Walls Dissolve: Transforming Access to Knowledge

A St. Cloud State University Vision for the Library and Learning Resources Services Facility of the 21st Century

A Program Statement — Approved 23 Sept 1993

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**Introduction and Goals**

Record numbers of faculty, students, and community members continue to come to SCSU's Learning Resources Services (LRS) to fulfill their research, information, production, recreation, and study needs. On average, 35,000 people enter the LRS turnstile for some kind of help each week.

St. Cloud State University faculty, responding to the social, cultural, political, and economic requirements of Minnesota, the US, and the world, are demanding more student research and inquiry; this is reflected in the call for excellence found in the Q7 report and the burgeoning use of LRS collections. LRS faculty, staff, and administrators are challenged by the level and variety of service and collection demands. No longer does LRS provide isolated services and collections of print materials supporting a lower division curriculum and teacher preparation; it is part of an ever expanding network of print, media, and electronic resources and services.

Within the lifetime of St. Cloud State University's new library and learning resources services building, academic librarianship will be radically changed by the continuing development and adoption of electronic and multimedia information resources and links with other organizations and educational institutions. Electronic tools and resources and alternative media will become ever more integrated into the daily operations of information processing and distribution for students and faculty. While only the most radical of commentators are predicting the total elimination of printed information, new forms of information will affect all areas of LRS services and collections, few more so than the traditional public services of Reference, Periodicals, and Government Publications. All three increasingly will become dependent on electronic forms, including CD-ROM, disk, tape, and remote access. As a consequence, each of these areas must be architecturally flexible, especially in considerations of shelving and electronic access. Design of these very public
areas requires the control of unwanted noise (critical in maintaining an appropriate research and study environment); a physical arrangement of user spaces to encourage interaction and collaboration for some while allowing individual inquiry and reflection for others; and an overall bright and stimulating atmosphere, yet not so distracting as to overwhelm the intent of the building: to provide an environment for inquiry, scholarship, and interaction. At the same time, however, library faculty and staff and their constituents must prepare for the time when the "library as place" is less an imperative, and move to the library as a source of knowledge and experience without regard to place.

Part of this movement away from the "library as place" can be found in the computer and interactive television networks with which LRS faculty and staff are already involved and which will continue to grow. Another part will be found in the emerging repackaging and "repurposing" of information as students learn to incorporate text, still and full motion images, and audio into course projects instead of traditional ten page papers. Electronic storage of and access to text and image, with all its copyright implications, will take place both within and from the "library as place" as well as remotely, utilizing emerging national and international networks. The "electronic library" is already close to a reality, the "library without walls" is not too far off; how many more years before we find virtual reality systems for training and experience available through "the library"?

Electronic processes already have had some impact on the way libraries operate. Technical library operations, including Cataloging and Acquisition, have made substantial progress in utilizing automated systems; future changes will continue to have an impact upon these and other processes, services, and spatial relationships. Instructional design and delivery systems have made quantum leaps over the past decade and will make equally great leaps at an ever increasing rate in the future. Design of these areas must anticipate continuing development necessitating changes in hardware, software, staffing, and staff and functional organization.
In St. Cloud State University's teaching and learning environment, the Library and Learning Resources Services building must be seen as a facility whose design is a positive aid to the process of instruction and inquiry. The design must accommodate radical changes in the format, production, delivery, and storage of information. These design elements must serve the needs of a demanding, diverse, and dispersed user population.

This Library and Learning Resources Services Program has been prepared to define and describe the functional areas and services of St. Cloud State University's vision of the library of the future and to describe these spaces to assist in the development of formal schematic drawings. The Program provides the functions, physical requirements, and spatial relationships that should exist in a new building in order to achieve this vision.
General Architectural Considerations

Flexibility  This crucial and difficult consideration has multiple meanings. While every effort has been taken in the specific program discussion that follows to anticipate future needs, there must be architectural provision for changing the operational function of or expansion or contraction of any area. Electrical wiring, LAN wiring, and other cabling (eg. fiber optic) must be able to easily reach any point in the building without undue complications or unsightly poles. In general, flexibility can be achieved with a simple interior design and layout.

It is essential to the future operations of the library and the incorporation of changing technology that cabling be easily added, deleted, and re-routed to meet changing needs.

Interior Design  The overall atmosphere should acknowledge human aesthetic, psychologic, and ergonomic needs and be bright and stimulating. Spatial organization should encourage traffic patterns that limit the need for excessive signage; major service points should be clearly visible; what signs are necessary should be integral to the interior design and not seen as appendages. Use of colors and design features should not be distracting nor easily or rapidly outdated. Small comfortable lounges should encourage casual encounters. Durability yet attractiveness of all furnishing and ease of maintenance are extremely important. In sum, the design should not distract from the intent of the building: to provide an environment for inquiry, intellectual development, and creative production.

Acoustics  Control of undesirable noise is critical to maintaining an acceptable research, study, and creative environment. Special consideration must be given to:

- Service points: faculty and staff must be able to talk with and instruct users without unduly disturbing or distracting others; faculty and
staff must also answer telephones.

- Faculty Offices: frequent phone calls, meeting with students and faculty, and general work requirements, require that these be away from research and study areas, yet easily accessible.

- Photocopiers and printers: must be acoustically isolated yet clearly visible and accessible or located in areas planned to be noisy.

- Utility Systems: noisy fans, ventilation ducts, elevators, and fluorescent hum are often unnecessary distractions.

- Lounges: while they encourage casual interactions and discussion, they frequently disturb users involved in more individual or quiet research or learning.

- Stairwells: footfall noise, opening and closing stairwell doors, and their frequent use for social conversations and gatherings, requires special attention.

Floors and Carpeting The use of durable yet attractive nonstatic carpeting throughout the building, with the possible exception of major traffic areas, will increase user acceptance, reduce faculty and staff muscle strain, and assist in acoustic control. Again, colors and patterns should not be easily dated; in addition, consideration should be given (location of seams and color or patterns) to the easy replacement of carpet in areas of high wear. Floors, except in areas of compact high density shelving and microforms which require greater load limits (approximately 300 psf live load), should carry 150 psf live load; suspended flooring that allows for easily accessible electrical, LAN, and fiber raceways should be considered for most areas.

Lighting This element has both practical and aesthetic aspects. Soft, warm color light (full spectrum) is essential to facilitate reading and enhance environmental psychology. Fixtures may be of a standard, parabolic design to reduce harsh reflections and glare. Microform reading areas must be equipped with dimmers; lighting in public service areas with computer terminal must be designed to reduce screen glare and reflection; office lights must be independently controlled from within each office. Special lighting may be necessary in rare book and manuscript areas to enhance conservation of materials.

- Lighting in public areas must be controlled from a central point (from
within the Circulation Service area) and be zoned; lighting should sustain a minimum level of 70-80 FC (foot candles) in public areas, 50-70 FC in offices, work areas, and workstation areas; lighting also must accommodate changing needs and operational functions. Consideration should be given to adequate lighting in compact high density stack areas. Some zones, eg. microforms reading area and classrooms, must have local lighting control, with digital light dimmers.

- Energy efficient incandescent task lighting should be available in faculty and staff work areas, particularly with computer terminals.
- Track lighting may be desired in the administrative office area, in some conference rooms, and in the main entrance/lobby to highlight displays, exhibitions, or artwork.
- Natural lighting should be available wherever it would not cause unnecessary reflection on monitors or excessive back lighting, or present problems for materials conservation.
- Exterior lighting must be designed to promote the safety of persons using the building at night as well as, potentially, enhance the building’s appearance.

Access and Security

The building must be designed to assure the personal safety of users and staff and prevent the loss of library resources. A zoned keying system, either standard or electronic, should be developed in coordination with Buildings and Grounds. The design and layout must accommodate special security (of people, resources, and facilities) and problems presented by:

- The after hours/24-hour study room, auditorium, and classrooms need to be accessible when the main public areas of the library/learning resources are closed; visibility in the after hours/24-hour study room is especially important.
- Rare book and manuscript storage areas may need special electronic or digital keypad locks.
- Fenestration with controlled louvers or LCD frosting should be in all classrooms and group study rooms.
- Placement of main service points, especially Circulation and Reference, should be positioned to enhance overall security; the former should be positioned to control egress through an optical based turnstile with 3M detection system. Each service point (and elevator) should be
equipped with a security alarm and/or communication system.

Utilities

As noted previously, it is imperative that electrical, LAN, and fiber optic cabling be able to reach any point in the building through easily accessible raceways. Outlet placement must be plentiful and easily accessed. Special attention is needed in computer areas (grounded, surge suppressed double duplex outlets for each workstation; special needs with separate breakers for hardware in communications control room), photocopier locations and microform reading areas (separate 15 amp breakers for each may be necessary), service points (careful attention to location of floor and countertop outlets and LAN connections), and stairwells and restrooms (outlets for maintenance).

- Plumbing lines must not be run over stack locations. A zoned wet/dry and halogen based fire suppression system should be used. Fire suppression systems should not use water under pressure in pipes over the collection or the electronic hardware.

Heating, Ventilation, and Air Conditioning

In order to preserve the physical collections, temperature must not be subject to significant short term changes, and should be held to a consistent year around temperature of 70° ± 2°. Likewise, humidity levels should be maintained at 50% ± 4%. Special treatment may be required for Archives, rare book, and manuscript collections to maintain a stable environment. Air conditioning must be in the communications control room.

- Operable windows are desirable in offices and staff work areas, but should only be included if preservation of the collections (temperature and humidity control) and security (key control and screens) can be assured; operable windows pose a security and preservation problem.

- Special attention must be paid to adequate ventilation of rest rooms, custodial closets, staff lounge kitchen, bindery, and graphics areas that use chemicals; regardless, the ventilation system should be able to filter all pollutants from air both entering and exiting the building.

- Direct digital/computerized controls should be able to be monitored, if not controlled, from a central area in the library; digital temperature and humidity monitors should be provided in all departments, user zones, and office areas (it does not make economic sense to have a monitor in all rooms).
Signage and Graphics
All signage and graphics must be easy to read, adaptable to change, and able to be locally maintained. Room numbering scheme must be logical and easy to follow with minimum intervention. To the extent possible, signage should adhere to the philosophy that “less is more.”

ADA Provisions
Physically challenged persons, either permanent or temporary, must have access to all library public services and facilities. The design and location of entrances and exits, service points, and resources must comply with provisions of the Americans with Disabilities Act and appropriate sections of Minnesota Statutes.

[It is assumed that each floor of the facility will have appropriate public rest rooms, drinking fountains, and custodial/maintenance closets. These areas are not discussed in this program except for certain areas where additional or special requirements must be met.]

Future Expansion
Despite the goal of this building being the “last” library to be built on the SCSU campus, the new building must be so designed to allow consideration for future expansion/addition without adversely affecting interior traffic patterns or mechanical/electrical systems or exterior design or requiring major interior redesign.

Roof Support
The roof must be designed and engineered to support up to six (6) satellite dishes (located so as to allow easy access to vertical electrical and communications systems.

Storage Room/s
It is assumed that sufficient general storage areas will be included on each floor for supplies and maintenance. It is further assumed that a large storage area will be on the basement level, convenient to a freight elevator, for storage of equipment, hardware, shelving, etc. This latter storage room should also be close to Technical Support work rooms. Ceilings in storage areas do not need to be finished, but the rooms do need to be acoustically isolated.
Bookstacks, Circulating Collections

Function
To house and display circulating books and related print resources in a manner which maintains the integrity of the classifications schemes (Library of Congress and Superintendent of Documents), allows for a logical layout of classified materials with clear articulation between areas using different classification schemes, and does not hinder user access. SCSU is proposing to split the collection into two parts: a Primary collection (approximately 20% of print resources; titles to be determined by a combination of date of publication (most recent 5-10 years) and high use (number of circulations per year)), and a Research collection (approximately 80% of print resources).

Location and Spatial Relationships
• Primary Collection. (200,000 volumes capacity) Most likely on the second floor surrounded by study areas and group study rooms; [faculty reading room].
• Research Collection. (750,000 volumes capacity) Most likely at the basement level to accommodate weight of high density compact shelving (approximately 1000 pounds per square foot).

Capacity and Design
• Primary Collection. This collection will be more or less stable in size, with a capacity for 200,000 volumes ± 10% (maximum 220,000). As new items are added to this collection, older and/or less used items will be moved to the research collections area. SCSU assumes continued acquisition of printed materials for the foreseeable future (in the range of 1-3% annual growth for all printed resources).
• Design. Need to provide 27,500 LF (full capacity would allow for 219,999 volumes) in 655 double-face units (consisting of 6 shelves 3' in length on a 20' wide base (bottom shelf), and standing 7'6" high) of standard metal cantilevered bracket library shelving. 95% of shelving shall be 9" nominal; remaining 5% shall be 12" nominal. Bookstacks shall be arranged in ranges in a single unit, placed 56"-60" on center (to allow 36"-40" aisle to comply with ADA), and should allow for
possible future reconfiguration. Bookstack ends shall be wood or laminate to match the interior design, with easily changed range finder labels at each end. Adequate lighting to read spine titles/labels on the bottom shelves is imperative (low lighting at all times with point & time of need lighting switches at end of each aisle controlled to turn off by motion sensor and timed delay?). Study and/or lounge seating must be visible and easily accessible from all points in the stacks.

- **Space needed.** Approximately 10,000 SF net.
- **Location.** Second floor.

- **Research Collections.** This collection will fluctuate in size as resources are added and deleted over time; an unknown portion of this collection will be subject to "float" within the MSUS system, probably less than 4-5%. Maximum anticipated size of this collection is 750,000 volumes (low estimate 600,000 volumes). Resources will move from the primary collection to the research collection as they get older or decrease in use; the research collection will have to be continually assessed and weeded (in coordination with other MSUS libraries, libraries in the St. Cloud area, and the University of Minnesota). Due to the weight of the high density compact shelving, the research collections will be housed on the basement level.
- **Design.** Mechanical assist high density compact shelving, with four-post reverse cantilever shelving, providing independent adjustability on both sides of all ranges; bookstack ends to be medium gloss baked enamel in a color to match the interior design (lettering or change of color to denote different collections, eg. periodicals, government publications, and general monographs), with easily changed range finder labels at each end. 40 modules (each module consisting of 63 double faced sections (6 movable and 3 stationary ranges of 7 units each) of 7 shelves on each side (would allow storage for 600,000 volumes at 17 volumes per shelf; maximum capacity of 846,700 at 24 volumes per shelf) [are additional modules needed if we include bound Per storage in compact area? what about docs?]. Aisles within the modules (between movable stacks) shall be 36”; aisles between modules shall be 60”. 95% of shelving shall be 9” nominal; remaining
5% shall be 12" nominal. The arrangement of modules should allow for logical sequence of classification and ease of use. For safety, each movable range shall include an automatic aisle locking safety mechanism with dual control lock release. In addition to low level general lighting directly over stacks (more light in open areas), overhead aisle lighting shall be situated directly over each aisle opening, with 3 light fixtures per aisle; all light mounts shall be attached directly to the top of the shelving ranges and shall recess above shelving ranges when aisles are in closed position.

- Space required. 26,000 NASF.
- Location. Basement.


**Vestibule and Lobby**

**Function**
The vestibule and lobby serve to isolate the outside from the inside and to provide an attractive transitional space preparing users to enter the building. The entrance serves as the “front door” to both the campus and the community.

**Location and Spatial Relationships**
The unsecured Lobby (outside the security detection system) should provide access to an auditorium, to CIM classrooms (which may be located on another floor; must maintain assurance of security for LRS resources, i.e. materials must not be able to leave by exiting through the classroom area), to an extended hours study room, and to storage lockers. The secure Lobby (inside the security detection system) should provide access to Circulation services, to elevators and stairs leading to other floors, and to the primary services located on the first floor.

**Capacity and Design**

- **Vestibule.** Should provide a generous track off area between the front doors and the doors to the lobby (depth in the range of 20-25 feet), with special treatment flooring to prevent the snow and slush of Minnesota’s harsh winter from entering the building. The vestibule must also serve as an airlock so that cold winter winds are kept out.
  - Space required. Approx. 400 SF per vestibule if more than one.
  - Location. First floor.

