

2022 Space Standards



February 14, 2022

State of Vermont

Agency of Administration

Department of Buildings and General Services

Jennifer M.V. Fitch, P.E., Commissioner

A handwritten signature in blue ink that reads "Jennifer M.V. Fitch".

Table of Contents

<i>Page</i>	<i>Section</i>
	Cover
1.	Table of Contents
2.	I. Introduction, II. Statutory Authority, III. Application
3.	IV. Guiding Principles
4.	V. Office Workspace Standards and Examples
8.	VI. Standard Workstation Workspace Examples
9.	VII. Standard Hoteling and Touchdown Workspace Examples
11	VIII. Standard Typical Private Offices
12.	IX. Standard Meeting and Conference Room Examples
13.	X. Support Spaces within a Department
14.	XI. Building-wide Amenities and Support Spaces
15.	XII. Allocation of Space
16.	Appendix A – Process
17.	Appendix B – Definitions
20.	Appendix C – Sources and Notes

I. Introduction

The following document serves as the Vermont Department of Buildings and General Services (BGS) Space Standards (“Standards”). It is intended to establish standards and processes that will allow BGS to provide productive, flexible, and comfortable work environments, assign space uniformly from agency to agency, and support alternative workplace strategies.

The Standards will support BGS in providing state employees with functional work environments appropriate for required tasks while maximizing the efficient use of space. They will also be used as a guiding document in the programming and planning of new projects, major remodeling, space reassignment, and leased space.

II. Statutory Authority

[29 V.S.A. § 165 \(b\)](#) The Commissioner of Buildings and General Services shall implement all reasonable and necessary measures to utilize all available space in all State buildings or structures before any improved property not owned by the State is leased to accommodate space needs of an agency.

[29 V.S.A. § 165 \(c\)](#) Notwithstanding any provision of law to the contrary, the Commissioner of Buildings and General Services shall have sole jurisdiction, sole authority, and sole responsibility for making space allocations and designating uses in any portions of any building or structure for which the Department of Buildings and General Services leases or pays for operation and maintenance expenses, or for which construction or fit-up was financed through an appropriation to the Department of Buildings and General Services.

III. Application

These Standards shall apply to all state office space and office support space under the authority of the BGS Commissioner. The BGS Design and Construction Division (DCD) and Planning and Property Management Divisions (PPM) and architects and planners under contract with BGS shall use these Standards for the purpose of determining space requirements for state building projects and for reassignment of space in existing facilities where the existing configuration will allow. Agencies and departments having authority over applicable office space are also encouraged to follow these standards.

Applicable areas of use include:

- Office space area standards for state positions,
- Space standards for support spaces such as public-facing client service areas, conference rooms, team rooms, touch down spaces and reception areas, storage, lactation rooms, break areas, and,
- Space standards for commonly used furnishings and equipment in work, shared, and support areas.

Spaces other than offices and office support spaces are more specialized by agency and BGS will address them on a project-by-project basis. Examples include classrooms, correctional facilities, courtrooms, laboratories, medical spaces, and warehouses. Each have specialized standards and, therefore remain outside the scope of this document, except for their office space portions.

IV. Guiding Principles

Space Standards are Based on Position Function and Requirements

Use these space standards to help assign space uniformly to similar positions across state government. The amount of space allocated to a position is based on the job duties and associated tasks and activities performed in a particular position. The standards support most functions and provide the space necessary to permit efficient performance of tasks. Space assignment determinations are based on the activities and duties performed by personnel occupying office space. The space allocations must be adequate for the furniture and equipment needed by employees to perform assigned tasks.

Private vs. Open Office Workspace

It is current working practice that employees will have open office workstations with few exceptions. This document recognizes that enforcing this policy is not possible without the provision of an adequate amount of conference, meeting, and focus spaces in state workspace to accommodate less frequent privacy requirements for staff supervision and discussion of confidential matters. Private offices will be assigned based on justification of functional need with a few exceptions. The most common functional need for privacy is frequent discussion of confidential matters in person or on the phone greater than 60% of a day or given week. Other occasional needs for privacy are as an aid to concentration or for security and isolation of confidential documents. In some cases, privacy needs will be accommodated by special furniture and equipment on a case-by-case basis.

A position must meet one of the following criteria for a private office to be permitted. Adequate nearby conference, meeting, and focus space must be assumed (and provided) as part of these criteria below:

- Position requires regular, confidential meetings of a frequency and duration which cannot be accommodated in nearby conference space.
- Position requires engagement in confidential conversations relative to agency internal matters or supervision of several personnel which involves dealing with sensitive personnel matters with a frequency and duration that cannot be accommodated in conference space.
- Position is responsible for sensitive investigations involving regular and frequent interviews or phone conversations in the workplace that cannot be accommodated in nearby conference space or separate interview rooms. Such investigations involve hearings, trials, actions against or on behalf of citizens of the State, or sensitive personnel investigation matters.

Assigned Versus Unassigned Personal Workspace (Offices or Workstations)

As a standard, employees who work 24 hours or over and three (3) or more days in the office shall be assigned a permanent workspace. Employees that work less than three (3) days and less than 24 hours per week in the office shall use the 'free address' model and use unassigned touchdown workspace or shared private office on a first-come, first-serve basis. Where necessary, supervisors and managers may assign a single workstation to two or more employees using a defined in-office work schedule.

Those who use such shared hoteling or touchdown personal workspace shall have access to nearby focus or team room space for occasional heads down work, private conversations, or online meetings.

In most cases, employees do not have more than one primary duty-station. When working in an alternative location, they shall use an unassigned hotel or touchdown workspace or shared private office.

V. Office Workspace Standards and Examples

Introduction:

The Purpose of This Section is Three-Fold:

1. Describe general workspace planning principles and specific statewide standards.
2. Give examples of the allocation and configuration of office space and related areas. As previously noted, these Standards apply to office space, or such space within specialized facilities. Special facilities including classrooms, correctional facilities, courtrooms, laboratories, medical spaces, or warehouse need specific attention and often have unique planning requirements.
3. Using the Standards will foster more consistent allocation of office space and its components around the state. Having Standards shared and used by all stakeholders will create greater consistency in the design and layout of state office space.

General Principles:

Average Square Feet per Person:

An average of 150 Usable Square Feet (USF) per person is the reference standard for space occupied by departments in state office space, per [the General Services Administration \(GSA\) and their Workplace Strategy Furniture and Information Technology \(FIT\) program](#); however:

1. It is an average only, the specific size of space required varies by function.
2. It does not include stairs, elevators, mechanical/electrical rooms, restrooms, facilities shared between departments such as a cafeteria or lunchroom, or corridors to another agency's offices.
3. Applying these standards can vary with the age and configuration of a buildings such as:
 - a. Older historic buildings with fixed walls and floor plans sometimes present difficulties to reconfigure to modern flexible workspace fully meeting the intent of these Standards.
 - b. Newer buildings are often better adapted to a more open-plan layout and more flexible and effective space use efficiency. This makes using the Standards easier to implement.

