8.01 - Introduction

The purpose of Chapter VIII is to set forth standards and planning criteria to be used in the physical development, evaluation, and assignment of spaces of institutions in the System. The standards are flexible and must be interpreted consistent with the "mission" and "guidelines" of the institution. Physical requirements and limitations, such as the confines of existing spaces in remodeling, as well as outsize equipment which should be noted in programs and evaluations, may necessitate deviations from the standards.

8.02 - Space Standards

The facility needs of an institution are projected on the basis of the mission, the approved programs of an institution and enrollment projections. (Refer to Section 7.02)

Three biennia enrollment projections, which are used to project instruction related space, need to be reliable because the planning and construction of a facility typically has a lead time of at least five or six years. If appropriate, more than one enrollment projection for which assumptions and reliability are stated should be made to a target planning period. For facility needs, enrollment projections must be reconciled with enrollment ceilings established by the Board.

Facility needs of an institution that are not entirely dependent upon enrollment and staffing must be projected using appropriate unit sizes (room size, station size, etc.), program bases and relevant criteria. Examples are spaces for activities or functions such as research and public services, that are variable in relation to enrollment and partially related to staffing, spaces for physical education that should have at least a minimal size, spaces for libraries that are to a considerable extent dependent upon collection size, and spaces for the physical plant that are dependent primarily upon the area served as well as the character or amount of service rendered. The basic or unit size of space, below which the function cannot be served, may also be a determinant of space size.

Projection Standards - Projection standards are for use by the institution's planning office and Board's office of Facilities Planning in estimating total space needs of an institution and may not
reflect an exact spatial configuration for any one category because it may vary depending on the special characteristics of the functions housed.

**Design Standards** - Design standards are for use by institutional personnel and planning consultants in identifying optimums of unit size and efficiency in the design of proposed facilities.

### 8.03 - Classroom Space Use Objectives

Classrooms are defined as general purpose instructional rooms with equipment suitable for lecture, discussion, and dry-demonstration formats. Rooms which are known as lecture halls, classrooms and seminar rooms are all expected to be subject to regular central assignment in order to achieve utilization at the maximum practical level. The objectives shall be to achieve at least the following minimum hours of scheduled occupancy of classrooms, and student stations as an average on an institution-wide basis:

<table>
<thead>
<tr>
<th>Classroom Scheduled Occupancy</th>
<th>Classroom Student Station Scheduled Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 hours per week</td>
<td>20 hours per week</td>
</tr>
</tbody>
</table>

Which is a Classroom Student Station Occupancy of 60 percent for 33 hours per week of Classroom Scheduled Occupancy

Inasmuch as the University of Oregon Health Sciences Center is a special purpose institution with unique scheduling of classroom facilities for the medical, dental, and nursing schools, it is not expected that the standards applicable to the other institutions within the System will apply. However, the objective shall be to achieve utilization of classroom space at the maximum practicable level at the Center.

### 8.04 - Classroom Projection Standard

Classroom space needs will be projected on the basis of student stations in conformance with classroom space use objectives (Section 8.03). Area requirements will be determined utilizing a norm of 15 square feet per student station including related service areas (weighted mean derived from survey of the typical distribution of classroom sizes and related service areas).

### 8.05 - Classroom Design Standard

The number of square feet per station in general purpose classrooms will vary with the size of the room and the type of station, ranging from chairs around a table in a seminar room to a fixed-seat lecture hall. Additional square footage for special equipment may be required. Typical classroom sizes are:
<table>
<thead>
<tr>
<th>No. of Student Stations</th>
<th>Sq. Ft. per Student Station</th>
<th>Sq. Ft. Area of Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>20</td>
<td>300</td>
</tr>
<tr>
<td>20</td>
<td>17.5</td>
<td>350</td>
</tr>
<tr>
<td>25</td>
<td>16</td>
<td>400</td>
</tr>
<tr>
<td>30</td>
<td>1</td>
<td>450</td>
</tr>
<tr>
<td>40</td>
<td>14.2</td>
<td>568</td>
</tr>
<tr>
<td>50</td>
<td>13.5</td>
<td>675</td>
</tr>
<tr>
<td>60</td>
<td>13</td>
<td>780</td>
</tr>
<tr>
<td>80</td>
<td>12</td>
<td>960</td>
</tr>
<tr>
<td>100</td>
<td>11</td>
<td>1,100</td>
</tr>
<tr>
<td>125</td>
<td>10</td>
<td>1,250</td>
</tr>
<tr>
<td>200</td>
<td>9</td>
<td>1,800</td>
</tr>
</tbody>
</table>

8.06 - Class Laboratory Space Use Objectives

Teaching laboratories are defined as rooms used by regularly scheduled classes which require special-purpose equipment for student participation, experimentation, observation, or practice in a field of study.