- **Lobby.** Should be an aesthetic and inviting transitional space preparing users to enter the main library. The Lobby should be divided. An unsecured Lobby outside the entrance optical turnstiles with a partitioned space for storage lockers. Access to the main auditorium and an extended hours study room must be outside the entrance turnstiles. Access to CIM classrooms from this area should be available if the security of collections can be assured. The Lobby could be divided by a “video wall” that could
show creative displays as well as information about library acquisitions and services or campus events (the back side could provide space for artwork) or a double sided, glass fronted display case (with approximately 24" depth on each side). One side of the display area would provide optical entrance turnstiles leading to elevators (2) and the main stairway; the other side would provide the exit control optical turnstiles with 3M security detection system (see Circulation). A security screen would divide both sides of the Lobby when the main Library and Learning Resources Center is closed, thereby allowing access to the auditorium. The secured Lobby should be acoustically isolated as much as possible from the unsecured lobby and from the main library.

- Each Lobby should provide some comfortable lounge seating (space for 10 people in each lounge) and space for an electronic information kiosk (LRS LAN, campus CWIS, and electrical connections) that would provide information about LLRS hours, services, personnel, collections, and events. This would be a graphical interface touchscreen system.

- Secure lobby must have space for at least 2 to 4 self service check out machines [from 3M]

- Space required. unsecured Lobby: 1800 SF
  secured Lobby: 2400 NASF (balance is traffic circulation in GSF)
  Locker alcove: 400 SF

- Location. First floor, directly accessible from vestibule.

- Furnishings. Need to be designed with a concern for heavy use.
  2 - electronic information kiosk
  1 - "video wall" or double sided display cabinet
  ? - upholstered seating for 10 in secured lobby
  ? - bench seating for unsecured lobby (able to seat 10 people)
  2 - self service circulation check out machines
**Administrative Offices**

**Function**
Central reception space for the primary LLRS divisions, Resources and Information, Center for Information Media, and Instructional Development; offices for LLRS administration and faculty to conduct daily work; conference rooms for faculty and staff meetings. A number of joint use spaces are available for each LLRS operational unit.

**Location / Spatial Relationships**
Most likely 3rd floor; reception area must be visible from elevator and stairways. The major spatial relationships are within functional units and not necessarily with the administrative offices. Administrative offices need to be in close proximity to each other, to the support staff, and to the photocopier, FAX, and files room.

**Capacity and Design**

- **Reception.** The reception area should be an aesthetically designed space to receive visitors, students, faculty, and other users, clients, and vendors. In addition to a receptionist’s desk (with LAN connections and telephone), there should be an attractively appointed waiting area for 4-6 persons (2-4 upholstered chairs, an upholstered couch, coffee table), and a workstation [see standard workstation specs]. The area should include a coat closet to accommodate needs of staff and visitors.

- **Space required.** 400 SF.

- **Furnishings.**
  2 - Modular L-shaped desks, adjustable height monitor and keyboard wire management for LAN, administrative LAN and electrical connections)
  2 - ergonomic desk chairs
  2 - 4-drawer lateral file cabinets for each desk
  1 - Credenza
  4 - Upholstered reception chairs
  1 - Upholstered couch
  1 - Coffee table
• **Supplies and Photocopy Room.** This could be a single room, approximately 200 SF, should be directly accessible from reception area. Built in counter along one wall with locked cabinets below and locked cabinets above; space on countertop for network queued printer (LAN connections and surge suppressed electrical outlets); space on countertop for FAX (telephone connections and surge suppressed electrical outlets); space for administrative photocopier with adjacent countertop space for sorting. [*If there is to be a coffee closet, it should not be included in this room as it would be too close to electronics.*]

  * Space required. 200 SF.
  * Furnishings.
    1. Built in countertop with lockable cabinets below
    1. Laserprinter (LAN and electrical connections)
    1. FAX (telephone and electrical connections)
    1. Photocopier (electrical connections)
    5. 4 drawer file cabinets
    50 LF shelving, either wood-faced or designed to match decor

• **Dean’s Office.** Should be directly accessible from reception area. As the principal administrative office for an important academic unit, the space must allow managerial efficiency while retaining visual aesthetics. Should include an area for small group conferences and discussions. Must have LAN connection, possibly two; numerous surge suppressed electrical outlets.

  * Space required. 240 SF.
  * Furnishings.
    1. Administrator desk with armchair
    1. Computer workstation with adjustable height monitor and keyboard; wire management for LAN and electrical connections
    1. Credenza
    1. 5’ round conference table
    4. Side chairs
    21 LF shelving, either wood-faced or designed to match decor
• Administrative support offices. At present there are three administrative support faculty and staff, one for program and personnel, one for grants and research, and one for budget and facilities; it is unknown whether this structure will continue very far into the future; but, if other division leaders have offices in this area, then so should R&I. There should be 4 offices, each of 150 SF; fenestration (with LCD or interior louvers) to reception (?); small coat closet.

• Space required. 600 SF (4 offices of 150 SF each).

• Location.

• Furnishings.
  1 - Desk, 30” x 60”, with ergonomic chair (telephone; electrical)
  1 - Computer workstation, 30” x 48”, with adjustable height monitor and keyboard, wire management for LAN and electrical connections
  2 - side chairs
  1 - 4-drawer lateral file cabinet
  42 LF - standard shelving, 10” nominal

• Conference Room. This multiple purpose conference room is primarily for various LLRS faculty and departmental meetings, and faculty/staff training and development. [it could be used as a seminar room if entrances could be from both the reception area and the LRS public area] The room must have a movable soundproof wall to divide the room in half. Walls should be a muted color, with track lighting available to highlight artwork. Each of the partitioned areas should have LAN, ITV, and telephone access [built in tv monitors; cabinetry with doors to screen/monitor] and appropriate surge suppressed electrical connections; dry marker boards; and coat closets. The room should have two identical conference tables, one for each partition, each capable of seating 18 people in comfortable chairs; in addition, there should be sufficient space along walls for an additional 20 chairs and at least two credenzas. The conference room should be adjacent to or in close proximity to a coffee alcove; this alcove should be easily hidden from view from both the reception area and the conference room/s.
• Space required. 1150 SF
• Location.
• Furnishings.
  2 - Conference tables, approximately 4' x 18' (capable of seating 7 along each side) [3 - conference tables, capable of seating 5 along each side?]
  32 - upholstered swivel chairs with arms
  20 - chairs
  2 - dry marker boards
  [2 - 20'' color monitors/overhead video projection? ceiling mounted hidden, electrically controlled projection screens?]
  2 - credenzas

• Coffee alcove. Should be adjacent to reception area, but hidden from view, and adjacent or in close proximity to the conference room. Must have a countertop work area with small sink and built-in cabinets and small refrigerator below, electrical outlets along back of countertop; built in storage cabinets above,
  • Space required. 40 SF
  • Locations.
  • Furnishings.

• Restrooms. One each for male and female, both with space for two people, one of which must be handicap accessible. These restrooms could be in a hall connecting the reception area with the Center for Information Media and Instructional Development.
  • Space required.
  • Location.
  • Furnishings.
Interactive Information Services
(“Information Arcade”)

Function
This area, expanding upon the original concept behind Instructional Technology Services, will present a new model and integrated facility to promote the central role of the library and learning resources services to the inquiry, scholarship, and academic imagination of the university, and to establish close proximity to information in all formats and to the expertise of librarians and media specialists. The area will assist students in transforming and “repurposing” information (including audio, text, and image) into multimedia and hypermedia course projects integrating the basic skills of speaking, writing, and reading; it will provide an area for multimedia and computer assisted course instruction; and it will assist faculty to develop materials and teaching methods that integrate electronic and traditional information resources as appropriate to each discipline and course. The two classrooms could be used by CIM, ACS, and other departments requiring multimedia and computers for either instruction or student projects.

In addition, the current functions of ITS, audio listening carrels, video viewing carrels, and print production must be accounted for and included within IIS operations.

Location and Spatial Relationships
Ideally, this area should be adjacent to the professional production areas of the Instructional Design division [third floor?], and would share a faculty development work area. While the area would utilize resources found throughout the building, the most important operational relationship in addition to Instructional Design would be with the Center for Information Media, whose faculty could be instrumental in assuring the success of the facility for students (both within and outside their programs) and faculty colleagues.
Capacity and Design

A primary workstation area will provide a laboratory for individual and small group learning and production activities; a state-of-the-art, networked classroom will provide for group learning and research activities; a faculty development work space will provide privacy to develop new courses and course materials. This area requires sound isolation from the rest of the floor; it also requires special attention to lighting, possibly with dimmers.

- **Workstation area.** Requires 30 multimedia workstations that can accommodate 2 people. These should be L-shaped workstations (30" deep, 48" along the inside long face and 30" along the inside short face). Computer (LAN and fiber connections; surge suppressed electrical; there may be the need to provide multiple cables to each workstation for multiple monitors, eg. computer and video) below desk top; adjustable monitor and keyboard height [mounted at corner of L?]; shelf below desktop for cd-rom, videodisc, and videotape players; sufficient desktop workspace for book and materials; ergonomic chairs. These workstations could be configured in 2-station alcoves with short dividers with sound dampening surfaces separating the two workstations and larger dividers separating alcoves. Workstations would be networked to queues for laser printers at a service counter. Additional 3 workstations with networked flatbed scanners and/or overhead video capture stations.

- **Space required.** Approx. 2050 SF
- **Location.**
- **Furnishings.**

  33 - modular laminated L-shaped workstations with edge banding, adjustable height keyboard and monitor; wire management; LAN and electrical connections; CPU mounted below desktop; shelves below desk for cd-rom, videodisc.

  64 - ergonomic chairs with casters

- **Faculty Development Room.** Should be sound isolated from rest of workstation area; possibly secondary access from Instructional Development or Center for Information Media [joint use]. Requires 5 multimedia workstations configured as above (L-shaped workstations, 2 ergonomic chairs per workstation, adjustable monitors and keyboards,
CPU, cd-rom, videodisc, video below desktop, etc.; each station could also have a flatbed scanner). Room would also require a countertop (30" x 72") with space for networked laserprinter, with storage cabinets below (for paper and supplies). Coat closet. Storage lockers for temporary storage of faculty books, software, materials, etc. would be desirable.

- **Space required.** approx. 310 SF
- **Location.** Third Floor.
- **Furnishings.**
  5 - modular laminated L-shaped workstations with edge banding, adjustable height keyboard and monitor; wire management; LAN and electrical connections; CPU mounted below desktop; shelves below desk for cd-rom, videodisc.
  5 - ergonomic chairs

• **Multimedia Instructional Classrooms.** Should be 1 classroom, able to be divided into 2 classrooms of 35 workstations with space for two ergonomic chairs per workstation; space on the desktop for two monitors imbedded at a slant (so that sightline to instructor and projected display is unobstructed), and adjustable height keyboard. Each workstation should be about 60" wide. It is desirable that there be a laser printer station for every 5 workstations. There should also be 1 instructor workstation (possibly standup), with 4 monitors embedded at a slant, and an adjustable height keyboard. Both primary and instructor workstations need to be potentially connected to cd-rom, videodisc, or video [network?] and LAN, fiber, and sufficient electrical. Space between front student desks and front screen (approx. 1 foot from front wall) should be 8 to 10 feet. A recessed ceiling mounted, electrically controlled 6' x 8' projection screen in the front of each room. White, dry marker boards should be on the front wall, at least one of which is capable of being seen when the projection screen is lowered. Ceiling mounted video projection is desirable. Lighting control from the instruction station is imperative. Each classroom should have fenestration (either LCD or with internal louvers) to be able to monitor from the support desk when used for open computing. A lockable built-in storage cabinet should be near the front. Could also be used for interactive instructional television (need to allow additional space for ITV cameras and monitors).
• **Space required.** approx. 1400 SF each; 2800 SF total

• **Location.**

• **Furnishings.** [to be filled in later]

**Audiovisual Services.** The main purpose of this unit is to provide user facilities for listening and viewing media resources (primarily videotape, videotdisk, audiotape, cd-audio, and other media). The storage of media resources is discussed under Access Services (p. 37). The area will need substantial electrical connections and must be connected to ITV fiber and LAN. A photographic copystand must be included in the area near the service counter (30 SF — this space is not included in the allocations below). Area is heavily used by all departments; audio is heavily used by Foreign Languages and Music.

• **Audiovisual Listening/Viewing areas.** For users to view or listen to audio or visual resources; a combination of single user stations using headphones and acoustically isolated group rooms.

• **Audio Listening stations.** 15 single person audio carrels, with electrical connections (rough in for ITV and LAN), sufficient desktop space and/or shelf space for audiotape cassette player and cd-audio player.

• **Space required.** 24 SF ea. Total 360 SF

• **Location.**

• **Furnishings.**

  15 - laminated audio carrels, 30" x 36", with edge banding and sound dampening surfaces, wire management for LAN, ITV rough in and electrical connections.

  15 - chairs

• **Video Viewing stations.** 20 video carrels with seating for 2 people, with sufficient electrical connections (rough in for LAN). Video monitor should be mounted above desk top; desktop space for videotape and/or videodisk player; at least half the stations should also have sufficient desktop space for a computer for interactive videodisks.
• Space required. 800 SF
• Location.
• Furnishings.
  20 - laminated video carrels, 36" x 48", with edge banding and sound dampening surfaces; connections for ITV and electricity, rough in for LAN.
  20 - chairs.

• Audiovisual Rooms. Four group listening/viewing rooms with large screen monitors; could be used for group study, small seminar, or production presentations to clients. These rooms would be open to use when not otherwise reserved. They should be extremely flexible in design, capable of changing with changes in technology. The rooms should have comfortable upholstered seating for up to 10 people, be equipped with light dimmers, have fenestration to maintain visual security from service counter, and be acoustically isolated from surrounding areas. [Rooms could be equipped with a two-way intercom to the IIS service counter for additional security]
  • Space required. 200 SF each, 800 SF total.
  • Location.
  • Furnishings. (for each room)
    10 - upholstered chairs Total of 40 chairs.
    1 - large screen monitor Total of 4 large screen monitors

• Audio Production room. Acoustically isolated clean room for recording narration for video or visual productions. Design and finishing should enhance sound recording quality. Required a built in countertop (36" x 72") with sufficient space for a computer (with adjustable height keyboard, CPU below counter) for digital recording, and audiotape cassette for analog recording [possibility for DAT]. LAN and surge suppressed electrical connections. Space for 2-3 chairs.
  • Space required. 64 SF
  • Location.
  • Furnishings.
    2 - chairs
• **User Support service area.** This area must be located so as to have visual control of all computer workstations, group audiovisual rooms, and the two classrooms; it must also be in close proximity to audio and video carrels. A countertop (30" x 15' x 39" h) must have space for 2 computer workstations (LAN, fiber, electrical, and telephone connections) with adjustable height keyboards and swivel monitors; built in lockable storage cabinets below. A bookstack area (approx. 700 LF 10" nominal shelving) behind the counter will provide storage for software and manuals. A small alcove (with computer workstations and 60 LF shelving) for two support staff [graduate assistants] should be behind the counter.

  - **Space required.** 550 SF
  - **Location.** In close proximity to Instructional Development, but with clear delineation between public areas and staff work areas.
  - **Furnishings.**
    2 - high task chairs
    714 LF - 10" nominal metal shelves in 17 DF units (14 shelves/unit), 7'6" tall
    2 - laminated workstations with edge banding (30" x 60"), with adjustable height monitor and keyboard; lockable drawers; LAN and electrical connections; shared telephone connection
    2 - ergonomic chairs.

• **Staff Office.** To provide staff support for student and faculty multimedia production, simple maintenance of equipment, and user assistance. Must be able to contain two staff alcoves, each with a desk, workstation, file cabinet, and shelves.

  - **Space Required.** 180 SF
  - **Location.** Immediately adjacent to service counter.
  - **Furnishings.**
    2 - laminated desks with edge banding (30" x 60"), with lockable drawers, surge suppressed electrical and telephone connections
    2 - laminated workstations (30' x 60") with edge banding, adjustable height keyboard and monitor; surge suppressed electrical and LAN.
    2 - ergonomic chairs
Reference and Electronic Information Services

Function

References and Electronic Information Services is an expanding area that will continue to fulfill two basic functions:

- To provide assistance, consultation, and individual and group instruction to users (including via telephone and electronic media) in the access and use of information resources and services (with and beyond LRS).
- To house and make accessible reference information resources in any media, including reference books, indexes and abstracts, atlases, government publications, and CD-ROM and other electronic resources.

Some of these services overlap and interact with other LRS divisions. In particular, as the need for and use of electronic information grows, some machine readable data resources currently housed in academic departments, government documents, and academic computing may be available through a single service location, combining ACS Consultation Service with Electronic Reference Information service.

Location and Spatial Relationships

The Reference Service area needs to be among the most visible, after Circulation, upon entering the building, but needs to be isolated from the noise of the Lobby, Circulation Service area, and primary traffic patterns. It must, therefore, be located on the First floor. As the primary user assistance point, Reference Services must be in close proximity to the Government Publications Service area; it is desirable that Reference also be somewhat close to Periodicals.