Typical Office Space Configurations:

This section illustrates typical workstation and office configuration types. BGS assigns actual space allocations based upon understanding the proposed department business needs, age, and configuration of the building, whether new or existing and other factors.

Modular Workspace and Offices:

BGS strongly encourages the use of modular furnishing systems due to their flexibility for later reconfigurations and adjustments.

Meeting Space:

Provide flexible, easy to access meeting space of small to large sizes near private workstation areas. Doing so helps create balanced office workspace with nearby places to meet, focus, and collaborate. Evaluate both the departmental frequency and type of use to not *over* or *under* size meeting space.

See common examples of various sized meeting spaces on page 12. Be sure to provide suitable technology support and collaboration tools in the spaces and ensure meeting spaces are easy to reserve online.

Storage Space:

Burdening an individual workspace and coworkers with infrequently used file storage is not an effective use of space, and contrary to creating a professional work environment. Evaluate the necessity, quantity, and location of storage space within the department with these two factors:

1. **Frequency:** For example, items used every five minutes should be within the individual work area. Items used a few times a day can be in an adjacent storage area or a filing area at the end of a series of workstations. Store other lesser used items in a storage room or off-site as required.
2. **Urgency:** For example, a fire extinguisher will hopefully never have to be used but must be nearby when needed. Similarly, evaluate file storage urgency with business needs in mind.

To alleviate onsite file storage as possible or not required, we encourage agencies and departments to scan documents. The BGS Print and Postal Shop has various scanning services available to assist. Note, Vermont State Archives and Records Administration (VSARA) must approve storage headed to off-site public record locations. Request an offsite or onsite storage facility when the primary purpose is to store or warehouse furniture, equipment, forms, and older files.

Daylighting and Views:

To the greatest extent practical, provide employees access to daylight and views at their workspaces and from within meeting space areas.

Best practices in design discourage locating private offices, meeting spaces, and tall workstation cubicle walls at or near exterior walls. This reduces access to shared daylighting and views while increasing lighting energy usage and Heating Venting Air Conditioning (HVAC) cooling requirements with higher energy costs. Instead locate these uses nearer the internal building core away from exterior walls and windows. Consider the same locations for other support spaces like breakrooms, focus room, workrooms, and storage all depending on the age and flexibility of your building.

Sustainability, Health, and Wellbeing in the Interior Environment:

BGS is mandated to supply healthy and safe workplaces for employees and our visiting public. We strive to reduce energy and resource use in our facilities lowering environmental impacts while improving health and wellbeing outcomes. See the [BGS Design Guidelines](#) referenced in the appendix for more information. Similarly, we regularly advise departments in buying contract furnishings and workstations, weighing factors such as space utilization, ergonomics, flexible reuse, indoor air-quality, recycled content, and long-term durability.

Client-Facing Agencies and Client Service Spaces:

Client-facing agencies, whose employees regularly meet with, and counsel members of the public should be housed in an office or workplace designed with a *client service model* in mind. That planning model should include:

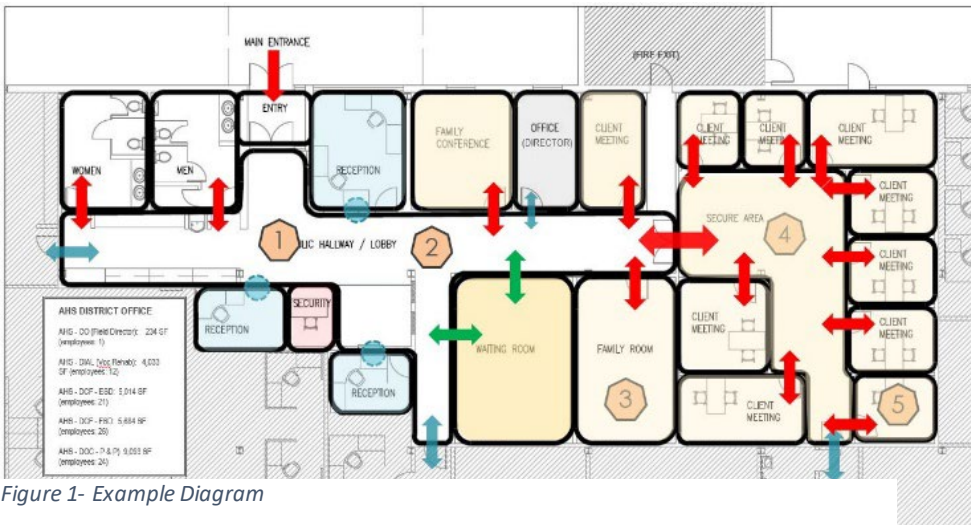


Figure 1- Example Diagram

- A publicly available/unsecured waiting area that does not have uncontrolled access to the rest of the building and secure work areas.
- The waiting area and client service area should include restrooms so that clients do not have to enter secured private workspace area to use the restroom.
- Next to the waiting area, locate a series of interview/meeting rooms that functionally serve as **touchdown or short-term transaction spaces**. These small meeting rooms should allow for employees to meet with clients without the client having the ability to access the rest of the building/secured space.
- Plan the room layouts so employees serving these meeting rooms can have unrestricted egress (the ability to exit the room unimpeded).
- For larger multi-floor buildings with departments that provide public facing client services, consider grouping together, preferably located on the ground level, shared lobby areas and client service rooms which maintain clear public and private secure separation, also known as “front of house and back of house.” Ensure there is a secure path of unrestricted egress for staff serving these areas. (That means egress paths separate from the public.)
- Adjust and align the appropriate floor plan layout design response to the building size and occupancy, overall threat levels, and need for separations between client service uses.

Workstation Standards:

The following standards are not furniture vendor specific. Use them to guide the configuration and design based on demonstrated business needs for workstations and related equipment.

- 1) **Open Workspace:** When moving from enclosed offices to modular workstations, it is typical to be tempted to use tall wall panels with narrow aisles. This is to be avoided. Experience shows the most comfortable designs have shorter wall panels that reduce visual distraction while still providing access to daylight,



views, and improved air flow along with wider aisles. Walls from private offices located on exterior walls can add to the “rabbit warren effect” of interior workstations and office space, blocking shared views and access to daylight, and is to be avoided where possible.