The expected utilization of laboratory space at each institution shall be the maximum practicable level. The objective shall be to achieve at least the following minimum hours of scheduled occupancy of laboratories and laboratory student stations as an average on an institution-wide basis:

Class Laboratory Scheduled Occupancy

Lower Division 22 hours per week

Class Laboratory Student Station Scheduled Occupancy

18 hour per week
Which is a Class Laboratory Student Station Scheduled Occupancy of 80 percent for 22 hours per week of Class Laboratory Scheduled Occupancy

Upper Division 16 hours per week

12 hours per week
Which is a Class Laboratory Student Station Scheduled Occupancy of 75 percent for 16 hours per week of Class Laboratory Scheduled Occupancy

Inasmuch as the University of Oregon Health Sciences Center is a special purpose institution with unique scheduling of class laboratory facilities for the medical, dental, and nursing
schools, it is not expected that the standards applicable to the other institutions within the System will apply. However, the objective shall be to achieve utilization of class laboratory space at the maximum practicable level at the Center.

8.07 - Class Laboratory Projection Standard

Class laboratory space needs will be projected on the basis of student stations in conformance with laboratory space use objectives (Section 8.06). Area requirements will be determined by the character of special-purpose equipment, the number of students expected to be served, and the associated service area requirement.

8.08 - Class Laboratory Design Standard

The design standards for class laboratories vary with the academic discipline and must conform to the student station size, equipment, and service requirements. Examples of area allowances for some disciplines, including the student station and the ancillary service areas, are as follows:

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Net Assignable Square Feet per Student Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Science</td>
<td>160</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>160</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>110</td>
</tr>
<tr>
<td>Theater</td>
<td>100</td>
</tr>
<tr>
<td>Chemistry</td>
<td>68</td>
</tr>
<tr>
<td>Dairy Science</td>
<td>68</td>
</tr>
<tr>
<td>Geology</td>
<td>68</td>
</tr>
<tr>
<td>Physics</td>
<td>65</td>
</tr>
<tr>
<td>Plant Pathology</td>
<td>65</td>
</tr>
<tr>
<td>Anthropology</td>
<td>50</td>
</tr>
<tr>
<td>Zoology</td>
<td>50</td>
</tr>
<tr>
<td>Business Administration</td>
<td>32</td>
</tr>
<tr>
<td>Speech</td>
<td>32</td>
</tr>
</tbody>
</table>

8.09 - Other Instructional Facilities Standard

There are instructional spaces on most campuses that are used for instructional programs not included within the previously identified categories outlined in this chapter. These include spaces such as special class laboratories, music practice rooms, programmed-instruction study areas, individual study laboratories, drama facilities, museums, and galleries related to the instructional program. The justification of these facilities is related directly to the mission and guidelines for the institution, and the areas are determined by an analysis of the specific requirements.
Examples of groupings of disciplines are suggested below, but space entitlements for each institution must be justified by programmatic needs.

Group I - Disciplines suggested which have very little, if any, special instructional space needs: Economics, History, Sociology

Group II - Disciplines suggested which have minimal special instructional space needs: Business Administration, English, Political Science

Group III - Disciplines suggested which have moderate special instructional space needs: Applied Science, Entomology, Foreign Language, Vocational Training

Group IV - Disciplines suggested which have considerable special instructional space needs: Chemistry, Engineering, Health Sciences, Physics

Group V - Disciplines suggested which have extensive special instructional space needs: Art, Drama, Music, Zoology

8.10 - Office Projection Standard

An office is defined as a room or suite of rooms equipped with desks, chairs, files, bookcases, word processing equipment, etc., that is assigned to one or more persons primarily for the performance of administrative, clerical, or faculty duties, other than meeting classes. The projection standard includes active office service areas such as reception-waiting areas, conference rooms directly associated with instructional and administrative offices, file rooms, and work rooms.

