Facility Planning and Management Overview
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This publication will provide information about facility planning and management. This first issue introduces the topic and deals primarily with facility planning. Subsequent issues will deal with a variety of topics related to the field including nonterritorial offices, child care center design, indoor air quality, and deferred maintenance. Facility planning and management is an interdisciplinary field drawing on other disciplines including architecture, planning, engineering, and management.

What is facility planning?
Facility planning is a systematic approach for developing the physical setting of an organization or institution. It helps an organization manage one of its most important assets, the space it occupies. Facility planning is a tool that can be used by a variety of organizations or institutions—educational, health, social service, governmental, justice—and large and small corporations and businesses. Planning, as the term implies, is futuristic. The goal of planning is to anticipate future conditions or circumstances and develop a way of responding that benefits the individual, group, and organization. Planning is also an ongoing process because present and future conditions and circumstances change and must be responded to.

Facility planning is important because it helps an organization look at how it does business, how that might change, and how the physical setting affects the way it does business. Facility planning can be used as part of a general management strategy. It is useful whether the organization is developing new space, moving to renovated space, renovating in place, or reorganizing. A building is an important and expensive asset to any organization whether the space is rented or is owned by the organization. Facility planning helps organizations and institutions use this asset effectively and efficiently.

Who does facility planning?
Different people use facility planning. Architects and professional planners use this tool as part of the design process. Although organizations and institutions often hire consultants to do facility planning, the owners/users of a facility, or future facility, can use this tool themselves. When design consult-
How is facility planning used?

Facility planning is probably most often used when an organization requires new or renovated space. In such cases, facility planning is used to generate space requirements for the organization. But it might also be used as part of a reorganization. Organizations and institutions sometimes change departmental responsibilities, functions, or hierarchical relationships. When these changes occur, the existing physical arrangement of spaces may no longer be the most efficient. Facility planning can help the organization fit its space to the new structure. A future issue of this publication will address work space options that do not require major space renovations every time there is an organizational change. The facility planning process, however, can help you determine which work space option is appropriate for your business.

Large and small institutions often prepare master plans periodically, and facility planning may be used as part of this process. A master plan lays out the goals and objectives of an institution, documents existing conditions (including a building inventory), and lays out the steps the institution must take to achieve its goals and objectives. The facilities are a major part of the master plan. Facility planning helps an institution make decisions about the need for new space, renovated space, and obsolete spaces.

Sometimes several small or related organizations decide to share space. Facility planning can determine whether their individual space requirements are compatible and what kind of facility would work for the group as a whole.

The facility planning process

Organizations and institutions can initiate the planning process internally. Design and/or planning consultants will probably be needed at some point; however, several tasks can be done by an organization without a consultant's assistance. In fact, it may be helpful for an organization to go through this process before calling in a consultant for two reasons. One, the organization will have the opportunity to develop clear goals and objectives for its own use; and two, the organization will have generated material that will be useful to the consultant.

There are four statements in the facility planning process that an organization or institution should prepare:
1) organizational goals and objectives;
2) facility goals;
3) organizational functions and existing space-related problems; and
4) facility requirements.

Statement of goals and objectives

The organization states its mission and goals. The goals statement can also be futuristic, determining what the organization hopes to accomplish. The objectives should be directly related to the goals and be as specific as possible so that the organization can evaluate how well it is meeting its goals. Although buildings need to be planned for the long term—20, 30, 50 years, or more—it is advisable to look at goal statements every five years and objectives every year or two. Remember, planning is an ongoing process.

If the organization is a service one, the statement should include a description of the clientele and whether any changes are anticipated in the composition of that group. For example, if an organization currently serves young families but plans to expand that service to all families (including senior citizens), not only will the number of clients probably increase, but the services will change. This may affect the staffing requirements, but it will also affect the way the building is used.

