities

500 – Special Use Facilities

600 – General Use Facilities

700 – Supporting Facilities

800 – Health Care Facilities (student & animal)

900 – Residential Facilities

FACILITY CODE

A unique four-digit code identifying a facility owned or leased by Cornell.

ROOM NUMBER

The official number assigned to a room by Facilities Inventory.

ROOM AREA

Done by Facilities Inventory.

STATION QUANTITY

Identifies the occupancy capacity of the selected space where information about capacity is useful in assigning the space, and can appropriately be accommodated in the room.

ROOM TYPE CODE

A series of codes giving a general description of a room's last use as of June 30th, i.e., classroom, office, sleep/study, laboratory, etc.

From Policy 2.7 page 17 Cornell
Reporting the Use of Facilities

100 – Classroom Space (Instructional)

110 Classroom– A room with a flat floor used by **31 to 90** people for classes that do not require special purpose equipment for student use. (Movable and tablet arm chairs)



120 Lecture Hall – A room with stepped or sloped floor that can accommodate 91 or more students for classes that do not require special purpose equipment for student use. (Use this room type code for any instructional space with stepped or sloped floor and fixed seats or tables no matter what the station quantity.)



130 Seminar Room – A room used by small groups of students (30 or less) for classes or discussion purposes that do not require special equipment. (Usually has movable tables and chairs or a conference room table)



100's Service Spaces

125 Lecture Hall Service– A room that directly serves one or more lecture halls as an extension of the activities in such a room.

(Should be grouped) 110/115, 120/125, 130/135

100's Service spaces – These spaces often have audio equipment, projectors, computers, computer racks with DVD, CD, VHS equipment. Can be at the front, side, or back of a space in closets or rooms.

They should not be confused with 530 Audio-Visual, Radio, TV or 535 Audio-Visual, Radio TV Service space.



100's Clarification Notes

- Make note that a function of a room that may show up on the room signage (e.g., Seminar) may not accurately reflect the room type. It is better to make the observation of the room and disregard the room signage name.
- Seminar rooms for room type coding purposes are small instructional rooms, not necessarily rooms where non-instructional lectures & discussions occur.
- Further discussion of Seminar rooms vs. Meeting rooms follows in a later section.

200 – Laboratory Facilities (instructional)

210 Laboratory – Dry A room used primarily by regularly scheduled classes that require special equipment for student participation, experimentation, observation, or practice in a field of study. Water is not available within the room to serve the function of the room. (Dry Lab has no need for a water source in the laboratory)



212 Laboratory - Wet – A room used primarily by regularly scheduled classes that require special equipment for student participation, experimentation, observation, or practice in a field of study. Water is available within the room to serve the function of the room. (Wet Lab has water source available)



200's Service Spaces

215 Laboratory Service-Dry – A room that directly serves one or more “dry” class laboratory as an extension of its activities. (Does not need to be adjacent to the room, can be down the hall, experiment materials storage, prep rooms)

217 Laboratory Service-Wet – A room that directly serves one or more “wet” class laboratory as an extension of its activities. (Does not need to be adjacent to the room, can be down the hall and does not need to have water in this room or space but often does have a water source) glassware storage, dishwashing, prep rooms are typical spaces

(Service Spaces usually are grouped with their room type) 210/215, 212/217, 220/225, 230/235 231/236 240/245 241/246