Office space needs will be projected at an institutional level based upon the number of FTE faculty and staff, the headcount of non-employed advanced graduate students, and FTE senior administrative staff. The projection standard, which will include the types of areas identified in the preceding paragraph, is 150 net assignable square feet per FTE faculty, staff, and non-employed advanced graduate students (three non-employed advanced graduate students headcount equals one FTE for purposes of office space projections), and 210 net assignable square feet per FTE senior administrative staff.

8.11 - Office Design Standard

The following office design standards will be used except where special equipment, such as pianos and drafting tables, require larger areas. When office sizes and lay-out are determined, it is important that flexibility be maintained so that assignments can be made without regard to rank for efficient functioning and ease of reassignment.
a. Faculty offices:
   Senior Faculty (Instructor-Professor) 100
   Department Head 150
   Graduate and/or Teaching Assistant 50

b. Administrative offices:
   Presidents 300
   College Dean or Director 200
   Administrative Assistant 100

c. Staff offices
   Secretary/clerk 75
   Reception area 150
   File Room space:
      with work space 10/file
      without work space 6/file

d. Other:
   Advanced graduate student study space (multiple office) 50
   Conference room 20

8.12 - Library Standard

Libraries are defined as a room or group of rooms used for the collection, storage, circulation, and use of books, periodicals, manuscripts, and other reading or reference materials.

Libraries in the System are to be programmed to provide for the space outlined below. Stack space and non-book material space will be based on the estimated size of collections six years following the completion of a facility or facility addition. (Warehouse operations are not applicable.)

Library Reader Space - Reader stations are to be provided for 15 percent of the fall term FTE undergraduate students and 25 percent of the fall term FTE graduate students at all institutions. Reader station space will allow 25 square feet for each FTE undergraduate student and 30 square feet for each FTE graduate student.

Faculty Research Reader Space—Research space standards are outlined under Section 8.15 RESEARCH STANDARD. In addition, there is an entitlement of 15 square feet for carrel space in the library for each FTE faculty identified primarily in Groups I and II of Section 8.15 RESEARCH STANDARD, such as the humanities, social sciences, etc. There is an entitlement of three square feet of carrel space for each FTE faculty identified primarily in Groups III, IV, and V of Section 8.15 RESEARCH STANDARD, such as the life, physical, and behavioral sciences, agriculture, etc.
Stack Space—The following allowances, which reflect a higher percentage of bound periodicals at health science and law libraries will be used in providing stack space:

<table>
<thead>
<tr>
<th>nasf/volume</th>
<th>HS &amp; Law</th>
<th>All Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000 vols.</td>
<td>0.12</td>
<td>0.10</td>
</tr>
<tr>
<td>next 900,000 vols.</td>
<td>0.08</td>
<td>0.07</td>
</tr>
<tr>
<td>next 1,000,000 vols.</td>
<td>0.05</td>
<td>0.05</td>
</tr>
</tbody>
</table>

or by:

<table>
<thead>
<tr>
<th>nasf/volume</th>
<th>HS &amp; Law</th>
<th>All Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000 vols.</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>next 100,000 vols.</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>next 800,000 vols.</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>next 1,000,000 vols.</td>
<td>15</td>
<td>16</td>
</tr>
</tbody>
</table>

Non-Book Material—The following space allowances, which have been developed by measuring collections and the space required for storing, handling, and using non-book materials, will be used in projecting space needs.

<table>
<thead>
<tr>
<th>Item</th>
<th>Formula Items per Sq. Ft. of Floor Space</th>
<th>Suggested Standard</th>
<th>Space To Be Allotted in Minimum Units of Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microcards</td>
<td>6,000</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Microprints</td>
<td>1,400</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Microfiche 4&quot;x 6&quot;</td>
<td>2,500</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Microfiche 3&quot;x 5&quot;</td>
<td>6,000</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Microfilm reels</td>
<td>60</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Film strips</td>
<td>200</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Slides</td>
<td>700</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Transparencies</td>
<td>500</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Motion picture reels</td>
<td>12</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Video tape reels</td>
<td>3</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Computer tape reels</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Tape reels</td>
<td>30</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Phonograph records</td>
<td>75</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Picture files</td>
<td>500</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Maps</td>
<td>50</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Pamphlets</td>
<td>150</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Test files</td>
<td>150</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Multi-media kits</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Government documents</td>
<td>50</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Unbound periodicals</td>
<td>15</td>
<td>bibliographical units</td>
<td>10</td>
</tr>
</tbody>
</table>
Archives  Space requirements for collection will be submitted by institutional librarian.
Manuscripts  Space requirements for collection will be submitted by institutional librarian.