- a. **Workstation Size:** 6’ x 7’ workstations (42 NSF) or 6’ x 6’ (36 NSF) align with the 150 USF per person standard. Do not use larger size workstations unless business needs warrant it. Note, the specific size of workstations relative to size of circulation and surrounding aisles may vary. They may be assigned, shared, or unassigned.
- b. **Corridor and Aisle Widths:** Width is typically 6’- 0” for major egress aisles and a minimum of 3’-8” for secondary aisles. Major egress aisles may narrow to 5’- 0” minimum or less at a column or other obstruction or depending on building architecture. Building codes, accessibility standards, and other legal restrictions may also govern aisle and corridor widths; in some cases, the minimums above may need to increase to meet codes and standards.

- 2) **Panel Heights:** Typically, panel heights may range from 48" high between "side to side" workstations and about 66" or less high along the "center spine" of a group of workstations. When required, use a glass or solid fabric stacker panels to achieve the 66" overall height along the spines. Glass stacker panels can be added to the top of low panels to supply enclosure and views to outside windows or other coworkers for collaboration purposes.



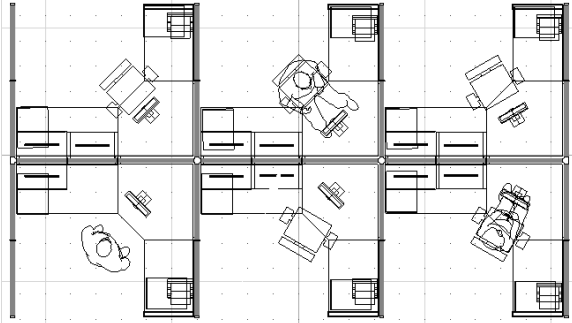
- 3) **Work Counters:** Work counters are typically 24" deep. When furniture is provided as part of the project, BGS will supply a base level workstation with a fixed sitting or fixed standing work counter adjustable in one-inch increments. Optionally, adjustable sit-stand work counters also provide added space use flexibility and easy adaptability to staff ergonomic needs. Costs have lowered recently. This makes them a good alternative to fixed height worksurfaces where appropriate and fits within the project budget.
- 4) **Components:** Individual workstations may include the following based upon the department's business needs: (but finalized between the department business offices, BGS, and furniture vendors):
- Under counter storage, including one pedestal file locking unit for personal items.
 - Higher internal or tower storage by the work counter may be a choice or nearby storage.
 - Shelves or wall mounted accessories to hold cups, add coat-hooks, and such.
 - Mobility solutions for laptop docking, and monitor arm(s), and adjustable keyboard tray, pencil drawer upon demonstration of need with user requirements.
 - Power and data access on furniture panels, and/or at worksurfaces.
 - The department provides task chairs which move with staff from old to new workspace.

5) **Hoteling or Touchdown**

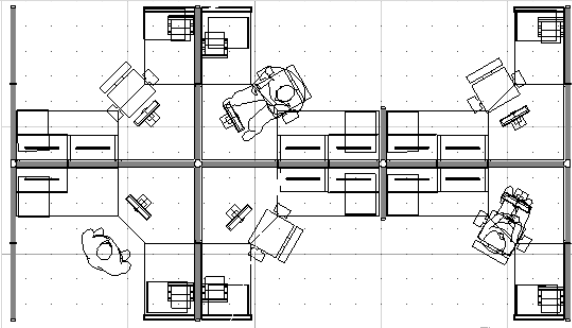
Workspace: Such workstations provide assigned or unassigned space for internally and externally mobile, temporary, or seasonal workers, or visiting vendors at 3 to 5 staff/seat usage ratio. They range from 5'x 5' (25 NSF) to 6'x 6' (36 NSF) these smaller workstations may include adjustable sit-stand worksurfaces rather than fixed ones to enhance flexible staff sharing.



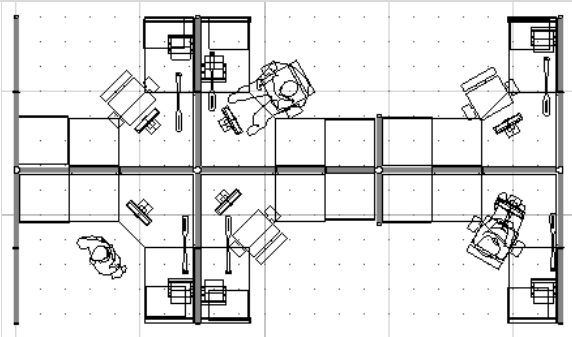
VI. Standard workstation workspace examples



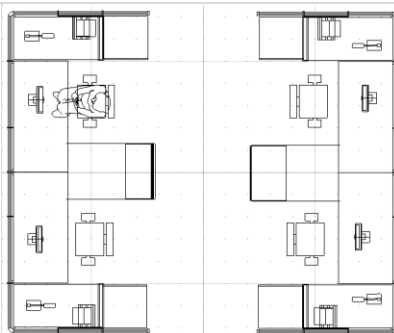
1A - 6 single units: All single 6' x 7' (42 NSF) or 6' x 6' (36 NSF) workstations open on one side to the corridor. Side panels are 47" high, center panels range from 47" to 66" high. Provide fixed work counter adjustable in one-inch increments. Counter on corridor side would need side panel to be adjustable.



1A - Mixed single & double units: This is like 1A except that it illustrates configuring two workstations as a double. The right side of the illustration shows a bull-pen arrangement. This shows higher 66" panels along the shared spine. Adding end glass stacker panels can optionally provide further visual separation.

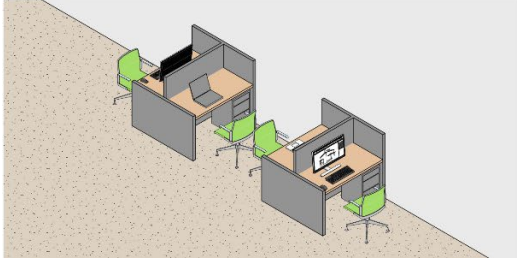


1B: - Also like the above, except with all 47" tall panels, it shows the use of optional storage towers in the place of part of the work counter, and no higher center panels. This is a more collaborative and open option.

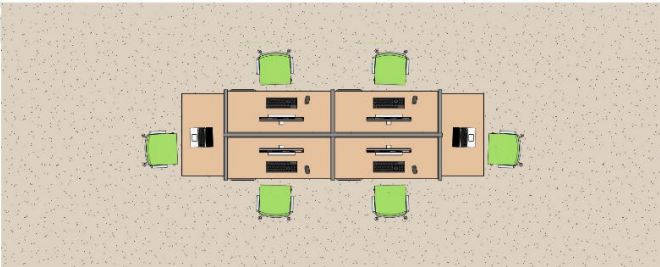


1C: - An illustration of four "C" shaped units with "peninsulas" or "bullpens" shared between each pair.