Within Reference Services there are several important spatial relationships. Computer workstations, accessing all electronic information resources (LAN (including CD-ROMs), OPAC, Internet, CWIS, etc.) must be visible from the Reference service desk area; reference bookstacks must be adjacent to study tables and in close proximity to the Reference service desk area and sound isolated photocopiers; Reference faculty offices must be adjacent to the staff
support work area and should be in close proximity to the Reference service
desk area. As ACS Consultation Service and Electronic Reference grow closer
together, they may be combined in a single consultation service that would
need to be located in close proximity to the Reference service desk area and
faculty offices [some consultation may take place in offices].

Capacity and Design

- **Reference Service desk area.** Must be a major focal point of the first floor.
  While its design and finish are an aspect of the overall interior design,
certain elements, such as lighting and placement, must make it stand out.
The need for signage should be reduced to absolute minimums. The
design of the desks must accommodate changing technological needs, must
not present a physical or psychological barrier to service, and should be
large enough (L-shaped with rounded end for consultations) to provide a
workspace, an adjustable height monitor and keyboard (CPU below
desktop; LAN, CWIS, electrical; monitor and keyboard capable of being
used from either end of the L; one computer could have a scanner
attached and might therefore need extra desk space) at the consultation
end, lockable telephone (2 telephone lines with voice mail) and storage
drawers. The inevitable desk clutter should be at least partly screened.
Each desk could be two-tiered so that part of the desk allows the librarian
to greet and interact with the user at or near eye level while librarian is
seated and the other part of the desk serves as consultation and
collaboration space. There should be space for two comfortable side
chairs and an ergonomic chair at the consultation end. The desks could be
configured to have visual control of overlapping reference service areas.
A single queued printer should be in a soundproof cabinet.

- **Space required.** 250 SF
- **Location.** First Floor, visible from main lobby.
- **Furnishings.**
  2 - L-shaped tiered desks, 30" x 60" x 39" along one side, 20" x 60" x 29"
  along the other; with wire management; 3 drawers; emergency call
  button on at least one desk.
  2 - high task chairs with casters
  2 - ergonomic work chairs with casters
  4 - comfortable side chairs
18 LF of shelving for ready reference (no higher than 39"
1 - information kiosk (electronic and print)

• **Electronic Information workstations.** This area provides access to a variety of electronic information resources available via the LAN (including access to cd-roms, OPAC, CWIS, and Internet). These need to be under the visual control of the reference service desk and need sound buffering from adjacent study and public use areas. There should be 30 workstations, at least 3 of which must be handicap accessible. Lighting is a particular concern in the workstation area.
  * Space required. Approx. 1350 ASF @ 45 SF/workstation
  * Location. First Floor.
  * Furnishings.
    - 30 - computer workstations, 30" x 48" with adjustable keyboard height, below desk CPU storage with accessible disk drive, desk space for cd-rom drive (?) and printer in sound buffer (or silent printers), LAN and surge suppressed electrical.
    - 30 - ergonomic chairs

• **Online Catalog Access workstations.** There should be at least 10 standup and 2 handicap access OPAC workstations within the Reference Service area; they do not have to be located in one particular place or grouped together. It is anticipated that these terminals will be scattered throughout the building and initially will provide access to both the OPAC and CWIS; as information systems change and users become more sophisticated the use of this equipment will change so their design and function must be flexible to accommodate change. [There must also be 5 OPAC workstations in the bookstack areas of both the 2nd floor and basement level.]
  * Space required. 280 ASF
  * Location. First Floor, Reference Services area.
  * Furnishings.

• **Reference Bookstacks.** This is an open bookstack area for non-circulating print resources (not periodicals or media), including some government publications. Bookstacks need to be in close proximity to the Reference service desks and immediately adjacent to study seating (seating does not
need to be visible from Reference service desks and should be sound buffered from electronic information area). This is a heavily used collection. Consultation work surfaces must be planned for this area; alternating high and low shelving could be one solution. Bookstack ends should be wood to match the interior design and have appropriate range label holders. Bookstacks should be capable of holding 24,276 volumes at 204 vols/DF capacity, not including atlases or indexes and abstracts; and 700 LF shelving for indexes and abstracts [both collections could stabilize or shrink in the near future; if indexes and abstracts continue to grow, some additional bookstacks may be added or, if reference volumes shrink, utilized from the reference stacks]. A separate atlas case with deep shelves should be in close proximity [possible as a transition from Reference bookstacks to Map area in Government Publications service area].

- **Space required.** 3800 SF (?)
- **Location.** First Floor.
- **Shelving.**

**Reference collection.** 10" shelves in alternate full height (12 ranges, 76" - 12 shelves per DF unit) and counter height (10 ranges, 40" - 6 shelves per DF unit), 7 DF units per range. 4' aisles are preferable, 3' aisles are a minimum.

**Indexes and abstracts.** 10" shelves in alternate full height (4 ranges, 76" - 12 shelves per DF unit) and counter height (3 ranges, 40" - 6 shelves per DF unit), 7 DF units per range. Locate adjacent to reference collection in the same shelving module and adjacent to study tables. 4' aisles are preferable, 3' aisles are minimum.

**Atlas collection.** 15 LF. [Could be designed as a large countertop (approximately 10' x 4') with shelves on one side for standing books (shelves 18" deep) and narrow shelves on the other side for books to lie flat; sloped top work surface.] The atlas collection could serve as a transition to the map collection area of the Government Documents service area.

- **Photocopy alcove.** Must be adjacent to the Reference bookstacks; could be shared with Government Publications service area. Must be in a space
acoustically isolated from stacks and reading/study areas with 5'-6' tall movable sound absorbing walls. The alcove should be similar to photocopier areas in other parts of the facility (should be at least one alcove on each floor containing collections). The alcove must be large enough to house 2 photocopiers (one circuit/machine), with a countertop work surface for sorting and collating and lockable built in storage below. A "panic" or user assistance button connected to the Circulation service would provide user assistance or programmable copiers to let a central place know when copiers need paper or toner.

- **Space required.** 90 SF
- **Location.** First Floor.

- **Reading and Study area.** Primary area for the use of reference resources. Study seating in the Reference service area could be shared with Government Documents and Periodicals. The most popular reading and study areas are somewhat secluded; noisy areas with heavy surrounding traffic are generally unpopular. Emphasis on group study generally means lots of conversation that can bother others close by. The Reference service area should be able to seat about 200 people. [This could be increased.]

  - 5 group study rooms (with interior fenestration) seating up to 6 people each (table 48" x 96" and 6 chairs; table with LAN rough in and electrical for 2 connections) [224 SF ea.; 1125 ASF]
  - 30 tables seating up to 4 people each (tables 48" x 60" and 4 chairs; 15 tables with rough in for LAN and 2 - 2-plex electrical connections);
  - 48 individual desks (24 desks, 30" x 48", with wire management and rough in for LAN and 2-plex electrical connection; 24 desks, 30" x 36").

These reading and study tables should be adjacent to the Reference bookstacks and situated so as to reduce the impact of conversational noise from the Reference service desks to the tables and from the tables to the Reference service desks and electronic information services workstations. Durability of tables, desks, and chairs is more important than design.

- **Space required.** 6900 ASF
- **Location.** First floor.

- **Furnishings.**
  - 5 - laminated tables with edge banding, seating 6 (48" x 96")
15 - laminated tables with edge banding, seating 4 (48" x 60"), with wire management (rough in for LAN and electrical connections)
15 - laminated tables with edge banding, seating 4 (48" x 60")
24 - laminated desks with edge banding (30" x 48"), with built in electrical and rough in for LAN connection
24 - laminated desks with edge banding (30" x 36")
198 chairs.

- Reference Faculty Offices. There are currently 10 faculty librarians who provide service at the Reference Desk, one of whom has a split assignment in another area; no growth is anticipated in this number except for the possible merging of the data consultation between ACS and Reference into a single position or team. The offices should be visible from the Reference service desk, and must be easily accessible to users and advisees. Each faculty office must be 150 SF, preferably with a window, space for a desk (electrical, telephone) and workstation (LAN, electrical). Wall space should be provided for posters or artwork to individualize work environment. Office doors should be oversized (48" wide), opening onto or adjacent to the work area. Small bulletin boards should be outside each door. If there is interior fenestration, it must be louvered or LCD to gain privacy when necessary.

- Space required. 1500 ASF
- Location. First Floor, adjacent to Reference service area.
- Furnishings (for each office).
  1 - laminated desk with edge banding (30" x 60")
  1 - workstation (30" x 60") with adjustable height monitor and keyboard; LAN and surge suppressed electrical; task lighting
  1 - ergonomic desk chair (option with arms)
  2 - side chairs
  1 - 4 drawer lateral file cabinet
  42 LF - standard metal shelving, 10" nominal

- Staff work area. Provides space for 1 classified staff (could receive users prior to entering offices) and 1 student worker and a small common area. The staff member would need one desk (telephone,
electrical), ergonomic chair, and a computer workstation (LAN, electrical), 2 side chairs, and 2 4-drawer lateral file cabinets. The student worker is primarily involved with reshelving and does not need a separate work area [or could use the common area]. The common area would serve to separate the staff work area and faculty offices and would consist of a countertop with lockable built in cabinets below and 20 LF of shelving above; and a small coat closet.

- **Space required.** 200 SF
- **Location.** First floor, adjacent to Reference faculty offices.
- **Furnishings.**
  1 - laminated desk with edge banding (30" x 60"); telephone and electrical connections
  1 - workstation (30" x 60") with adjustable height keyboard and monitor; wire management for LAN and electrical connections; task lighting
  1 - ergonomic desk chair
  2 - side chairs.

- **Machine Readable Data Consultation Services.** This area would combine the data consultation services of Academic Computing with Reference to provide consultation for and assistance with accessing and utilizing various statistical datasets in electronic format; it would also provide a space for the future development of text and image analysis tools and resources. The area would also serve as an electronic information services research and development area. Alcoves would be available to faculty and graduate/upper division students for data/text manipulation requiring specialized hardware and/or software. Must have numerous electrical outlets and LAN connections and be extremely adaptable to reconfiguration.
  - **Space required.** 420 ASF (3 consultation/work alcoves @ 90 SF ea.; R & D area @ 150 SF)
  - **Furnishings.** (See standard alcove configuration)

- **Library Instruction Laboratory.** This room would primarily be used for the large library instruction program (information literacy, especially with electronic information, will be a growing educational and societal need),
and could be used for auto-instructional and CAI packages [anticipate moving to CAI for 104/204 within 5 years]. Requires 15 workstations that can accommodate 2 ergonomic work chairs per station; space on the desktop for one monitor embedded at a slant; adjustable height keyboard. Each workstation should be about 48" wide. Laser printer station for every 5 workstations is desirable. One instructor workstation (possibly standup), with one monitor embedded at a slant; adjustable height keyboard. All workstations connected to LAN (cd-rom network, OPAC, instructional server) and surge suppressed electrical. Space between front student desks and front screen should be 8-10 feet. Recessed ceiling mounted, electrically controlled 6' x 8' projection screen; white dry marker board visible when projection screen is down; ceiling mounted video projection is desirable. Lighting control from instructor station. Classroom should have fenestration (either LCD or internal louvers) to be able to monitor when used for open computing. Lockable built in storage cabinet (24" x 36") should be near the instructor station.

- **Space required.** 800 SF

- **Location.** First Floor, near the Reference service desk and offices, but in a location that does not require walking through the service area to enter.

- **Furnishings.**

  15 - modular student workstations, 30" x 48", with embedded monitors, adjustable height keyboards, wire management for LAN and electrical connections
  3 - printer stations, 36" x 48"
  1 - instructor workstation/lectern, 30" x 48", with embedded monitors (2-3), adjustable height keyboard, lighting controls
  30 - chairs

- **Library Instruction Classroom.** Primarily used for large library instruction program demonstrations and lectures (issues of information literacy). Room would be available for open study when not in use as a classroom, so instructor station must be lockable. Must be able to seat 40 students comfortably and retain a flexible seating arrangement (tables for 2 people, 30" x 48" that can be moved into groups of 4, 6, or 8). Recessed ceiling mounted, electrically controlled 6' x 8' projection screen; space between
front row of desks and screen should be 8'. White dry marker boards, visible when screen in lowered; ceiling mounted video projection is desirable. Classroom should have fenestration (either LCD or internal louvers) to be able to monitor when room is available for open study.

Lockable built in storage cabinet (24" x 36), with wire management and LAN and electrical connections, should be near instructor station. Shared with CIM...

• Space required. 1000 SF
• Location. In close proximity to Reference and Government Publications service areas.
• Furnishings.
  40 - laminated student desks with edge banding, 30" x 36"
  40 - chairs
  1 - instructor lectern, with wire management, embedded monitor, adjustable height keyboard, CPU below top, lighting controls.
  1 - 6' x 8' projection screen
Faculty Reading Room

Function
Provide Faculty a quiet reading and meeting place; to provide an environment to encourage faculty and library interaction and collaboration.

Location and Spatial Relationships
There are no special or important spatial relationships with other areas of the Library and Learning Resource facility. The most logical relationship is probably with the open stack circulating collection [most likely on second floor] or near the faculty development work room in the Interaction Information Services area. If located near the classrooms, it could be used as a "Green Room" for conferences and/or lectures.

Capacity and Design
The room should be able to seat, in comfortable upholstered chairs and couches, 15 faculty. Must be well designed and arranged to encourage interaction and privacy. Floor lamps, task lighting, and track lighting would improve overall ambience. In general, it could be designed around three clusters of furniture. Must have exterior windows and wall space for artwork. The room must not be hidden away in a distant corner of the facility.

- Space required. 350 SF
- Location.
- Furnishings.
  - 3 - upholstered couches, each seating 3 people
  - 6 - upholstered chairs
  - 3 - end tables with lamps
  - 3 - coffee tables
  - 1 - credenza
Access (Circulation) Services

Function
This service is one of the major user contact points of the Library. It provides stack management (reshelving and shelf reading) for all print collections (except Reference, Government Documents, and current periodicals). It provides a discharge and sorting area for returned materials; and provides personal check-out (charge) and will manage automated check-out. Approximately 150,000 print resources (primarily books) circulated through this department in FY 1992. The proposed Circulation Services area will expand to incorporate Information/Document Delivery services (combining the functions of interlibrary loan and periodicals photocopy services) and Reserve. Closely affiliated and housed in the same area will be the former services of Distribution (equipment and educational video booking and storage) and Instructional Technology collections (audio CDs and tapes and videodiscs) in a single media resources collection.

Location and Spatial Relationships
The main Circulation service counter should be visible from the entrance turnstiles into the secured lobby and should control egress through the exit optical turnstile with 3M security detection. It should be near an elevator, preferably not public, to transport materials between floors. The service counter (or counters around a central secured work area) will serve as the principle public contact with Information/Document Delivery, Reserves, CMLE, and media resources collection and equipment, all of which will be housed in the Circulation Services work area. The work area should be secure and designed to allow easy return of equipment, a secure exterior and interior materials return, and a lockable service counter with a secure materials return from both the extended hours study room and the outside.

Capacity and Design
• Circulation Services Counter/s. The primary counter should be about 40' in length, at least 10' of which serve as the exit control zone (exit must be designed so that those tripping the security alarm cannot exit rapidly).
The primary counter will serve as a principle directional information point for patrons unfamiliar with Library services or resources or not wishing to use the information kiosks. The counter should be designed to screen clutter on the worktop; it should have space for three circulation workstations (monitors imbedded at a slant in worktop, adjustable height keyboards, light wand; CPU below worktop) which will allow check-out service for all LRS resources, reserve materials, and document delivery materials. Must be in close proximity to reserve and media compact storage module; an under the counter shelf could serve for Document Delivery book pickup storage area. [Separate counter for Reserve materials and Media resources with separate circulation terminals is a possibility]

- Space required. 500 SF (?)
- Location. First Floor. Adjacent to main lobby exit.
- Furnishings.
  3 - high task chairs
  1 - 3-drawer file cabinet (for Document Delivery materials)
  1 - 30" x 40' laminated counter top, with some built in storage, space for CPUs, at least 9 LF shelving (for will call) below, wire management, telephone and LAN connections

- Sorting area. Within the Circulation services work area and immediately adjacent to the services counter. Needs to include 2 workstations with circulation terminals (adjustable height monitor and keyboard, light wand, CPU below desktop) for discharge (and Reserve processing?). Space next to each workstation for two booktrucks; storage area for additional 6-8 book trucks for transporting materials to other floors. 150 LF shelving for sorting. One work table [between workstations?].
- Space required. 200 SF
- Location. Within Circulation work area, adjacent to service counter.
- Furnishings.
  2 - workstations, 30" x 60", with adjustable height monitor and keyboard (LAN, electrical)
  1 - work table, 48" x 60'
  2 - ergonomic work chairs.
• **Closed Stack Shelving.** For media and reserve materials.