Station Counts – Instructional Laboratories

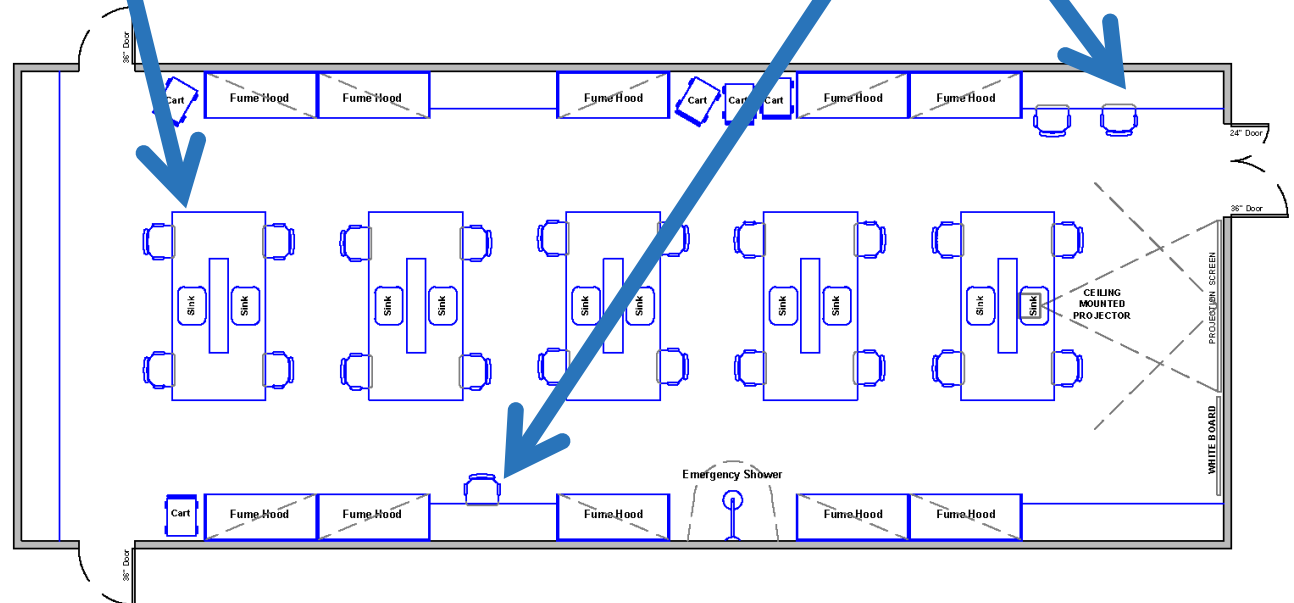


▶ Instructional Laboratory station counts?

5 benches with 4 student stations at each bench

3 additional seats at perimeter work spaces

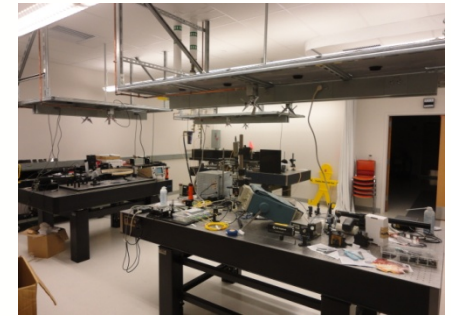
Station count for the room is 20 not 23



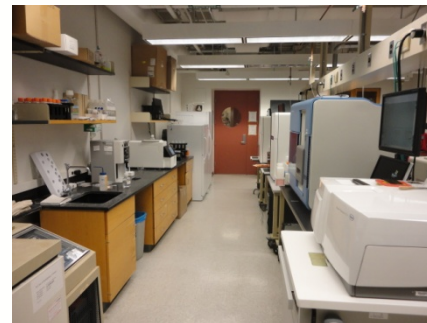
<http://fe.fs.cornell.edu/fig/inventory/system.cfm>

250's – Laboratory Research

250 Non-Class Laboratory (Research) –A room used for laboratory application, research, and/or training in research methodology requiring special purpose equipment for staff and/or student experimentation or observation.



255 Non-Class Laboratory Service (Research) A room that directly services one or more non-class laboratories as an extension of the activities in those rooms ([Tissue culture](#), [common equipment rooms](#), [microscope rooms](#), [analysis/data entry areas](#), [research prep rooms](#), spaces where active research or experimentation is not taking place)



200's Clarification Notes

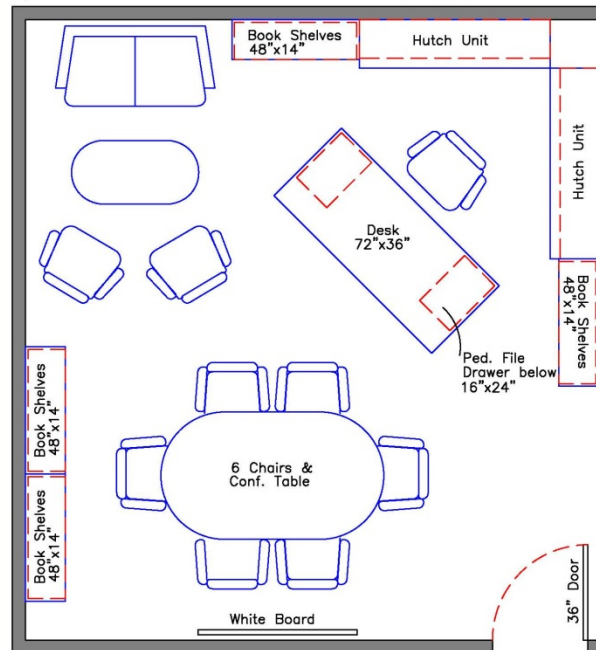
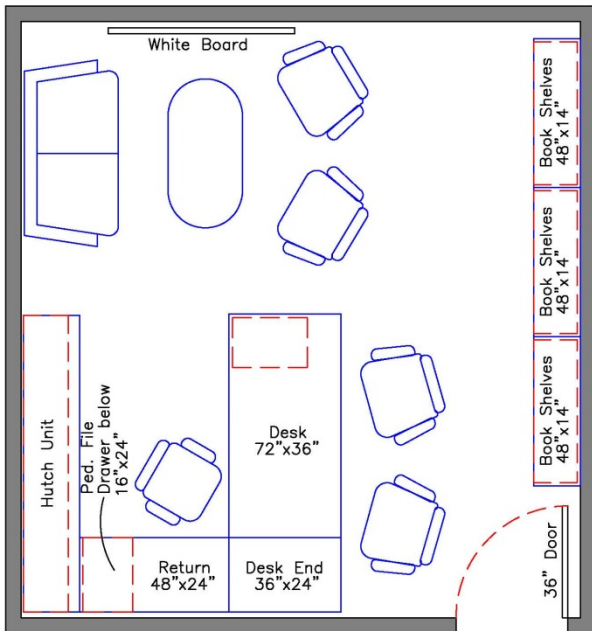
- Cornell has a large number of instructional laboratory types (220-246) that are difficult to discern in the field without internal knowledge. It would be best for space coders to review the definitions of these rooms in Policy 2.7, Appendix B prior to coding spaces. Unless Mark observed an outright error, he deferred to the Cornell coding for these spaces.
- Over the next year Cornell will review these instructional lab types with Paulien and recommendations for a more simplified structure may be proposed to the campus.
- One of the distinctions we need to discuss over the next year is the value of separating wet and dry labs. For now, continue coding wet and dry separately. However, do not use “wet” when there may be water but it is not important to the function of the room (i.e., a coffee sink in the corner does not make a wet lab).
- Use the existing Cornell guidance for station quantities in fixed bench labs for now (see link on slide 14). The study will recommend clarifications for this guidance.