The following is an example of a goal statement for a service organization:

Once the goals are agreed on, the organization develops objectives. A key to developing good objectives is to ask the question, How will this objective help achieve the goal? For the Resource Center for Healthy Families, some objectives might be:

- to provide parenting education services and a place where parents can practice these skills;
- to provide health education and preventive medical care;
- to provide homemaking education including family financial planning, healthful cooking skills, and home maintenance skills.

Statement of facility goals

The organization makes a statement about the priorities for the physical space the organization occupies. This is a general statement and not a set of specific space requirements. It should establish the general criteria for the facility. These goals help define the space that will ultimately help the organization meet its operational goals and objectives. Examples of some facility goals might be:

- to provide a humane work environment for all workers (e.g., needs of workers with disabilities, good indoor air quality);
- to facilitate communication between appropriate work groups;
- to provide flexible work settings;
- to use space more effectively;
- to accommodate workers' personal needs (e.g., on-site child care center, wellness facility, cafeteria);
- to provide for integration of information technologies into the organization's functions;
- to offer a welcoming appearance.

Functional statement

The organization describes the way it currently functions, how that may change, and the existing physical conditions including any problem areas. One good way to begin this task is to...
develop (or modify) an organization chart. The chart should describe both hierarchical relationships (who answers to whom) and functional relationships (who works with whom). The chart should reflect the way the organization intends to function, which means that the chart will change as the organization changes. The organizational chart will help a consultant if one is hired and it will be useful to the organization.

After an accurate chart is completed, the organization needs to prepare a description of each unit, work group, or department (whatever subdivision makes sense), indicating what its primary functions are and its typical daily activities. The description should include the number of staff, the types of positions (job titles), and the type and frequency of outside contacts the unit has. Also to be included is whether the unit works directly with another unit and the nature of that interaction (e.g., staff work together on projects, daily phone contact). The following is an example of a department description:

**Payroll department**

This department prepares the payroll for all employees. Time cards for each employee are submitted each week through interoffice mail and processed by the payroll clerks on desktop computers. All records are kept on magnetic tape in file cabinets and on compact disk. Checks are distributed to a designated person in each of the other units in person. Although employees are paid weekly, there is a staggered schedule, so a portion of checks is distributed every week. Total staff: 12.

**Director—1**

**Administrative assistant—1**

**Supervisor—2**

**Payroll clerk—8**

Outside contacts: telephone inquiries, interoffice mail, check pickup once a week on Thursdays by designated persons from 10 to 11 a.m.

This description should also state whether that group meets together regularly and list any special activities or functions that the group performs and the frequency of these activities. A description of each person's job responsibilities, daily functions, outside contacts, amount of time spent in the field rather than the office, and meeting requirements can also be included. Or this can be done by job title if several people perform essentially the same function.

Documenting all these activities is important for two reasons. One, it helps the organization analyze what it does and whether changes are needed; and two, it helps establish space needs, spatial relationships, and other facility requirements. The following chart gives some examples:

<table>
<thead>
<tr>
<th>Functional requirement</th>
<th>Facility requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>number and type of staff</td>
<td>number of workstations or offices</td>
</tr>
<tr>
<td>type of outside contacts</td>
<td>need for reception/waiting area or counter area, location of unit within the facility</td>
</tr>
<tr>
<td>frequency of unit meetings</td>
<td>need for conference or meeting space</td>
</tr>
<tr>
<td>individual job functions</td>
<td>amount of work space, number of file cabinets, visitor chairs, type of wiring and outlets, equipment, location of workstations</td>
</tr>
<tr>
<td>printing and distribution of monthly newsletter</td>
<td>workroom, equipment, number of outlets, furniture, daylight, ventilation</td>
</tr>
<tr>
<td>field staff prepare reports and set up appointments biweekly</td>
<td>shared workstations with telephones and computers</td>
</tr>
</tbody>
</table>

Nearly all activities in the workplace have facility-related implications. For example, if a unit within an organization has contact only with other internal units and this contact is by telephone or electronic mail, then a reception/waiting area is not required. But appropriate wiring is needed, and all staff will require a computer and a telephone at their workstations. It also means that, because public contact is not necessary, the unit can be located away from the main circulation or the entrance. Likewise, a unit requiring a lot of public contact should be located where the public can get to it easily, and it needs a waiting area or public counter. Another example is the need for a shared workroom by two units that frequently work together on projects. In this task, only the functional requirements need to be described, not the details of the spaces.

