State of Utah

OFFICE SPACE STANDARDS

Evaluation & Update

Division of
FACILITY CONSTRUCTION
& MANAGEMENT

STATE OF UTAH

Office Space Standards

[02.26.16]
Contents

01 Evaluation
   Introduction
   Study Process
   Review of 1994 Space Standards
   Recommendations

02 Updated Space Standards
   Introduction
   Goals for the State Standards Update
   Additional Recommendations
   Open & Private Office Standards
   Meeting & Support Space Standards
   Space Standards Implementation
   Determining Approximate Space Needs
   Planning & Programming Grossing Factors

03 Appendix
   A. Utah Procurement Code 63G-6a-804
Office Space Standards

EVALUATION

Images are included as concept illustrations and are not endorsements of particular furniture manufacturers or products.
Introduction

In the summer of 2015, the State of Utah Division of Facilities and Construction Management (DFCM) contracted with MHTN Architects to evaluate the Utah State Office Space Standards currently in use, dating from 1994, and a recently-completed draft of a proposed update to the standards. The review included consideration of current office space usage and recent trends in the public and private sectors, in Utah and other states. The desired deliverable was an evaluation of the current and proposed standards, and recommendations for updated standards. During the updating process, progress drafts were submitted to DFCM, state agencies and the Utah State Building Board for review, and review comments were incorporated. The resulting final document contains two sections:

Section 01 focuses on the review and evaluation of the 1994 standards and recently proposed update, and related recommendations.

Section 02 contains the updated State of Utah Office Space Standards that resulted from the evaluation and review process. It contains:

- updated private and open office workspace standards;
- meeting & support space standards;
- a guideline for determining general square footage needs during early planning stages;
- guidelines for using efficiency and grossing factors when determining project space needs.

Study Process

The steps used to develop this document and its conclusions and recommendations are outlined below.

1. Review of:
   - 1994 State of Utah office standards
   - the recent draft of a proposed new standards document
   - a 2012 report prepared for the state of Alaska regarding their space standards (received from DFCM)

2. Internet-based research regarding space standards developed by other states and municipalities, and by private sector entities.

3. Analysis of data regarding the usage of office space over the past twenty-five to thirty years. Data was obtained from the consultants’ past program and predesign projects as well as predesign documents prepared by other architectural firms. The analysis focused on private and open office space sizes, ratios of enclosed to open office space, and how these have changed over time.

4. Formulation of preliminary conclusions and recommendations, submitted to DFCM and State agencies for review and comment.

5. Incorporation of review comments and finalization of the updated Office Space Standards document.

Images are included as concept illustrations and are not endorsements of particular furniture manufacturers or products.
Review of 1994 State of Utah Office Space Standards

A review of the State of Utah space standards dating from 1994 and a recently proposed update led to the following observations and conclusions:

1. The recently proposed update maintained the workspace types and sizes which had been in place since 1994. The document stated: “Nationally there has been little change in traditional office space utilization...”

**Conclusion:** This report challenged the statement that little had changed in traditional office space usage. Research and analysis pointed to changes in office space usage in recent years, a trend that has been observed by the consultants as they’ve planned and designed office space during this period. Likely due to the increasingly high cost of constructing buildings, owners are questioning and reevaluating traditional office space usage. They are challenging previous assumptions about space allocations and are striving to be as efficient as possible with work space.

2. The methodology presented in the recently proposed update for determining space standard sizes was complex and difficult to understand. Many variables were involved and they included calculations based on status and hierarchy, such as:
   - A position’s pay grade relative to the highest paying state job
   - Whether a position is management vs. professional vs. technical or clerical
   - Quantity of subordinates

Also, the process of determining a standard for a given position within an agency included the agency giving a recommendation regarding space needs. Agencies are not disinterested parties; they would likely be desirous of obtaining the most favorable and comfortable workspaces for their employees.

**Conclusion:** The methodology seemed unnecessarily complex. The use of status and prestige factors in calculating space allocations was seen as counter to current trends to assign space based on activities and functional needs. Using hierarchy in calculations may lead employees to view workspace type and size as a reflection of their value and to give workspace size undue scrutiny and importance.