• **Reserve materials area.** Within the Circulation services work area and immediately adjacent to the services counter; also needs to be near service counter for extended hours study room if possible. Approximately 300 LF shelving; storage in high density compact shelving combined with Media Resources collections. Reserve processing would be handled within the Circulation work area.

• **Media Resources Collections.** Provide within the Circulation work area a closed stack storage area for non-print media, including 16mm film and phonograph recordings (both of which have already been eliminated from acquisition and will be phased out over time), video tape, videodisc, CD-audio, and newer media technologies (eg. CD-I, CD-V, digital storage). Storage will be combined with the reserve materials collection in a single high density compact storage unit. This area needs to be easily accessible from the Circulation service counter and from the Media Support Technologies area.

- **Space required.** 655 ASF
- **Location.** First floor, within Circulation work area.
- **Shelving.** This will be a single high density compact storage module allowing substantial growth for all media. A module will consist of 63 DF units (9 ranges of 7 units, with three stationary units and two aisles). All shelves to be 9" nominal except one range to be 12" nominal.

• **Media Support Technologies.** Anticipate the need to continue providing distributed equipment support to campus instructional programs (eg. video players and monitors on carts) for at least a short period of time beyond the completion of building. Distribution of some equipment (eg. overhead projectors) will probably cease as each classroom becomes equipped. A small area should be set aside for a workbench to handle small repairs. As the need for this service decreases, this space could be used for other purposes. If the campus were to move to signal distribution instead of equipment distribution [commitment to costly equipment, control, and fiber cabling?], this area should be capable of being easily connected to fiber links [fiber capability should be available...
from the beginning].
• Space required. Approx. 800 SF.
• Location. First Floor, within Circulation work area.
• Furnishing.
  1 - workbench, 36" x 96", with one shelf (24" deep) below and one shelf (18" deep) above
  1 - high task chair

• Staff Work area. This will be a common space serving the needs of all Circulation Services. For Circulation it will provide space for billing and mailing overdue notices and other general office work; for Media support it could provide media booking assistance. This area must be adjacent to the sorting area [two discharge workstations connected to this area?]. Must have space for 2 work tables, 2 computer workstations, filing cabinets, and a coat closet (serving all staff in area). There should be 4 semi-private alcove work areas, each with a desk, workstation, file cabinet, and shelves, for classified staff/supervisors; two alcoves should be in close proximity to the Circulation service counter and to staff work area; the other two could be closer to a Media resources counter (if necessary).
• Space required. 610 SF total [250 SF work area, alcoves 90 SF each])
• Location. First Floor, within Circulation work area.
• Furnishings.
  2 - laminated work tables with edge banding (48" x 60")
  6 - laminated workstations with edge banding (30" x 60"), with adjustable height monitor and keyboard (LAN, electrical)
  4 - laminated desks with edge banding (30" x 60"), with lockable drawers (telephone, electrical)
  6 - work chairs
  4 - ergonomic desk chairs
  5 - 4-drawer file cabinets
  4 - 2-drawer file cabinets (for alcoves)
  48 LF of shelving (12 in each alcove)

• Faculty Office/s. At present, one librarian supervises and coordinates Circulation functions, one supervises and coordinates Distribution
Services, and one supervises interlibrary loan. In the future there may be only two people coordinating and supervising all Access Services functions; nonetheless, a third office should be included. Both offices should be accessible from outside the Circulation work area as well as from within. Each office should be 150 SF, preferably with a window, space for a desk (telephone, electrical) and workstation (LAN, electrical). Wall space should be provided for posters or artwork to individualize work environment. Office doors should be oversized (48”). Small bulletin boards should be outside each door. If there is interior fenestration, it must be louvered or LCD to gain privacy when necessary.

- **Space required.** 150 SF for each office; 450 SF total
- **Location.** First Floor, adjacent to Circulation work area.
- **Furnishings.** (for each office)
  1. laminated desk with edge banding (30” x 60”); telephone and electrical
  2. workstation (30” x 60”) with adjustable height monitor and keyboard; LAN and surge suppressed electrical; task lighting
  3. ergonomic desk chair (option with arms)
  4. side chairs
  5. 4-drawer lateral file
  6. 63 LF - standard shelving, 10” nominal

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- **Office for Central Minnesota Libraries Exchange (CMLE).** This office, supported by State funding, supports the information needs of, provides technical support and professional development programming for regional school and public librarians, and coordinates the work of regional public libraries, community and technical college libraries, and school media centers. The collections of St. Cloud State University provide a major resource for this service, supported by other statewide collections through MINITEX; needs to be close to an easy delivery point [e.g., loading dock?]. The office should be two rooms: a staff work area and a director’s office.

- **Staff Work area.** For sorting, packing, unpacking CMLE interlibrary loan materials; for production of newsletter; for responding to information requests; for general office work. Space for four book trucks. A countertop (30” x 10’) work area, with built in lockable
cabinets below and 20 LF shelving above, electrical connections, and a telephone jack [countertop plain paper FAX?]. Coat closet. Windows are desirable. Space for up to 4 book trucks.

- **Space required.** 550 SF
- **Location.** First Floor, within Circulation work area, adjacent to Document Delivery (ILL) office.

- **Furnishings.**
  2 - laminated desks with edge banding (30” x 60”), with telephone and electrical
  4 - laminated workstations with edge banding (30” x 60”), with adjustable height monitor and keyboard, LAN and surge suppressed electrical
  6 - ergonomic work chairs
  3 - laminated work tables with edge banding (48” x 60”)
  3 - 4-drawer filing cabinets
  1 - lockable storage cabinet (18” x 24”)
  54 LF - standard metal shelving
  1 - photocopier
  1 - FAX

- **CMLE Director’s Office.** For administration of CMLE activities, production of newsletter, union list of serials, CMLE directory, preparation of grant applications, state and federal reports, regional workshop materials, etc.

- **Space required.** 150 SF
- **Location.** First floor, immediately adjacent to CMLE work area, within the Circulation work area.

- **Furnishings.**
  1 - laminated desk with edge banding (30” x 60”); telephone and electrical
  1 - workstation (30” x 60”) with adjustable height monitor and keyboard; LAN and surge suppressed electrical
  1 - ergonomic desk chair (option with arms)
  2 - side chairs
  1 - 4-drawer lateral file
• **Document Delivery work area.** With the emphasis on access over collections [achieving an “appropriate interdependence” and balance between the two]. Area for processing and sending/transmitting/receiving of interlibrary loan requests and processing and sending/transmitting on campus copy requests [there may be the need for 2 scanners if electronic transfer of information increases greatly]. This would integrate the similar services now supplied by Interlibrary Loan and the photocopying service of Periodicals. The area could have as many as 6 people working at any one time; desirable to have a semi-private alcove for the area supervisor (classified staff) with desk and computer workstation. Coat closet storage. Must be close to CMLE work area; area to store materials for pickup (3 LF shelving, 3-drawer file) must be near Circulation service counter, not necessarily in Document Delivery work area. Document Delivery staff must be accessible to the public.

* Space required. 510 ASF

* Location. First Floor, within Circulation work area, adjacent to CMLE, convenient to Circulation service counter.

* Furnishings.

  5 - laminated workstations with edge banding (30" x 60"), with adjustable monitor and keyboard height, space on desk top for sound buffered printer; at least one station must have space for flatbed scanner and laserprinter either on the desktop or on an adjacent workspace, eg. countertop, (LAN, electrical)

  1 - laminated desk with edge banding (30" x 60"), with lockable drawers, with typewriter side table (30" x 22"), (telephone, electrical)

  1 - microfilm/microfiche reader printer (electrical) [development of digital microform scanning for direct transmission or hardcopy output? would require microcomputer and LAN connection]

  1 - countertop with built in storage below (30" x 10"), with space for FAX and possibly laser printer and photocopier, (telephone, LAN, electrical)

  1 - laminated work table with edge banding (48" x 60")

  6 - ergonomic chairs

  60 LF shelving for manuals, etc.

  1 - bulletin board
• **Access Services Storage Room.** Provide a central storage facility for equipment, paper, and supplies related to daily operations of facility. Must be accessible from all areas of Circulation work area. Must have 105 LF shelving, 18" deep; sufficient space to stack 150 cases photocopy paper (12" x 18") and 100 cases of computer paper (10" x 12") [these ratios may change with increasing use of computers; on the other hand the volume of printing may decrease if all students have electronic data storage accounts]. Two or three lockable cabinets are desirable. Must be non-static environment.
  - **Space required.** 120 SF
  - **Location.** Within Circulation work area.
  - **Furnishings.**
    3 - lockable storage cabinets
    105 LF - standard metal shelving, 18" nominal

• **Student Worker Cloak room.** To provide a secure area, within the Circulation work area, for time dock [probably computer mediated in the future] and student worker lockers (25). Must be adjacent to secure entrance to Circulation work area; could be adjacent to student worker employment coordinator's alcove.
  - **Space required.** 100 SF
  - **Location.**
  - **Furnishings.**
    1 - laminated table with edge banding, 30" x 36", with LAN and electrical connections (for either time dock or computer)
    25 - metal lockers, 12" x 24"

• **Sink alcove.** Within the Circulation work area. Must have a countertop work area (30" x 72") with small sink and built in cabinets below (could include a small refrigerator); electrical outlets along splashboard; built in storage cabinets above. Must be hidden from public view.
  - **Space required.** 40 SF
  - **Location.** Within Circulation work area
  - **Furnishings.** n/a
Government Publications and Maps Area

Function. The primary purpose of this unit is to provide access, through its status as a selective depository, to and services for United States Government publications in print, microform, and other formats. It is anticipated that over the next decade a majority of U.S. Government publications will migrate from print to electronic format, the latter in a combination of cd-rom depository items and Internet access; as much as 90% of current print resources may be available in electronic form only. As a consequence, this area will undergo some of the greatest changes and must remain extremely flexible.

Location and Spatial Relationships The Government Publications collections and service area needs to be immediately adjacent to the microforms reading area (part of Periodicals) and in close proximity to the Reference service area. Maps and Government Publications are somewhat discrete collections, but are part of the same overall service. Like the Reference service area, the area must be isolated from lobby noise and heavy traffic patterns, but not a physically separate room.

Capacity and Design Government Publications bookstacks. Most of the current government publications collections are not accessible from the online catalog; those that have experienced a dramatic increase in use [effort to include in PALS?]. Portions of the Government Publications collection will be merged into the Reference collection (eg, some indexes and state government publications [some federal documents reference materials?]), some into Periodicals (eg, government produced periodicals), others merged into the main bookstacks (eg, most state government publications). Government publications are predominantly microform (printed materials are only 16% of the federal publications collections); if microforms are to remain in the Government Publications area, that area must share a common microforms reader space with Periodicals. For printed government publications, 60% should be in compact shelving.
[probably at the basement level; would occupy less than one high density compact storage module or about 304 SF], with the other 40% [including Monthly Catalog] in a Publications and Maps service area adjacent to the Reference Service area (approx. 2000 LF or about 7 DF ranges, 7 units in length [similar to Reference bookstacks, alternating high and low stacks?]; 1000 SF). As dependence on printed government publications decreases, this area must be easily convertible to other uses [most likely electronic access].

- **Space required.** 1600 ASF for open shelving. [if all open, then 3400 SF]
- **Location.** First Floor, in close proximity to Reference service area.
- **Shelving.**
  
  10" shelves nominal (7 ranges 76" with 7 units per ranges and 14 shelves per DF unit. 4' aisles are preferable, 3' aisles are minimum) [other shelving already defined as part of the Research collections bookstacks on basement level]

- **Map Collections area.** This area, part of the Government Publications service area, would provide storage cabinets for the approximately 80,000 U.S., state, and international maps (most maps, including USGS topographic series, are part of the federal depository program). Few of these resources are currently accessible via the online catalog [need for input] at present. These resources may migrate to electronic form, but their graphic nature means this process will be slower than for textual or statistical information. Provision for the preservation of maps (eg. laminating) should be part of the technical processing (p. ). The large format of most maps means there must be sufficient table space; at least 3 large work tables with chairs. Some large format atlases from this area should be part of the atlas collection (see Reference) that could serve as a transition between areas [would the LC classed atlases, eg. plat books move to Reference? or to atlas area?]
- **Space required.** 900 SF
- **Location.** First floor, adjacent to the Reference service area and an open study area that would serve as a transition area between Reference and Government Publications.
- **Furnishings.**

  81 - metal map cabinets (36" x 48") with 5 drawers each, on 4" riser,
stacked 3 units high.
2 - oversize metal map cabinets (48" x 84"), on 4" riser.
3 - laminated work tables with edge banding (48" x 96")
1 - large light table (48" x 96")
24 - chairs

• Faculty Office and Work area. There must be one faculty office and an adjacent work area (see below). The work area is not a processing area; the government publications processing area would be merged into the main Technical Processing area. The work area allows for sorting and general work area for the maintenance of the Government Publications bookstacks and the maps.

• Faculty Office. Provides space for the administration of the Government Publications service. Like all faculty offices, it also provides space for consultation, course preparation, advising of students, and research. As such it must provide a comfortable and inviting environment; window is desirable. Wall space should be provided for posters or artwork to individualize work environment. If there is interior fenestration, it must be louvered or LCD to gain privacy when necessary. Coat closet.

• Space required. 150 SF

• Location. First Floor, adjacent to the Government Publications service area.

• Furnishings.

1 - laminated desk with edge banding (30" x 60"); telephone and electrical
1 - workstation (30" x 60") with adjustable height monitor and keyboard; LAN and surge suppressed electrical; space on desktop for cd-rom drive; task lighting
1 - ergonomic desk chair (option with arms)
2 - side chairs
3 - 4-drawer file cabinets [2]
63 LF - standard shelving, 10" nominal

• Work area. For sorting and stack maintenance of Government Publica-
tions service area. Should have a countertop (48” x 10’) with built in lockable cabinets below and a worktable. Coat closet. LAN and electrical cabling would allow future conversion of this room to an office if necessary. Must be adjacent to faculty office and Government Publications open bookstacks. This room could have a counter top opening into the service area (30” x 48”) for user assistance; would need a lockable security screen. As government print format decreases in volume, this room should have the flexibility to convert to an electronic access space and/or group study or an office. Must be adjacent to or include a staff work alcove.

* Space required. 240 ASF (incl. 90 SF alcove).
* Location. First Floor.
* Furnishings.
  For Work area
  1 - laminated work table with edge banding (48” x 60”)
  2 - chairs
  For staff alcove – see standard alcove configuration & furnishings

* Photocopier alcove. Should be adjacent to both the Government Publications open bookstacks and the map cabinets; could be shared with Reference service area. Should be in a space acoustically isolated from stacks and reading/study areas. Large enough to house 2 photocopiers (one of which must allow enlargement and reduction), with a countertop work space for sorting (built in lockable cabinet below). “Panic” button for user assistance. [see Reference Services area, p. 23]
  * Space required. 75 SF
  * Location. First Floor.

* Reading and Study area. Primary area for the use of government publications and maps. The Government Publications service area should be able to seat about 100 people [additional study tables could provide a transition between Reference and Government Publications and be used by both sections] (20 tables seating up to 4 people each (5 with wire management and rough in for LAN and electrical connections), and 20 individual desks (10 with wire management and rough in for LAN and electrical connections). One large computer table (60” x 96”) should be
divided into carrels and have access to the LAN (cd-roms and OPAC) and have space on either the desktop or shelf for a printer [could be queued]. These reading and study tables should be adjacent to the Government Publications open bookstacks and situated so as to reduce the impact of conversational noise from service desks and areas of heavy traffic.

- **Space required.** 3260 2260 ASF
- **Location.** First Floor.
- **Furnishings.**
  15 - laminated tables with edge banding, seating 4 (48" x 60")
  5 - laminated tables with edge banding, seating 4 (48" x 60"), with wire management, rough in for LAN, and electrical connections
  10 - laminated desks with edge banding (30" x 36")
  10 - laminated desks with edge banding (30" x 48") with wire management, rough in for LAN and electrical connections.
  1 - laminated table with edge banding, divided into four carrels with 12" shelf, seating 4 (60" x 96"), with wire management for LAN and electrical connections.
  108 - chairs.
Periodicals Service area

Function At present, Periodicals receives, processes, and provides access and user assistance for approximately 2700 periodical titles and 1600 corporate annual reports. The service is divided into five components.