300's Office Station Counts

► Review of an office Station Count

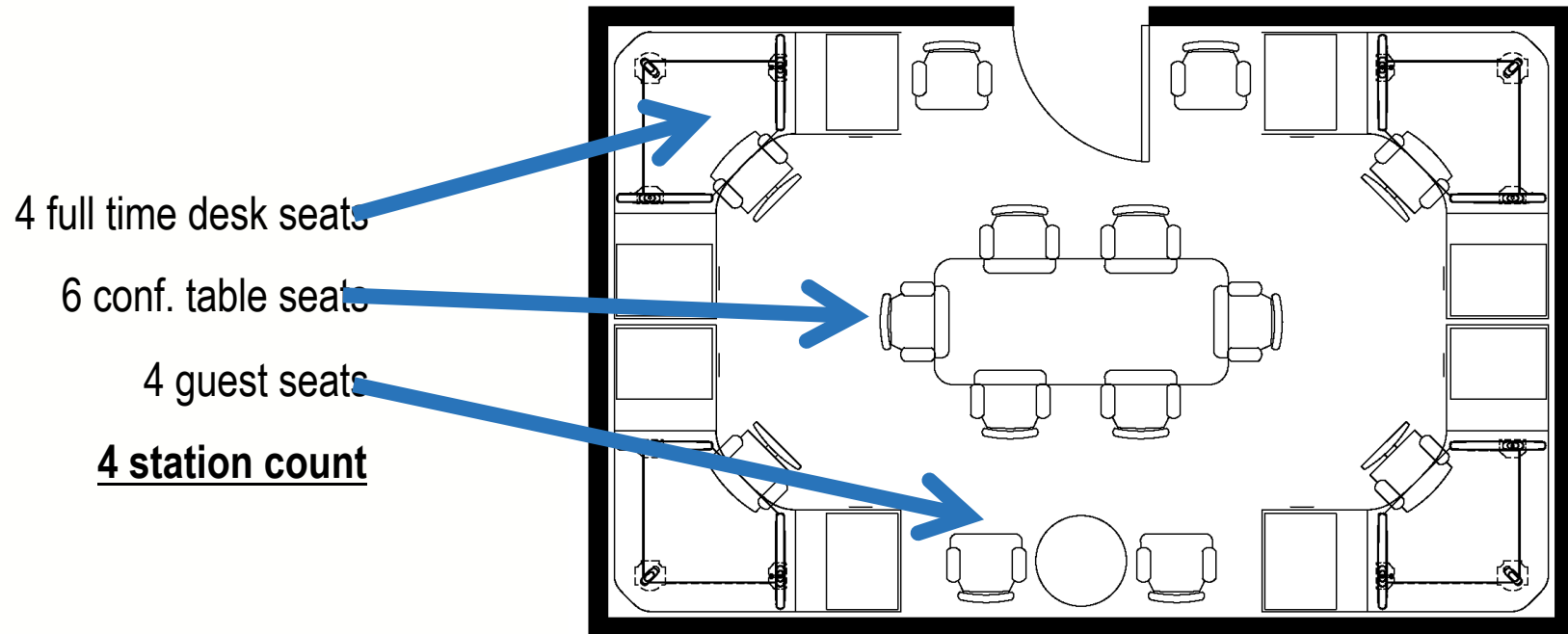
1 desk seat
 6 guest seats
1 station count

1 desk seat
 10 guest seats
1 station count



Station Counts – Multiple User Office

- ▶ Graduate Student Offices, Post Docs, Research Assistants, Staff cubicle offices.
- ▶ Full-Time work stations (the work area would be appropriate for a full time worker to be present 5 days a week).



<http://fe.fs.cornell.edu/fig/inventory/system.cfm>

315 – Office Service vs. 650 Lounges

315 – Office Service

- ▶ Break rooms specific to department or suite
- ▶ Kitchenette
- ▶ Lunch table and chairs



650 – Lounge

- ▶ Often have comfortable seating
- ▶ Open to all general building or campus occupants
- ▶ Can be a casual or formal environment
- ▶ Residence Halls also typically have lounge spaces



300's Clarification Notes

- Clarification of student work stations:
 - If a cubicle space has multiple student work stations but would be appropriate for one full time work station, count it as one.
 - If a student work station is very small or ad hoc, and not appropriate to sit at for 8 hours a day, do not count as a station.
 - If any work station is part-time, but is still appropriate to sit at for 8 hours a day, still count it as a station.
 - The presence of a chair does not necessarily mean the presence of a station.
- In reviewing 315 (office service) vs. 650 (lounge) consider all criteria before coding the space. Do not make the decision based on one item alone, instead take the overarching view.
 - One additional consideration may be vending. Although a kitchenette may have one machine, it's not unusual for a lounge to have multiple machines.