3. The 1994 standards had twelve private office and workstation sizes, nine of which had one or two alternatives of a different size, for a total of 23 workspaces. There were nuances of differences in defining which standard was appropriate for a given staff position.

**Conclusion:** The large quantity of workspace standards, and the corresponding criteria, were difficult to comprehend and use.

4. The recently proposed update document had a chart showing the distribution of workspace sizes among state employees. It indicated these percentages of use for existing workspaces:
   - 62% 100 net square feet or larger
   - 21% 81 net square feet
   - 17% 64 net square feet or smaller

**Conclusion:** The percentage of employees in workspaces 100 NSF or larger is much higher than what is typically seen, especially in recent years. Usually, the majority of workspace sizes are 80 NSF and smaller.

5. The recently proposed update document had a Master Job List in the appendix, which presented: state employee positions; the space standard “Group” to which each belongs; and the space type and size that have been assigned to it. A brief review indicated that the majority of positions had been upgraded to a larger size than the base standard, and many had been upgraded from an open office workstation to a private office.

**Conclusion:** There has been a tendency to upgrade workspaces beyond the defined standards. The complexity of the standards and the criteria used to allocate them may have facilitated this.
Recommendations

Recommendations for updating the office space standards included the following:

1. Base the workspace standards on employee activities and functions. Eliminate the past methodologies for determining space standards sizes, especially factors related to status and hierarchy.

2. Simplify and streamline the workspace standards. Organize them around workspace types and sizes rather than employee category or position. Simplify them by eliminating duplicate sizes and by reducing the quantity of options and alternates. Simplification will lead to these results:
   - The standards will be easier to understand and use.
   - Fewer, more uniform workspace types and sizes will increase flexibility; relocation of employees will be easier if workspaces are more uniform in type and size.
   - Workstation uniformity results in easier furniture management, with fewer parts and pieces to track.

3. Focus on providing an efficient and effective work zone and remove meeting space from workspaces as much as possible. Provide convenient shared open and/or enclosed meeting space for use when collaboration or sound privacy are needed. Retain meeting space in the immediate workspace only for those employee positions whose primary job function is to meet with others. Removing meeting space will allow a reduced size for most standards, as most of the space in the larger open workstations is needed for visitor chairs and/or meeting tables. The work zone in most of the current standards is similar in size from one standard to another.

Section 02 presents the updated workspace standards that incorporate these recommendations.
Images are included as concept illustrations and are not endorsements of particular furniture manufacturers or products.
Introduction

This document presents updated standards for the planning and design of office space for State of Utah agencies. They replace those established in 1994, and provide simplified and streamlined options for office space. The following revisions have been incorporated:

1. The standards are sized and configured to accommodate employee activities and functions. Employee position, title and status no longer factor into workspace sizes or assignments. This is consistent with recent trends in workspace planning in the Utah private sector, and in the public and private sectors of other states.

2. The standards are organized by workspace type and size, rather than by staff position, and the quantity of types and sizes has been reduced. The newly streamlined standards consist of three open workstation options and three private office options.

3. The standards focus primarily on providing an employee's immediate work zone. Some incorporate a small amount of meeting space but larger meeting needs are intended to be met outside the workspace. Separating meeting space allows the workspaces to be smaller; the largest open workstation is 80 net square feet.

The workspace standards are supplemented by meeting space standards, including a range of open and private meeting space to be used for collaboration, meetings and private conversations. This document also provides guidelines for:

- determining approximate space needs for planning purposes
- using grossing factors in planning and programming

The proposed standards may not work for all situations. When necessary, an exception based on functional need may be proposed.

The standards are to be used in new planning projects. They are not retroactive, and will not be applied to existing office spaces.

Goals for the State Standards Update

Goals for the standards update include the following:

1. Base standards on employee activities and functions, rather than employee position or status.

2. Make the workspaces highly efficient, while being careful to support functionality.

3. Make state standards consistent with current trends in space usage in other states and in the private sector.

4. Simplify the system and make it easy to understand and use.

5. Increase flexibility and ease of management in State of Utah office by having more uniformity in workspace types and sizes.

