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<div>Procedure Owner</div> <div>Facilities</div>		
<div>SUBJECT</div> <div>Office Space Planning and Standards</div>	<div>APPROVED SIGNATURE</div> <div>Katy Coba, Director Chief Operating Officer (Signature on file with DAS Business Services.)</div>	

PURPOSE

This procedure outlines guidelines to achieve the statewide office space standard established in support of the Governor's Executive Order 17-07 to optimize the use of state-owned and state-leased facilities. These guidelines are established to promote agency-wide consistency, predictability and standardization in order to implement the statewide policy Office Space Planning and Standards, 107-011-100.

APPLICABILITY

This procedure applies to all state agencies, boards and commissions that occupy facilities owned or controlled by DAS including private leased space and space in buildings owned or controlled by other agencies subject to ORS 276.001 to 276.625. Executive Order 17-07 defines "state agency" as any agency within the Executive Department as defined in ORS 174.112, other than the:

- Secretary of State.
- State Treasurer.
- Department of Justice.
- Bureau of Labor and Industries.

Agencies are required to follow these space standards when leasing or redesigning office space. Exempt agencies are not required to follow the guidelines and standards set forth in this policy. However, DAS encourages them to do so. The Executive Order directs DAS to assist any entities of state government that request support in accomplishing these objectives.

FORMS/EXHIBIT

- [Form 125601 Office Space Request and Space Planning Worksheet](#)
- [Form 125610 Space Standard Exemption Request](#)
- Exhibit 1 - Office Space Planning Guide

DEFINITIONS

Refer to Exhibit 1 - Office Space Planning Guide.

PROCEDURE

<u>RESPONSIBILITY</u>	<u>STEP</u>	<u>ACTION</u>
Agencies	1	<p>Plan for new or redesigned office space by submitting a completed Office Space Request form 125601 to res.info@oregon.gov (DAS Real Estate Services). A space planning worksheet is included on the reverse side of the Space Request form to assist with determining space need. The agency is encouraged to consider the aggregate standard of 175 Usable Square Feet per head count as a “maximum” space utilization or footprint in whatever distribution the agency program requires.</p> <p>Overall square footage per head count may vary between program work units with different program service delivery needs. The standards do not establish or imply minimum space entitlement or specify workstation sizes. Instead, it is a method of determining the overall office space requirements of a work group or agency and for determining how that space is utilized. Agencies are encouraged to implement strategies that will use less space while meeting the functional business needs of programs.</p>
Enterprise Asset Management	2	<p>Receive Office Space Request and work with the requesting agency on strategies to achieve the space standard. Real Estate Services will assist agencies with scheduling Capital Projects Advisory Board review of any spaces of 10,000 square feet or larger (significant lease), prior to budget requests.</p>
DAS EAM leasing agents	3	<p>Assist agencies with securing office space, parking, warehouse and various other types of facilities to meet agency program needs.</p> <p>Evaluate whether the agency’s space request aligns with Executive Orders, current laws, statewide goals and goals of the Six Year Facility Plan.</p> <p>Once the space need has been established, search for appropriate space first in state-owned facilities. If no space is available or suitable to meet the agency’s needs, search within the buildings described in ORS 276.004 or in other buildings owned or controlled by other state agencies; and finally, expand the search to private sector facilities while driving the highest value for Oregon state government.</p>
Enterprise Asset Management	4	<p>Review this procedure each biennium to determine if it aligns with statewide policy, Office Space Planning and Standards, 107-011-100.</p>

Exemption from the Space Use Standard Procedure – All agencies with special use needs requiring exemption from the space use standard due to unique circumstances, follow the procedure below.

<u>RESPONSIBILITY</u>	<u>STEP</u>	<u>ACTION</u>
Agency	1	Apply for an exemption of the space standard by submitting a “Space Standard Exemption Request” form 125610 signed by the agency head or designee. This exemption is intended to be used when an agency has need for more specialized functional programming (special use space). In order to consider granting an approval to an exemption request, the requesting agency must demonstrate that unique circumstances warrant the exemption. DAS Real Estate Services will work with the agency to ensure that space is being efficiently utilized and create an action plan, when appropriate, to arrive at a solution to enable the agency to meet the standard within a reasonable period of time.
Enterprise Asset Management	2	Evaluate Space Standard Exemption Requests for approval or denial. Provide the requesting agency with written documentation of the approval or denial of its space standard exemption request. Retain the completed, signed Space Standard Exemption Request form 125610. Each request is evaluated based on its own context according to factors described in the Office Space Planning Guide.

Exhibit 1

Office Space Planning Guide

Planning Models and Floor Plans

January 2019

**Department of Administrative Services
Enterprise Asset Management
Real Estate Services**

Policy #: 107-011-100

Exhibit 1

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WELCOME

The Office Space Planning Guide is a decision-making tool to assist agencies and the DAS Real Estate Services Program in estimating the amount of space needed for facility planning. The challenge of meeting functional space demands using limited resources in recent years has forced many public and private sector organizations to focus on space efficiency, environmental efficiencies and rigorous management of property costs. When determining the best way to forecast and utilize workspace, today's facilities and real estate professionals must consider the following factors:

Space availability	Security concerns
Energy costs and water usage	Emergency management planning
Operation and maintenance costs	Alternative workplace arrangements
Ever-changing mission requirements	The new mobile workforce

State government is a collection of diverse agencies with differing missions. Therefore, the task of developing or confirming a government-wide standard for office workspace using per head count is a significant challenge. In practice, it has become apparent that one size does not fit all. Facilities that require large support areas, such as those that deliver services to the public (e.g. community services offices, licensing offices, parole offices, etc.) and special purpose facilities (e.g. laboratories, data centers, courtrooms, etc.) do not readily fit a generic space utilization model. However, space standards allow organization to plan for new space, to evaluate usage of existing space, and to benchmark against other organizations in the public and private sectors.