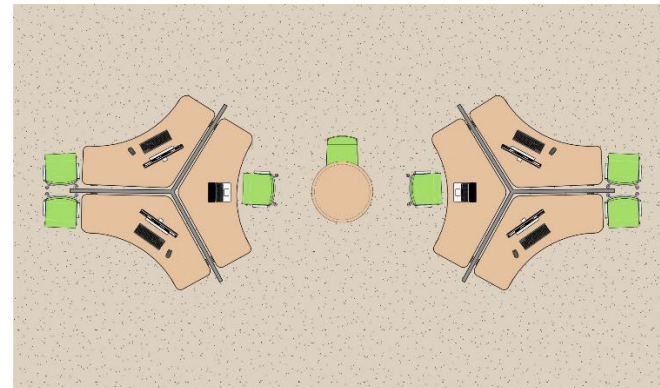
VII. Standard hoteling and touchdown workspace examples



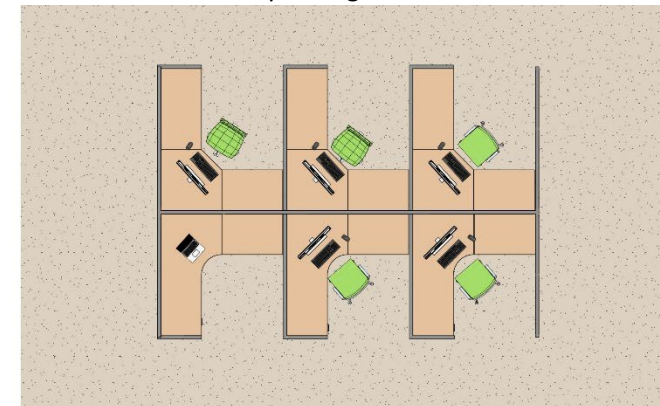
2A – Small table pairs: 2' x 4' small work areas with up to 48" tall walls shown here with workstation divider panels for possible visual separation between workspaces. For lower cost options, choose less expensive low or high tables, and or sit-stand worksurfaces with a privacy knee screen below.



2B – Larger Island: This shows an island with 2' x 4' work areas on ends with 2' x 5' spaces in between. for drop-ins who need or want visual connection. Could be furnished instead with a long table 30" - 60" in width with or without files below for face-to-face interaction. Could also be part of a work café space.



2C– Organic (120 degree) pods: 2' x 7' curving work surfaces. Two pods of three shown with low or high table in between for easy shared face to face collaboration. Adding optional glass stacker panels could supply visual separation. Could also be full-time workstations depending on business needs.



2D – Longer-term spaces: 6' x 6' workstations with optional sit-stand worktops supply drop-in flexibility integrating into adjacent 6' x 7' standard workstations with optional glass stacker panels.

VIII. Standard Typical Private Offices

Culture, Leadership, and Management Trends in Use of Workspace:

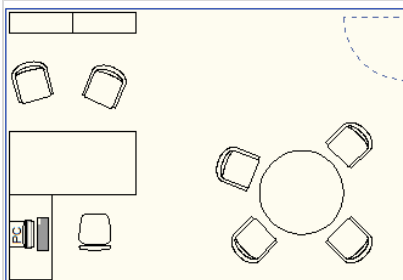
Over the last twenty years, management mindsets have shifted regarding executives or senior level administrators using private office workspace. Some leaders and managers prefer to work next to their team members and not in private office space, with easy access to focus rooms or other meeting space.

Senior Administration:

Offices are typically provided for department heads, commissioners, major program directors, and senior administrators with appointing authority when they have a significant number of direct reports and meet the justification of need criteria. For others, it is based on business need and verifiable confidentiality requirements. The following show examples indicating the relative size and representative contents of such offices. Specific layouts should reflect the actual business needs of the position and building architecture.

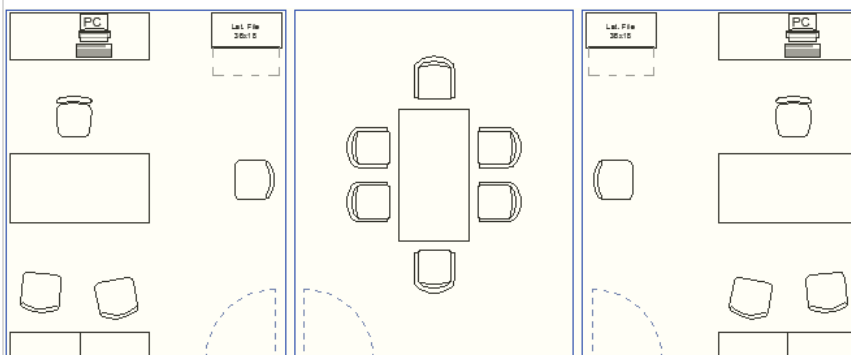
Location and Specific Building Conditions:

Depending on programmatic need, private office workspace may be required to be shared by more than one user. Also, with older buildings with existing oversize offices, (greater than 165 NSF in size) it is critical to share private office space whether doubling up or more within for more effective space usage.



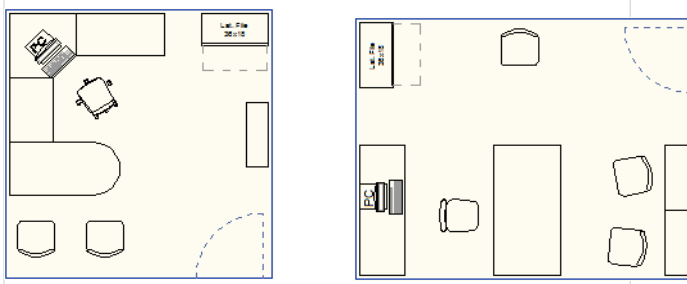
Up to a 250 NSF Office: Secretary, Commissioner

- 1 "L" Desk with PC and or laptop, could have multiple monitors and arms.
- 1 Meeting table
- 2 Bookcases, optional lateral file cabinets.
- 1 Task chair, 6-7 side chairs



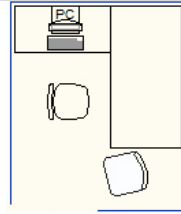
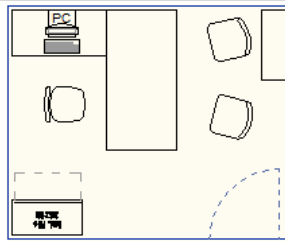
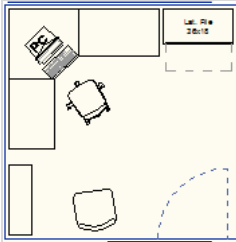
Up to 180 NSF Office: Senior Appointing Authority Offices with/without a Shared Conference Room.