• Current Periodicals. A closed collection (access for faculty, graduate students and library staff only, with limited seating (5)) for current year periodicals and all corporate annual reports. A large service counter provides the only access for undergraduates and other users [requires a current barcode] who check-out materials for use in the building; the counter also provides storage for newspapers. Two tables behind the counter provide a staff work area. The current stack area is also used for storage. There is also a separate user assistance/information desk on the floor [infrequently staffed].

• Annual Reports. Closed area within current periodicals; currently kept in 11 4-drawer file cabinets. [how long to keep in paper; move to fiche would cost; alternative storage might be Hollinger boxes]

• Bound Periodicals. Open stacks.

• Microforms. Storage and public use area (readers and printers) for microfiche and microfilm for periodicals, newspapers, and college catalogs; also storage area for classified microfilm and microfiche sets.

• Receiving and processing area. Staff work area and storage area.

Many of these functions will likely change over the next several years, again primarily as the result of increasing electronic access to information. Over the last two years more than 200 electronic journals and newsletters, many of which are never produced in print form, have become available on Internet. Some of these are free; others require subscription. Regardless, the major issues of cost, cataloging, copyright, and archiving electronic journals needs to be addressed. More and more scholars and scholarly presses are investigating electronic publishing as a partial solution to the problem of spiraling serial
costs and the imperative to cancel subscriptions as the answer to cost containment.

Merging government periodicals into a single periodicals area and making holdings available on the online catalog will go a long way to improving access to holdings.

Location and Spatial Relationships

The Periodicals service area should be on the first floor, near the Reference service area housing indexes and abstracts, and in close proximity to the Government Publications service area in order to utilize a shared microforms resources area (described below).

Within the unit, a service counter should be immediately adjacent to the current periodicals stack area, providing user assistance and check-out, controlling access. The service counter should be in close proximity to the microforms resources area. The staff work area for receiving and processing should be moved to a central technical processing area [problem of easy access to current, bound, and micro collections]. Bound periodicals will be moved to a section of the high density compact storage area on the basement level [could be classified and become part of the main collection; regardless, older volumes (older than 5 years) could (should) all checkout]. Indexes and abstracts will move to the Reference bookstacks [some discontinued indexes could be discarded, classified for inclusion into the circulating collection]. The photocopying service could be merged with interlibrary loan into a Document Delivery service [this document assumes merger].

Design and Capacity

- Current Periodicals. There are two parts to this service: a stack area and a service counter. [should this area remain a closed stack/limited access area]

- Current Periodicals stack area. There are about 2700 current periodical subscriptions; moderate growth to 3000 subscriptions could [should] take place. Requires 2295 LF of 10" nominal shelving to hold the current collection [Could hold a moderate increase; approx. 4% unused. Whether current periodicals will be stored as at present (requiring 42 DF units of 9 shelves) or on slanted display shelving (requiring about 100 DF at 30 titles per unit) has enormous square
footage implications]. Stacks should be standard metal cantilevered bracket library shelving in units standing 7'6" high. Additional provision should be made to move current newspapers from shelves under service counter to special stack with shelves 24" x 36"; this would require 26 shelves [again, open vs closed access, and flat vs slanted display shelving has square footage implications]. The stack area also has limited seating (5 desks with chairs) for faculty or graduate students.

- **Space required.** 1000 SF
- **Location.** First Floor.
- **Shelving.**
  2295 LF standard metal cantilevered bracket library shelving, 10" nominal.
  78 LF standard metal shelving (for newspapers), 24" nominal
  5 - laminated desks with edge banding, 30" x 36"
  5 - chairs

- **Periodicals Service counter.** This provides workspace for the check in/check out function and sorting/reshelving; it also provides for the security and access control necessary for closed stacks [a counter would not be necessary in open stacks, but a glass wall separating an optical turnstile entrance from a security detect exit, the latter passing a small control/assistance counter from a workroom]. A counter, with work top clutter shielded from user view, with 4 return slots emptying to movable book bins, built in storage below countertop, and space for 4 terminals. There should also be space for 2 worktables. [annual reports file cabinets included here]
- **Space required.** 500 SF
- **Location.** First floor
- **Furnishings.**
  1 - countertop, 3' x 40', with built in storage below, 4 openings for materials return emptying to movable bookbins (30' x 30'); space for 4 monitors on desk top (CPUs below counter), adjustable height keyboards, lightwand, wire management (LAN and electrical connections); telephone.
  4 - high task chairs
2 - laminated work tables with edge banding, 48" x 60"
2 - chairs
11 - 4-drawer file cabinets (annual reports)
1 - newspaper rack

- Photocopier alcove. Three alcoves should be within the Periodicals area, two immediately adjacent to the Periodicals service counter or in close proximity, and one within the current periodicals area [if open current periodicals reading area, then this should be reversed; an additional alcove could be used for text scanning to download to disk or transmit]. Should be in a space acoustically isolated from reading/study areas. Large enough to house 2 photocopiers (one of which must be handicap accessible), with a countertop work space for sorting (built in lockable cabinet below). "Panic" button for user assistance. [see Reference Services area, p. 23]

- Space required. 225 ASF (3 @ 75 SF each)
- Location. First Floor.
- Furnishings.
  6 - photocopiers.

- Periodicals Reading Area. Must be immediately adjacent to the current periodicals display area, convenient to both the periodicals service counter and a photocopier alcove, and be a controlled access area (eg. optical turnstiles with detect gates). Must be capable of seating 100 persons in a mix of single person and four person study tables (10 single person tables, 20 four person tables) and lounge chairs (for 10 people). Must have adequate lighting and open traffic circulation; an exterior window would be beneficial. As a browsing/reading area it must be attractive and comfortable.

- Space required. 3000 SF
- Location. Immediately adjacent to current periodicals stacks
- Furnishings.
  20 - laminated tables with edge banding (48" x 60") seating up to 4 people each (10 tables should have rough-in for LAN, 2 - 2-plex electrical connections, and wire management)
  10 - laminated tables with edge banding (30" x 36") seating on person
• Periodicals Faculty Office. There is one library faculty responsible for managing the periodicals collections and supervising the staff. The office should be visible from the Periodicals service counter and easily accessible to users and advisees. The faculty office should be 150 SF, preferably with a window, space for a desk (electrical, telephone) and workstation (LAN, electrical). Wall space should be provided for posters or artwork to individualize the work environment. If there is interior fenestration, it must be louvered or LCD to gain privacy when necessary.
  • Space required. 150 SF
  • Location. First floor, in close proximity to Periodicals service counter.
  • Furnishings.
    1 - laminated desk with edge banding, 30" x 60"; telephone and electrical connections.
    1 - workstation, 30" x 60", with adjustable height monitor and keyboard; LAN and surge suppressed electrical connections; task lighting.
    1 - ergonomic desk chair (option with arm)
    2 - side chairs
    1 - 4-drawer lateral file cabinet

• Periodicals Work room. For sorting and stack maintenance of current periodicals area. Should have a countertop (36" x 10') with built-in lockable cabinets below, 20 LF shelving above. Coat closet. LAN and electrical cabling would allow future conversion of this room to other uses. [This room could have a countertop opening into the service area (30" x 48") for user assistance; could also provide exit security for an open access current periodicals area; would need a lockable security screen.]
  • Space required. 150 SF
  • Location. First floor.
  • Furnishings.
    1 - laminated work table with edge banding (48" x 60")
    2 - chairs
- **Staff Work Alcove.** Must be within the controlled access area and adjacent to both the periodicals work room and periodicals stacks/reading area. Could be a modular alcove within Periodicals workroom. Must have a desk, workstation, shelving, and file cabinet. Must be sound isolated from reading area.
  - Space required. 90 SF
  - Location.
  - Furnishings.
    1 - laminated desk with edge banding, 30" x 60", with lockable drawer, telephone and electrical connections
    1 - laminated workstation with edge banding, 30" x 60", with adjustable monitor and keyboard height, wire management, LAN and electrical connections
    1 - ergonomic chair
    1 - side chair
    1 - 4-drawer file cabinet
    21 LF - standard metal shelving

- **Microforms area.** This is a joint use area providing storage and facilities to read and print resources in microformats, including microfiche, microfilm, ultrafiche, and microcard. It provides storage for microforms for Government Publications, Periodicals, and the general collection; these could be discrete storage areas, with government publications and periodicals adjacent to their respective service areas. The common reading and printing area is a single joint use area. The government publications microforms storage area must be adjacent to the Government Publications service area; the periodicals microforms storage area must be in close proximity (visual monitoring, user assistance) to the Periodicals service area.
  - Microforms storage.
    - Periodicals (including ERIC [which are probably government publications], LEL-LAC, and classified fiche and film). Maximum capacity for 117 10-drawer microfiche/film metal cabinets on 4" riser. [1648 SF with 4' aisles]
    - Government Publications. Maximum capacity for 33 10-drawer microfiche/film metal cabinets, 26" x 30", on 4" riser. [465 SF]
• Space required. 2113 SF
• Location. First Floor
• Furnishings.
  150 - 10-drawer metal microfiche/film cabinets, 26" x 30", on 4" riser

• Microforms user area. Space for microfiche and microfilm readers and reader printers to be used by all areas. Microfiche appears to be the most heavily used of the microformats; microfilm has been decreasing; in general, users dread the use of microforms and prefer hard copy—they prefer to print than read the microform. [Should anticipate converting some microform readers to microform scanners that would convert a microform image to a digital form for electronic transmission.] Anticipate the continued growth of this collection for the foreseeable future; however, this space needs to be heavily wired for both electrical outlets and roughin for LAN connections in anticipation of converting at least part of the space to electronic access as certain products migrate to cd-rom format or network access. The area should also have a user assistance desk. This area should have a zoned means of controlling light [dimmer?] for the readers and reader/printers, while providing sufficient light to read small labels in microform drawers.
  • Space required. 1150 SF, 45 stations @ 25 SF ea.
  • Location. First floor.
  • Furnishings.
    20 - microfiche reader stations, 30" x 36", with wire management and electrical connections
    10 - microfilm reader stations, 36" x 48", with wire management and electrical connections
    1 - micro-opaque card reader station, 30" x 36", with wire management and electrical connections.
    1 - ultrafiche reader station (for LEL-LAC), 36" x 48", with wire management and electrical connections
    10 - microfiche reader/printers, 36" x 48", with wire management and electrical connections
    3 - microfilm reader/printers, 36" x 48", with wire management
and electrical connections
1 - laminated workstation with edge banding, 36\" x 60\", with
lockable drawers, adjustable height keyboard and monitor,
wire management, and LAN and electrical connections.
45 - chairs
1 - ergonomic desk chair

- Storage Room. Primarily for storage of paper, toner, and supplies
related to microform reader/printers and bulbs for microform
readers. Does not need to be very large. Must be within or
immediately adjacent to the Microforms area.
  - Space required. 75 SF
  - Location. First floor.
  - Shelving.
    30 LF standard metal shelving, 10\" nominal
Resources Processing Services area

This unit centralizes in a single area all technical processing functions and is composed of two departments, Acquisitions and Cataloging, and two subsidiary areas related to service areas, Government Publications and Periodicals processing. This program merges separate processing areas into a single location while maintaining integrity of operations.

At present, Acquisitions has the primary responsibility for verifying, ordering, receiving, pre- and post-cataloging processing, and payment processing for all print and media resources except government publications and periodicals; also in-house repair and bindery and bindery shipment preparation for all print resources (including government publications and periodicals). The department works closely with the collection development librarian [presently a member of the reference team], and library selectors. Government Publications and Periodicals are responsible for the same processing functions for their respective collections; this program proposes coordinating these functions and merging them in a central location.

Cataloging has primary responsibility for bibliographic control (cataloging and classifying) and processing for circulation all print and non-print materials added to the collection. In the future, this department will also need to provide catalog information so that users can identify electronic resources available over national and international telecommunications network. At present, Government Publications catalogs and processes for circulation federal depository resources. Again, this program proposes merging these functions in a central location.

For the most part, all processing should be accomplished within one week of receipt, thus lessening the need, in the absence of a preview approval plan, for a faculty preview area.
Location and Spatial Relationships

Acquisitions and processing must be close to either the receiving/mail room area or a freight elevator leading to the receiving/mail room. There are certain conveniences in being located close to collections. Within the Resources Processing area, monographic, serial, periodical, and government publications processing should be merged into the same physical area adjacent to the cataloging area; communication between these two areas is extremely important.

Capacity and Design

Three overall design criteria must be addressed for all departments within the Resources Processing area:

- Logical sequencing of work flow and clarity of collections processing (i.e., avoiding errors in receiving and processing between monographs, serials, periodicals, and government publications, but allowing flexibility of staffing for similar operations [this is partly a design issue and partly a staff training issue]); this assumes a high degree of flexibility of layout as the types of resources acquired and the methods of processing change over time.

- Security of collections. There should be limited or controlled public access to all receiving and processing areas. Security of staff can be more readily assured if security of resources in processing is achieved. Faculty offices located in this area must be more easily accessible to the public than the work areas [i.e., advisees and other visitors should not have to enter or pass through the work areas to locate a faculty office].

- Pleasant work environment. In general, semi-private work alcoves would allow the opportunity to individualize work environments; it would remove the immediate work area from excessive noise and traffic; it would maintain the need to interact with and supervise others. Natural light and windows are very desirable.

- Acquisitions area. For verifying, ordering, receiving, pre- and post-cataloging processing, and payment processing for all print and media resources including government publications and periodicals. The area will consist of 2 faculty offices, 7 staff alcoves, a general work area, a bindery work room, and a storage room.
• Faculty Offices. For 2 librarians. The offices must be accessible to the public without the necessity of entering the processing work areas; must be adjacent to the acquisitions processing area. Each faculty office should be 150 SF, preferably with an exterior window; space for a desk (electrical and telephone connections) and workstation (LAN and electrical connections); interior fenestration with louvers or LCD is an option. Wall space should be provided for artwork to individualize work environment.

- Space required. 300 SF (150 SF each)

- Location.

- Furnishings. (for each office)
  1 - laminated desk with edge banding, 30" x 60", with electrical and telephone connections
  1 - laminated workstation with edge banding, 30" x 60", with adjustable height monitor and keyboard, LAN and electrical connections; task lighting,
  1 - ergonomic desk chair
  2 - side chairs
  1 - 4-drawer lateral file cabinet
  60 LF shelving

- Staff Work Alcoves. Provide space for verifying and preparing orders, processing payments, handling special materials, and other general office work associated with acquisitions. In general, all alcoves are somewhat similar in design, but with flexibility to allow for different operational functions. All alcoves must be adjacent to the processing work area. Each alcove (80-90 SF) must have space for a desk, workstation, file cabinet, shelves, and a countertop work area; each must have space for 2 book trucks (8 SF each) immediately adjacent to the workstation; each must be wired for option of 2 computer monitors and CPUs. While it must be feasible to complete any processing operation from any staff alcove, some differentiation should be noted. Three alcoves are dedicated to general acquisitions functions: one for accounting and processing; one for verification, preparation, and transmission of orders; one for receiving. One of
these alcoves must also be equipped with a videotape and videodisk
players with monitor [may need to be oversized alcove]; another must
have space for a typewriter. Two alcoves are dedicated to periodicals
functions: in this case both must be capable of accounting, processing,
and receiving. Two alcoves are dedicated to the government
publications functions: receipt and process, and cataloging.

- **Space required.** 560 - 630 SF total
- **Location.**
- **Furnishings.** (for each alcove)
  1 - laminated desk with edge banding, 30" x 60", with electrical
     and telephone connections; lockable drawers
  1 - laminated workstation with edge banding, 30" x 60", adjustable
     height monitors (possibly 2) and keyboards, wire
     management with 2 LAN and electrical connections; task
     lighting; space for printer.
  1 - ergonomic desk chair, with adjustable arms
  2 - 4-drawer file cabinets
  48 LF shelving, 10" nominal

- **Processing Work area.** For receipt, distribution, accessioning, labeling,
  and other tasks associated with processing and preparation of
  materials prior to placement in collections. In response to the changes
  in scholarly publishing and information demand, acquisitions will
  undergo substantial changes over the next two decades; as a
  consequence, this area needs considerable design flexibility. This is an
  open workspace with several worktables and large aisles to facilitate
  movement of materials, book trucks, and mail carts. It must be
  adjacent to a freight elevator or the receiving/mail room; also to staff
  work alcoves and faculty offices, storage room, and a bindery room.
  It is preferable that this area not be directly accessible to the public
  (controlled access). There must be a coat closet with a shelf for
  student worker backpacks. There must be 5 DF shelving ranges (4
  units with 12 shelves per DF unit, 10" nominal); shelving must be
  adjacent to and easily accessible from both the acquisitions processing
  area and cataloging work area (possibly serving as a divider between
  the two areas).
• Space required. 2300 ASF [1352 SF in staff work area]
• Location.
• Furnishings.