The benefits of space management include:

1. Understanding space usage. Where are people and how are they using each space? It is important to monitor the actual compared to planned space utilization and make changes in usage accordingly.
2. Identifying underutilized spaces. An average of 45% of modern office space is vacant at any point in time. Space management optimizes workspace usage.
3. Aligning workspace initiatives with business goals, including sustainability goals, such as less energy and water usage to reduce the state's carbon footprint.
4. Making informed forecasts of future space needs.
5. Helping to analyze actual space usage, compare it with the planned space usage and make informed decisions that will impact budgets by reducing the state's office space costs while meeting the business needs of state agencies.
6. Increasing efficiency with integrated workplaces to enhance interdepartmental relations and workspace flexibility, increasing productivity and fostering employee collaboration and retention.
7. Streamlining the move process and reducing costs when an agency needs to relocate.

A measure of success of space standards is the actual "Usable Square Feet (USF) per head count" achieved. Space standards applied consistently can provide space at the lowest possible cost in sufficient quantities and qualities for programs to function more efficiently. A space standard should promote a common understanding of acceptable levels for utilizing space across the portfolio. Functionally the standard should be specific enough to be consistently applied and broad enough to be flexible when needed. The standard will be evaluated as part of our ongoing effort to analyze data on modern office workspace and evaluate innovative approaches to facility efficiency metrics.

This policy and procedure allows a space standard exemption when appropriate. Agencies must show that they have exercised due diligence in requesting an exception to the space standard.

In order to consider granting an approval to an exemption request, the EAM Administrator, must be satisfied that unique circumstances warrant the exemption. Each exemption request will consider, but not be limited to the following factors:

- Specific agency mission requirements justifying space in excess of the standard.
- Benchmarking with similar organizations performing similar functions to ensure the space utilization is reasonable.
- Existing plan and layout of the building. Example: historic structure may influence calculations.
- Third-party vendor's recommendation based on facility condition, business climate, or other factors.
- Workplaces with fewer than 10 employees.

Each request will be evaluated, based on its own merit and considered within its own context. Agency should ensure that space is being efficiently utilized. DAS Real Estate Services will work with the agency to create an action plan to arrive at a solution to enable the agency to meet the standard within a reasonable period of time.

BACKGROUND

Portfolio Workplace and Space Optimization Study:

A team composed of Real Estate Services staff and an outside consultant was hired to:

- Study the State of Oregon's current space standards and practices.
- Research other states and other public sector entities for "best practices" and appropriate benchmarks.
- Identify workplace and portfolio trends and best practices.
- Explore different approaches for the application of space standards.
- Recommend whether to retain, update or revise the current standard and how it is or should be applied based on the results of the research.
- Develop a plan to implement changes to achieve a new recommended standard.

Goals of the study:

1. Reduce DAS's overall occupancy costs.
2. Propose utilization rates that reduce the State's overall footprint without compromising workplace effectiveness.
3. Provide recommendations for workplace standards that support new ways of working, improve user satisfaction and situates space as a tool to attract and retain talent.
4. Improve individual and team productivity.
5. Reduce energy consumption related to real estate.

Analysis of Oregon facilities:

Oregon currently has the highest square footage utilization target of 250 USF per seat of any of the states or private sector organizations benchmarked.

Oregon	California	Colorado	Tennessee	WA	Utah	Fed Gov
250 USF/seat	Unknown	175 USF/seat (20% load)	175-200 USF/Seat	185 USF/seat (20% load)	Unknown	157 USF/seat
Programming standards	Manages standards	Standards for leased spaces	Manage & enforce standards	Approve projects with standards	Standards for new projects	Keep within a stated USF target
Limited flexible work policy	Flexible work policy primarily for field workers	No flexible work policy	Piloting new flexible work program and policies	Pilot flexible work policy	None	Widely implemented flexible work policy varies by agency

Workspace Types:

* Most Organizations are here

Cellular Space	Open Plan	*Activity-based Open Plan	** Hybrid Mobility	Full Mobility
Fully assigned offices and/ or high partition workstations	Fully assigned open plan workstations	Fully assigned open plan workstations and support space	Mix of unassigned and assigned workstations and support space	Fully unassigned workstations and support space
300-250 sf/person	250-200 sf/person	200-150 sf/person	150-100 sf/person	100-50 sf/person

** Current shift is going here

Shortcomings of Oregon's former space planning:

- High proportion of space assigned to individual workspace, low proportion to shared workspace and support space;
- Inflexible;
- Did not support informal collaboration and teamwork; and
- Limited access to daylight and views.

Study recommendations to meet Oregon goals:

1. Adopt and enforce a new space utilization target.
2. Require business case analysis for all new space acquisitions and for renewals/expansions greater than 10,000 RSF where current utilization is greater than 200 USF.
3. Find opportunities to BETA test new standards.
4. Establish standardized space categories and types to improve reporting and metrics.
5. Analyze the most cost effective way to implement enterprise-wide space management technologies.
6. Create a governance program for the management of occupancy data across the portfolio.

[ORS 276.428](#) requires DAS to approve and supervise all leases for office quarters for all state agencies. ORS 276.410 requires DAS to assign state agencies office space in the buildings described in ORS 276.004 or in leased quarters as provided in 276.420 to 276.429 or in available space in other buildings owned or controlled by other state agencies.

[Executive Order 12-17](#) outlines a systematic “investment” approach to future planning of state infrastructure and capital projects that rely on General and Lottery Fund debt capacity for funding. A [10-Year Strategic Capital Investment Plan](#) is in development to provide an integrated, long-range strategy for future capital investments that align with key state, regional, and community goals and objectives.

[Executive Order 17-07](#) Section IV (A) requires that state agencies conduct a review of their use of state-owned and state-leased space and take immediate steps to optimize space efficiency by eliminating or reducing space (consistent with satisfying business needs and controlling statutes, regulations and DAS policies).

History of DAS Office Space Planning and Standards Policy

The Office Space Planning and Standards Policy 107-011-100, (formerly 125-6-100) was last revised in 2003. The 2003 version based space allocation in categories of position within three types of space, Workstation space, Support Space and Special Program Space with a “not to exceed” average allocation of 250 Usable Square Feet per head count. In addition, it required that “new space” (new or reconfigured existing space) use the “Open Landscape” office design approach, as well as set a goal of 20 percent reduction of usable area compared to conventional furniture space layouts by using systems furniture. This approach relied on a long list of job classifications as a means of determining which staff resided in what types and sizes of workspaces. Perimeter enclosed spaces were not to exceed 10% of the total perimeter. It proved difficult to keep up-to-date, interpret, and enforce.