Library Services and Administration - An additional area equal to 25 percent of the space generated by the reader and stack space will be allotted for library services and administration.

8.13 – Computer Facilities

Computer facility needs beyond instruction and research vary at each institution and may or may not be separated into instructional, research and administrative components. Inasmuch as the amount of equipment may range from input/output terminals to centralized Systemwide components, space requirements will reflect the equipment housed and the size of the supporting staff.

Technological advances may reduce the area required for equipment or permit expansion of capabilities without increasing facilities.

8.14 – Special Service Facilities

In general, facility projection and space standards are associated with specific functions. Special and independently administered services such as printing, central duplicating, cafeterias independent of student unions and housing, and parking structures, which are not identified elsewhere in these standards, will be programmed in accordance with institutional needs.

8.15 – Research Standard

These standards recognize research as a creative inquiry. A number of factors unique to each institution must be identified and correlated to the needs of the institution in the application of research space standards. The mission of the institution, which is relatively constant, must be identified and only those standards that are consistent with the mission should be applied. Some research space requirements within the institution will vary from year to year and others will be relatively constant for a long period of time. It must be recognized that changes of entitlement to research space occur and that a process for an institutional review of space assignments needs to be identified and applied. Further, space needs must be differentiated by discipline and may be differentiated by the functional orientation of the discipline.

The use of research space standards for projecting institutional space requirements will utilize a composite methodology with the components identified hereafter.

The entitlement to the space by any one individual or department is responsive and flexible; it must relate to the extent of faculty involvement in research, the level of grant-funded
research and the needs of the discipline. It is implicit that the appropriate administrator should promptly reassign underutilized research space.

Departments will be expected to share, as far as practical, specialized equipment as well as common and/or interdisciplinary support space. It is expected that the design and layout of research space will allow for maximum flexibility for reassignment.

The amount of space that is allocated to research for each institution and the allotments within each institution are dependent upon the following factors:

1. Consistency with the mission of the institution.

2. Level of involvement in research.
   a. Consistency with teaching appointments for "instruction and related research."
   b. Levels of grant-funded research in addition to that which can be integrated with research expected as a part of an instructional appointment.

The derivation of research space entitlements will require officials at each institution to develop a distribution of the programs associated with 1 and 2 above into the appropriate space projection group as outlined hereinafter. The space entitlement is a function of the number of FTE faculty, where FTE faculty is the sum of the full-time equivalent professors, associate professors, assistant professors, instructors, research assistants unclassified, research associates, graduate teaching and research assistants, as well as one-third of the advanced full-time graduate students (9 hr.) not included above. (Classified support personnel associated with research do not generate space but are accommodated by the proper group assignment of the FTE faculty.) (See also 8.12 LIBRARY STANDARD, Faculty Research Reader Space.) Office space associated with research appointments is provided for in office projections. (Refer to 8.10 OFFICE PROJECTION STANDARD.)

The discipline distribution (see following outline) is based upon functions required by the research undertaking. Groups II through V include those disciplines that require minimal to extensive amounts of laboratory, laboratory service, studio, and studio services space for research, while Group I includes disciplines with primarily library and office space needs only. The disciplines suggested for each group are subject to adjustment to a higher, lower, or intergroup level depending upon the substantiated differing character of the research.

Group I – Disciplines with primarily library and office associated space needs only. Examples of disciplines suggested in this group are:

- Business & Management
- Economics
- Languages & Linguistics
- Literature & History
- Math
Philosophy
Political Science & Administration

Group II – Minimal research space requirement. This group generates 30 square feet per FTE faculty. Examples of disciplines suggested in this group are:

- Computer Science
- Education
- Fine & Applied Arts - primarily nonstudio
- Social Sciences (General Psychology, Sociology, etc.)
- Theoretical Studies (Public Affairs & Services, etc.)