Additional Recommendations

1. Use open office workstations for the majority of employees, providing convenient open and enclosed meeting space to support collaboration and privacy needs.

2. Provide access to daylight and exterior views for the majority of employees. Locate private offices in the building interior, with glass front walls. Place open office workstations at the building perimeter, nearest the exterior windows. Use lower panels, or higher panels with glass along the top, to allow access to views. Access to daylight and exterior views has been shown to be beneficial to employee satisfaction and productivity.

3. Allow employees flexibility within the workstation footprint to customize for particular worksurface amount and storage needs. In addition, offer the option of variable or standing height worksurfaces, which has recently been recognized as very healthful for office workers.

4. As stated in the Utah Procurement Code, use traditional casegoods furniture from Utah Correctional Industries (UCI) in private offices. Consider using systems furniture as an alternative if traditional office furniture is not feasible. (See Appendix A, Utah Code 63G-6a-804.)
Open Office and Private Office Standards

The updated standards have been streamlined and simplified. They include three open office workstations and three private offices, described on this page.

Open Office, 36 NSF (net square feet)
For employees who are part-time, or who spend only a portion of their work time in the office.

Open Office, 64 NSF
An efficient and comfortable workspace that is suitable for most employees.

Open Office, 80 NSF
A larger open office which accommodates a need for increased worksurface or storage, or 2 visitors.

Private Office, 120 NSF
Accommodates a need for confidentiality or privacy, and up to 3 visitors.

Private Office, 160 NSF
Accommodates a need for confidentiality or privacy, and 4-6 visitors.

Private Office, 240 NSF
Accommodates a need for confidentiality or privacy, and 8-10 visitors.

The standards are presented with more detail on the following pages.
**36 Net Square Feet**

This is the smallest of the open office standards. It is suitable for part-time employees or those who are in the office only a portion of the work day.

This standard could also be used for a “touch-down” station, a shared workspace for employees who don’t need a dedicated workspace, but require occasional access to briefly check in and perform needed functions.
36 NSF, Alternate 1

There are different configuration possibilities within the 36 NSF footprint, one of which is shown on this page.
64 Net Square Feet

The 64 NSF workspace is suitable for the majority of employees. It provides an efficient work zone with surface and storage possibilities that are adequate for most functions. All worksurfaces and storage elements are within easy reach. It can accommodate one visitor chair, if needed.
64 NSF, Alternate 1

There are multiple configuration options for this workspace. Alternate 1 incorporates additional worksurface, and also includes a visitor chair.

64 NSF, Alternate 2

Alternate 2 provides a maximum amount of worksurface within the station footprint, with its U-shaped workspace. All surfaces and elements are within easy reach.
80 Net Square Feet

The largest of the open office options, this provides increased worksurface or storage, or 1-2 visitors.

It is an efficient layout, but with the larger footprint, not all surfaces or storage elements are within an arm's length of the employee sitting at the computer.

Note the glass panels that align the top of the workstation, providing a sense of enclosure while allowing views.
80 NSF, Alternate 1

Alternate 1 provides a U-shaped work zone and accommodates 2 visitor chairs across a peninsula desk. This configuration would be suitable for employees who have a high volume of visitors that do not require privacy for their conversations.

80 NSF, Alternate 2

Alternate 2 provides a large, L-shaped work zone which allows space for a small meeting table within the workspace. This is suitable for employees who have a high volume of visitors that do not require privacy for their conversations, and who would prefer a table set-up for meeting with others.
120 Net Square Feet

Private offices are for employees who have a high level of privacy need (frequent private conversations or high level of confidential information in the workspace). It is recommended that only a small number of employees be located in private offices.

The 120 NSF standard provides an efficient workspace and accommodates up to three visitors.

The base private office layout shows the use of traditional casegoods furniture, which should be purchased from Utah Correctional Industries (UCI), per Utah Procurement Code (see Appendix A).
120 NSF, Alternate

This layout shows the use of systems furniture. If using traditional office furniture is not feasible, systems furniture may be an alternative (see Appendix A).
160 Net Square Feet

This office standard has an efficient workspace while providing room for a small table for four people.