A multi-year study culminated in 2013 with a recommendation to revise the space standard from a range to a single aggregate or average number of square feet per FTE as well as eliminating all job categories. This recommendation retained the 90 percent/10 percent split of cubicles to private offices.

At the same time, the 2013 standard gave more latitude to agencies to lay out their programmatic functions in the fashion best suited to the agency needs. Between 2000 and 2006, there was a rapid expansion of both owned and leased space. DAS recognized that an average of 250 Usable Square Feet per person utilization is adequate for administrative office functions, but may not adequately cover some agency unique requirements.

DAS began treating the standards as “guidelines” that is, not “mandatory” although agencies “attempted” in varying degrees to honor the DAS metrics established in the state space standard, agency-centric standards emerged as a means of addressing the ways in which those with unique program requirements, such as the DMVs, OSP, and DHS/OHA were informally granted “exemptions” to the standards.

By treating the need for additional unique program space in this way, DAS has lacked historic data to consistently size unique agency requirements. In addition, space has become more customized to individual agencies based on cultural differences and perceived needs. This has resulted in a move away from another goal of space standards; standardized work settings where groups can be moved from one space to another with minimal reconfiguring.

DAS has reassessed this “guideline” approach and has concluded that while there is merit to considering unique program needs separately, the benefits of consistency, predictability and standardization in the application of the Space Utilization Standards will be more cost effective and efficient. That is why the current standard is proposed as a statewide policy.

The research with other states and our client agencies led us to focus on the building blocks of space utilization, namely:

- Ratio of private office to workstation space (cubicles)
- Size of offices and cubicles
- Support space - type and size
- Special program space - type and size
- Circulation
- Strategic Activity Zones

Guiding principles of space planning

- Work units have options for different work processes and are welcoming and inclusive spaces.
- Use office space strategically to reduce occupancy costs and to support and stimulate performance. Business driven, innovative design that promotes wellness (ambient light, ergonomics and accessibility).
- Simplification of standards and guidelines so they are easily understood. Workspace sizes are multiples of each other, for easy configuration, flexibility, and internal mobility.
- Plan workspaces for work function, creating more opportunity for team work and collaboration instead of position, title, or rank in an organizational hierarchy. Workspaces match work performed and reflects the work team.
- Address the needs of cross-functional and self-directed work teams, teleworking, and shared space.
- Provide open, flexible workspaces whenever practical to realize organization values of openness and that is able to respond to change, better support the delivery of services to the public, and improve efficiency and productivity.
 - Use open space planning whenever practical to realize organizational values of openness.
 - Utilize office space in a rationalized, simplified and streamlined way.
 - Standardize the sizes of as many spaces as possible.
 - Use natural daylight and views.
 - Reduce wasted double circulation.
 - Provide ease of access, acoustics, security, environmental quality (air and temperature) comfort, and ergonomics; recognizing the impact of the office environment on productivity and satisfaction of workers.
- Ratio of private office to workstation space (cubicles) remains at 10 percent private office to 90 percent cubicles.
- Move people, not furniture when responding to change.
- Space utilization and exemptions to standards should be predictable, functional, and fair.
- Emphasize co-location and sharing of resources where appropriate.

Office space floor measurement - Building Owners and Managers Association (BOMA)

BOMA International has been the American National Standards Institute (ANSI) authority for the Standard method of Floor Measurement since 1915. Since 1915, BOMA standards are reviewed at least every five years and revised to address changing building design and use. The purpose of the BOMA area measurement standards are:

- To promote clear communications among all participants in a real estate transaction;
- To provide consistent measurement of rental square footage;
- To allow accurate comparisons through a clearly understood method of measurement; and
- Starting with the 2017 Office Standard, the BOMA measurement concepts and methodologies align with the International Property Measurement Standards.

New ANSI/BOMA Z65.1-2010 Standard replaces the ANSI/BOMA Z65.1-1996 Standard

The new guide, ANSI/BOMA Z65.1-2010 Office Building Standard, Method B replaces the ANSI/BOMA Z65.1-1996 Floor Measurement Standard for office buildings, previously used by DAS. A method was needed for computing rentable areas in multi-story multiple-occupant buildings using a single load factor on all floors, which was not permitted by the 1996 standard. The 2010 standard introduces new terms to simplify and clarify the process of measurement. One of the goals of Method B is to apply a single, uniform load factor for the entire building, not to each floor. Each tenant on each floor will have the same load factor used in the calculation of their rentable area. A new class of space is introduced, called Base Building Circulation. It assumes that base building circulation exists on all floor levels of a building whether they have multiple occupants or a single occupant. It is applied to all levels regardless of layout, thereby “fixing” common area. The occupant area times the load factor determines the rentable area for that occupant. $\text{Occupant Area} \times (1 + \text{Load Factor}) = \text{Rentable area}$.

A new class of space, “occupant storage”, was introduced and the load factor does not apply to this space. This standard is used to measure office space, manage space utilization, benchmarking and allocating business expenses to various cost centers. It is not intended for application to mixed use properties but may be applied to portions of mixed-use buildings that have office occupancy. This standard is not intended to be used to measure retail buildings, industrial buildings or multi-unit residential buildings. Separate measurement standards for buildings with these occupancies may be available from BOMA.

DETERMINING SPACE NEEDS

What is space planning?

Space planning is the process of designing and arranging office layouts so that staff can work together in departmental and team groupings, providing the best opportunity for efficient work flow, communication and supervision. Optimal space planning reduces cost by more properly utilizing the floor plan available to fit more people into an existing floor space while maximizing employee productivity and enabling a collaborative environment for the team. Additionally, good space planning can help reduce environmental impact, which is an important value for modern business.

It starts with an in-depth analysis of how the space is to be used. Then a space plan is created that defines the space zones and the activities that will take place in those zones. The space plan will also define patterns of how people will move through the space. The plan is finished by adding details of the furniture, equipment and hardware placement.

Open plan offices often include meeting rooms, cubicles and enclosed offices, etc. The following factors must be taken into account when planning the space:

Emergency lighting	Noise / acoustics
Fire alarms	Restrooms and drinking water locations
Fire escape routes	Vending, café, and coffee stations
Fire stopping	Ventilation
Heating / cooling zoning	Voice and data cabling
Lighting and light switches	

Critical choices to make while optimizing office design:

Use: What purpose is a space used for? Ranging from meeting spaces to workstations, private offices or cubicles.