720 LF - standard metal cantilevered bracket shelving, 10” nominal, in 20 DF units (7’6” x 3’ x 20”), 3’ aisles. [316 SF? Too much? This should be high density compact shelving if this much and loads are okay.]

5 - laminated workstations with edge banding, 36” x 60”, with adjustable height monitor and keyboard; LAN and electrical connections. [75 SF]

8 - laminated work tables with edge banding, 36” x 60”, with rough in for LAN and electrical connections. [120 SF]

2 - laminated work tables with edge banding, 48” x 96” [64 SF]

20 - 5-drawer file cabinets [2] [80 SF]

10 - ergonomic work/desk chairs

10 - book trucks [80 SF]

[12 - shlefist cabinets for GovPub? should convert to computer]

2 - mail carts

• Materials Storage area. This provides a secure room to store materials prior to receiving or shipping (e.g., materials before check-in, before boxing for shipment, boxed for shipment, etc.); also for empty boxes and packing materials. This room needs to be immediately adjacent to the processing area and in close proximity to the freight elevator and/or receiving. Should be adjacent to the Bindery room. Could have a countertop work area (36” x 96”), with storage below. Space for book truck storage (up to 6 trucks; 48 SF) and flat truck storage (13 SF). Numerous electrical connections. [Some of the shelving in the processing area might be better in this room in a single high density compact shelving area.]

• Space required. 320 SF

• Location.

• Furnishings.

864 LF - high density compact shelving [2] 1 module of 8 ranges of 4 DF sections, 12 shelves/section, with one aisle should be more than enough for processing and storage areas (1056 LF).
Could be combined into a single processing/cataloging shelving area.

- **Bindery and Repair room.** Space for equipment and up to two people working safely on book repair and simple binding. Needs associated with this room require adequate ventilation/air exchange system. Countertop work area (36" x 10') with 'sink and built in storage below. Adequate shelving and storage for 3 book trucks.
  - **Space required.** 300 SF
  - **Location.**
  - **Equipment.**
    - 1 - electric paper cutter, 54" x 60"
    - 1 - glueing machine, 50" x 20"
    - 1 - electric binder/stapler, 26" x 22"
    - 1 - paper cutter (table top)
    - 2 - heavy duty work table, 48" x 96"
    - 1 - roll laminator, 36" x 26"
    - 1 - deep stainless steel sink, with hot and cold running water

- **Cataloging area.** For bibliographic control (cataloging and classifying) and processing for circulation all print and non-print materials added to the collection; in the future this will expand to include cataloging of electronic information resources (eg. electronic journals and books). There should be a clear separation between the Acquisitions processing area and the Cataloging work area, but they must be adjacent to each other. Materials arriving from processing return to processing for labelling.

- **Faculty Offices.** For 2 catalogers/librarians/faculty. The offices must be accessible to the public without the necessity of entering the processing work areas; must be adjacent to the cataloging work area. Each faculty office should be 150 SF, preferably with an exterior window; space for a desk (electrical and telephone connections) and workstation (LAN and electrical connections; may need to be 2 CPUs and monitors); interior fenestration with louvers or LCD is an option. Wall space should be provided for artwork to individualize work environment.
• Space required. 300 SF (150 SF each)
• Location.
• Furnishings. (for each office)
  1 - laminated desk with edge banding, 30" x 60", with electrical and telephone connections
  1 - laminated workstation with edge banding, 30" x 60", with adjustable height monitor and keyboard, LAN and electrical connections; task lighting.
  1 - ergonomic desk chair
  2 - side chairs
  1 - 4-drawer lateral file cabinet
  60 LF shelving

• Staff Work alcoves. Four cataloging/classification alcoves. Two alcoves are primarily for OCLC cataloging, the other two are primarily for original cataloging; all require LAN and electrical connections. Each alcove should have a desk, workstation, file cabinet, and 21 LF shelving; and space for up to 4 book trucks adjacent to the workstation. Both original cataloging workstations must be equipped with videotape and videodisk players and monitors; the other two must be capable of attaching to OCLC and PALS. Must be adjacent to faculty offices.
• Space required. 360-400 SF
• Location.
• Furnishings. (for each alcove)
  1 - laminated desk with edge banding, 30" x 60", with electrical and telephone connections; lockable drawers
  1 - laminated workstation with edge banding, 30" x 60", adjustable height monitors (possibly 2) and keyboards, wire management with 2 LAN and electrical connections; task lighting; space for printer.
  1 - ergonomic desk chair
  2 - 4-drawer file cabinets
  48 LF shelving, 10" nominal
• **Staff Work area.** Processing area related to cataloging and classification. Area for student workers. Countertop (30" x 60") with built in cupboard below, small sink, shelving above.
  - **Space required.** 230 SF
  - **Location.** Adjacent to cataloging alcoves.
  - **Furnishings.**
    - 2 - laminated work tables with edge banding, 36" x 60"
    - 2 - ergonomic chairs

• **Storage room.** To provide secure storage for cataloging supplies and non-print materials awaiting cataloging.
  - **Space required.** 100 LF
  - **Location.**
  - **Furnishings.**
    - 180 LF - standard metal shelving. [so much?]
Special Collections

Function
Provides safe and secure storage and preservation for rare books, manuscripts, and archive collections as well as a comfortable reading and display area. Will combine presently disparate collections (archives, rare books, manuscripts, MEMO historical media equipment, and the Central Minnesota Historical Center collections) into a single service area with a common reading room.

Location and Spatial Relationships
n/a

Capacity and Design
There are three important design considerations.

• Foremost is the need for stack areas to maintain a constant temperature and humidity; any fluctuation can be damaging. The temperature must be maintained at a level somewhat lower than the rest of the building, the humidity somewhat higher. No sunlight (ultraviolet light in particular) should reach the collections, either in the storage areas or in the reading and display area.

• The integrity of the different collections must be maintained, although they could share a common storage area [to lessen the need to design two rooms with constant temperature and humidity]. Separate processing areas for archives (to include manuscript and equipment processing) and CMHC (administered by the History Department), with separate entrances to a central storage area would assure operational distinctions.

• A common use, comfortable, attractive reading and research room seating 16 users; with glass fronted book display (for distinctive rare books) and an exhibition area [possibly a display wall, with glass on both sides, separating the special collections reading room from the rest of the library]. It will be important to display these valuable print resources, especially as information becomes increasingly digitized.

• Special Collections Storage area. Must have consistent temperature and humidity; must not allow sunlight or ultraviolet lights; must be adjacent...
to processing areas and convenient to the special collections reading room; must be able to ensure security and preservation of collections. Requires 2034 LF of metal shelving 24" x 36" (large enough to store large acid free and Hollinger boxes) [this could be an oversize high density compact shelving module, similar to warehouses, where a module consists of 63 DF sections of 24" x 36" shelves, with two access aisles 48" wide; this would occupy 1100 SF]. This area would store all special collections (archives, manuscripts, rarebooks, and CMHC collections), present and projected.

- **Space required.** 1100 SF
- **Location.** Accessible only from the special collections processing areas.
- **Shelving.**
  
  2034 LF - 24" x 36" metal shelving [high density compact module]
  
  288 LF - 12" x 36" standard metal shelving.
  
  1 - ladder (occupies 3' x 4' space)

- **Reading room.** Shared by Special Collections and CMHC. Comfortable, attractively appointed room for up to 12 people. Lockable display bookcases for portion of rare book collection (32 LF); wall space for display of historic photographs and portraits; lockable display area [wall separating reading room from main library?] for portion of MEMO historic media equipment. Room be able to be secured and provide the only access to the Special Collections storage and work areas.
  
  - **Space required.** 300 240 SF
  
  - **Location.**
  
  - **Furnishings.**
  
    3 - wooden reading tables, 36" x 60", wire management for table top lighting
  
    12 - comfortable chairs [eg. Windsor]
  
    2 - glass front book cabinets, lockable display cabinet/s

- **Special Collections Processing area.** Two areas for processing the resources of Special Collections and CMHC. Both must be adjacent and provide the sole access to the Special Collection storage area. They should be close to bathrooms or have small countertops with sinks (for washing.
hands to maintain integrity of fragile resources).

- **Special Collections Processing area.** For processing archives and manuscripts (rare books are not a current acquisitions program). Provide one staff work alcove with desk, workstation, file cabinet, and countertop workspace; wall space to individualize environment. One additional work table and computer workstation would provide additional workspace for future scanning to electronic storage and/or scanning and electronic transfer. Coat closet.

  - **Space required.** 200 SF
  - **Location.**
  - **Furnishings.**
    1 - laminated desk with edge banding, 30" x 60", with electrical and telephone connections; lockable drawers
    2 - laminated work station with edge banding, 30" x 60", with adjustable height keyboard and monitor, LAN and electrical connections
    1 - laminated work table, 36 x 60"
    2 - ergonomic work chair
    2 - 4-drawer file cabinet
    12 LF - shelving (for work alcove)

- **CMHC Processing area.** For processing historical records and manuscripts of CMHC. Provide one staff work alcove with desk, workstation, file cabinets, and countertop workspace; wall space to individualize environment. Book shelves. Coat closet.

  - **Space required.** 170 SF
  - **Location.**
  - **Furnishings.**
    1 - laminated desk with edge banding, 30" x 60", with electrical and telephone connections; lockable drawers
    1 - laminated work station with edge banding, 30" x 60", with adjustable height keyboard and monitor, LAN and electrical connections
    1 - laminated work table, 36 x 60"
    2 - ergonomic work chair
1 - 4-drawer file cabinet
1 - storage cabinet.
21 LF - shelving (for work alcove)

- **Faculty Office.** Space for one archivist/faculty. The office must be accessible to the public without the necessity of entering the Special Collections reading room or work areas; must be adjacent to and accessible from the reading room. The office should be 150 SF, preferably with an exterior window; space for a desk (electrical and telephone connections) and workstation (LAN and electrical connections); interior fenestration with louvers or LCD into reading room is an option. Wall space should be provided for artwork to individualize work environment.

- **Space required.** 150 SF
- **Location.**
- **Furnishings.** (for each office)
  1 - laminated desk with edge banding, 30" x 60", with electrical and telephone connections
  1 - laminated workstation with edge banding, 30" x 60", with adjustable height monitor and keyboard, LAN and electrical connections; task lighting.
  1 - ergonomic desk chair
  2 - side chairs
  1 - 4-drawer lateral file cabinet
  60 LF shelving
Center for Information Media

Function
Graduate and specialist degree programs and undergraduate support courses in educational communications, instructional systems design, information technologies, human resources development and training, and information literacy. The Center (CIM) is a unit within the College of Education and Learning Resources Services. CIM’s goals are to:
• Provide students with the necessary skills to access, assess, and apply various information media in their educational and professional experiences;
• Develop leadership skills in information and instructional technology management, and message and instructional design, production, and delivery.

To accomplish these goals requires an extraordinary degree of flexibility in faculty and facilities design. The CIM program and facilities must be able to adapt changes in curriculum, methods, and technologies of information and instruction by restructuring facilities easily.

Location and Spatial Relationships
CIM classrooms and laboratories must be accessible to students and visitors without the necessity of entering the library [many classes are offered nights and weekends]; yet the faculty and staff of both CIM and LLRS must be able to pass through a security door to conduct business. CIM office area and faculty offices should be close to classrooms, although it is not necessary to be adjacent; some classes will also utilize classrooms located in other areas of the building, eg. the multimedia classrooms in the Interactive Information Services area (p. 18). CIM office area and faculty offices must be in a unified area. It is desirable that the Center be able to share the central reception area located in the Administrative Offices area (p. 14).

Capacity and Design
The emphasis in design of classroom spaces is on flexibility and comfort, with substantial access to technology. All classrooms (including seminar rooms) must have ITV capability [this should be a campus ideal] and access to LLRS
and campuswide LANs. Faculty offices should be clustered to promote collaboration and should be located adjacent to a small workroom and near laboratories [to allow students to seek advice or assistance easily]. The CIM office area should accommodate files, library of graduate papers, processing of applications, and provide a work space for the Center secretary. If adjacent to the Administrative Offices (using the same reception desk) CIM would not need a separate coffee alcove or rest room facility. It could also utilize the Administrative Conference room for departmental meetings.

- **Classrooms.** A variety of classrooms of different configurations accommodating different numbers of students needs to be available for CIM's undergraduate service and graduate professional courses. Most of these classrooms are also used by other departments on campus. CIM courses are taught in a variety of pedagogical styles, including lecture, seminar, and small group breakouts; all classrooms require extensive access to multimedia (including ITV) and/or information technologies (LAN), both for labs and distance education. Four classrooms and one laboratory are required.

- **Classroom seating for 60 students;** should be able to divide the room into two smaller classrooms with a soundproof wall, each half seating 30 students. Each half must have full multimedia instructional capabilities (including access to ITV and LAN). Each student workstation should have embedded monitors for unimpeded view to instructor and projection screen; space for CPU and CD player below workstation desktop; workstations approx 40 SF ea. There should be one instructor workstation/lectern (standup), with monitor embedded at a slant, adjustable height keyboard, and lighting control. Lockable built in cabinet near instructor station containing cd-rom, videodisc, and videotape players. Overhead projection system. Recessed ceiling mounted, electrically controlled 6' x 8' projection screen (8' from front row of student seating). White, dry marker board capable of being seen when screen is lowered.
  - Space required. 2400 SF
  - Location.
• **Furnishings.**

60 - laminated workstations with edge banding, adjustable height keyboard, embedded monitors; space for CPU and CD player below desktop

60 - ergonomic chairs

2 - 6' x 8' ceiling mounted projection screen

2 - ceiling mounted video projection

2 - instructor lecterns with wire management, embedded monitor, adjustable height keyboard, CPU below top, controls for equipment [through computer?]

• **Seminar room** capable of being divided into 2 smaller seminar rooms seating up to 16 students (32 students total) around a central table [this could be U-shaped to allow the instructor to moderate discussion more easily; would also allow a monitor to be easily placed at the opening of the U]. While full multimedia is desirable in these rooms, this may be achieved through a large screen monitor rather than ceiling-based projection. These rooms could also be used for teleconferencing and ITV distance education. Instead of a lectern, controls and required equipment could be at a lockable workstation. It is desirable that the general furnishings (wood table and comfortable chairs) and the overall design be along the lines of a conference center. Requires connections for LAN, ITV, and surge suppressed electricity. [These rooms should be in close proximity to the CIM offices and could also be used for media production presentations and client conferences for the Instructional Development offices. Do these seminar rooms overlap with the use of the Administrative office conference room?]

• **Space required.** 800 SF (400 SF each)

• **Location.**

• **Furnishings.**

32 - comfortable chairs on casters

2 - U-shaped wooden tables

2 - control cabinets for multimedia programs.
• **Faculty Offices.** For 5 faculty. Each office should be 150 SF, preferably with a window, space for a desk (telephone, electrical) and workstation (LAN, electrical). Wall space should be provided for posters or artwork to individualize work environment. Windows are desirable. Coat closet. Office doors should be oversized (48”) opening to a common work area and the staff work space. Small bulletin boards should be outside each door. If there is interior fenestration, it must be louvered or LCD to gain privacy when necessary.

• **Space required.** 750 SF (150 SF each)

• **Location.**

• **Furnishings.**

  5 - laminated desks with edge banding (30” x 60”); telephone and electrical, lockable drawers
  5 - laminated workstations with edge banding (30” x 60”) with adjustable height monitor and keyboard; LAN and surge suppressed electrical; task lighting
  5 - ergonomic desk chair (option with arms)
  10 - side chairs
  5 - 4-drawer lateral file
  315 LF -standard shelving, 10” nominal (63 LF per office)

• **Division Leader Office.** Administration of CIM; interviews with graduate applicants; student advising; faculty conferences. Should be 200 SF, preferably with a window, space for a desk (telephone, electrical) and workstation (LAN, electrical), credenza, 3 side chairs. Wall space should be provided for posters or artwork to individualize work environment. Office doors should be oversized (48”). Small bulletin boards should be outside each door. If there is interior fenestration, it must be louvered for LCD to gain privacy when necessary.

• **Space required.** 200 SF

• **Location.** Adjacent to staff work space, part of faculty office cluster.