The base private office layout shows the use of traditional casegoods furniture, which should be purchased from Utah Correctional Industries (UCI), per Utah Procurement Code (see Appendix A).
160 NSF, Alternate

This layout shows the use of systems furniture. If using traditional office furniture is not feasible, systems furniture may be an alternative (see Appendix A).
**240 Net Square Feet**

This is the largest private office standard. It is suitable for high level administrators who have a high level of need for privacy and frequent meetings of up to 8 people.

The meeting zone shows an option for a wall-mounted monitor above a credenza.

This layout uses a traditional desk and credenza, which require more space than systems furniture.
240 NSF, Alternate

An alternate layout for the large private office which has a smaller, four-person meeting table, but provides space for two lounge chairs.
Meeting & Support Space Standards

It is recommended that the majority of employees use open office workspace. Open and enclosed meeting and auxiliary space should be provided for the convenience and support of staff, when collaboration or privacy are required.

The amount of meeting space that is appropriate varies according to the functions and needs of the particular department or agency. The space type (open, enclosed or semi-enclosed), capacity (number of seats), and the quantity of the various types and sizes, must be determined on a case by case basis during a project’s predesign phase.

The following pages contain layouts of support spaces and commonly-used open and enclosed meeting spaces, with recommended sizes for the number of seats to be accommodated. A list of the included meeting room capacities and sizes is below:

<table>
<thead>
<tr>
<th>Seats</th>
<th>NSF</th>
<th>NSF/Seat</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>120</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td>160</td>
<td>20</td>
</tr>
<tr>
<td>12</td>
<td>260</td>
<td>21.6</td>
</tr>
<tr>
<td>16</td>
<td>375</td>
<td>23.4</td>
</tr>
<tr>
<td>20</td>
<td>450</td>
<td>22.5</td>
</tr>
</tbody>
</table>

Images are included as concept illustrations and are not endorsements of particular furniture manufacturers or products.
**80 Net Square Feet**

The Telephone Room provides space for employees to have private telephone conversations, or 2-person meetings or conversations.

It can accommodate two people and provides a worksurface for convenient note-taking or laptop use.
**80 NSF (4 Seats)**

The four-seat capacity space could be open or enclosed, according to particular department or agency needs.

---

**120 NSF (6 Seats)**

The six-seat capacity space could be open or enclosed, according to particular department or agency needs.

---

**160 NSF (8 Seats)**

The eight-seat capacity space could be open or enclosed, according to particular department or agency needs.
180 Net Square Feet (1-4 Seats)

The Focus Room provides enclosed space for employees who are housed in open office, but have occasional need for enhanced ability to concentrate or focus. The 180 NSF room depicted here would accommodate up to four people at one time to work quietly together. The worksurfaces are separated by short partitions.

This room could also be used by a team for project-based work or collaboration.
260 Net Square Feet (12 Seats)

This size of meeting space would most typically be provided in an enclosed room.
375 Net Square Feet (16 Seats)

This medium capacity meeting room is shown with 6’ x 3’ tables that are arranged in an overall 6’ x 15’ configuration. Using smaller tables in this manner increases flexibility by allowing other configurations or sizes as necessary.
450 Net Square Feet (20 Seats)

As in the standard shown on the previous page, this 20-seat capacity room uses smaller tables to create an overall large table configuration.
Space Standards Implementation

The space standards should be implemented as follows:

1. The 64 NSF open office workstation is assumed to be the base standard used by all employees, with exceptions as noted below.

2. Adjacent open or enclosed meeting space will be provided to accommodate meeting and collaboration needs. The quantity, types and sizes of the meeting/support space will vary according to the nature of the work performed by the agency, and will be determined during programming.

3. Employees who require more worksurface or storage than is available in the 64 NSF workstation, or who have 3-person meetings during 50% or more of the work day, may request an 80 NSF open office workstation.

4. Employees who are part-time or who are in the office only a portion of the work day may be assigned the 36 NSF open office workstation, as a dedicated workspace or a shared touchdown space.