- 1 Desk or worksurface with PC and or laptop, could have multiple monitors and arms.
- 1 Rear credenza
- 1 Bookcase, with optional lateral file cabinets, other storage.
- 1 Task chair, 2-3 side chairs
- 1 30" x 72" Table, 6 meeting room chairs (Shared conference room is optional) Could also be shared admin.



Up to 150 to 180 NSF Office:

- 1 Desk worksurface
- 1 Table with PC and or laptop, monitor arms, 1 file cabinet
- 1 Bookcase
- 1 Task chair, 2-3 side chairs



Up to 100 to 120 NSF Office:

- 1 “L “Desk with PC or laptop, monitor arms, pedestal file cabinet.
- 1 Lateral file cabinet
- 1 Bookcase
- 1 Task chair, up to 2 side chairs

Up to 64 to 80 NSF Focus Office:

- 1 “L “Desk with PC or Laptop, monitor arms
- Pedestal file cabinet, below desk
- 1 Task chair,
- 1 Side chair, sliding or in-swing door

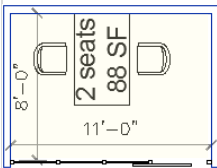
Public Client-Service Areas and Private Workspaces - Office and Focus Office Space:

If the department meets clients in a separate public client service area, staff will no longer meet with a client within private workspaces. Specific layout details depend on departmental programmatic needs, BGS Security profile, and other factors. For questions or more info about the BGS Security Profile, plan to contact the BGS Office of State Safety and Security early in the process.

In the private workspace portion, if the employee meets the justification of need for an individual or shared office, rather than having one (depending on their business needs), the department may assign them to use a shared focus office with sufficient scheduling access for their focus work or confidential conversations. Note such private focus offices will not be large enough to meet others in. Internal meetings will take place in nearby meeting space in the private workspace.

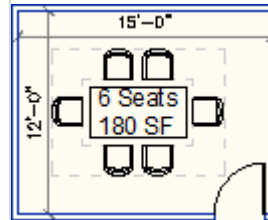
IX. Standard Meeting and Conference Room Examples

For client service areas and or private work areas depending on programmatic needs.
(All square footage indicated are NSF.)



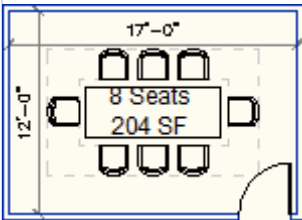
2 - 3 Seat "Huddle / Focus" Room

Sliding or inswing door
24" - 30" Wide table,
24" Wall clearance behind chair



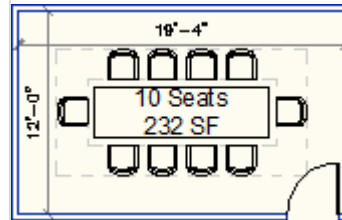
6 Seats – Team Room, Meeting

28" Chair spacing,
36" Wide table,
and 27" wall clearance



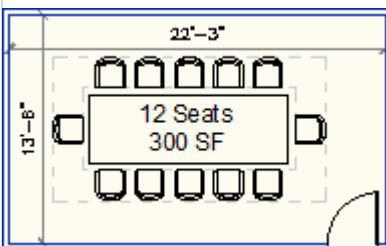
8 Seats – Team, Meeting

28" Chair spacing,
36" Wide table,
and 27" Wall clearance



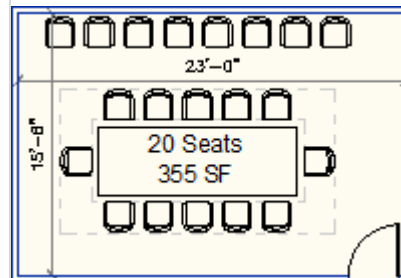
10 Seats - Meeting

28" Chair spacing,
36" Wide table,
and 27" wall clearance



12 Seats – Conference

28" Chair spacing,
48" Wide table,
30" Wall clearance
42" At Head of table



20 Seats – Conference (Medium)*

28" Chair spacing,
48" Wide table,
30" Wall & aisle clearance
52" At head of table
72" Open (34" tall) counter with sink.

* Equip large conferences rooms to allow for refreshments and include an open counter with sink for setting up food and drinks with space below for waste/recycling/compost containers as per the most recent BGS Design & Construction Guidelines.

X. Support Spaces within a Department

Early on, the appointing authority or person responsible for the department's space organization along with DCD and PPM should establish the requirements guiding the process. The following are space types followed by a description of their basic needs. The space required is determined based on the function and the number of employees using the support space area. (Note, see [BGS Design & Construction Design Guidelines](#) for more specifics regarding the below – See appendix C, item [11])

- **Reception Area:** Indicate the number of seats which meet department needs 80% of the time.
- **Files and File Storage Areas:** Specify the number, type, and grouping of files. Estimate the quantity of files needed today and up to the next five years. (When planning, be mindful of electronic storage and archiving plans. Paying for underused storage areas is expensive and wasteful.) Note: When planning, pay attention to the floor loading capabilities of the floor to support heavy files.
 - **Assessing file storage needs - Analyze and add up the lineal footage including the following:**
 - Personal close-at hand: Filing needed for daily work within a workstation or private office.
 - Group work area shared: Filing needed nearby for weekly personal and shared group work.
 - Shared storage room: Filing needed sporadically within the office, but not secure.
 - Secure storage room: Filing needed to be secure due to regulatory requirements.
 - Off-site storage: Filing needed infrequently in less expensive secured off-site space.
- **Workroom:** Sizes vary according to demand and usage needs. Uses may include copy/print/fax, recycling, mail, supplies and storage, shipping/receiving, coat/boot rack, and separate ventilation.
- **Data / Server room:** Provide a minimum 7' X 7' (49 NSF) well-ventilated room. Coordinate specific needs with the BGS Design Guidelines, BGS Office of State Safety and Security, and the Agency of Digital Services (ADS) as a separate Air Conditioning (AC) system may be required and as well as integration with other infrastructure in the room.
- **Copy / Print / Fax:**
 - Small Copier - 30 NSF with storage cabinet for paper, side table, and shelf.
 - Large Copier - 45 NSF with storage cabinet for paper, side table, and shelf.
 - Dedicated telephone fax line - indicate if needed in requirements.
- **Recycling Area:** 36 NSF minimum (up to 8 standard bins) in a central but less visible location.
- **Office Supplies:** Indicate the number of lockable supply cabinets and their size requirements.
- **Breakroom / Kitchenette / Social Hubs:** Provide at least one (1) kitchenette for the building. Consider more when the project has multiple floors, tenants and/or is a large single or multi-department facility.
 - Dedicated breakrooms range from 10' x 12' (120 NSF) or larger in size.
 - For smaller workspaces, supply a 40 to 60 NSF kitchenette in an alcove located off an internal corridor near a conference room.
 - For larger multi-department groups these spaces may act as a centralized social hub with added informal seating and lounge furniture choices. May also include personal staff storage lockers.
- **Special Equipment and Spaces:** Please note any special equipment, furniture, or spaces not mentioned above with their size, power, and data requirements. Provide product cut-sheets to BGS.
- **Infants in Workplace:** In accordance with 'Infants in the Workplace Policy' (13.13), the state is piloting a new program enabling infants to be at work with their primary caregiver six-weeks up to six-months of age. (Note, the policy has a separate request process in place with required site inspections by the BGS Safety Officer). For more information and forms see this link: [State of Vermont Infants at Work](#).
 - **Office Space Design Considerations:** For an infant located with primary caregiver in staff workstations, hotel spaces, or private offices.