• **Furnishings.**

  1 - laminated desk with edge banding (30” x 60”); telephone and electrical
  1 - workstation (30” x 60”) with adjustable height monitor and key-
board; LAN and surge suppressed electrical; task lighting
1 - ergonomic desk chair (option with arms)
3 - side chairs
2 - 4-drawer lateral file
63 LF - standard shelving, 10" nominal

• CIM Reception and Secretary (Staff work area). Area for receiving students and visitors, processing applications and administering daily operations of graduate program and undergraduate service courses. Must be part of the office cluster, adjacent to faculty offices, and serve to screen visitors. Must have a desk, workstation, and lateral file cabinets. A small reception area, with comfortable seating for 4 people, must be partially screened from work areas. Should also have a library for storage of graduate papers. Coat closet.
  • Space required. 250 SF
  • Location.
  • Furnishings.
    1 - laminated desk with edge banding, 30" x 60", lockable drawers, connections for telephone and electricity
    1 - laminated workstation with edge banding, 30" x 60", with wire management and connections for LAN and electricity, adjustable height keyboard and monitor
    1 - ergonomic desk chair
    4 - comfortable upholstered chairs
    5 - 4-drawer file cabinets (option for lateral)
    42 LF - attractive shelving

• Examination room. Partitioned area in main office with sound barrier for graduate student written comprehensive examinations; could double as a student worker station when not used for exams. Must be adjacent to and visible from the CIM secretary's work area. Requires a workstation, LAN and electrical connections, and task lighting; oversized door with fenestration.
  • Space required. n/a
  • Location.
- **Furnishings.**
  1 - laminated workstation with edge banding, 30" x 48", with adjustable height keyboard and monitor, wire management, LAN and electrical connections
  1 - ergonomic chair

- **Graduate Students Office and work area.** Space for up to 4 graduate student assistants to conduct work related to CIM instructional programs and operations. Requires 4 workstations with modular dividers, shelving, coat closet; one of the workstations would be used for newsletter production. A countertop, 30" x 12', with lockable built in cabinets below, 20 LF shelving, 10' nominal, above. Sufficient space on countertop for laserprinter and photocopier. Storage closet (4' x 8') for equipment, handtrucks, etc.
- **Space required.** 320 SF

- **Furnishings.**
  4 - laminated workstations with edge banding, 30' x 60', with adjustable height keyboard and monitor, lockable drawers; wire management for LAN and electrical connections.
  4 - ergonomic chairs
  42 LF - standard metal shelving, 10" nominal
Technical Support Services

Function
Provides research and development, implementation, and maintenance support for instructional communication technologies; provides a staff with expertise to plan and maintain technologies ranging from audio equipment and sound systems to multi-network interactive instructional television to local area networking of information systems. This area is vital to the success of the transformation of information and knowledge access and utilization embodied in this program’s vision.

Location and Spatial Relationships
Within the Library, Technical Support Services will work closely with three departments, Instructional Development, Interactive Information Services, and Reference and Electronic Information Services. With the first two support is primarily in the area of instructional communication technologies, especially media production; with the latter, support is primarily in the area of local area networking and client/server information systems within the library. Logical spatial relationships with all three may be difficult to achieve. The primary goal is to assure ease of access to all areas of the building, especially for wire and cable management; close proximity to the service elevator and/or the receiving/loading dock is essential.

Capacity and Design
Technical Support Services requires five discrete areas:

- Office area. For administration, planning, research and development.
- Work area. For set up and repair of instructional and information technology equipment, and supplies storage; must be environmentally clean.
- Work area. For heavy tool and material fabrication; must be adequately vented.
- Communication center. Secure, limited access, environmentally controlled room for ITV and satellite control systems, LAN servers, routers, and bridges, and related information and instructional technologies.
• Storage. Secure storage room.
The office area must be suitably designed to meet with vendors, consultants, and visitors. Clean work area must be flexible, with sufficient space to work on equipment up to 16 SF (4' x 4'). The location of the fabrication room (need to isolate noise) and communication center are more flexible.

• Office area. As noted in Location and Spatial Relationships above, placement may be difficult. It is desirable that the office area share a reception area and clerical support with an established unit, eg. Administration or Instructional Design. Must be adjacent to the clean work room and storage room; in close proximity to the fabrication work room. The office cluster could share a coat closet. The office area will consist of:

• Private Office. For unit head. Provide administration and planning for unit. Must provide a comfortable space in which to meet with faculty, vendors, consultants, and administrators. In design, similar to a faculty office, with more numerous LAN, fiber, and electrical connections.
  • Space required. 150 SF
  • Location.
  • Furnishings.
    1 - laminated desk with edge banding, 30" x 60", with lockable drawers, wire management for telephone and electrical connections.
    1 - laminated workstation with edge banding, 30" x 60", with adjustable height monitor and keyboard, wire management for LAN and electrical connections
    1 - ergonomic chair
    2 - side chairs
    1 - 4-drawer file cabinet
    21 LF - standard metal shelving

• Staff work alcoves. Six alcoves for Technical Support staff. Each modular alcove must have a desk, workstation, shelving, and file cabinet. Each alcove should be about 90 SF.
  • Space required. 540 SF (6 alcoves @ 90 SF)
  • Location.
• **Furnishings.** (for each alcove)
  1 - laminated desk with edge banding, 30" x 60", with lockable drawer, telephone and electrical connections
  1 - laminated workstation with edge banding, 30" x 60", with adjustable monitor and keyboard height, wire management, LAN and electrical connections
  1 - ergonomic chair
  1 - side chair
  1 - 4-drawer file cabinet
  21 LF - standard metal shelving

• **Clean Work room.** For set-up and repair of electronic communications equipment and computers. Must be a limited access room adjacent to and with admission only from the Technical Support office area. Must have standard 70 footcandle lighting, with 120 footcandle task lighting. Must have 2 countertop work areas with static grounding bars connected to the building master grounding system (4" copper strap). Requires isolated and conditioned power supply and multiple signal conduit with oversized j-boxes. Adequate shelving for storage and manuals, and parts cabinets. This is a utility space and must have easily cleaned walls and hard floors; easy access to wire and cable conduits/troughs/ducts is imperative
  * Space required. 456 SF
  * Location.
  * Furnishings.
    1 - wall mounted countertop, 30" x 15', with built in cabinets below, 18" shelf above
    1 - free standing countertop, 48" x 10', with built in cabinets below
    6 - high task chairs
    2 - parts and supplies cabinets [12 SF each]
    42 LF - standard metal shelving, 10" nominal, 7 shelves per section
    36 LF - heavy load metal shelving, 24" nominal, 4 shelves per section

• **Communications Center.** For analog and digital information and instructional communications systems controls; desirable that this room be located in close proximity to the Technical Support office area [although not imperative]. The center should have clear delineation
between systems, i.e. between LANs and related systems and instructional technologies such as ITV. This is the central site for all information and instructional cables, fibers, and lines entering or exiting the building. [Cable, fiber, and line specifications will be supplied at a later date.]

Requires space for 12 equipment racks (5-6 racks each for LAN, OPAC, etc. and ITV, etc.), with work access behind each rack. For LAN, requires ventilated cabinet with sufficient space for 5 LAN servers, potentially a miniVAX or other mass storage system, and a controller’s workstation. For ITV, requires ventilated cabinet with space for 2-3 servers and a controller’s workstation. Must have expansion space. A suspended flooring system would facilitate cable and line access. A countertop work area (30” x 72”) with built in cabinets below and 18 LF of shelving is desirable. The center must have a constant temperature and be static free. It must have extremely limited access.

- **Space required.** 500 SF
- **Location.**
- **Furnishings.**
  
  10-12 - standard metal equipment racks (each rack requires 9 SF including rear access path) [108 SF]
  
  1 - server cabinet for 5 servers and 32 cd-rom drives, 36” x 10’ (each server requires 3 SF space) [30 SF]
  
  1 - server cabinet for 3 servers [10 SF]
  
  1 - laminated operator console with edge banding, 30” x 72”, with adjustable height monitors (2) and keyboard; wire management [50 SF]
  
  1 - laminated workstation with edge banding, 30” x 60”, with adjustable height monitor and keyboard, wire management [40 SF]
  
  1 - countertop work area, 30” x 72”, with built in cabinets below, wire management; with static bar connected to building ground [50 SF]
  
  4 - ergonomic chairs
  
  1 - high task chair
  
  21 LF - standard metal shelving, 10” nominal [for manuals, etc.]
• Fabrication room. Located in an area where loud noises would not disrupt normal library operations or services; acoustically isolated room. Provides work area for power equipment (band saw, drill press, grinder, etc.); must have adequate ventilation and lighting; should be designed to eliminate dust and filings from becoming airborne and transported to other areas of the building. This is a utility space and must have hard floors and easily cleaned walls.
  • Space required. 200 SF
  • Location.
  • Furnishings. n/a

• Storage Room. For short and long term storage of equipment and shipping cartons; must have limited access. Heavy duty equipment shelving is required. Location is not critical.
  • Space required. 200 140 SF
  • Location.
  • Furnishings.
    48 LF - heavy duty metal shelving, 24" nominal, 4 shelves per section.
Instructional Development Services

Function Produces instructional and promotional media in a variety of formats for SCSU faculty, administration, and university-business and university-government cooperative clients. Level of production varies from simple overhead transparencies and camera-ready production graphics to sophisticated multimedia shows and integrated computer mediated training and learning packages. As the use multimedia and integrated instructional packages develops, and as faculty and students begin developing and producing multimedia projects in response to curricular and program requirements, the distinctions between Instructional Development Services and Interactive Information Services (p. 19) will begin to blur. Nonetheless, while encouraging interaction between the two services, separate areas for faculty and student production and professional production must be maintained.

Location and Spatial Relationships Must be located in close proximity to the Interactive Information Services area, yet with a clearly recognizable distinction between service areas. The primary access should be through the shared Administrative reception area (p. 15). Could possibly share clerical support with Technical Support Services. Desirable to have easy access to freight elevator and/or receiving/loading dock to facilitate movement of equipment.

Capacity and Design Instructional Development consists of four distinct areas:

- Reception and Conference area. Serve as the primary client contact area and screen visitors to faculty and staff offices and production area.
- Offices for faculty and staff. For administration, production, meetings, advising, course preparation, and advising.
- Media production area. A primary workspace.
- Storage. Secure areas for equipment and master tape storage.

All work areas will be using computers for course preparation, research, and production; must be able to adjust light intensity at each workstation.
lighting?]. Windows in offices, reception, conference room, and work area are desirable, but light must be controlled with louvers (blinds) or drapes. There should be no windows in photography or multimedia production areas, sound booth, or storage areas.

- **Reception area.** Must be able to provide after hours security, screen visitors and monitor access to offices and production areas while presenting a welcoming facade and environment [windows and/or artwork would enhance ambience]. Must be able to seat 4 people in comfortable chairs. A counter, 30" x 60", will provide a space for production requests to be delivered and picked up. Must be adjacent to conference room and provide easy access to offices, production areas, and be in close proximity to Interactive Information Services. Should be connected to Administration reception area.

- **Space required.** 250 SF
- **Location.**
- **Furnishings.**
  1 - laminated reception countertop with edge banding and laminated facing, 30" x 60" x 39" h, with wire management for LAN and electrical connections, adjustable height monitor and keyboard, lockable drawers
  1 - ergonomic high task chair
  4 - upholstered chairs

- **Conference Room.** Use Conference room in Administrative office area or seminar rooms in CIM.

- **Faculty and staff offices.** Provide work and production space. All have extensive LAN connections, several have special equipment needs. All need to be adjacent or in close proximity to the reception and production areas. All offices must have a high degree of acoustical isolation.

- **Division Leader Office.** Provide area for administration and production, sufficient space to meet and consult with students, faculty, administration and external clients. Requires a desk,
workstation, table with 4 chairs, bookshelves, credenza, and coat closet. Windows are desirable. Wall space should be provided for posters or artwork to individualize work environment. If there is interior fenestration, it must be louvered or LCD to gain privacy when necessary.

- **Space required.** 200 SF
- **Location.** Immediately adjacent to ID reception.
- **Furnishings.**
  1 - laminated desk with edge banding, 30'' x 60'', with lockable drawers; telephone and electrical connections
  1 - laminated workstations with edge banding, 30'' x 60'', with adjustable height monitor and keyboard; wire management with LAN and electrical connections, task lighting
  1 - ergonomic desk chair (option with arms)
  1 - 36'' diameter round meeting table
  3 - side chairs
  2 - 4-drawer lateral file cabinets
  63 LF - standard shelving, 10'' nominal

- **Faculty Offices.** Offices for five faculty and staff [all meet and consult with clients]. Each office should be 150 SF, preferably with a window; space for a desk, workstation, and 2 side chairs. Coat closet. Wall space should be provided for posters or artwork to individualize work environment. If there is interior fenestration, it must be louvered or LCD to gain privacy when necessary. Small bulletin boards should be outside each office.

- **Space required.** 750 ASF (5 @ 150 SF)
- **Location.**
- **Furnishings.**
  4 - laminated desks with edge banding, 30'' x 60'', wire management for telephone and electrical connections, lockable drawers
  4 - laminated workstations with edge banding, 30'' x 60'', with adjustable height monitor and keyboard, wire management for LAN and electrical, task lighting
  4 - ergonomic chairs (option with arm)
8 - side chairs (2 in each office)
4 - 4-drawer lateral file cabinets
252 LF - standard shelving, 10" nominal (63 LF in each office)

- **Media Production Offices.** Three offices, one for the media production coordinator, one for the audiovisual specialist, and one for the photography coordinator. Both of these offices must have doors to both the reception area and the production commons. Both offices could support the reception area. Each office should have a workstation, file cabinet, and coat closet. The media production coordinator office will have a drafting/light table. The audiovisual specialists office must have space for media duplication equipment.
- **Space required.** 450 ASF (3 @ 150 SF)
- **Location.** Adjacent to both reception and production commons areas.
- **Furnishings.**
  3 - laminated workstations with edge banding, 30" x 60", with adjustable height keyboard and monitor, lockable drawers, wire management for LAN and electrical connections, task lighting
  2 - laminated desk with edge banding, 30" x 60", with lockable drawers, wire management for telephone and electrical connections
  1 - drafting/light table, 48" x 36", with wire management for electrical connections, task lighting
  3 - ergonomic desk chairs
  1 - high task chair
  3 - side chairs
  3 - 4-drawer file cabinets
63 LF - standard shelving, 10" nominal (21 LF in each office)
12 LF - standard shelving, 18" nominal (in audiovisual coordinator office), with wire management for electrical connections

- **Production Commons and work areas.** Primary production and collaboration areas. Commons will contain networked output devices (eg.
laserprinters, 35mm, etc.), modular workstations, oversized work tables for large projects; must be adjacent to media production rooms and sound booth. Commons must be flexible to adapt to changing needs in technology and size of production work groups. One third of the Commons, adjacent to the darkrooms, will serve as the photo production area (work tables for slide mounting, light tables, etc.), adaptable to a small photo studio (requiring special lighting and acoustic control). A movable, soundproof divider, separating the main Production Commons from the Photo Commons, is desirable.

- **Space required.** 1620 SF
- **Location.**
- **Furnishings.** [not given]

- **Darkrooms.** Require three darkrooms, one each for black and white photo, film process photo, and stat photo (each with separate entrance), immediately adjacent to the Production Commons. All three require sinks, running water, electricity, adequate ventilation, etc. [specifications not supplied]. Each should be 100-120 SF. Photo and darkroom technology are changing rapidly, as is the use of still photography in instruction; the use of these rooms will change over time and must be adaptable to other uses.
  - **Space required.** 300 - 360 SF
  - **Location.** Immediately adjacent to photo area of Production Commons.
  - **Furnishings.** [not supplied]

- **Multimedia Production rooms.** Three rooms of 100 - 150 SF, adjacent to each other (with fenestration between each) and the Production Commons. All require acoustic isolation and lighting controls. [One room, adjacent to sound booth, could be for digital sound equipment; one for digital video equipment; one for computer animation. No other functions supplied.]
  - **Space required.** 300 - 450 SF
  - **Location.** Adjacent to Production Commons.
  - **Furnishings.** [not supplied]
• **Sound Booth.** Small room adjacent to and with fenestration between one of the media production rooms for sound recording [eg. narration]. Must be completely sound isolated.
  - **Space required.** 80 - 100 SF
  - **Location.** Adjacent to Production Commons and one media production room.
  - **Furnishings.** [not supplied]

• **Storage rooms.** Require three storage rooms, all adjacent to the Production Commons:
  - **Video equipment storage.** For video cameras, lights, tripods, recorders, and related equipment used for location shoots.
    - **Space required.** 100 SF
    - **Furnishings.** n/a
  
  - **Still camera equipment storage.** Cameras, strobes, lights, tripods, and related equipment used for still photography.
    - **Space required.** 100 SF
    - **Furnishings.** n/a
  
  - **General storage and archives.** For office supplies; refrigerator for film supplies; shelves for storage of video and other media production masters
    - **Space required.** 200 SF
    - **Furnishings.**
      126 LF - standard metal shelving, 10" nominal
      84 LF - standard metal shelving, 18" nominal
Auditorium

Function
Multimedia auditorium for large class instruction, meetings, presentations, interactive teleconferencing, and general university functions.