5. Employees who have frequent telephone or in-person conversations of a confidential nature, or who frequently work with confidential or private information or materials, may require a private office. (“Frequent” is defined as 50% or more of the work day.) The office size will be 120 NSF unless there are 4-6 visitors (160 NSF) or 8-10 visitors (240 NSF) in the office on a regular basis.

Determining Approximate Space Needs

When planning office space projects, it is helpful to have a guideline to determine overall approximate space needs, prior to a programming process which calculates space needs more precisely.

We recommend using the following as a guideline for very early project planning phases:

**Usable or Department Gross Square Feet per person:** 220 to 280, depending on type of office space and major departmental or agency functions.

**Gross Square Feet per person:** 280 to 360, depending on type of office space and major departmental or agency functions.

The lower end of the square footage range (220 usable SF and 280 GSF) should be used for agencies or departments that have primarily open office workstations, with work tasks that focus on data entry, call-center activities, etc.

The higher end of the range (280 usable SF and 360 GSF) should be used for agencies or departments that require a high percentage of private offices (for example, the Attorney General’s Office).
Planning & Programming Grossing Factors

During the architectural programming phase, it is critical to use appropriate grossing factors to calculate space needs. Factors vary according to building type and function, and should be recommended by an experienced programmer. Square footage definitions and general factor guidelines are below.

Net Square Feet (NSF): Area inside surrounding walls or furniture panels
Programming typically begins with a list of spaces and associated net square foot amounts.

Efficiency or Circulation Factor: Initial factor applied to NSF to calculate size of planning blocks which include wall and immediate circulation space
Ranges from 1.6 (for small spaces) to 1.1 (for large spaces).

Department Gross Square Feet (DGSF): Planning block of NSF plus area for surrounding walls / furniture panels and immediate circulation
(NSF x Efficiency Factor = DGSF)

Building Grossing Factor: Multiplier which accounts for building common elements and spaces such as: major circulation; toilet rooms; stairs; elevators; vestibules; mechanical, electrical and communications spaces; custodial closets; and exterior walls
Ranges from 1.2 to 1.4, depending on building type

Gross Square Feet (GSF): Total area of a building measured from the outside surfaces of exterior walls
(DGSF x Building Grossing Factor = GSF)

RECOMMENDED EFFICIENCY/CIRCULATION FACTORS
Factors to apply to individual spaces during architectural programming to determine Department Gross Square Feet

<table>
<thead>
<tr>
<th>Individual Space NSF</th>
<th>Efficiency/Circulation Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 89 NSF</td>
<td>1.60</td>
</tr>
<tr>
<td>90 - 199 NSF</td>
<td>1.40</td>
</tr>
<tr>
<td>200 - 499 NSF</td>
<td>1.33</td>
</tr>
<tr>
<td>500 - 999 NSF</td>
<td>1.25</td>
</tr>
<tr>
<td>1,000 - 1,499 NSF</td>
<td>1.18</td>
</tr>
<tr>
<td>1,500 - 1,999 NSF</td>
<td>1.15</td>
</tr>
<tr>
<td>2,000 NSF and greater</td>
<td>1.10</td>
</tr>
</tbody>
</table>

TYPICAL BUILDING GROSSING FACTORS
Multiplier to apply to DGSF to calculate building GSF; varies according to building type

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Grossing Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative/Office</td>
<td>1.20</td>
</tr>
<tr>
<td>Courthouse</td>
<td>1.34</td>
</tr>
<tr>
<td>Laboratory</td>
<td>1.40</td>
</tr>
</tbody>
</table>
This excerpt from the Utah Code regards the use of Utah Correctional Industries Division products in furnishing state agency offices. It is referred to in the Office Space Standards document under “Additional Recommendations, No. 4.”