Layout: The layout should complement and support its use. A layout is composed in the form of an office floor plan. This will show where everything goes architecturally or for furniture placement in space design.

Appearance: Once the layout is understood, the design comes into play. How should the space look and feel? Does the design reflect the culture? Interior design has even proven to be a critical factor in the success of a space? Studies have even shown that color in the workspace can impact employee productivity and mood.

Storage and Filing: Most offices still require space for storing important paperwork or supplies. These spaces also need to be accounted for in the layout.

Standardization: For large-scale implementation of an office space layout and design, it is important to consider which elements can be standardized. For example, should all the cubicle spaces and conference rooms look the same? What elements of the layout or appearance of the office apply to the entire office space?

With these basic questions, space planning becomes more strategic and a workplace can be transformed into space that is both functional and pleasant.

Key factors to creating an efficient and productive space:

1. Evaluate and detail wants and needs;
2. Consider technology and equipment requirements (computer cabling and phones);
3. Allow the space to be personalized;
4. Promote positive change;
5. Remain budget and time aware;
6. Design for daily operations;
7. Different parts, one whole;
8. Allow for growth;
9. Incorporate adequate storage and filing needs in the beginning of the project.

Current trends include:

- **Utilization of both open and private spaces**

The trend of having open and private spaces has gained momentum over the past few years. The current demand is to provide a variety of spaces: open collaboration spaces, semi-private workspaces, private conference rooms and closed offices. While offices and cubicles can help eliminate distractions, open workspaces are ideal for the promotion of conversation, creativity and collaboration – which, of course, gives a huge boost to productivity.

- **Flexible layouts for scale**

Flexible layouts make it easier to scale and grow. Instead of being locked into a floor plan that will not allow for a growing team, flexible layouts achieved by well thought-out space planning leave more room for expansion. Offices that don't have a lot of space available can achieve open and closed spaces with multi-use spaces (such as kitchens that double as meeting space or a lounge that can be converted into a collaboration space), temporary/moveable

walls, mobile workstations and furniture that is easy to rearrange. With a flexible layout, the office is designed with growth in mind. That process of finding more space for more people is made easier, saving everyone time. Leadership and staff alike.

- **Glass walls to promote openness and allow natural light to flow through the space**

Glass walls are a hot trend in workplace design. While glass promotes a sense of transparency, there is actually a more scientific explanation for why glass walls are helping to boost office productivity: The lighting. Glass walls make the best use of light in the office and creates a sense of openness. Glass walls can help brighten the areas with naturally occurring light or with the light from around the office.

Implementation of new office space planning and standards policy includes:

- Adoption of *ANSI/BOMA Z65.1-2010 Office Building Standard, Method B (single load factor method)*;
- Ensuring adoption of guidelines for all new leases.
- Designing an implementation plan for existing buildings – DAS-owned buildings have been laser measured based on the BOMA 1996 standard. These measurements are being converted to BOMA 2010, Method B standard building-by-building to determine building load factor for each building.
- Determining the occupant area of each tenant and calculating the Rentable Square Footage (RSF) for each tenant based on the load factor for each DAS-owned building.
- Recalculating uniform rental rate for each uniform rent tenant, once the new Rentable Square Footage (RSF) calculations are completed to determine if any adjustments are required. Some rents in DAS-owned buildings may change as these measurements are adjusted. Amendments to lease agreements will reflect those changes.
- Reviewing this space standard each biennium to determine if it remains adequate and aligned with state government's business activities and mission.

Space Standard Exemption Request:

Agencies must show that they have exercised due diligence in requesting an exception to the space standard.

In order to consider granting an approval to an exemption request, Enterprise Asset Management (EAM), must be satisfied that unique circumstances warrant the exemption. Each exemption request will consider, but not be limited to the following factors:

- The description of the specific agency mission requirements justifying space in excess of the standard.
- Benchmarking with similar organizations performing similar functions to ensure the space request is reasonable.
- Existing plan and layout of the building. Example: historic structure may influence calculations.
- Third-party vendor's recommendation based on facility condition, business climate, or other factors.
- Workplaces with fewer than 10 employees.

Each request will be evaluated, based on its own merit and considered within its own context. Exemptions from the standards will not be granted based solely on previous allocations or personnel preferences. Agency should ensure that space is being efficiently utilized. DAS EAM Real Estate Services will work with the agency to arrive at a solution so that the standard can be met within a reasonable period of time.

Examples of documentation to support exception review process:

- Letter of support of Legislative Fiscal Officer.
- Staffing plan.
- Policy and procedures that justify the exception.
- Action plan for future workspace reduction.

Next steps

- Analyze consolidation opportunities.
- Ensure adoption of guidelines for new construction and remodels.
- Use a USF per head count measure as a key performance metric.
- Focus on flexibility and optimal workspace usage that better matches type of work performed.

APPENDIX A - Glossary

Alternative workplace (AW): The combination of nontraditional work practices, settings, technologies, and locations that supplement or replace traditional offices. A formal AW program is supported with policies, tools, and technologies. An informal AW program is a collection of ad-hoc practices (no policies, but services and technologies).

Amenity area: A portion of a building that adds a convenience for the occupants of a floor or building and that is not used exclusively by any one occupant. Refer to “building amenity area” and “floor amenity area” for specific examples.

Assigned workspace: Workspace dedicated to one worker.

Base building circulation: The minimum path on a multi-occupant floor necessary for access to and egress from:

- Occupant areas
- Access stairs, escalators and elevators
- Restrooms, janitorial closets and water coolers
- Required areas of refuge
- Life safety equipment (such as fire hose cabinets and fire extinguishers)
- Building service and amenity areas (such as building lobbies, building conference rooms, sky lobbies, and the like).

Discussion: Base building circulation area (BBC) occurs in ANSI/BOMA Z65.1-2010 Office Building Standard, Method B (single load factor method) only.

