

Space Planning

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Space planning is an integral part of the interior design process, but the demand for it as a discrete service is growing.

Summary

SPACE PLANNING SERVICES

Why a Client May Need These Services

- ▶ To use space efficiently and effectively
- ▶ To accommodate special processes and work flows
- ▶ To create a desired image and atmosphere

Knowledge and Skills Required

- ▶ Spatial design ability and skills
- ▶ Knowledge of interior detailing, materials, and finishes
- ▶ Expertise in selecting and specifying FF&E
- ▶ Knowledge of ergonomics
- ▶ Delineation and presentation skills
- ▶ Familiarity with building codes and regulations

Representative Process Tasks

- ▶ Programming (interiors)
- ▶ Preliminary diagramming
- ▶ Space and schematic furniture plans

In space planning, the design professional blocks out interior spatial areas, defines circulation patterns, and develops plans and layouts for furniture and equipment placement. Space planning services consider numerous design parameters, including the client's project goals and priorities, the client's organizational structure and relationships, space allocation criteria, building codes and access for the disabled, furniture standards, circulation and work flow, design considerations, the constraints of fixed building elements and building system interfaces, security and privacy issues, and flexibility for accommodating future space needs.

The advent of high-rise office space with unfinished interiors stimulated the market for space planning services as a stand-alone interior design activity for the corporate market. Once spaces in these multitenant, multifloor office buildings and office parks are leased, they must be improved to accommodate the new tenants' activities. Tenant build-out often requires planning for several hundred thousand square feet of office space and frequently includes design for auxiliary and support spaces as well. During the 1990s the importance of space planning was fueled by the increasing rate of organizational change, the desire to accommodate new management strategies to increase creativity and productivity, and the continuing need to integrate new technology into the workplace.

CLIENT NEEDS

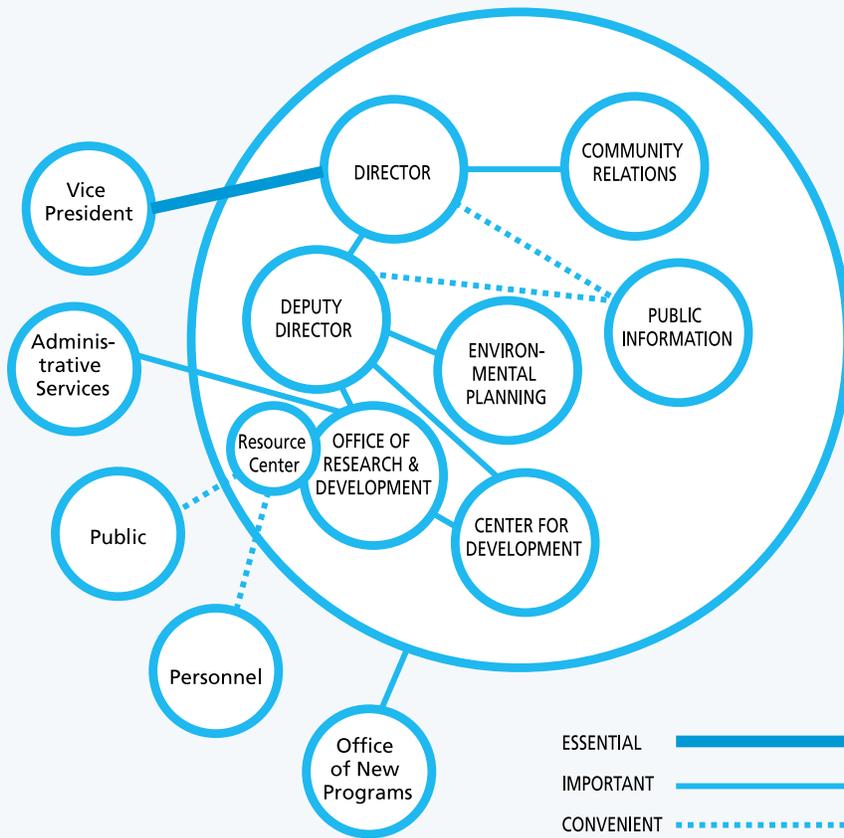
Clients who want to use existing space more efficiently or tenants required to do their own interior build-outs often require space planning services. In particular, the interiors of older facilities may need reorganization to accommodate new equipment or new work processes.

