SPACE GUIDELINES
September 2003
for Smithsonian Institution Facilities
Preface

The workplace represents a tremendous influence over the worker and his or her productivity. Influences on the workplace include adequacy and quality of the individual and common work areas, environmental quality, amenities, and technology and other tools. Certainly, we could name others. In this first edition of the Smithsonian Institution Space Guidelines, we are limiting our focus to quantity of space, thereby assisting the planner and programmer in defining total space needs. The intent of this document is to provide the planner and programmer with a "broad-brush" view of space needs. In issuing this document, we do not intend to preclude detailed architectural programming that should be implemented by the designer in the pre-project planning or conceptual design phase.

In the first edition we’ve dealt with spaces that are common to almost all of us in the Institution, that is, office, administrative, and general storage spaces. Future editions will be more ambitious. As we explore more spaces, configurations and standards that are specific to the museum, research, educational, and support areas, we will add that information to the future editions of the Guide. We will also consult with internal and outside experts. Regarding functionality, efficiency, and the interrelationship of staff, tools, and workplace, we will rely heavily upon the exhaustive work already done by GSA’s Real Property Division (www.policyworks.gov). Ultimately, we intend for this document to be part of helpful process in developing space needs, instead of being a just another manual on the shelf.

Finally, the “we” in this preface represents the cooperative effort of three groups within the Office of Facilities Engineering and Operations; the Engineering & Design, Facilities Master Planning, and Real Estate divisions. We have also gathered our information from many sources as is reflected in Part 2 of this guide. We intend to make this document dynamic, revising it as new information and innovations occur and will maintain the most up-to-date version on the OFEO intranet web site. If you have any question or updates on space, please contact me at rombah@si.edu or 202 275-0250, or contact Michelle Spofford at spoffordm@si.edu or 202 275-0223. We hope you will find our efforts here useful.

Harry Rombach
Associate Director for Facilities Master Planning
OFEO Office of Facilities Planning and Resources
September 1, 2003
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   E. ASID Space Standards
   F. GSA Real Estate Division Workplace
   G. GSA Real Estate Division Performance
   H. GSA Real Estate Division Innovative
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1. Space Guideline Objectives

The objectives of the Smithsonian-wide Space Guidelines document are as follows:

- **Provide a tool for taking the first step in developing space requirements.**
  The document puts in place a tool to assist planners and programmers whenever they need to plan for new space, or redesign existing space in any of the Smithsonian facilities. Having an SI-wide Space Guidelines document will ensure a consistency in space size for similar administrative, managerial, and utilitarian functions in different facilities. This will assist in simplifying real estate inventory and classification requirements, and provide fairness in the allocation of space within units and throughout the Institution.

- **Define space requirements for universal and specialty space.**
  The document also addresses “specialty space” needs such as scientific research space, curatorial art space, and other functions that cannot be accommodated in the more generic administrative and managerial categories. Users of the guidelines should understand that the document is just that, a guide. Users should expect to encounter some size variation within space categories, even with the more universal requirements like office space. As a result, more often that not, area is given in a range of square feet.

- **Provide definitions for each space type.**
  The document defines spaces by the types of functions that would typically be performed in each of the space standard categories. It avoids older systems that categorized space standards exclusively by job title and rank. We selected our approach for two main reasons. One is that by looking at what we intend to achieve in each space and developing the space accordingly, we can assist in nurturing a productive environment. Second is that in the Smithsonian, we have not standardized job titles. Titles vary in their meaning and responsibilities throughout the Institution. Therefore, categorizing space through job title is not practical. In this guide, we categorize space by function and offer some examples of what activity and what occupant the space is most suited for.

- **Provide sample space layouts to give clarity to how space can accommodate the users.**
  The document offers sample layouts or plans for each space type. These are only as tools to inform users of what can be included in each space type. Final design of specific spaces will ultimately be the responsibility of the designer. He or she will conduct a detailed architectural programming and design process for these spaces.
2. Background & Process

In developing the Guide, Smithsonian planners approached this daunting task in this way in a way that the rationale for assigning certain space sizes to certain functions is clearly understood and widely accepted.

Planners drew on many sources and considered the following factors during the information gathering part of this effort:

- **Guidelines and standards that have been developed by other agencies and organizations**
  Most notable are the guidelines produced by the General Services Administration and the American Society of Interior Designers. These guidelines and standards are included in the appendix of this document.

- **Guidelines and standards developed for recent SI master planning efforts**
  These efforts include the guidelines and standards developed during the master planning and space planning efforts at NMNH HMSG, and AIB.

- **Information gathered from past programming efforts**
  Efforts included those that occurred during the master planning process at STRI, SERC, and the Smithsonian Marine Station at Ft. Pierce, FL.

Once data and information was gathered, planners assembled it into a format that would facilitate analysis and comparison. The following tasks preceded establishing a common set of guidelines for Smithsonian spaces:

- **Organizing the information into space categories**
  These categories are common to most Smithsonian units, for example, private office and open office areas, conferences rooms, general storage areas, and so on.