Benching: is a workstation layout that provides a basic set of tables and chairs, essentially parallel work surfaces along a spine, but generally includes all necessary IT connections. It is more than just a piece of office furniture, it's a method of working. Generally this layout is not used for Hoteling, which requires a reservation, but is used for free address or hot-desking spaces, which are available on a walk-in basis. Benching size is generally (4 X 4) per workstation. “Drop-in,” “Flexible” and Touchdown space are other terms used to describe this type of workstation.

Building amenity area: Areas that serve all occupants of a building. Examples include:

- Building conference / meeting rooms
- Daycare facilities
- Food services facilities
- Health or fitness centers
- Locker or shower facilities
- Lounges or vending areas

Discussion: In the predecessor standard, building amenity area was part building common area. Refer to definition on amenity area.

Building common area: This term was discontinued from the predecessor standard and is no longer used.

Building Owners and Managers Association (B.O.M.A.): This organization has developed a nationally accepted standard method of measuring and calculating floor plan area in leased space.

Building service area: Areas that serve the entire building. These areas represent part of what was known in the predecessor standard as “building common area.” These areas include, but are not limited to the following areas that serve the entire building:

- Building manager offices, including building staff locker and shower areas
- Corridors, including egress corridors
- Electrical closets and rooms
- Equipment rooms (fully enclosed)
- Fire control rooms
- Janitorial closets
- Loading docks (enclosed)
- Lobbies (main and auxiliary)
- Mechanical rooms (fully enclosed)
- Restrooms
- Storage for building maintenance supplies and equipment
- Telephone closets

CAFM system: Computer Aided Facility Management software. Manages people and space.

Circulation Space: This term was discontinued in ANSI/BOMA Z65.1-2010 Office Building Standard, Method B.

Collaboration: Although collaboration is defined as “working together”, effective collaboration entails both individual, focused tasks and interactive group work. Proximity and visual contact help people interact frequently and build relationships that help them share information, think creatively, and reach more innovative solutions. Studies have demonstrated that collaborative or team-oriented space can reduce costs as well as enhance work effectiveness.

Common Area: This term was discontinued in ANSI/BOMA Z65.1-2010 Office Building Standard, Method B.

Confidential Conversation: Conversations between employees and clients which may not be disclosed to third parties consisting of matters involving personal or operational security, confidential legal issues, confidential investigations, personnel counseling and medical or financial matters. Policy development, research and exercising supervisory responsibility over subordinate employees is not considered confidential conversation.

Coworking: A style of work that involves a shared workplace, often an office, and independent activity.

Cubicle: See “Workstation Space.”

Drop-in space: See “Benching,” “Flexible” and “Touchdown” space. Often used in “Satellite offices.”

Executive Enclosed Workstation: A workstation with four-sided, floor-to-ceiling enclosures using drywall, demountable or removable partitions. See also, “Private Office”. 10'x12' = 120 sf or 10'x14' = 140 sf

Facility Efficiency Standards: are workspace standards that are intended to promote incremental space efficiency, consistency, and cost savings. Facility professionals continuously look for ways to reduce the area allotted, to make space configurations more efficient, and to conserve resources. Design, location, size, and space are important facility efficiency areas for state agencies. Facility Efficiency Standards are intended to provide equitable, functional, efficient and flexible space for tenants and

- Includes design criteria to include suggested furniture layouts and guiding principles for space planning (i.e. location of built vs open space, proportion of offices to open space)
- Includes methodology for determining acceptable components of space (i.e. number and sizes of conference rooms, training rooms, etc.)
- Does not include - décor package* standardization of color choices coordinated with carpet, wall color, and furniture finishes, signage, etc.)
- Does not include equipment or information technology standards.

A number of factors affect an organization's ability to use a single standard to maximize its space efficiency. Those factors include:

- Building attributes (columns vs clear span), window to core depth ratio
- Program requirements of certain service agencies that serve the public
- Organizational philosophy which supports alternative work styles allowing workers to work outside the office.
- Configuration of space: The percentage of staff that resides in private enclosed offices vs open plan workstations has a major impact on the space required as well as costs of tenant improvements.
- Financial: Making changes to improve efficiencies actually costs money.

Flexible space: See Benching,” “Drop-in” and “Touchdown” space.

Floor Amenity Area: Portion of a floor that adds a convenience for all occupants of the floor and that is not used exclusively by any one occupant. An example is a break room shared by only the occupants on one floor.

Floor Common Area: The area that provides services (washrooms, telecom and mechanical rooms, janitorial rooms, etc.), or public corridors/circulation for the tenants on that floor. This term was discontinued in ANSI/BOMA Z65.1-2010 Office Building Standard, Method B. See “Floor Amenity Area.”

Floor Service Area: Portion of a specific floor that provides services that enable occupants to work on that floor. Examples include: Restrooms, electrical, janitorial and telephone closets and mechanical rooms.

FTE (Full-Time Equivalent): The approximate number of persons employed by a department and requiring office space. Also referred to as “head count” or “person.”

Gross Building Area: This term was discontinued in ANSI/BOMA Z65.1-2010 Office Building Standard, Method B. See Interior gross area (IGA).

Growth space: Allow for growth space when planning space needs throughout the term of a lease. For example; if the plan is to grow from 30 to 50 head count by the end of a ten-year lease, plan space for 40 head count.

Guidelines: Statements designed to provide direction when planning office space. While not mandatory, guidelines should be followed unless there is justification not to do so.

Head count: The approximate number of persons employed by a department and requiring office space. Also referred to as “FTE” and “person.”

Hoteling: Is a workspace that provides a reservation based system to share desks or offices. It is also known as on-demand space. A workstation or office is not assigned to a specific person but is reserved in advance through an on-line reservation system for a period of time ranging from hours to days. Hoteling was born out of numerous studies in the 1990s that showed how often traditional, assigned workspaces were unoccupied. In many cases desks were only occupied 35 percent to 50 percent of the time. Recent research by GSA in federal office continues to show similar results with people spending approximately 30-40 percent of their time at assigned workstations. See Benching, which is a first-come first served, walk-in space that requires no reservation.

Hub / Support Space: See “Support Space.”

Huddle area: A small conference room used for an impromptu, standing team meeting.