After preparing the functional statements for each unit (and individual staff, if appropriate), the organization should examine them to see what changes are anticipated and document them. These changes could be in number of staff, composition of staff (e.g., fewer secretarial staff, more outreach specialists), responsibilities of the unit, working relationships between units, or the number of units (i.e., consolidation). These changes represent what the organization will look like in the future. Functional changes may be a response to changing organizational goals and objectives or merely a better way to
meet goals and objectives. When projecting future staff changes, it is advisable to plan in five-year time frames and do updates when necessary.

Part of this task might include a statement of facility problems. This could include general problems such as poor indoor air quality, inadequate wiring, poor heating, or problems specific to one or two groups such as lack of sufficient file space or meeting space. In addition to facility-wide or systems-related (HVAC, electrical, or plumbing systems) issues, space-related problems often fall into the following categories:

- **size of space** - too small or too large for the number of people or furniture and equipment required;
- **location of space** - proximity of spaces should relate to functional needs; e.g., a resource library for the public should not be located in a private office;
- **amount of space** - there is too little or too much space in the facility for the functions of the organization; e.g., a project room is needed but there is no space available to make one;
- **type of space** - the space does not fit the activities or staff functions; e.g., the staff works as a team but all workstations are in private offices.

In some cases, a complete facility analysis should be done by an architectural or engineering consultant. It is helpful, though, for the organization to identify problem areas, which will assist the organization in the next task and guide the consultant if one is hired.

**Facility requirements**

The organization develops facility requirements based on the goals, objectives, and functions defined in the previous statements. An architectural consultant may be hired at this stage to complete the facility planning process. The organization, however, can prepare a statement of facility requirements, and the consultant can expand on it for space planning and design.

There are two types of facility requirements. One type is facility-wide and includes such things as air circulation systems, wiring for computer networks, and parking. The organization may be able to make only general statements about these; a consultant can help with the specifics. The other type of requirement is for individual spaces and should be as specific as possible. The requirements for individual spaces should include:

- **personnel** - total number for each unit and by position type; indicate current needs and projected needs (five-year projection);
- **workstations** - description of workstations by each position type indicating type of station (e.g., private office, open office, shared station), equipment needed, shelf space, file space, number of visitors accommodated, and work surfaces (e.g., desk, drafting board); identify staff who work from home or a satellite location and may not need permanent space at the main office;
- **type and number of support spaces** - these spaces are not permanently assigned as staff workstations and include conference rooms, workrooms, mailrooms, and audiovisual rooms. Indicate what activities will take place in the space, the equipment that will be used there, how many people will typically occupy the space, and whether it can be used by more than one unit;
- **proximity** - indicate which spaces and units need to be next to each other and why. Also specify if some groups should not be next to each other;
- **type and number of special spaces** - describe the space and why it is special (e.g., special ventilation requirements, special electrical requirements), who will use it, and proximity requirements.
- **access** - describe the access required for each unit and the organization as a whole in terms of number of visitors from outside the organization, number of visitors from within, frequency and time of visits, reasons for visits, and duration of visits.

It is not necessary to specify the square footage required for any of these spaces. Although guidelines exist for space requirements for certain activities or equipment, the design consultant can best determine square footage needs. The consultant will prepare an architectural program based on the work done by the organization, including the space and square footage requirements.

**Conclusion**

Facility planning allows an organization to look at what it is doing, how it might do things differently, and how its physical setting supports (or hinders) its goals, objectives, and daily activities. A facility plan can help an organization achieve the kind of physical environment it needs.

**Future topics**

In Facilities Planning and Management, we would like to address the concerns of readers involved in the planning, design, and maintenance of facilities. Let us know what topics you’d like to see in future issues.

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