- **Displaying information side-by-side**
  Included in the task was showing the information in relationship to the space classification now used by the Smithsonian in its facilities management system, FacilityCenter®. These classifications are known as “space class” and the more specific “space class type.” A full listing of the space class and space class types can be found in Appendix A, issued as a separate document.

- **Looking for similarities**
  Planners looked for similarities between the different guidelines and standards, and found a mix of common space sizes that offered the Smithsonian a wide berth in accommodating space needs.
The following chart represents the proceeding process and shows the standards that resulted from it.

<table>
<thead>
<tr>
<th>SPACE CLASS</th>
<th>SPACE CLASS TYPE</th>
<th>GSA STANDARDS</th>
<th>NMNH STANDARDS</th>
<th>ASID STANDARDS</th>
<th>AIB STANDARDS</th>
<th>SI STANDARDS</th>
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<tbody>
<tr>
<td></td>
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<td>ID</td>
<td>SIZE (SF)</td>
<td>ID</td>
<td>SIZE (SF)</td>
<td>ID</td>
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<td>PRIVATE</td>
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<td>EXEC-400</td>
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<td>A1</td>
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<td>EXEC-300</td>
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<td>Director 170-190</td>
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<td>PROF-100</td>
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<td>SHARED (WORKSTATION)</td>
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<td>-</td>
<td>C6a/C6b</td>
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<td></td>
<td></td>
<td>PROF-120-O</td>
<td>120</td>
<td>Professional 110-130</td>
<td>C5a/C5b</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PROF-99-O</td>
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<td>-</td>
<td>C4a/C4b</td>
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<td></td>
<td></td>
<td>TECH-81-O</td>
<td>81</td>
<td>Staff 80-100</td>
<td>C2a/C2b</td>
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<tr>
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<td></td>
<td></td>
<td>TECH-64-O</td>
<td>64</td>
<td>-</td>
<td>C1a/C1b</td>
</tr>
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<td></td>
<td>ADMN-48-O</td>
<td>48</td>
<td>Intern 40-50</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ADMN-36-O</td>
<td>36</td>
<td>-</td>
<td>-</td>
</tr>
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<td>OFFICE:</td>
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<td>I3</td>
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<tr>
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<td>RECP-35-O</td>
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<td>-</td>
<td>I1</td>
</tr>
<tr>
<td>ASSEMBLY:</td>
<td>CONFERENCE ROOM</td>
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<td>CONF-480</td>
<td>480</td>
<td>Training Rm 770-790</td>
<td>J6a</td>
</tr>
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<td></td>
<td></td>
<td>CONF-390</td>
<td>390</td>
<td>Large Conf. 375-395</td>
<td>J5</td>
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<td>J4</td>
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<td></td>
<td>CONF-140</td>
<td>140</td>
<td>Small Conf. 130-150</td>
<td>J3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>J2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CONF-100</td>
<td>100</td>
<td>Team Room 90-110</td>
<td>J1</td>
</tr>
</tbody>
</table>
3. Space Categories & Definitions

A diverse group of Smithsonian staff developed “space class” and the more specific “space class type” space categories and definitions a few years ago. This effort was part of implementing a much broader SI-wide facilities management system. Those categories are still valid and are used in this document. A full list of the categories is included in Appendix A, issued as a separate document.

Planners have a tendency to work with minimum standards when calculating the size of space. However, not all cases fit the minimum standard. The size of a space is derived from the function or an activity being performed in it and sometimes more space is required. As a result, space quantities in this guide are often given in ranges. Also, existing building structure or historic fabric may dictate room sizes. Designers using this document must be flexible in their thinking when dealing with existing buildings.

The following chart summarized the space guideline for the space class types that planners have looked at so far.