Organizations that have grown, downsized, or simply reorganized may need space planning services. Because organizational change is occurring faster than in the past, many organizations want to maximize the flexibility of interior spaces so they can accommodate change efficiently. Some space planning consultants play an ongoing support role to facility managers who must respond to churn rates. In these cases, the consultant may be assigned responsibility for interior design and space planning, while the facility manager covers programming, operations and business planning, and day-to-day adjacency and equipment needs.

As already noted, the need for space planning may spring from a change in organizational philosophy. In corporate environments, many organizations are moving away from hierarchical structures toward a more team-based approach that favors more egalitarian, collaborative work space to replace executive offices and cubicles.

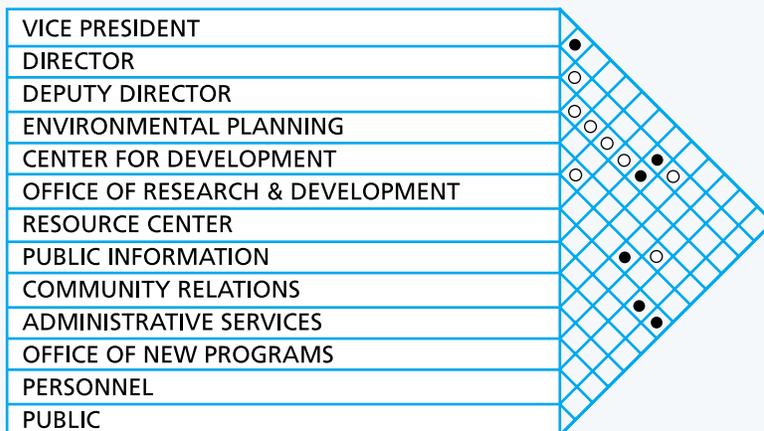
Government agencies often have predetermined programs or space allocations for each department or group of offices that are derived from budget cost centers (x dollars equates to x square feet or meters). These restrictions may guide space planning options.