- Possible added lactation rooms (temporary or permanently part of the workspace).
- Possible added storage area for infant related supplies and equipment.
- Family restrooms (in buildings 50,000 GSF or greater).
- Changing tables in single-use and multi-stall restrooms.

XI. Building-wide Amenities and Support Spaces

Determining the need for the following building-wide spaces is considered as part of a multi-tenant floor or building, not related to a single department’s requirements. Work with DDC and or PPM to develop building-wide needs. Comply with the [Americans with Disabilities Act \(ADA\)](#) and [state accessibility requirements](#) and [all applicable codes](#).

- **Space for BGS Operations and Maintenance (O&M) Personnel:** For every state-owned or leased office or workspace facility, supply space for BGS O&M personnel or landlord janitorial and building engineer staff. Exact details depend on whether the building is part of a campus or stand-alone. Generally, provide the following:
 - Per 25,000 GSF of floor area: Provide (1) 80-100 minimum NSF office for a custodial staff person, (1) 80-100 minimum NSF offices for maintenance staff. Provide (1) 120 NSF minimum storage and (1) 120 SF minimum workroom.
 - 50,000 GSF or greater of floor area: Provide larger storage and workroom space to be determined by the building’s operational needs. Consult BGS O&M staff for specific requirements and minimum sizes.
- **Larger Food Service / Break Area / Social Hub:** ± 20 NSF/person using space plus kitchenette, vending machines, and/or food service. As a blended space strategy, such spaces can act as an important social hub and flexible workspace as well as a place to dine.
- **Vending Machines:** Supply space as required for equipment; allow 18 NSF per machine. In state-owned buildings coordinate specific needs and placement requirements with the State of Vermont Division of the Blind who operates them within their [Business Enterprise Program \(BEP\)](#). Property owners in leased space control the supply of vending machines.
- **Recycling Room:** Provide a 240 NSF minimum size depending upon building size and number of departments using the building. Locate next to loading dock. Supply mop-sink and drain in floor to wash down space.
- **Lactation Rooms:**
 - A lactation room is required per Section 7 of the federal [Fair Labor Standards Act](#). Equip the rooms with a comfortable chair, refrigerator with freezer, hand sink, and lockable cabinets or lockers. Lactation spaces shall not be in restrooms. Provide dimmable lighting levels options.

Lactation Room Quantities:

Lactation Room Spaces (adopted from National Institute of Health guidelines)	
Number of Female Employees (at worksite)	Suggested Number of Stations Needed
Fewer than 100	1
Approximately 250	2
Approximately 500	3

Sourced and adopted from: [US Dept. of Health and Human Services, Office of Women’s Health supporting Nursing Mom’s at Work program](#).

- **Bicycle Storage:** For new building projects over 50,000 GSF, provide exterior bike parking (covered where possible) for up to 10 bikes, near the primary building entry. No inside bicycle storage allowed.

XII. Allocation of Space

How to Apply: Consult BGS to identify the right workspace types and sizes to include in planning.

Workspace Allocation:

The chart shows the standard space type allowance by net square feet (NSF) per user.

Space Type	NSF per User within the Space
Private Office *	100
Shared Office*	40
Workstation	36-42
Hotel/Touchdown Spaces	20-36

* **Note:** Except for senior agency leadership, individual and shared private offices are discretionary, based on demonstrating meeting justification of need.

Meeting Space Allocation:

The chart shows the standard space type allowance by net square feet (NSF) per user.

Space Type	NSF per User within the Space
Collaboration	20
Focus Room	40
Focus Point	40
Conference	15
Training	25-35

How to Apply:

Before showing collaboration, focus, conference, or training space to be included in a facility, please consult the “how to apply” standards found in Criteria 2 - Space Strategies, Type of Space, Efficiency, and Effectiveness (see page 22).

Allocation of Office Support Spaces:

- Include only those office support spaces required to serve actual business need. The spaces should be relative in size to the square footage of the facility, number of floors, and number of users.
- Agencies should consolidate these office functions where possible by providing central mail operations and integrated copier and printer functions in enclosed spaces.
- To support greater internal space use mobility, provide additional collaboration and focus space with soft seating, supporting hoteling and touch-down spaces as well as workstations as needed.
- All facilities over 20,000 GSF should have employee showers, when and where financially feasible.

Questions or need further information?

Please email BGS.Planning@vermont.gov with any questions. Please Include “Question about Space Standards and Planning” in the email subject line.

Appendix A - Process

Space Requests

State entities undergoing program changes resulting in an imminent or planned request for space or significant update or replacement of modular workstation and loose furniture, [must submit a space request to BGS](#). This is separate from a move request. For substantial projects impacting larger groups of employees, multiple-facilities, and or extensive square footage of workspace, state entities shall assign key personnel to the planning process to work with BGS.

Modernization and Hybrid-working

These standards help support state efforts to modernize business operations and help in attract and retain our talented workforce. The recent Pandemic taught the State that telework, or remote working is a viable solution that can help further support in person working and the work life balance needs of our workforce. However, it is not a one-size fits all solution. It is an important part of hybrid-working, a newer approach to work. It involves a mix of in-person office work and a degree of remote working with more a focus on collaboration and shared workspace, as approved by appointing authorities, suited to job duties and business function.