Location and Spatial Relationships
Must be accessible from the outer lobby (unsecured) and accessible when the library is otherwise not open. As a consequence, it must have access to rest rooms that are outside the secure zones of the facility.

Capacity and Design
An acoustically isolated and enhanced room, with comfortable theatre style seating with fold-down writing arms for 375 people. Must be able to divide room into three smaller auditoriums, each acoustically isolated from the other, seating 125 people. Must have one 12' x 16' ceiling mounted electrically controlled projection screen; when divided, three 8' x 10' ceiling mounted electrically controlled projection screens must be available in each. Ceiling mounted video projection systems must be available for full auditorium and each subdivision; with LAN, fiber, and ITV connections. Attractive background must be available for formal presentations. Stage area for panels and debates should be 12'-15' deep. Three removable lecterns, with separate audio, visual, LAN, and lighting controls for full auditorium and each subdivision. Individual seats could have wiring for jacks for keypad access to LAN [for automated test response system] and jacks for headphones for simultaneous translation [or translated parallel audio tracks].

- Space required. 2000 ASF (180 seats @ 10 SF)
- Location.
- Furnishings.

180 - upholstered theatre style seats arranged in three groups of 125
3 - electronic lecterns, with wire management, adjustable height keyboard, controls for LAN, ITV, fiber, sound, lighting, etc.
Extended Use Study Lounge

Function
Primarily for extended study during hours when library and learning resources are closed to the public, especially during examination periods. During other periods, the area could provide a gathering place for faculty and students and a place to eat or drink without entering the secure areas of the building.

Location and Spatial Relationships
Must be accessible from the outer lobby (unsecure). Should have a common wall with Circulation work area for a secure pass through.

Capacity and Design
Should be a functional but comfortable room, with tables and chairs for study and reading. Must be accessible without entering the main library secure areas. Must be able to seat 40 people at study tables (36" x 48") and an additional 10-20 people in comfortable reading chairs; tables could have electrical connections and rough in for LAN connections. Must be space for one handicap accessible computer station (36" x 60") providing access to LAN and CWIS. Photocopier should be in a partially closed alcove with sound dampening wall surfaces. Alcove must be large enough for up to 4 vending machines and a photocopier with adjacent countertop work and sorting area; alcove must be capable of being locked with a mechanical screen. Windows to the outside would enhance ambience and security.
- Space required. 1300 SF for reading room, 90 SF for alcove
- Location. Adjacent to the outer lobby.
- Furnishings.
  10 - laminated tables with edge banding, 36" x 60", with wire management and electrical connections, rough in for LAN connections.
  1 - laminated workstation with edge banding, 36" x 48", with wire management and LAN and electrical connections
  41 - chairs
  10-20 - upholstered reading chairs
Support areas

Function
Provide a secure indoor area for receiving, staging, and shipping of library resources, mail, equipment, and other deliveries into and out of the building.

Location and Spatial Relationships
Must be located adjacent to the exterior truck loading dock and trash holding area. Must be adjacent to, with controlled access from a separate service entrance. Must be adjacent to and have easy access to (no tight corners) a freight/service elevator in order to facilitate deliveries to other areas of the building.

Capacity and Design

- **Shipping Room and Loading Dock.** Must design loading bay so that adjacent areas of building will not be affected when loading dock door is open in inclement weather, especially winter. An intercom must be provided on the exterior to notify library staff when deliveries are received; an electronically controlled lock and exterior video surveillance camera might limit need to provide staff for the area. Exterior dock should have a roofed platform; an adjustable height dock leveller might be necessary; dock must be at floor level. The shipping room is purely utilitarian for shipment and delivery storage; could also serve as packaging area.
  - Space required. 200 SF
  - Location.
  - Furnishings. n/a

- **Mail Room.** Serves as a secure area for sorting incoming mail and small package deliveries and for storage of mail and small packages prior to delivery to operational areas. Must be a secure room accessible only to library faculty and staff. Must be adjacent to and have access to the shipping room and loading dock; must be adjacent to the service entrance; service entrance must not directly enter the mail room. Must be large enough to accommodate book trucks, hand dollies, and mail carts. Must
have a countertop mail sorting area, adjacent sorting bins, space for outgoing mail bag [mail chute from administrative office if on another floor?]. Must have telephone and electrical connections.

- Space required. 200 SF
- Location. Adjacent to shipping room and loading docks.
- Furnishings.
  1 - laminated or metal mail sorting table, 36" x 84", with side and back splash guards; shelves for movable sorting bins below
  1 - 1 high task chair
Staff Lounge

Function Provide library and learning resources faculty and staff a pleasant environment in which to eat meals and take breaks.

Location and Spatial Relationships No important spatial relationships or location requirements. Must be easily accessible to all faculty and staff without the necessity of passing through numerous locked doors, yet food odors must not be able to enter user areas.

Capacity and Design Must be a pleasant and comfortable atmosphere, preferably with exterior windows. Must provide both a lounge area, with 1-2 couches, 2 chairs, and coffee table, and an eating area, with 4 tables seating 4 people. Must have a kitchenette area with sink, countertop, 30" x 108", with splashboard, built in cupboards above (with below cupboard lighting) and cabinets below, electrical outlets, refrigerator, and microwave oven. A sink (countertop with cabinet below) alcove with two lavatories, one handicap accessible, is desirable. Must have bulletin board for announcements. Wall space for artwork. An adjacent vending machine area, for up to three vending machines, could be in a hallway. Could be part of administrative office area.

- Space required. 500 SF
- Location.
- Furnishings.
  2 - upholstered couches able to seat 3 people
  2 - upholstered chairs
  1 - coffee table
  4 - laminated tables with edge banding, 40" x 40"
  16 - chairs
  2 - bulletin boards, 4' x 4'
  1 - refrigerator
  1 - coat tree
Reading and Study areas

Function  To provide a variety of easily accessible study, reading, and collaborative learning spaces throughout the building.

Location and Spatial Relationships  Seating for 2700 people, scattered liberally throughout the building (200 already in Reference, 100 in Government Publications. In general, easy access to open bookstacks and compact shelving area is desirable.

Capacity and Design  Large "warehouses" of tables and chairs are to be avoided. Areas of traffic and noise are not conducive to study or reading and are likewise to be avoided. A combination of open, small group, acoustically isolated reading lounges, laminated study tables seating 4 to 6 people (at least one third of which have electrical connections and rough in for LAN access), laminated individual study tables (half of which should have electrical connections and rough in for LAN access), and 6 group study room seating up to 10 people.

• Space required. Total: Approx. 48300 ASF
  • Individual seating for 500 persons @ 40 SF each: 20000 ASF
  • Group study table seating for 1000 persons @ 25 SF each: 25000 ASF
  • Group study rooms (6 for 10 people @ 250 SF): 1500 ASF
  • Reading lounges (6 for 10 people @ 300 SF): 1800 ASF

• Location. Throughout building, concentrated on lower level and first and second floors.

• Furnishings. [to be completed]

• Photocopy alcoves. In addition to the five alcoves described under functional areas of the program, there must be one alcove on the lower level, one, possibly two, on the second level, and possibly one additional one on the first floor. These must all be configured similarly, with two photocopiers, countertop workarea with lockable cabinets below, and a user assistance button. Should not be separate rooms, but acoustically isolated from adjacent reading areas.
### Summary of Square Footage Allocations

<table>
<thead>
<tr>
<th>Pg.</th>
<th>Area</th>
<th>User ASF</th>
<th>Collections ASF</th>
<th>Staff ASF</th>
<th>Other ASF</th>
</tr>
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<tbody>
<tr>
<td>10</td>
<td>Primary Collection</td>
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<tr>
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<td>(static circulating)</td>
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<td>Research Collection</td>
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</tr>
<tr>
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<td>(dynamic, compact, circulating)</td>
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<tr>
<td>13</td>
<td>Vestibule</td>
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<tr>
<td>13</td>
<td>Lobbies</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>• Outer (unsecured; part of GSF)</td>
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<td></td>
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<td>na</td>
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<tr>
<td></td>
<td>• Inner (secured; 40% is part of GSF)</td>
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<td>• Lockers</td>
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<td>Administrative Offices</td>
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</tr>
<tr>
<td></td>
<td>• Reception</td>
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<tr>
<td>16</td>
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<td>(4 @ 150 SF)</td>
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<tr>
<td>18</td>
<td>• Coffee Alcove</td>
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<tr>
<td>18</td>
<td>• Restrooms (not part of NASF)</td>
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<tr>
<td>Pg.</td>
<td>Area</td>
<td>User ASF</td>
<td>Collections ASF</td>
<td>Staff ASF</td>
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<tr>
<td>20</td>
<td>Interactive Information Services</td>
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<tr>
<td></td>
<td>• Multimedia Workstations</td>
<td>2,050</td>
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<tr>
<td></td>
<td>(33 @ 62 SF)</td>
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<td>20</td>
<td>• Faculty Development</td>
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<tr>
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<td>• Multimedia Classroom/s</td>
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<td>(1 divided 2 @ 35 students)</td>
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<tr>
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<td>• Audio/Visual Svcs</td>
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<td>• Audio Listening</td>
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<td>(20 @ 40 SF)</td>
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<tr>
<td>23</td>
<td>• AV Rooms</td>
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<tr>
<td></td>
<td>(4 @ 200 SF? ~ 4 @ 300 SF)</td>
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<td></td>
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</tr>
<tr>
<td>23</td>
<td>• Audio Production</td>
<td>64</td>
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</tr>
<tr>
<td>24</td>
<td>• User Support Desk</td>
<td>550</td>
<td></td>
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</tr>
<tr>
<td>24</td>
<td>• Staff Office, 2 @ 90 SF</td>
<td>180</td>
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<tr>
<td>26</td>
<td>Reference Services</td>
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<tr>
<td>26</td>
<td>• Service Desks</td>
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<tr>
<td>27</td>
<td>• Electronic Info Wkstations</td>
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<tr>
<td></td>
<td>(30 @ 45 SF)</td>
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</table>
### Summary of Square Footage Allocations

<table>
<thead>
<tr>
<th>Pg.</th>
<th>Area</th>
<th>User ASF</th>
<th>Collections ASF</th>
<th>Staff ASF</th>
<th>Other ASF</th>
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<tr>
<td>27</td>
<td>Catalog Online Wkstations</td>
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<td>280</td>
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<td>(12 @ 23 SF)</td>
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<tr>
<td></td>
<td>additional 10 OPAC on lower level and 2nd fl. ea.</td>
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<tr>
<td>27</td>
<td>Reference Collections/Bookstacks</td>
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<td>(2 copiers)</td>
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<td>Reference Faculty Offices</td>
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<tr>
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<td>(10 @ 150 SF)</td>
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<td>30</td>
<td>Staff Work Area</td>
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<tr>
<td>31</td>
<td>Machine Readable Consultation Office</td>
<td></td>
<td>320</td>
<td></td>
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<tr>
<td></td>
<td>Services Office - (3 alcoves @ 90 SF, R&amp;D &quot;Imagineering room&quot; @ 150 SF)</td>
<td></td>
<td></td>
<td>150</td>
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</tr>
<tr>
<td>31</td>
<td>Library Instruction Lab</td>
<td></td>
<td>950</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(15 @ 62 SF)</td>
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<tr>
<td>32</td>
<td>Library Instruction Classroom</td>
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<td>1,000</td>
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<td></td>
</tr>
<tr>
<td>34</td>
<td>Faculty Reading Room</td>
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<td>Access Services</td>
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<td>Service Desk</td>
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<tr>
<td>36</td>
<td>Sorting Area</td>
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<td>Pg.</td>
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<td>User ASF</td>
<td>Collections ASF</td>
<td>Staff ASF</td>
<td>Other ASF</td>
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<td>Reserve/Media Collections</td>
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<tr>
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<td>Staff Alcoves &amp; Work Area</td>
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<tr>
<td>38</td>
<td>(4 @ 90 SF; work @ 250 SF)</td>
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<tr>
<td>38</td>
<td>(2 @ 150 SF)</td>
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<tr>
<td>38</td>
<td>additional faculty @ 150 SF?</td>
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<td>150</td>
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<td>39</td>
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<td>Staff Work Area</td>
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<td>Director's Office</td>
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<td>** Document Delivery (incl. ILL)</td>
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<td>** Student Worker Cloak Room</td>
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<tr>
<td>42</td>
<td>Sink Alcove</td>
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<td>Government Publications</td>
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<tr>
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<td>Government Bookstacks</td>
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<td>(2,000 LF)</td>
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<tr>
<td>44</td>
<td>Map Collections</td>
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<td>User ASF</td>
<td>Collections ASF</td>
<td>Staff ASF</td>
<td>Other ASF</td>
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<tr>
<td>45</td>
<td>Documents Libn/Faculty Office (1 @ 150 SF)</td>
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<td></td>
<td>150</td>
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<tr>
<td>45</td>
<td>Work Area</td>
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<tr>
<td>46</td>
<td>Photocopier Alcove</td>
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<td>Government Reading Area</td>
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<td>Current Periodicals (2,295 LF)</td>
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<td>Service Counter</td>
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<td>Photocopier Alcoves (3 @ 75 SF)</td>
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<td>225</td>
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<tr>
<td>51</td>
<td>Periodicals Reading Area - could be within Current Periodicals secure area. Seating for 100 @ 30 SF</td>
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<td>3,000</td>
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<td>Periodicals Libn/Faculty Office (1 @ 150 SF)</td>
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<td>Staff Work Alcove (1 @ 90 SF, add to Work Room)</td>
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<td>53</td>
<td>Microforms Storage</td>
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# Library and Learning Resources Service Building Planning

## Summary of Square Footage Allocations

<table>
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<tr>
<th>Pg.</th>
<th>Area</th>
<th>User ASF</th>
<th>Collections ASF</th>
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<th>Other ASF</th>
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<tr>
<td>54</td>
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<td>61</td>
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<tr>
<td>62</td>
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<td></td>
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Special Collections
## Summary of Square Footage Allocations

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<td>(incl. 1 alcove @ 90)</td>
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<td>• CMHC Work Area</td>
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<td>67</td>
<td>• Archivist/Faculty Office</td>
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<td></td>
<td>• Classrooms</td>
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<td>• Multimedia Classroom/s</td>
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<tr>
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<td>• Division Leader</td>
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<td>72</td>
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<td></td>
<td>(1 @ 150 SF)</td>
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</table>
### Summary of Square Footage Allocations

<table>
<thead>
<tr>
<th>Pg.</th>
<th>Area</th>
<th>User ASF</th>
<th>Collections ASF</th>
<th>Staff ASF</th>
<th>Other ASF</th>
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<tbody>
<tr>
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<td>(1 @ 200 SF)</td>
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<tr>
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<td>83</td>
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<td>(3 @ 120 SF)</td>
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<td>Multimedia Production Studios</td>
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<td>(3 @ 150 SF)</td>
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</table>
## Summary of Square Footage Allocations

<table>
<thead>
<tr>
<th>Pg.</th>
<th>Area</th>
<th>User ASF</th>
<th>Collections ASF</th>
<th>Staff ASF</th>
<th>Other ASF</th>
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<tbody>
<tr>
<td>84</td>
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<td>• Storage</td>
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<td>(2 @ 100 SF; 1 @ 200 SF)</td>
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<td>(180 seats @ 10 SF)</td>
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<tr>
<td>86</td>
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<td>60</td>
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</tr>
<tr>
<td></td>
<td>(w/ copier alcove)</td>
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<tr>
<td>87</td>
<td>Support Areas</td>
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<td>• Shipping Room</td>
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<tr>
<td>87</td>
<td>• Mail Room</td>
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<td>89</td>
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<td>(500 @ 40 SF; remaining</td>
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<tr>
<td></td>
<td>@ 30 SF)</td>
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**Total Square Footages**

[Building total = 158,320 NASF]

<table>
<thead>
<tr>
<th>Pg.</th>
<th>Area</th>
<th>User ASF</th>
<th>Collections ASF</th>
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<td>Total Square Footages</td>
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</table>

**Total Percentage of Building**

(based on total square footage of 158,320)