<table>
<thead>
<tr>
<th>SPACE CLASS</th>
<th>SPACE CLASS TYPE</th>
<th>SPACE GUIDELINES</th>
<th>FUNCTIONS</th>
<th>SUITABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV-5</td>
<td>Private</td>
<td>350-450SF (32-42SM)</td>
<td>Strategic planning sessions, executive staff meetings, fund raising, and so on.</td>
<td>Top senior-level management overseeing a broad range of program and facilities management activities. For example: Under Secretary, broad organizational director, unit director</td>
</tr>
<tr>
<td>PV-4</td>
<td></td>
<td>275-325SF (25-30SM)</td>
<td>Strategic planning sessions, executive staff meeting, consultations, and so on.</td>
<td>Senior management overseeing many separate offices that have similar goals and objectives. For example: executive director, unit director</td>
</tr>
<tr>
<td>PV-3</td>
<td></td>
<td>230-250SF (21-23SM)</td>
<td>Second or third line supervision, staff meetings, consultations, and so on.</td>
<td>Management that oversees a single office or function that may have several divisions and branches or sub-functions. For example: office director, department chair, section head, lead curator, laboratory head</td>
</tr>
<tr>
<td>PV-2</td>
<td></td>
<td>170-190SF (16-18SM)</td>
<td>First or second line supervision, staff meetings, consultations, and so on.</td>
<td>Management that oversees one or more functions that are closely related. For example associate director, research director, program manager</td>
</tr>
<tr>
<td>PV-1</td>
<td></td>
<td>100-120SF (10-12SM)</td>
<td>First line supervision, confidential or sensitive information handling, meetings with one or two persons, consultations, professional research and study, and so on.</td>
<td>Management or research that is narrowly focused on one aspect of an office or division's function(s). For example: assistant directors, branch heads, HR officers, contracting officers, legal specialists, conservators, post-doctorate professionals</td>
</tr>
<tr>
<td>Office:</td>
<td>Shared (Workstations)</td>
<td></td>
<td></td>
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<td>------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>WK-3</td>
<td>80SF (7.5SM)</td>
<td>Project management, financial management, design and engineering</td>
<td>Professional work that requires room for one-on-one meetings, layout out space, or other space intensive activities. For example: project managers, architects, engineers, designers, technicians</td>
<td></td>
</tr>
<tr>
<td>WK-2</td>
<td>64SF (6.0SM)</td>
<td>Administration, contracting, technical work</td>
<td>Administrative or technical work that require basic work space. For example: Administrative or management assistants, technicians, and similar staff</td>
<td></td>
</tr>
<tr>
<td>WK-1</td>
<td>48SF (4.5SM)</td>
<td>Occasional or periodic administrative or technical work, &quot;hotelining,&quot; research carrel</td>
<td>Administrative or technical work that require minimal space and may not be for continuous occupancy. For example: Part-time staff, visiting staff, volunteers, interns, contractors</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Office:</th>
<th>Reception</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RC-2</td>
<td>130-150SF (12-14SM)</td>
<td>3-6 Person Waiting Area</td>
</tr>
<tr>
<td>RC-1</td>
<td>30-50SF (3-5SM)</td>
<td>1-2 Person Waiting Area</td>
</tr>
</tbody>
</table>

| Assembly: Conference Rooms | |
|---------------------------|------------------|-------------------|
| MT-30                     | 770-790SF (71-73SM) | Meeting, conference, audio-visual presentation space for up to 30 persons | Training, large conferences and meeting, presentations requiring spaces with sophisticated presentation capabilities |
| MT-18                     | 375-395SF (35-37SM) | Meeting, conference, presentation space for up to 18 persons | Smaller training, conferences and larger meeting, all requiring space with some presentation capabilities |
| MT-12                     | 220-240SF (20-22SM) | Meeting and conference space for up to 12 persons | Medium-size meetings requiring space with minimal presentation capabilities |
| MT-8                      | 130-150SF (12-14SM) | Meeting and conference space for up to 8 persons | Smaller meetings and teaming sessions |
| MT-4                      | 90-110SF (8-10SM) | Meeting space for up to 4 persons | Small meetings, counseling sessions, small private discussions, and small teaming sessions |

In the following section sample layouts for each space class type option are given. In most cases furniture layouts are also given. These depictions will give the user of this Guide some idea of what each space can accommodate. A wide variety of configuration can be developed and the layout in no way precludes a thoughtful programming and design process.
PV-5
350-450 NSF

PV-5.1 Alternate
350-450 NSF

Attributes May Include:
A. 170-190 NSF Office Suite with Adjacent Conference Room
B. Seating for 6-8 People

Executive Seating Shown
Modify Chair Style to Increase Seating Capacity
Shared (Workstation) & Reception

WK-3
80 NSF

WK-3
Alternate
80 NSF

WK-2
64 NSF

WK-1
48 NSF

RC-2
Reception
130-150 NSF
4'-0" Partition

RC-1
Reception
30-50 NSF
Assembly/Conference Diagrams

Large Training/Conference Room
Seating for 30 People
Side Chair Seating Shown

MT-30
770-790 NSF

Large Training/Conference Room
Seating for 12-18 People
Executive Style Seating Shown
Modify Chair Style to Increase Seating Capacity

Attributes May Include:
Pin-up Surfaces
A/V Screen
Lectern
Assembly/Conference Diagrams

**MT-12**

220-240 NSF

Medium/Large Conference
Seating for 8-12 People

Executive Style Seating Shown
Modify Chair Style
to Increase Seating Capacity

*Dashed Lines indicate potential 120 NSF adjacent presentation area
if needed in addition to 220-240 NSF conference space

**MT-8**

130-150 NSF

Assembly/Small Conference
Seating for 6-8 People

Executive Style Seating Shown
Modify Chair Style
to Increase Seating Capacity

**MT-4**

90-110 NSF

Assembly/Teaming
Side Chair Seating Shown
File Diagrams

SPACE GUIDELINES

LATERAL FILES
3' x 1.75'
9 NSF

16 BOOKCASES
108 NSF

4 LATERAL FILES
60 NSF

8 LATERAL FILES
78 NSF

MOBILE FILES
120 NSF

16 LATERAL FILES
156 NSF
Storage Room Diagrams

Small Storage
110-130 NSF

Copy/Fax Print room
130-150 NSF
  Printer
  Fax
  Copier

Large Storage
150-170 NSF
  BUILT-IN SHELVING
  24" D
  FLOOR TO CEILING