Individual Space: Uses modular enclosed cubicles sized to maximize planning flexibility and reduce churn cost. Work setting choices with modular furniture:

- | | |
|-------------------------|-----------------------|
| • 4'x6' = 24 sf cubicle | 7'X7' = 49 sf cubicle |
| • 6'x6' = 36 sf cubicle | 8 x8' = 64 sf cubicle |

Interior gross area (IGA): The area, measured in a horizontal plane, of a floor level of a building that is circumscribed by the IGA boundary, without deductions for columns or projection necessary to the building. IGA is not used for leasing purposes, but it is the foundation of all calculations in the BOMA 2010 standard. It is measured identically under Methods A and B. The space inside the IGA boundary is the interior gross area for the floor.

Load factor B – (BOMA 2010, Method B single load factor): A ratio, total preliminary floor area divided by total occupant area. The single load factor B of the entire building is applied to each occupant area to determine rentable area. Load factor B is the same on all floor levels of a building. No load factor is applied to occupant storage space. Oregon State government uses Method B exclusively. If a building has a total preliminary floor area of 100,000 sf and 85,000 usable square feet, the load factor would equal 1.18 (100,000 divided by 85,000 = 1.18).

Major vertical penetrations: A floor opening in excess of 1 square foot that serves vertical building systems or vertical occupant circulation functions. Examples: stairs, elevators, flues, pipe shafts, HVAC ducts and their enclosing walls.

Method B – The product of multiplying the occupant area times the load factor B of the building to determine the rentable square feet of an occupant. (85,000 X 1.18 = 100,300)

Net Square Feet (NSF): This term was discontinued in ANSI/BOMA Z65.1-2010 Office Building Standard, Method B.

Non-assignable Area: This term was discontinued in ANSI/BOMA Z65.1-2010 Office Building Standard, Method B.

Occupant area: A portion of a building where an occupant normally houses personnel, equipment, fixtures, furniture, supplies, goods or merchandise. For purposes of this policy, the term “Usable Square Feet (USF)” is interchangeable with the term “Occupant area.” The term “Usable Square Feet” is not used in Method B.

Occupant storage: Space that is usable by occupants only for storage because of its location and/or because the levels of finish, lighting, power and HVAC are unsuitable for use as office space. Generally located in basements, mechanical levels and enclosed parking levels. Occupant storage is accounted for separately from the other rentable areas of the building, without application of a load factor.

Office density: Is defined as the space (per square foot) per workstation. Office density excludes office support spaces. A higher office density means a lower space per workstation and a lower density means more space per workstation.

Office Project: A leasing or construction project for office space for a work unit. Office projects may be approved as part of a general office plan or on an ad hoc basis as a result of department requests.

Office Support Area: See “Support Space.”

Office/Workstation Area: Private offices and workstations used in performance of normal office activities.

Open Office Concept: Office planning that integrates function, aesthetics, acoustics, lighting and replacements characterized by free-standing panels and systems furniture rather than private offices.

Open Workstation: A workstation with no enclosures or two to three enclosures below ceiling height using screens or panels.

Parking: Enclosed, structured floor area located within the building and used for transient storage of motor vehicles, including associated circulation and services (such as exhaust fans and ducts that serve the parking area) but not including loading docks, sally ports, occupant storage and building service areas such as enclosed auxiliary lobbies used to enter a building from parking areas.

Discussion: Parking is included in the interior gross area of a building (unlike the predecessor Standard) but is deducted when calculating preliminary floor area. Loading docks within the building are not considered to be parking but are classified as building service area.

Persons: The approximate number of individuals employed by a department and requiring office space. Also referred to as “head count” and “FTE.”

Preliminary floor area: The result of subtracting the areas of the major vertical penetrations, parking, and occupant storage on a floor level from the interior gross area of that floor level. The building total of the preliminary floor areas of all floor levels of a building is equal to the building total rentable area of the building. The preliminary floor area of any floor is generally fixed for the life of the building unless the floor is physically modified, and is unaffected by changes in the internal configuration of occupant suites and corridors.

Private Office: A workspace with four-sided, floor-to-ceiling enclosures using drywall, demountable or removable partitions. See also, “Executive Enclosed Workstation”. 10'x12' = 120 sf or 10'x14' = 140 sf

Rentable Area: Rentable square footage is the area of the enclosed interior space of the building, other than holes in the floor, such as stairwells, elevator, and mechanical duct space. If its floor you can stand on, you pay for it, because it is rentable space. Usable square footage (occupant area) PLUS a portion of the building's shared space determines Rentable Square Feet (RSF) of an occupant. Occupant area X building load factor = Rentable Area

Discussion: The rentable area of a floor level or occupant is the result of multiple computations and cannot be directly measured except through the measurement of an entire building, applying Method B. The total rentable area of all floors of a building will always equal the building total preliminary floor area.

Satellite office: Drop-in space on the employee side of the commute.

Service area: See Building service area for ANSI/BOMA Z65.1-2010 Office Building Standard, Method B.

Space Envelope: The total amount of office space provided to a work unit, as determined under these standards.

Space Planning: Analyzing workflow, space, and equipment needs of work units to plan efficient equipment, furnishings, and support systems.

Space Standards: An all-embracing and often misunderstood component of space planning and management. Although space standards go by many different names in states, generally there are two components:

1. A decision-making tool for estimating overall space need or footprint in planning/budgeting; and
2. Guiding principles for the space planning within that space (Usable Square Feet per head count).

Space Utilization: A calculated measure of how efficiently space is being used, this metric varies for different space types, with greater emphasis on office / administrative uses. The State of Oregon standard is 175 Usable Square Feet per

Head count for Traditional Office Space. For other uses, a secondary metric is used (see Facility Summary Narrative 107BF16a in Budget Instructions) for insight into how agencies determine space needs for non-office-based operations.

Special Use Space: Agency unique spaces such as:

Auditoriums	Observation rooms
Campground manager offices	Public information / exhibit areas
Classrooms	Radio / communication centers
Computer mainframe / server rooms	Receiving area for special items
Customer service areas	Shipping / receiving areas (loading dock)
Equipment maintenance areas	Supervised visitation rooms
Examination rooms	Survey and mapping rooms
Hearing rooms	Training facilities
Laboratories	Vaults
Libraries	Visitor centers

Such areas may require special electrical, mechanical, security, floor and data cabling systems. Based on programmatic needs, an agency may request an exemption by submitting a Space Standard Exemption Request form. Also referred to as “Special Purpose Space.”