315 – Office Service vs. 730 Storage

315 – Office Service

- ▶ File room specific to department or suite (includes archive files)
- ▶ Copier/Printer rooms
- ▶ Work rooms
- ▶ Office Supply closets
- ▶ **Typically used often and multiple times per day**



730 – Storage

- ▶ Warehouse storage of items
- ▶ Items for campus-wide usage
- ▶ Items stored for use through out the entire building – furniture systems/ panels, product storage for several buildings
- ▶ **Typically not used daily**



730 – Storage (What is Storage?)

Use/Definition: A room or building used to store materials or equipment that serves multiple room use categories, organizational units, or buildings.

Includes: Central storage facility (warehouse) and inactive unit storage. The concept of central or general storage is the key to applying this code correctly.

The vast majority of “storage” rooms on campus are service rooms that directly support a primary activity room or room group: for example, a copier paper storage room, office service (315). Service rooms are somewhat close to the areas they serve and are used more than occasionally.

Storage areas are commonly called surplus storage, central campus supply, or warehouses. It also includes storage rooms in a building or building area that serve multiple room use categories and that are used for general or surplus (e.g. furniture, equipment).

730 – Storage (What is not Storage?)

Limitations/Comments: Storage related to other types of space follows that classification of that type of space with a “service” designation. For example, a storage closet for office supplies is classified as office service (315).

If the materials being stored could be placed in a warehouse, implying only occasional demand for the materials, then 730 storage facility is the appropriate classification.

Storage that must be close at hand because of the nature of the materials stored, and the demands placed upon them by the program, should be classified in the appropriate “service” category. (File archive rooms in a building or basement should be classified as 315 office service)

350 Conf. Rooms vs. 680 Meeting Rooms

350 Conference Room- A room serving an office complex and used primarily for staff meetings and unit activities that are not directly related to instruction. (room is typically reserved and controlled by office unit or is specific to a department, it is not open to anyone on campus for use and tend to be smaller in size than meeting rooms.)



680 Meeting Rooms – A room used for a variety of non-class meetings. (room is typically open to anyone on campus requesting a meeting space, student club meeting spaces, conference center or hotel conference meeting rooms, and typically seat more than a conference room in multiple seating arrangements.)



355 and 685 - Conference and Meeting Room Service – A room that directly serves one or more conference rooms or meeting rooms as an extension of the activities in that room. (typically adjacent to the conference or meeting room space. Can be storage, AV equipment, tables and chairs, kitchenette, etc.)



Station Counts – Conf. and Meeting Rooms

- ▶ Review of Station Counts & Maximum Occupancy

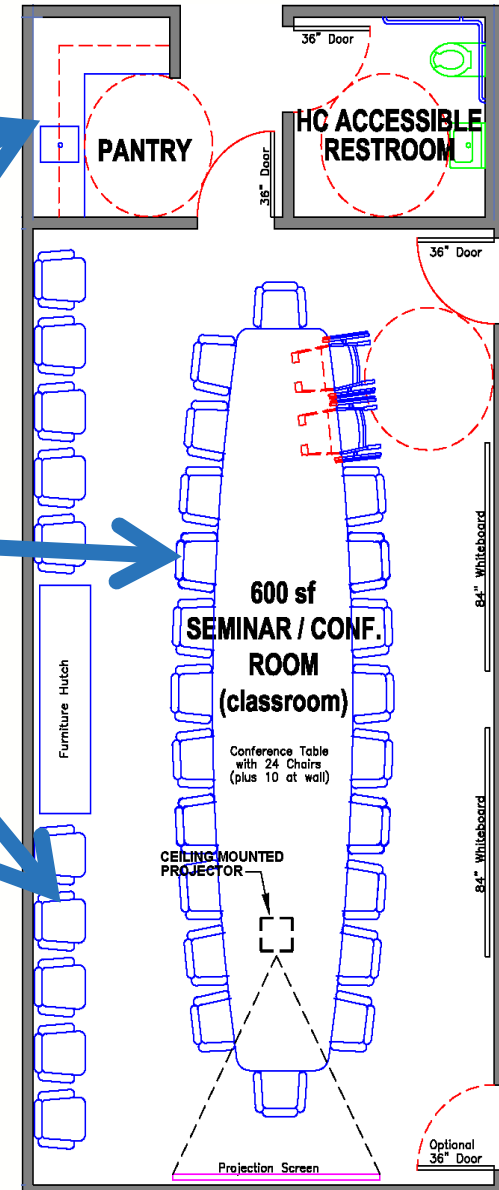
NY State Occupancy signage



Service Space
Room Type Code
355 or 685

24 seats at table
10 seats at wall
34 station count

How is the room
set up most of the
time?