Project Funding

If a space request and or project is approved, funding can be allocated according to the state-owned space process or leased space process. Whether owned or leased, BGS shall manage the determination of the scope of work, related costs, and implementation requirements as follows:

- **Major renovation and new construction that require Capital Construction Funds:** Capital Construction funds relating to state-owned buildings must be approved by the Legislature and are administered as part of BGS's proposed budget submitted to the Agency of Administration (AOA). Funding requests shall be incorporated into the Capital planning recommendations and considered with all funding demands.

Please Note: The Agency of Administration (AOA) handles all Capital Construction Funds Requests. Some funding requests may go directly to AOA.

- **Major renovation and new construction not involving Capital Construction Funds:** Departments must submit requests to BGS well in advance of budgetary deadlines when involving major renovation or new construction in state-owned buildings or projects in leased space. Submit no later than summer or early fall for work planned for the forthcoming fiscal year cycle. Departments pay for these costs from operating funds. BGS will request the funding source to bill these costs. Project funding authorization must be obtained from the appointing authority **PRIOR** to submitting a space request.
- **Moving costs, minor renovations, and leasing costs:** Departments pay for these costs from operating funds. PPMPPM will request the funding source to bill these costs back to a department. Before submitting a space request, obtain authorization to fill out a request first from agency appointing authority leadership. Note, when filling out a space request, the appointing authority is automatically notified as part of the process.

Appendix B – Definitions

Introduction:

We provide the following to help further describe terms used in this document.

Ancillary Space: Includes supporting office space functions such as meeting space, breakrooms, lactation rooms, janitorial, data and electrical closets, and storage areas.

Breakroom/Social Hub: A multipurpose space that is open, semi-enclosed or enclosed that provides ways for people to connect with colleagues, perform concentrative or interactive work, and enjoy beverages and food. Usually has furniture, counters, sink(s), refrigerator, microwave, toaster, and other equipment.

Client Service Area: A meeting area securely separate from private office workspace designed for safely meeting public customers needing confidentiality and privacy and/or requiring retail style customer service-oriented transactions. The spaces range from a single meeting room suitable for 2-3 people, to a variety of rooms of assorted sizes and types suitable for a larger group. Such areas will have access to appropriately sized waiting areas for mixes of small and larger groups.

Collaboration Space: A space that is open, semi-enclosed, or enclosed for informal meetings supported by whiteboards, telepresence and conference technology, and flexible furniture.

Conference Room: An enclosed space for meetings. Has four walls and a ceiling with limited visual and acoustical distractions for 5-20+ users. Often has whiteboards, telepresence and conference technology, and flexible furniture.

Department Grossing Factor: This is a consistent percentage added to the department’s projected total NSF functional requirements to allow for wall thickness and circulation within the department.

Desk Sharing: This an alternative workplace arrangement in which two or more employees share use of a single workspace where each employee has a designated day and or time to use the workspace.

Focus Room: An enclosed space with limited visual and/or acoustical distractions for 1 -4 users.

Focus Point: A non-reservable, semi-enclosed space with limited visual and acoustical distractions for user(s) made with movable furniture and or combination of wall layouts.

Gross Building Area (GBA): Represents the total square footage of the building. It comprises all floor areas including the “USF”, the additional service, circulation and other components included in the “RSF” plus the exterior walls, all vertical core space, and mechanical equipment floors. “GBA” may be calculated in early planning, before building design, if the department is to be housed in new construction or a major renovation. It is crucial to determine the overall size of the building or overall space needs.

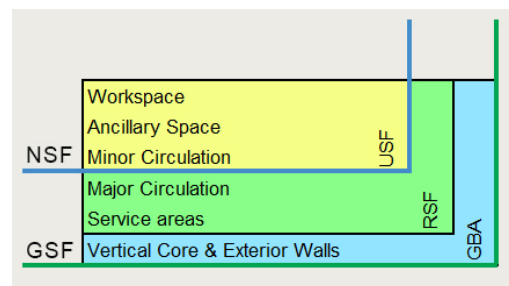


Figure 2- Net Square Feet (NSF) and Gross Square Feet (GSF) comparison

Having this helps with creating budgets aligned to the level of information known. To calculate the total GBA, planners will multiply a grossing factor to the subtotaled departmental net square footage (NSF) or usable square feet (USF). Grossing factors may range from 1.20 to 1.60 or a *higher* multiplier depending on the building and project type. Using this method in the planning stage ensures the building will have

the proper required added spaces and facilities serving the needs of the individual departmental and common shared spaces.

Growth Factor: This is an allowance, preferably based on a rational projection of activity, used to project future requirements. State explicit assumptions effecting the growth factor in the space program.

Hoteling: This an alternative workplace arrangement where employees use non-dedicated, non-permanent workspaces assigned for use by reservation on an as-needed basis. Such space is suitable for mobile workers based elsewhere, visiting vendor partners, part-time staff within the office, and internally mobile full-time staff.

Lactation Room: An enclosed space that is sanitary, safe, secure, and private, which allows for breastfeeding or expressing breast milk. Should have room for a small-refrigerator, hand sink, and lockable cabinets/lockers. May be single-use, or multiple-use. Provide combination lock and an in-use indicator.

Mobile Work (Mobility): Refers to an employee's ability to work freely inside and outside the office. Mobility also encompasses all remote work that is functionally required for a job. Telework is a sub-set of mobility in which an employee works specifically at home or at an approved alternative worksite, such as a satellite office at another state facility, or elsewhere.

Mobility Work Profile: Identifies the work profile of an employee and their level of mobility within and outside the office. Determining the proper work profile helps planners and designers in assigning the most effective type of individual and shared workspace to meet business needs. For example, if a manager physically uses their office 5-16 hours a week, spending the rest of their time in meetings on or off site, having a private dedicated office may be an ineffective use of their space. Consider re-characterizing them as an internal mobile worker with access to a focus room, hotel space, or workstation allowing the conversion of their former office to a shared meeting room.

Net Square Feet (NSF): This is the area within a room or workspace housing a function. Walls, columns, or other spaces are not included. Workstations are a slight exception in that they are measured from the centerline of their panels. This measure is typically used only when describing individual workspaces. Circulation is calculated separately to evaluate space efficiency. NSF forms a component of USF.

Office Space: Refers to the total work environment. Also referred to as workspace. BGS uses this distinction to avoid the confusion between references to a department's office at large and an individual workstation or office.

Private Office: An enclosed workspace with limited visual and/or acoustical distractions for one user.

Remote Work: Is an alternative working solution which usually means the act of performing work functions at an off-site worksite which may include an agency or department satellite office, working from home, or another shared workspace off-site.