Standard of measurement: ANSI/BOMA Z65.1-2010 Office Building Standard, Method B (Single Load Factor Method) introduces a new class of space, base building circulation and a revised global summary of areas to redistribute the Rentable area of a the building across its floor levels in a manner that produces an identical load factor on all floor levels of the building. It assumes that base building circulation exists on all floor levels of a building whether they have multiple occupants or a single occupant.

Standards: A maximum space utilization, which must be followed when planning office space. Standards do not establish or imply minimum space entitlement and consideration should be given by departments to meet their requirements using less space.

Storage: See “Occupant storage.”

Support Space: Shared space containing furniture, equipment or materials used by a work unit. For example, photocopier rooms, file cabinets, meeting rooms, coffee counter, social area, etc. These shared spaces are located near the people that use them on a regular basis and may be enclosed or open depending on the type of equipment and the work performed in them. May also be called “HUB” space. This space is included within the “Occupant area.”

Systems Furniture: Modular workstations, components, and panel systems used in open office environments.

Team Shared Space, uses a shared desk for daily activities. These flexible working environments will leverage the natural mobility of individuals and eliminate the need for assigned cubicle spaces. Candidates for this work environment spend 3 or less days at the location, have a laptop computer and benefit from a flexible work environment. See Hoteling.

Tenant Improvements: The interior of an office building, designed and constructed to meet the needs of the work unit. This includes partitions, finishes, signs and modifications to telephone, lighting, electrical, heating and ventilation as necessary to service the office layout.

Third place: Workplace other than home or employer-provided office. Examples: café, customer site, library, hotel lobby, etc.

Touchdown Space: An unassigned workstation layout that provides a basic set of tables and chairs, essentially parallel work surfaces along a spine, but generally includes all necessary IT connections. It is more than just a piece of office furniture, it's a method of working. Generally this layout is not used for Hoteling, which requires a reservation, but is used for drop-in space, which are available on a walk-in basis. Touchdown space size is generally (4 X 4) per workstation. “Benching,” “Drop-in,” or “Flexible” space are other terms used to describe this type of workstation.

Traditional Office Space: Spaces where work is typically done in an office setting, without a large public interaction component, and where the office function is the primary use of the building.

Universal Workstation: A planning module of 64 square feet (nominal 8 feet x 8 feet) based on an open office furniture system, with several possible work surface and storage configurations.

Usable Area: This term was discontinued in ANSI/BOMA Z65.1-2010 Office Building Standard, Method B.

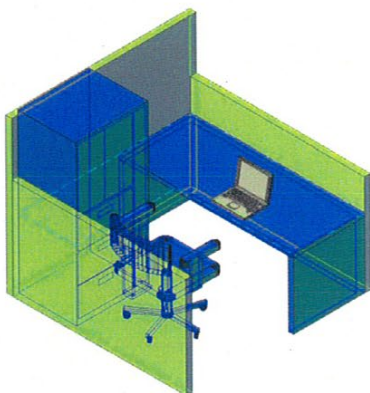
Usable Square Feet - (USF). This term is not used in Method B but was used by the predecessor method. For purposes of this procedure, this term is interchangeable with the term "Occupant area."

Vault space – As used in Method B, vault space is sub-grade space that is enclosed and contiguous to a basement that extends below the adjacent ground plane past the property line, often under a public right-of-way, such as a sidewalk or alley.

Discussion: The term "vault" is used here in an architectural sense, stemming from the masonry vaulting that commonly covered such spaces in older buildings, and is not be confused with bank vaults whose purpose is to secure vaults. Vault space must be disclosed when presenting building measurements. It is the only class of space that may extend past a property line. The most common vault space is a transformer vault, but vault space can also be any class of space including occupant area. It may be used as parking, areaways, and window wells that are not enclosed.

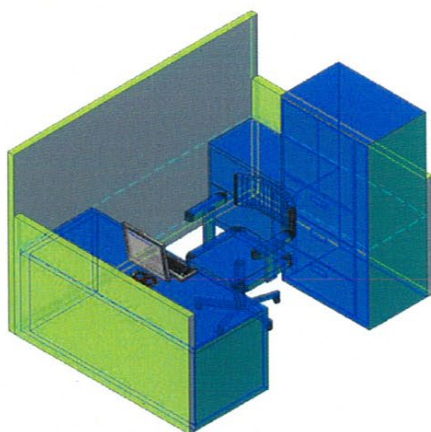
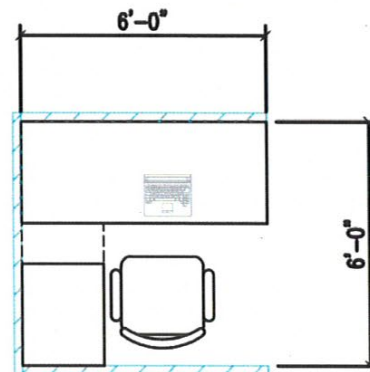
Workstation Space: Spaces with systems furniture, computer and phone equipment allowing people to perform their job functions. Workstation space may be enclosed or open depending on the confidentiality, security, visual and acoustical privacy requirements of the job.

APPENDIX B – Workstation and Floorplan Examples



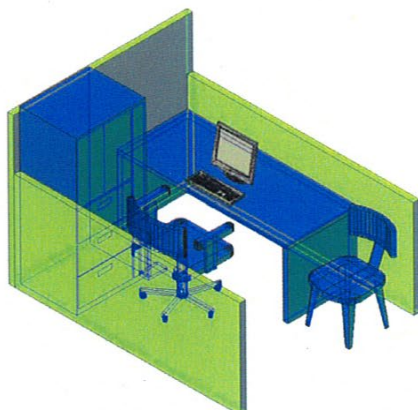
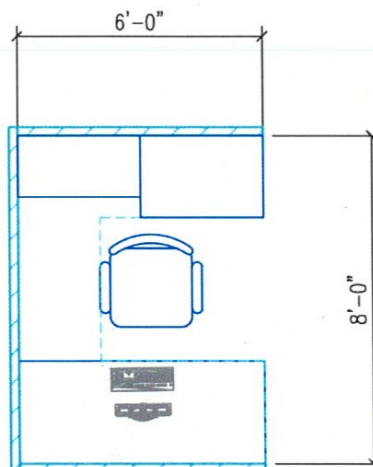
WORKSTATION 1
36.0 SQ. FT. USABLE