<http://fe.fs.cornell.edu/fig/inventory/system.cfm>:

130 (Seminar Room) vs. 350 (Conference Room) vs. 680 (Meeting Room)

- Conference rooms and meeting rooms may occasionally hold instruction, but it is not the predominate use.
- Department seminars are often held in Meeting rooms, not Seminar rooms. Seminar rooms are for small instructional groups. They are in the classroom facilities category (100's).

Station Counts

- For these rooms the station count should be as the room is used most often (the layout preferred by the department).
- Make sure your station count does not exceed the maximum occupancy code number that is sometimes posted in the room.
- Window benches should not be counted as stations.

530 – Media

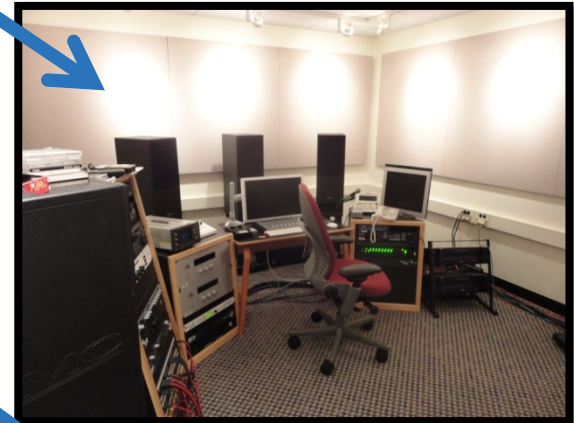
530 Audio-Visual, Radio, TV Service -

A room used for the production and distribution of audiovisual, radio, and TV materials; or the operation of equipment for the communication of these materials. (usually referred to a TV studios, radio studios, sound studios, graphics studios.)

535 Audio-Visual, Radio, TV, Service – A

room that directly serves an audiovisual, radio, or TV facility as an extension of the activities in that facility. (usually referred to as film libraries, tape libraries, control rooms, videotape recorder rooms, property storage, prep and audio equipment rooms).

Do not confuse with control rooms or projector rooms in lecture halls or auditoriums – (100's and 600's have their own support/service categories for these types of rooms).



610–Assembly vs. Lecture Hall

610 Assembly- A room designed and equipped for the assembly of many persons for events such as dramatic, musical, devotional, livestock judging, or commencement activities. The room can also be used for instructional or classroom activity purposes to a minor or incidental extent (**Less than 50% of the schedulable week**)



120 Lecture Hall – A room with **stepped or sloped floor** that can accommodate 91 or more students for classes that do not require special purpose equipment for student use. (**This type of space is mainly used for instructional lecture purposes and typically would not have performance, musical, devotional, livestock judging or commencement activities.**)



710 vs. 715–Data Processing-Computer and Service

710 Data Processing-Computer - A room used as a computer based data processing or telecommunications center with applications that are broad enough to serve the overall administrative or academic primary equipment needs of a central group of users, unit, college, school, or entire institution. (typically are 24/7 air conditioned spaces with multiple servers)



715 Data Processing Computer Service – A room that directly serves a central computer or telecommunications facility as an extension of the activities in that facility. (rooms are typically smaller than data center 710 spaces, usually referred to as Building Distribution Rooms and house data cabling racks or connection equipment for computers, telephony, internet. Computer repair and work rooms that serve the central data center space are also considered 715 spaces.



Office spaces or cubicles that have one computer server in them that is specific to research or another function of that department should not be coded as 710 space.



700's Clarification Notes

- A building would typically only have one or two main data rooms (710), but could have multiple building distribution rooms (715), unless the program is heavily reliant on computer processing.
- Computational server rooms for research that serve multiple labs should be coded as 710.
- If a server room only supports one research lab or research unit it should be coded as 255 in support of that lab.

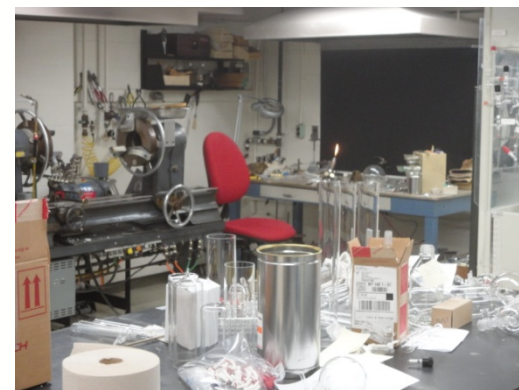
720 Shop vs. 255 Non-Class Lab Service (Research)

720 Shop - A room used for the **manufacture**, repair, or maintenance of products or equipment. (Typically is allocated to the central or unit facility operations, but also for shops that manufacture equipment for research labs. If a shop is dedicated to only one research lab or experiment, it should be coded as 255 Non-class laboratory service space. A shop commonly will have unique equipment and tools. Note that 725 should be used for service support rooms associated with shops.)