APPENDIX A: Utah Procurement Code 63G-6a-804

Utah Code

(E) deadlines and a termination date;
(F) consequences that will be used to evaluate the performance of the procurement item;
(G) any fees and associated expenses or an explanation of the circumstances warranting a waiver of those fees and expenses;
(H) the obligations of the procurement unit and vendor;
(I) provisions regarding the ownership of the procurement item during and after the trial use or testing period;
(J) an explanation of the grounds upon which the contract may be terminated;
(K) a limitation of liability;
(L) a consequential damage waiver provision;
(M) a statement regarding the confidentiality or nondisclosure of information;
(N) a provision relating to any required bond or security deposit; and
(O) other requirements unique to the procurement item for trial use or testing.

Publication of notice under Section 63G-6a-406 is not required for a procurement pursuant to a trial use contract.

(7) The division or a procurement unit with independent procurement authority may extend a contract for a reasonable period of time without engaging in a standard procurement process, if:
(a) the award of a new contract for the procurement item is delayed due to a protest or appeal;
(b) the standard procurement process is delayed due to unintentional error;
(c) changes in industry standards require significant changes to specifications for the procurement item;
(d) the extension is necessary to prevent the loss of federal funds;
(e) the extension is necessary to address a circumstance where the appropriation of state or federal funds has been delayed;
(f) the extension covers the period of time during which contract negotiations with a new provider are being conducted; or
(g) the extension is necessary to avoid a lapse in critical governmental services that may negatively impact public health, safety, or welfare.

Amended by Chapter 196, 2014 General Session

63G-6a-803 Emergency procurement.

(1) Notwithstanding any other provision of this chapter, a procurement officer or the procurement officer’s designee may authorize an emergency procurement without using a standard procurement process when an emergency condition exists.

(2) A procurement officer who authorizes an emergency procurement under Subsection (1) shall:
(a) make the authorization in writing, stating the emergency condition upon which the emergency procurement is made; and
(b) ensure that the procurement is made with as much competition as reasonably practicable while avoiding harm, or a risk of harm, to the public health, safety, welfare, or property.

Enacted by Chapter 347, 2012 General Session

63G-6a-804 Purchase of prison industry goods.

(1) A procurement unit that is not a political subdivision shall purchase goods and services produced by the Utah Correctional Industries Division as provided in this section.

(b) A political subdivision of the state may, and is encouraged to, purchase goods and services under this section.
(c) A procurement unit is not required to use a standard procurement process to purchase goods or services under this section.

(2) On or before July 1 of each year, the director of the Utah Correctional Industries shall:
(a) publish and distribute to all procurement units and other interested public entities a catalog of goods and services provided by the Correctional Industries Division, including a description and price of each item offered for sale; and
(b) update and revise the catalog described in Subsection (2)(a) during the year as the director considers necessary.

(3) A procurement unit that is not a political subdivision of the state may not purchase any goods or services provided by the Correctional Industries Division from any other source unless it has been determined in writing by the director of Correctional Industries and by the procurement officer or in the case of institutions of higher education, the institutional procurement officer, that purchase from the Correctional Industries Division is not feasible due to one of the following circumstances:

(i) the good or service offered by the division does not meet the reasonable requirements of the procurement unit;
(ii) the good or service cannot be supplied within a reasonable time by the division; or
(iii) the cost of the goods or service, including basic price, transportation costs, and other expenses of acquisition, is not competitive with the cost of procuring the item from another source.

(b) In cases of disagreement under Subsection (3)(a):

(i) the decision may be appealed to a board consisting of:
(A) the director of the Department of Corrections;
(B) the director of Administrative Services and
(C) a neutral third party agreed upon by the other two members of the board;

(ii) in the case of an institution of higher education of the state, the president of the institution, or the president's designee, shall make the final decision; or
(iii) in the case of any of the following entities, a person designated by the applicable rulemaking authority shall make the final decision:
(A) a legislative procurement unit;
(B) a judicial procurement unit; or
(C) a public transit district.

Amended by Chapter 445, 2013 General Session

63G-6a-805 Purchase from community rehabilitation programs.

(1) As used in this section:
(a) “Advisory board” means the Purchasing from Persons with Disabilities Advisory Board created under this section.
(b) “Central not-for-profit association” means a group of experts designated by the advisory board to do the following, under guidelines established by the advisory board:

(i) assist the advisory board with its functions; and
(ii) facilitate the implementation of advisory board policies.