OPTIONS:
FILING : 24"-192"
STORAGE: 72"-192"
WORKSURFACE: 6'-10'



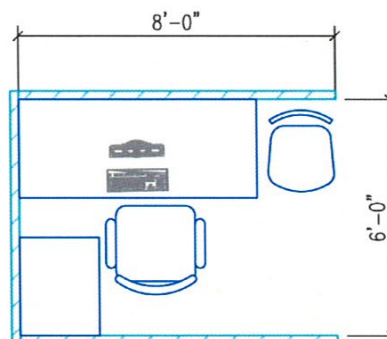
WORKSTATION 2
48.0 SQ. FT. USABLE

OPTIONS:
FILING : 24"-288"
STORAGE: 72"-216"
WORKSURFACE: 6'-16'



WORKSTATION 2A
48.0 SQ. FT. USABLE

OPTIONS:
FILING : 24"-288"
STORAGE: 72"-240"
WORKSURFACE: 6'-16'
EXTRA SEATING: 1



Workstations

Notes

- Workstation layouts are suggestions only. Actual configurations should take specific program needs into consideration.
- Workstation panels are shown at nominal 3" thickness. Exact panel thickness should be confirmed by interior project manager prior to space planning.
- In order to optimize daylighting and ventilation, the height of workstation partitions should be limited. It is recommended to utilize panel heights of 3'6" (42") to a maximum of 5'4" (64"). Use of taller "Open Frame" and glazed panels can be effective daylighting but may restrict ventilation.
- It is recommended to utilize electronic files to reduce the amount of paper files stored at individual workstations.
- Usable square footage is measured as the actual open space with the panels.
- Minimum 42" clear aisles should be maintained.
- When feasible, perimeter aisles should be provided. Especially along exterior window walls.

Options:

Filing:	File cabinets (standard or lateral), suggested configurations as measured by total lineal inches (I.E. cabinet width x number of drawers).
Storage:	Overhead (desk or panel mounted) units may include under cabinet task lighting. Measured by total lineal inches.
Work surface:	Total lineal width of individual surfaces, measured at centerline. Optional increased work surfaces shown as dashed lines.
Extra Seating:	As required.

Types of Spaces



Collaboration

- Introduce phone rooms
- Increase meeting rooms for 4-6 attendees
- Increase meeting rooms for 8-12 attendees
- Increase ad-hoc meeting space for 1-3 attendees
- Create “Hub” spaces that connect the pantry areas and copy areas (Conference rooms, Huddle rooms, Phone rooms, Open teaming areas, Social spaces)
- Improve and enhance collaboration tools (whiteboards & technology)



Flexible Work Areas

Flexible working environment will leverage the natural mobility of individuals and eliminate the need for second office / cube spaces. Shared Office / Meeting Room

Candidates for this work environment spend 3 or less days at the location, have a laptop computer and would benefit from the flexibility.

- Shared desks use a shared area desk for daily activities.
- Variety of spaces to choose from to suite the work style and task to enhance productivity.
- Enable people to connect and collaborate with team members.

Modular Enclosed Workspace / Conference Room



Modular Enclosed

Executive office 180 SF (18 X 10)
Standard Office 120 SF (12 X 10)
Conference room 180 SF (18 X 10)

Conference Room

Cube with modular furniture options 6' x 4' = 24 SF
Cube with modular furniture options 6' x 8' = 48 SF
Cube with modular furniture options 8' x 8' = 64 SF

Modular Open
6' x 8' Workstation



Modular Open
8' x 8' Workstation



Note: Workstation images are examples of what the workstation sizes could look like. Exact design and layout of workstations will be coordinated with Interiors staff.

Floorplan Examples

Example Scenario A (235 USF/Seat, 114 HC)

Workspaces Ratio: 65% Open to 35% Enclosed. Useable Area: 26,817 ft



Enclosed Office
Open Office
Support Space
Collaboration Space
Circulation
Base Plan

Observations	Floor Calculations	Floor Figures
» Large amounts of USF devoted to private offices and large cubicles. » 1120 USF used for Storage. » Little USF devoted to collaboration space: 588 ft². » Low HC for the floor.	<div> <div>Open</div> <div>Enclosed</div> <div>Support</div> <div>Collaboration</div> </div> <div> <div>55%</div> <div>30%</div> <div>11%</div> <div>4%</div> </div> <div> </div>	Circulation: 9,487 ft² Circulation Factor: 35% Multiplier: 1.83 Head Count: 114 235 USF/seat

Individual Space
Team Shared Space
Floor Support Space

Example Scenario B (170 USF/Seat, 157 HC)

Workspaces Ratio: 90% Open to 10% Enclosed. Useable Area: 26,817 ft



Enclosed Office Open Office Support Space Collaboration Space Circulation Base Plan

Observations

- » Large private offices and overly large cubicles are reduced in favor of small and collaborative workspaces.
- » Circulation factor is generous with maximum HC.
- » 240 USF used for Storage, a significant savings in USF.
- » Collaboration space increased 750%.

Floor Calculations

Open	Enclosed	Support	Collaboration
54%	6%	6%	34%



Floor Figures

Circulation: 10,260 ft²
 Factor: 38%
 Multiplier: 1.61
 Headcount: 157
 170 USF/seat

Example Scenario C (184 USF/Seat, 146 HC)

Workspaces Ratio: 92% Open to 8% Enclosed. Useable Area: 26,817 ft



Enclosed Office Open Office Support Space Collaboration Space Circulation Base Plan

Observations

- » Large private offices and overly large cubicles are reduced in favor of small and collaborative workspaces.
- » Circulation factor is increased to 37% while simultaneously increasing headcount.
- » 317 USF used for storage, mostly in "pocket" areas.
- » Substantial increase in collaboration space.

Floor Calculations

Open	Enclosed	Support	Collaboration
55%	6%	10%	26%



Floor Figures

Circulation: 10,050 ft²
 Factor: 37%
 Multiplier: 1.67
 Headcount: 146
 184 USF/seat