255 Non-Class Laboratory Service (Research) A room that directly services one or more non-class laboratories as an extension of the activities in those rooms

Does the shop serve multiple departments and/or research labs in a building or complex? Can other research labs across campus order manufactured equipment from this shop? Custom Glassware shop in Olin Chemistry as an example.



800 – Health Care Facilities (student and animal)

870 Supplies - A room used to store supplies for health care facilities. (Typically is referred to as central supply, pharmacy supplies, storage dispensary, miscellaneous storage of a relatively inactive nature, other than that included in other primary and service room types.)



895 Health Care Service - A room used by housekeeping, linen, storage, and handling. (Rooms used by housekeeping staff for storeroom, closets, locker rooms, etc., for building maintenance and operation.)



These two categories are used when coding spaces in health care facilities with patients (students and animals). Note: that a hospital may also have 730-Storage spaces (hospital bed or animal cage storage rooms) for facilities and bulk storage of building supplies. The 870 and 895 room use code is more directly related to patient care and rooms in a building that serves patients.

935–Sleep Study Service vs. 730-Storage

935 Sleep-Study Service - A room (or group of rooms) that directly serve the occupants of sleep-study rooms. (rooms usually referred to as mail rooms, laundry and pressing rooms, linen closets, maid rooms, **trunk storage**, and telephone rooms when located in residence halls or student living spaces)

730 Storage - A room or building used to store materials or equipment that serves multiple room use categories, organizational units, or buildings. (furniture storage rooms that serve multiple residence halls, custodial or cleaning supplies warehoused that provide inventory to multiple buildings and campus facilities.

Note: Storage closets for Resident Hall Directors or Faculty in Residence would be properly coded as 955-Apartment Service. Bike Rooms in residence halls should be coded as 935 Sleep-Study Service not storage



000-Unclassified Facilities (non-assignable)

010 Custodial Area – For servicing the maintenance and operation functions of a facility. (typically referred to as building care closets, custodial closet, custodial toilets, trash rooms, maintenance supply and storage closets, building cleaning supply areas)

Note: Does not include mechanical rooms, public toilets, lobbies, corridors, unit storage, or other service spaces associated with other rooms types.

Offices, conference rooms, or lounges used by the maintenance staff should not be coded with 010 Custodial Area, but under the appropriate room type that best represents the function of the room. (Example: break/lunch room for custodial staff should be coded as 315 Office Services if used by multiple custodians)

Bulk Storage rooms of paper products, cleaning supplies, light bulbs, etc. that are pulled from inventory to supply multiple buildings on campus should be coded as 730-Storage.

000-Unclassified Facilities (non-assignable)

NON-ASSIGNABLE SPACE

020 – Circulation

030 – Mechanical Area (Also known as Electrical, Plumbing, HVAC, Boilers, and Building Service spaces)

Mechanical Spaces that have files, boxes, furniture, chairs, tables and panels in them should be coded as 030 – Mechanical Area, not as 315 Office Service or 730–Storage. These spaces are appropriately coded to Electrical, Mechanical, Plumbing and other Building Services spaces as 030.

ASSIGNABLE SPACE

050 – Inactive Area

060 – Alteration or Conversion Area

081 – Dept. Moved, space Unassigned



Capturing program space from circulation

Excerpt from the Cornell Facilities Inventory Newsletter Fall 2008

Existing building space allocation can have a significant impact on allocating space for new programs or replacement buildings. As such, careful examination of multipurpose and circulation space may provide more accurate space reporting. What was traditionally coded as circulation space may in fact be coded to program if it can be clearly identified and delineated on the floor plans. Examples of this are as follows.

Circulation areas that are secured, serve as support to the connected research areas, and do not allow public circulation.

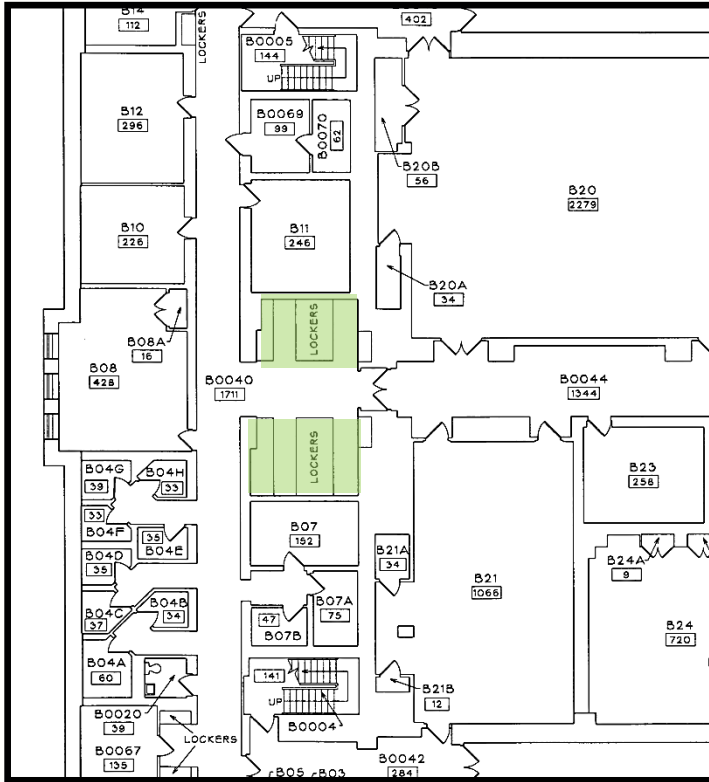
Spaces architecturally designed to hold equipment or lockers. Currently the corridor includes this space, but the equipment or locker area should be coded as program space if it can be clearly delineated on the floor plan.