Rentable Square Feet (RSF): Includes the "Usable SF", as described below, plus service spaces such as corridors, bathrooms, mechanical and electrical spaces. It does not typically include major vertical penetrations for items such as elevators, ventilation shafts or fire-rated stair towers. Landlords will frequently charge this basis, so it is not uncommon to include those spaces in the planning figures.

Shared Private Office: An enclosed workspace with limited visual and/or acoustical distractions for up to three users. Open office workstations may be installed in such spaces or loose furniture, or a combination.

Space Usage Factor: This factor describes the percent of time a space is used as compared to an average benchmark of time like a day, workweek, month, quarter, or year. Measuring how often a space is used versus its vacancy helps BGS and PPMPPM understand if its continued use by a department makes sense programmatically and financially. In the planning and design phases, BGS may ask for room or space usage data to determine this factor. Such data often comes from calendar scheduling, and or occupancy data available from smart sensors, internal surveys, observation, and other means. (For example, having a conference room vacant 95% of the day, week, or month may not be the highest and best use of that space with other possible uses more relevant to consider, including reducing space needs.)

Telepresence: The use of online or dedicated internal audio-visual telecommunication technology for participation in distant events such as meetings, conferences, or webinars. Using such technologies helps employees attend meetings which may be far away and or expensive to easily attend. Smartphone technology also allows people to informally “drop-in” with face-to-face video calls enhancing connection and collaboration.

Touchdown Spaces: An un-reserved, first-come, first-served based type of workspace. Such a workspace is suitable for a more mobile part-time user, or externally mobile users. Comes with a smaller worksurface and minimal personal storage with access to additional personal storage in nearby shared areas. Also, may be known as a mobile-bench and other terms.

Training Room: An enclosed space for recurring specialized training. Has four walls and a ceiling with limited visual and acoustical distractions for 10-30+ users. They have flexible furniture, wall-mounted collaboration tools such as whiteboards, and some degree of audio-visual telepresence technology.

Trauma-Informed Design: “Trauma-informed physical environments promote physical, mental, and social health. They ensure physical safety from harm and danger. To support mental health, they emphasize consistency, predictability, and personal control.” [11]

Usable Square Feet (USF): This is the total space required by a department. It includes “Workspaces”, “Ancillary Space” and internal department circulation also referred to as “minor circulation”, plus the thickness of walls within the space. Designers and planner use this number in evaluating space needs as it stands for the work areas which can be occupied by personnel. It does not include building common space for elevators, stairs, bathrooms, public-circulation areas outside of a suite etc.

Workplace Strategy: It is the dynamic alignment of an organization’s work patterns with the work environment to enable peak business performance and reduce costs. Often bulleted lists of strategies, they can positively influence space programming and layouts, use of technology, furniture purchases, overall costs, pride-in place, and organizational culture. Developing them early on in planning will help ensure long-term success through all stages of the project. Using strategies throughout the project process provides a benchmark to measure and test the effectiveness of design solutions to meeting these key business goals.

Workstation: A semi-enclosed workspace using modular furniture for one user. Can be adapted to many user and departmental driven business need combinations and sizes. This includes changes in partition heights, storage, technology, collaboration, ergonomic, visual privacy, and worksurface requirements.

Appendix C – Sources and Notes

Numerous office space standards and workplace strategy best practices have been published for a wide variety of businesses and governmental audience types. However, BGS has found the following shared commonalities and emerging themes in the applied research reviewed:

- Less reliance on use of strict hierarchical square foot allocation “standards” by employee position, rank, and pay scale. The use of “standards” based on business programmatic needs have proven more effective at encouraging the goals of consistent, efficient, and flexible space use.
 - Use of shared workspaces are becoming more common. The major reason is to create effective
 - flexible spaces for collaboration addressing needs for worker focus work, increased technologically driven worker mobility, and changing business processes.
 - With advances in digital processes, individual office and workstation floor area has reduced in size as the need for paper-based transactions and on-site file storage decrease.
 - Smart organizations pay closer attention to workers behavioral temperament (ranging from introverted to extroverted tendencies) by providing access to flexible dedicated quiet and focus areas as well as spaces for group social interactions and group work.

Additionally, BGS consulted many references and standards to benchmark and validate the development of the standards including those of other states, federal government, and the private sector.

A Brief List of Examples and Sources - The following is a sampling of sources and standards used to inform the creation of the Standard:

1. [“\(The once\) Alternative Workplace Strategies: Fifth Biennial Global Benchmarking Study 2018”](#), a collaboration between AWA, Global Workplace Analytics, HAWORTH, and IFMA.
2. [“State Facilities Workplace Strategies and Space Use Guidelines”](#), State of Washington Office of Financial Management – Facilities Oversight Program, May 2017. Offers an extremely helpful modern workplace design and strategy format useful for routine use in Office Space planning.
3. “The Best Place to Work: The Art and Science of Creating an Extraordinary Workplace”: Ron Friedman, 2014, A Perigee Book, a Penguin Group imprint.
4. “Quiet: The Power of Introverts in a World That Can’t Stop Talking”: Susan Cain, 2012, Crown.
5. The General Services Administration (GSA) Workplace Strategy Furniture & Information Technology [\(FIT\) program](#).
6. [“Workspace Utilization and Allocation Benchmark”](#), US GSA Office of Government Wide Policy, Office of Real Property Management Performance Measurement Division, July 2011.
7. “Circulation: Defining and Planning”, GSA Public Building Service and Gensler, May 11, 2012.
8. For more detail on office acoustics and design criteria relating to see [“P100 Facilities Standards for the Public Building Service – Section 3.5.3 Acoustics”](#), GSA, July 2018, Pages 99-101. See Table 3.1.
9. For Operations & Maintenance Ancillary spaces: BGS uses the space guideline of 25,000 sq. ft. per custodian and 50,000 sq. ft. per maintenance mechanic. These square footage guidelines are backed up by “Facilitiesnet.com” who surveyed hospitals, federal government, state government, municipal government, and retailers across the country with 1,925 responses. The “Custodial Staffing Guidelines” book for educational facilities 1998 2nd edition was also used to justify the 25,000 square footage rules for custodial services. Note specific space allocations depend on whether the facility is a stand-alone building or part of a campus, and other project details.
10. BGS Design Guidelines, found at http://www.bgs.vermont.gov/dnc/design_guidelines
11. For trauma-informed design recommendations, see <https://www.nationalcouncildocs.net/wp-content/uploads/2019/06/Trauma-Informed-Design-Summary.pdf>
12. For more on daylighting and interior design, see: <https://www.wbdg.org/resources/daylighting>.