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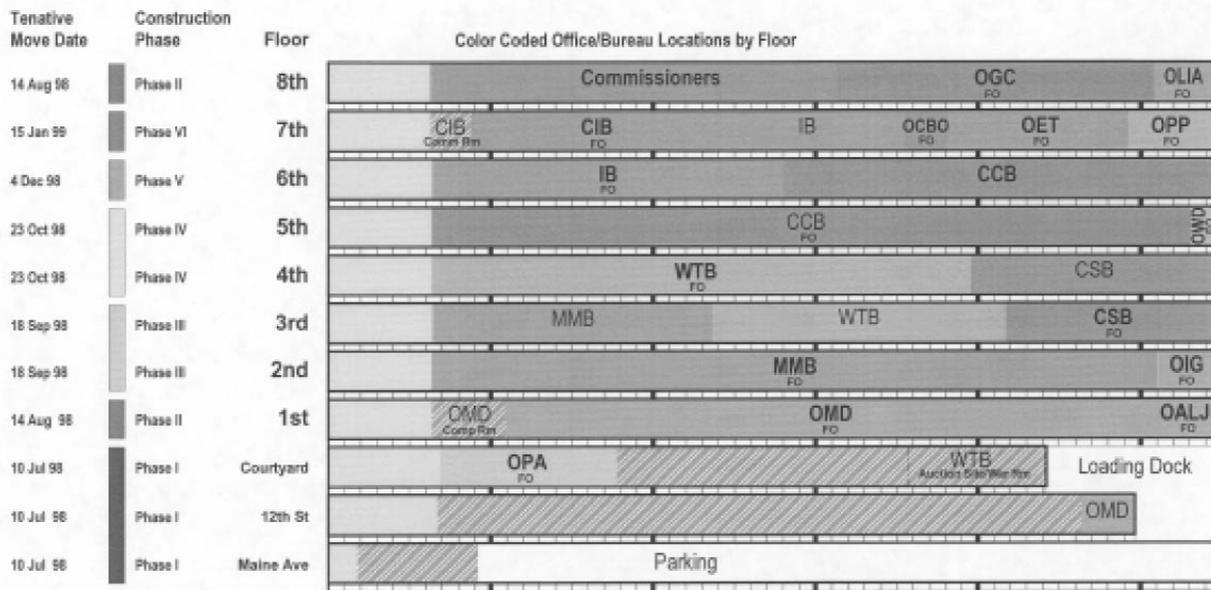
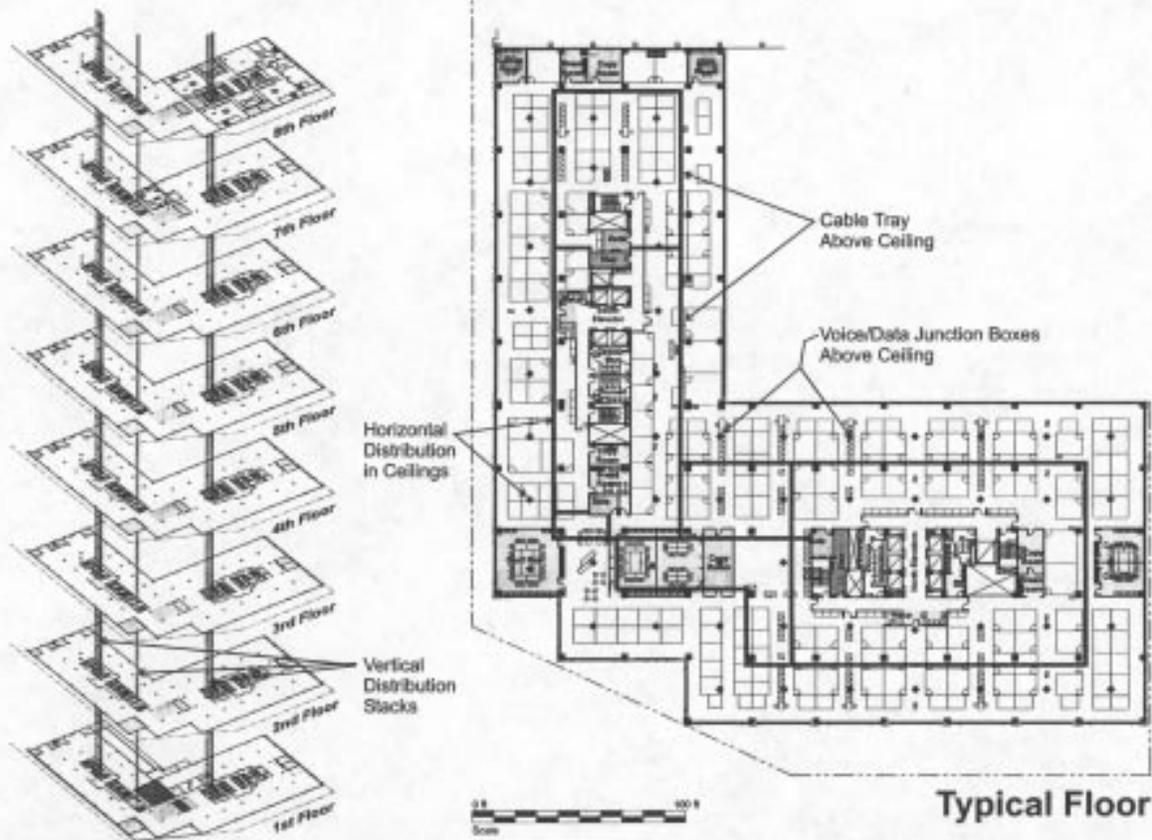
Note: Adjacencies within the Group are assumed to be important unless otherwise indicated.

The organizational bubble diagram indicates the relative importance of the relationships between individuals, groups, and departments to help in deciding where to locate them.



● IMMEDIATE PROXIMITY ○ CONVENIENT PROXIMITY

The adjacency diagram identifies the proximity requirements between major groups and departments.



Common Use Space (Color)
 (i.e. Conference Rooms, Break Rooms, Copy Rooms)

Specialized Function Space (Pattern)
 (i.e. Commission Meeting Room, Computer Rooms, Print Shop)

Blocking plans delineate the “horizontal” boundaries and approximate locations for departments and groups within an organization. Stacking diagrams or plans show the “vertical” locations of organizational groups and departments among the various floors.

Harris Design Group, Inc., Bethesda, Maryland

Some clients seek space planning to address specialized functions or work flows, and in these cases the consultant will need expertise about the work process that takes place in the space and the special equipment involved. Entertainment, videoconferencing, medical facility, retail, and kitchen design are examples.

Professional design and architecture firms with interior design capability are the major providers of comprehensive space planning services. In addition, in-house facility management and strategic planning groups may be involved.

Space planning is an integral part of interior design and building design services. Other closely aligned services may include programming, facility management, furniture and equipment acquisition, asset inventory services, move management, and tenant services.