Waiting areas or vestibules that serve as support space to other program rooms. These spaces should be coded to appropriate program functions

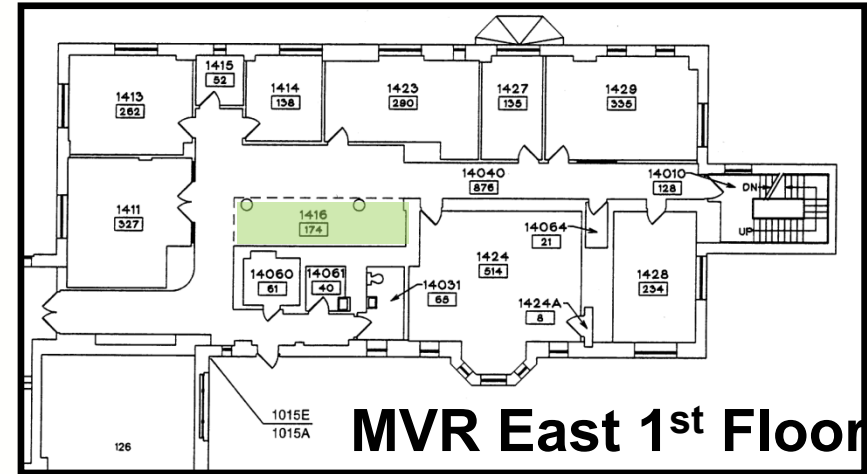
Work areas in greenhouse circulation spaces that hold work benches and sinks. These areas should be coded to program use when they are permanent and can be separated from the circulation.

Areas architecturally designed into large circulation spaces that serve as study areas or lounges. These should be coded as program spaces if they can be clearly delineated on the floor plan.

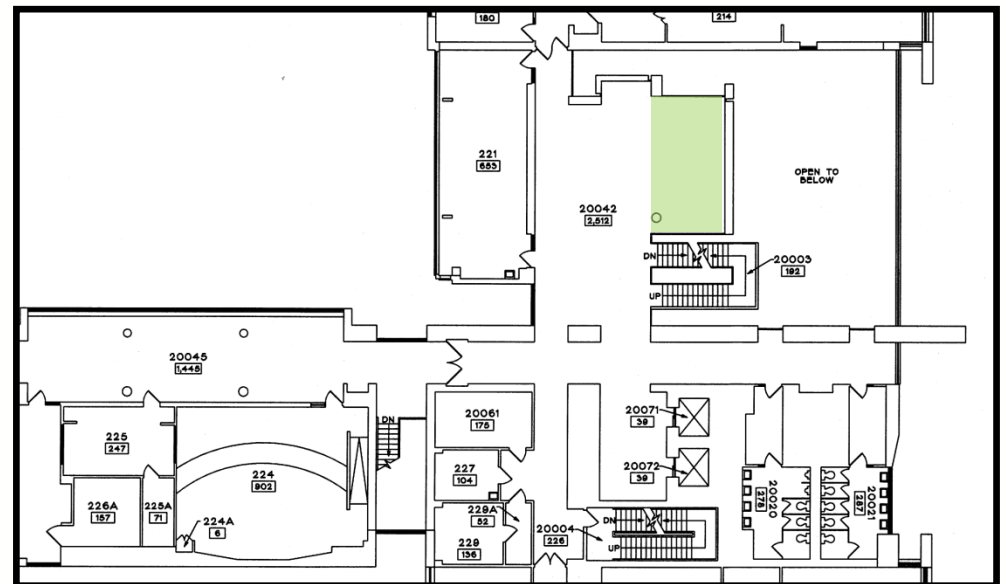
Capturing program space from circulation