Group III – Moderate research space requirements. This group generates 110 square feet per FTE faculty. Examples of disciplines suggested in this group are:

- Architecture & Environmental Sciences
- Communications & Theater (films, TV, etc.)
- Home Economics - nonlaboratory setting
- Music
- Physical Education
- Social/Physical Science (Anthropology, Geography, etc.)

Group IV – Considerable research space requirements. This group generates 300 square feet per FTE faculty. Examples of disciplines suggested in this group are:

- Engineering (Industrial, General)
- Fine & Applied Arts - studio
- Home Economics - laboratory setting (Foods, Textiles, etc.)
- Natural Sciences (Biology, Botany, Zoology, etc.)
- Physical Sciences (Chemistry, Geology, Pharmacy, Physics, etc.)
- Psychology - Experimental
- Clinical Sciences - Medical
- Dental

Group V – Extensive research space requirement. This group generates 360 square feet per FTE faculty. Examples of disciplines suggested in this group are:

- Agriculture & Natural Resources (Crop Sciences, Animal Sciences, Forestry, etc.)
- Engineering (Chemical, Civil, Mechanical and those not included in Group IV) Basic Science

8.16 - Physical Education Recreation & Athletic Standard
Physical education activity and support areas are used frequently for recreation and also, to a lesser degree, by athletic teams. It is expected that many of the areas can be used for a full schedule of instruction and when not being used for instruction, be available for physical
recreation and athletics, in contrast to having duplicate facilities for use by physical recreation and athletics. Facility requirements from the three categories may be combined for translation into an overall facility program.

Physical education areas are those that are used principally by students and faculty for physical education instruction.

Recreation areas are those that are used principally for physical recreation activities.

Athletic team areas are those that are used principally for interinstitutional team sports.

Space projections shall be made on the basis of fall term FTE total undergraduate enrollment and 25 percent of fall term FTE graduate enrollment.

(It is acknowledged that larger institutions may experience somewhat more intensive use of facilities due to diversity factors.)

Projection Standards for physical education instruction with compatible use for physical recreation and athletics are:

a. Indoor space is projected at 12 square feet per FTE student as defined above. This includes approximately nine square feet for the activity areas and three square feet for the ancillary services areas of lockers, showers, etc. The space allocation must be made in units of complete teaching stations/activity areas. The minimum facility should be projected on the basis of a 3,000 FTE student enrollment as defined above.

   Approximately 55 percent of the activity area required high ceilings, such as 25 feet for basketball, and somewhat lower ceilings for court games such as handball and apparatus requirements of gymnastics. Another 30 percent of the area may have lower ceilings for combative activities, dancing and weight lifting, with an additional 15 percent for swimming and diving pools.

b. Outdoor activity areas are projected at 100 square feet per FTE student as defined above. The space allocation must be made in units of complete teaching stations/activity areas for all types of field sports. The areas need to be convenient to lockers and showers, and those areas used for classes should be within a ten-minute walking distance from academic classrooms. The minimum total facility should be projected on the basis of a 3,000 FTE student enrollment as defined above.

   Approximately 60 percent of the areas are sodded or turfed for games such as soccer, touch football, and softball. Another 15 percent is for courts, such as tennis and volleyball, with an additional 20 percent in specialized areas, such as
for track and field, baseball, archery, and golf. An additional five percent is for related service areas.

**Recreation and Athletic Areas** - In addition to the indoor and outdoor physical education areas outlined in "a" and "b" above, provisions may allow for additional square footage in sports fields and buildings for use in intramural sports, varsity sports, and recreational uses as appropriate for the institution.

**Design Standards** should conform to recognized planning criteria such as those outlined in publications by the American Association for Health, Physical Education and Recreation, the National Recreation Association, and other standard sources.

8.17 - Student Health Services Standard

The type of health service facilities required is usually a matter of institutional policy as well as proximity to and working arrangements with local hospitals. They include such areas as examination rooms, treatment rooms, observation rooms, laboratories, reception-waiting areas, supply rooms, and infirmary facilities. The latter are appropriate primarily at larger institutions.

Space projections of this category should be based upon the number of people served, typically on the basis of one to one-and-a-half square feet per fall term FTE student. Office space for physicians and supporting staff is projected under Section 8.10 OFFICE PROJECTION STANDARD.