SKILLS

First and foremost, space planning requires the ability to visualize space in three dimensions and a keen sense of composition, scale, and proportion. Technical knowledge and familiarity with furniture and equipment are required to make dimensional calculations, propose appropriate furniture options (custom, ready-made, modular, systems, etc.), specify ergonomically appropriate furniture and equipment, and comply with applicable building and fire codes, including the requirements of the Americans with Disabilities Act and other accessibility mandates.

Architects are generally qualified as space planners by virtue of their education and experience. However, additional knowledge of anthropometric and interior spatial issues is essential for firms that offer space planning services. Such knowledge is generally possessed by individuals who have fulfilled the education, examination, and experience requirements for National Council for Interior Design Qualification (NCIDQ) certification and who are professional members of the International Interior Design Association (IIDA) or the American Society of Interior Designers (ASID).

Related disciplines. Space planning often requires close coordination with other disciplines. For example, medical planners and retail facility planners are extremely valuable team members for health care and retail projects. Communications and audiovisual consultants often are needed. If a project requires furniture acquisition and installation, the designers may need to team with furniture installers.

Tools and resources. Databases for cataloging furniture and equipment, and software to support them, are important tools for space planners who need to analyze these data. Although space planning documentation can be done manually, computer-aided design and drafting programs are useful for diagramming and for preparing layouts and three-dimensional visualizations.

For space planning in existing facilities, a camera is useful for recording existing conditions, and measuring devices are needed to generate critical dimensions.

▶ **Preliminary space planning and analysis at a macro level (before the design is set) can help determine structural and building modules that may be more accommodating to furniture and equipment placement. Otherwise, space planning occurs within constraints set by a “frozen” building design.**

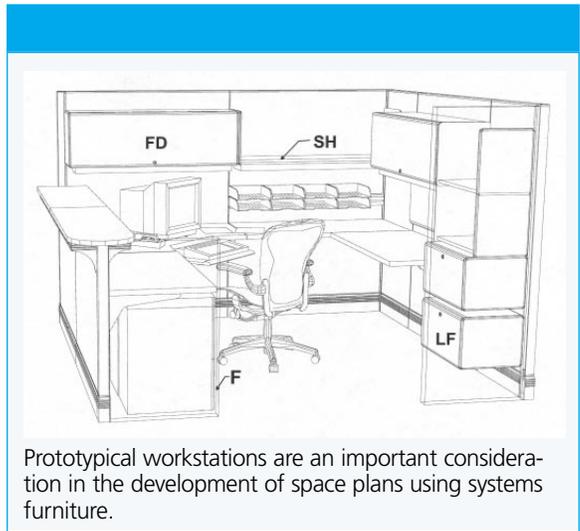
PROCESS

Each space planning project is unique. An architecture firm's decision to compete for a particular project will depend on many factors, such as the size and scope of the project, the schedule, and the firm's background in the facility type. Regardless of the size and scope, the space planning process usually embodies the following increments of work:

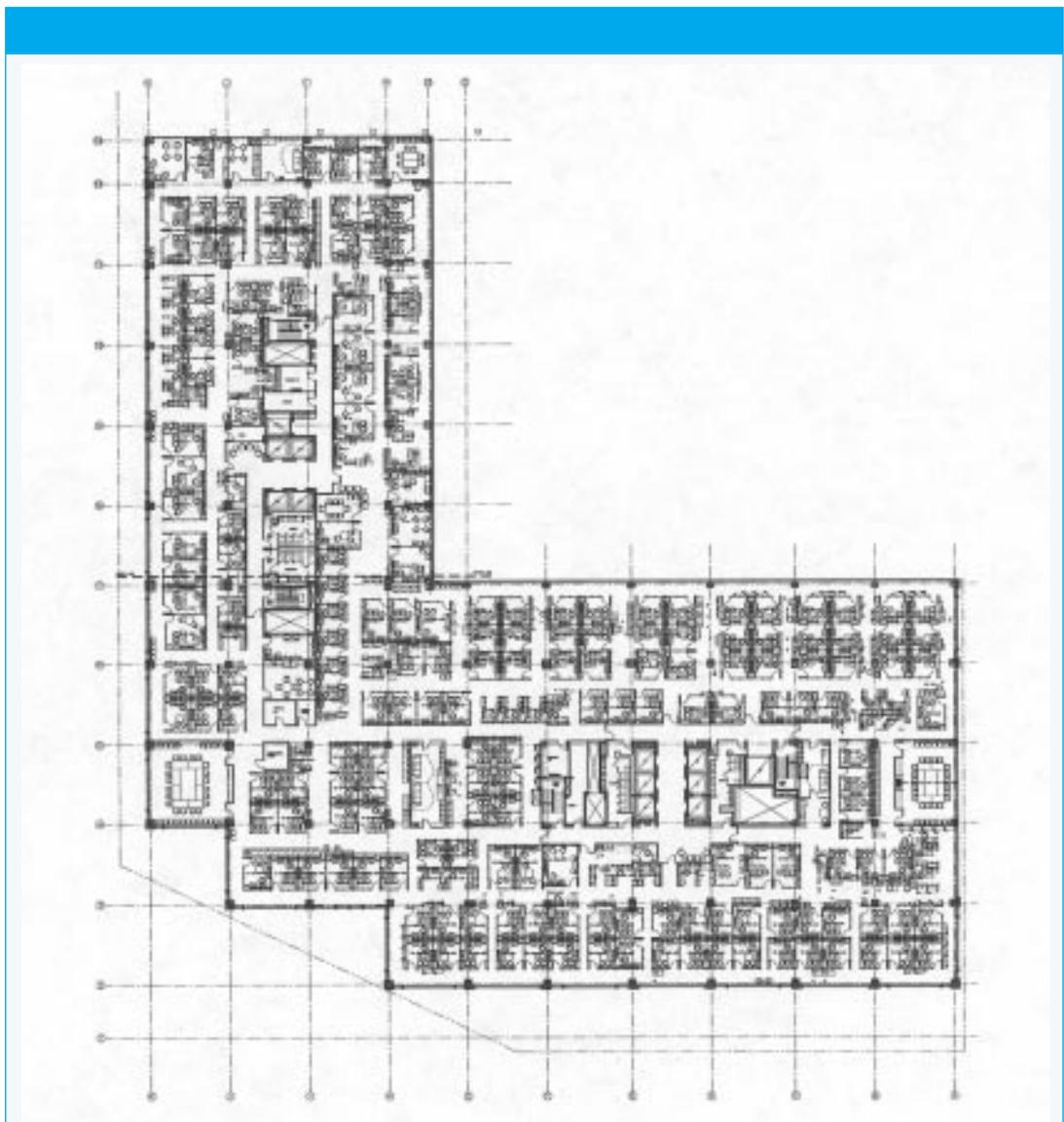
Programming. Space planning services typically begin after the programming phase, which may be offered as a separate service or as an integral part of space planning. Programming tasks usually include a space survey, which consists of an inventory of existing (or proposed) equipment and furniture, interviews with clients and users, and other data collection tools. The information gathered is compiled and analyzed to determine the range of functions that must take place in the space and the accepted space allocation standards for each.

Preliminary diagramming. Next, area assignments are prepared to estimate the approximate square footage needed for each function and/or space. Then spatial positioning and relationships may be illustrated by bubble and adjacency diagrams. Blocking plans

▶ **Programming findings set the parameters, requirements, and standards for the development of interior configurations and layouts in space planning.**



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A space plan shows fixed elements such as walls, partitions, and columns and movable elements such as furniture and equipment.

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(overlaid on the building core and shell plan) show horizontal boundaries of major functional areas and circulation patterns for each figure. Stacking diagrams and plans show how functions are placed on each available level. These preliminary diagrams are often included in the space program report, which is usually the first deliverable.

Space plans and furniture plans. Following approval of the program report, documents for space planning are developed that include space plans for the interior and schematic furniture plans. The space planning package may include budget breakdowns for each space (if requested). Interior construction and structural requirements also are part of the space planning documentation. Once approved, these documents form the basis for the construction documentation of interior spaces and, when applicable, the selection and specification of furniture, furnishings, and equipment.



The results of space planning can provide a basis for developing interior architectural elements and furnishing of interior spaces.

“Space Planning” was originally published in *The Architect’s Handbook of Professional Practice*, 13th edition, ©2000 by the American Institute of Architects, published by John Wiley & Sons, Inc.

The AIA provides a contract document designed especially for alternative architectural services.

B102–2007, Standard Form of Agreement Between Owner and Architect without a Predefined Scope of Architect’s Services.

AIA Document B102–2007 is a standard form of agreement between owner and architect that contains terms and conditions and compensation details. B102–2007 does not include a scope of architect’s services, which must be inserted in Article 1 or attached as an exhibit. Special terms and conditions that modify the agreement may be included in Article 8.

The separation of the scope of services from the owner/architect agreement allows users the freedom to append alternative scopes of services.

AIA Document B102–2007 replaces and serves the same purpose as AIA Document B141–1997 Part 1.

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