Lincoln Hall -



MVR East 1st Floor

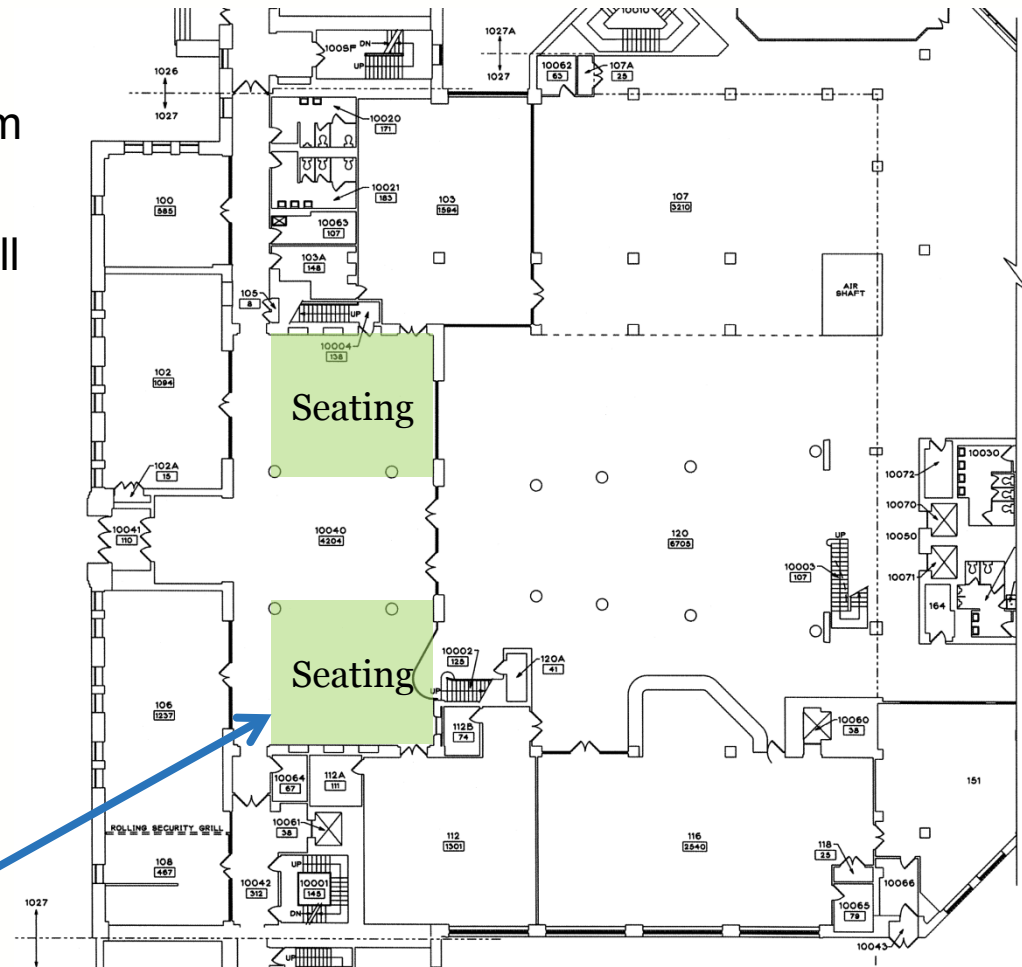


Weill Hall 2nd Floor

Capturing program space from circulation

Note: Please be aware that areas that are currently coded to circulation space have special room numbers that indicate that they're circulation. By changing part or all of the room use wither the room will have to be renumbered or an additional room will be created to reduce general circulation and add a separate program space. These new "rooms" created from circulation will have to be field verified by the Facilities Inventory drafter and delineated on the floor plan using dotted lines.

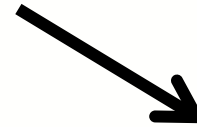
Facilities Inventory drafter to add dotted lines.



Mann Library 1st Floor Lobby

Assignable vs. non-assignable spaces

024 Lobby – Transition from an exterior or interior Circulation Area to an area of specific use. (This type of space will often have seating areas that are in defined spaces to either side of the main circulation pathway. If separate and not in the defined corridor exit way, these spaces could potentially be captured as assignable space. Physical Science Building atrium space as an example is in an atrium but is coded as 630-Dining space which is then used by students after hours as lounge or study space.)



Capturing Programmable Space from Circulation

- The Facilities Information Group has a process to appropriately capture programmable space. The process requires review by EH&S.
- Further clarification and direction will follow in future months. This is not an area of emphasis during the close of the regular inventory cycle (May – August 2012).

Brief Review

- The use that takes place or occupies the room?
(Room Type Code Category)
- How often is the space used by a dept. or group?
(50/50 rule can help sometimes, instructional vs non-instruct.)
- Is it activity space or service support space?
Service spaces end in the number “5”
- What rooms and types of spaces are adjacent to the room.
- Multiple Use Spaces – Who or what equipment is critical to the operation/instruction. Who or what could not leave this area or space and have it still function properly?
- Size of room and Room Type Code Category

Next Steps

- Paulien will provide to Cornell the FY11 inventory file with several new columns that include Paulien's assessment of the room type code, station count, and comments. This data is in addition to and does not automatically over-write the Cornell data. Mary-Lynn will parse out this data file by college & division and send it to the org administrators with further direction including how to submit questions. Note that this file is being returned as guidance to assist with this year's facilities inventory and the org admin and department space inventory contacts will need to use their best judgment about how to or whether to incorporate the Paulien suggestions. This file will not contain field work comments for every room, particularly those in the facilities occupied by the Johnson School and the Law School.
- Over the course of the next year, Paulien and the Cornell space study team will be assessing the current list of codes in use at Cornell. We hope to simplify and clarify the current coding. Any change in direction will be more widely discussed during the coming year and any changes will be broadly communicated before next year's inventory cycle closes.
- Any questions about this presentation should be directed to Mary-Lynn Cummings, Director of Space Planning: spaceplanning@cornell.edu; 607-255-2557

Thank-you for attending this review session, your time is greatly appreciated!



Questions and Answers