8.18 - College Union Standard

The functions that college union facilities house and the composition of the college community served may vary considerably from one campus to another but they exhibit an overall balance in relation to the size of the student body. College unions are institutional centers that provide services as required and/or desired by the users to complement those provided in the community.

A nominal level of college union facilities may include the following functions:

1. **Organizational Activities**
   - Publications
   - Rooms for meetings
   - Organizations and interest groups - offices, workspace, and storage
   - Broadcast - radio, television

2. **Recreation**
   - Active - table tennis, bowling, etc.
   - Passive - lounge, music listening, television viewing, etc.
   - Hobbies - crafts, arts, etc.
(Extensive physical recreation facilities as well as some off-campus facilities may be considered outside the guidelines.)

3. Socio-Cultural
   Galleries
   Auditoria
   Ballrooms
   Etc.

4. Administration

5. Food Service
   Cafeteria
   Snack Bar
   Dining Room
   Service

6. Specialized Services
   Bookstores
   Concessions
   Etc.

The area required for a college union must be responsive to the services expected to be provided and varies with size of the institution by the following approximation: Using fall term student FTE as a base, a straight line curve with a minimum of 14 NASF per fall term student FTE for institutions with 2,400 FTE enrollment to eight NASF per fall term student FTE for those with 20,000 or more FTE enrollment. An institution with fewer than 2,400 fall term student FTE may use the standard for 2,400 or provide a smaller amount of space as appropriate to the needs of the institution.

Nonassignable spaces, such as elevators and mechanical rooms, as well as work and storage areas necessary for the maintenance and custodial functions, are important to the operation of college unions and need to be included. In addition to the net assignable spaces noted above, the PHYSICAL PLANT AREA STANDARD is applicable. There usually are some additional unique needs dependent upon the activities housed in the union facilities; for instance, specialized and adequate storage is very important to service multipurpose spaces such as dining room/ballrooms.

8.19 - Residential Housing Standard

It is expected that institutions will provide a reasonable amount of residential housing to supplement living accommodations available within the community. While projections of need may be appropriate for an individual institution, diversity of student populations and campus locations do not lend themselves to Systemwide standards.
Residence housing areas may include food service, as well as central food storage, furniture storage, and maintenance as appropriate for the institution.

Design standards for residence halls are:

a. For residence halls including kitchen and dining areas, either within the dormitory building or an allocable area in a different building, the gross area per student based upon the outside dimensions of a building would, in general, range of 215-235 square feet.

b. For kitchen and dining facilities, included in the area referred to in item "a" above, regardless of the location thereof, the approximate gross area per resident would range of 30-40 square feet.

c. For a typical two-student sleeping/study room included in item "a" above the net inside room area would be about 140-180 square feet.

8.20 - Physical Plant Service Area Standard

Areas required for the operation and maintenance of the campus physical plant are identified in two categories: for the support of (1) central service functions and (2) building custodial functions.

1. Central Service Functions—This encompasses all of the areas used for buildings and grounds operation and maintenance, including heating plants, service shops, garages, storerooms, and warehouses. Central and building area required for the delivery, pick-up, and holding/storage of materials should be included also and should be located in conjunction with custodial areas. The area is calculated at five percent of the net assignable square feet of the buildings fully served. It may or may not include various auxiliary enterprise areas and other areas such as agricultural facilities. If these are included, they should be in proportion to the amount of service rendered.

2. Building Custodial Functions—This encompasses all of the area used for regular custodial functions, including deliveries of supplies, collection, and pick-up of waste and materials for recycling within each building. The area is calculated as approximately 0.7 percent of the usable area of a building, excluding mechanical rooms. To allow for satisfactory and efficient use and storage of equipment and supplies, the basic custodial area should have the following minimal characteristics:

A. In buildings with elevators

1. An approximately 8x12' supply and equipment room close to the elevator on the main floor.

2. An approximately 5x8' supply and equipment room close to the elevator on all other floors.

3. For all floors with 15,000 usable square feet or more, an additional approximately 3x5' closet adjacent to washrooms.

B. In buildings without elevators, custodial area should be provided as in A.1. above on each floor and A.3. above if applicable.