### Contents

#### Preface

xiv

#### 1. Building, Planning, and Architecture

- A. Indicators of Dissatisfaction with Existing Facilities  
- B. Institutional Planning Team  
- C. Determining Space Needs  
- D. Joint Use Considerations  
- E. Selecting a Library Building Consultant  
- F. Choosing an Architect  
- G. Client/Architect/Contractor Relationship  
- H. Architectural Design  
- I. Choosing a Contractor  
- J. Recommended Resources  

1

#### 2. Building Construction Alternatives

- A. New Construction Considerations  
- B. Building Addition Considerations  
- C. Conversion of Existing Buildings for Library Use  
- D. Preserving Existing Library Buildings  
- E. Virtual Library Considerations  
- F. Alternatives to Increasing Library Spaces  
- G. Recommended Resources  

17
3. **Library Site Selection** 25
   A. General Conditions 25
   B. Community Planning Issues 26
   C. Location 27
   D. Accessibility 28
   E. Size 29
   F. Environmental Issues 30
   G. Safety Issues 31

4. **Sustainable Design** 33
   A. LEED Certification 33
   B. Sustainable Sites 34
   C. Water Efficiency 36
   D. Energy and Atmosphere 37
   E. Materials 38
   F. Indoor Environmental Air Quality 39
   G. Lighting and Daylighting 40
   H. Roofs 41
   I. Heating, Ventilating, and Air Conditioning 42
   J. Recommended Resources 43

5. **General Exterior Considerations** 45
   A. Landscaping 45
   B. Parking 47
   C. Building Exterior 48
   D. Roof 49
   E. Bicycle Racks 49
   F. Flagpole 49
   G. Exterior Signage 50
   H. Loading Docks and Delivery 51
   I. Outdoor Trash Enclosures 53
   J. Outdoor Book and Media Returns and Curbside Pickups 53
   K. Recommended Resources 54

6. **Interior Organization of Library Buildings** 55
   A. Public Health Considerations 55
   B. Entrance 56

available at alastore.ala.org
C. Circulation Desk Facilities  
D. Reference Facilities  
E. Information Commons  
F. Collaborative Spaces  
G. Multimedia Facilities  
H. Media Production and Presentation Labs  
I. Special Collections, Rare Books, and Archives  
J. Reserve Book Room  
K. Faculty/Graduate Carrels and Study Rooms  
L. Group, Quiet, and Silent Study Spaces  
M. Literacy Center  
N. Young Adult Facilities  
O. Children’s Facilities  
P. Meeting and Seminar Rooms  
Q. Convenience Facilities  
R. Displays  
S. Public Art  
T. Interior Signage  
U. Workroom and Offices  
V. Staff Lounge  
W. Friends of the Library  
X. Library Store  
Y. Interior Storage  
Z. Safe and Shelter Rooms  
AA. Recommended Resources  

7. Compliance with ADA Accessibility Standards  
A. Transportation, Parking Lots, Parking Signage, and Accessible Routes  
B. Ground and Floor Surfaces  
C. Curb Cuts  
D. Ramps  
E. Stairs  
F. Lifts and Elevators  
G. Doors  
H. Entrances  
I. Accessible Routes within the Building
### CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Drinking Fountains</td>
<td>94</td>
</tr>
<tr>
<td>K. Toilet Rooms</td>
<td>95</td>
</tr>
<tr>
<td>L. Toilet Stalls</td>
<td>95</td>
</tr>
<tr>
<td>M. Water Closets</td>
<td>96</td>
</tr>
<tr>
<td>N. Urinals</td>
<td>97</td>
</tr>
<tr>
<td>O. Bathroom Sinks</td>
<td>97</td>
</tr>
<tr>
<td>P. Handrails and Grab Bars</td>
<td>97</td>
</tr>
<tr>
<td>Q. Controls and Operating Mechanisms</td>
<td>98</td>
</tr>
<tr>
<td>R. Alarms</td>
<td>99</td>
</tr>
<tr>
<td>S. Signage</td>
<td>99</td>
</tr>
<tr>
<td>T. Telephones</td>
<td>101</td>
</tr>
<tr>
<td>U. Fixed or Built-in Seating and Tables</td>
<td>101</td>
</tr>
<tr>
<td>V. Assembly Areas</td>
<td>102</td>
</tr>
<tr>
<td>W. Building Assistance Facilities</td>
<td>103</td>
</tr>
<tr>
<td>X. Service Animals</td>
<td>104</td>
</tr>
<tr>
<td>Y. Recommended Resources</td>
<td>105</td>
</tr>
</tbody>
</table>

#### 8. Telecommunications, Electrical, and Miscellaneous Equipment

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Industry Standards</td>
<td>107</td>
</tr>
<tr>
<td>B. General Considerations</td>
<td>107</td>
</tr>
<tr>
<td>C. Entrance Facility</td>
<td>108</td>
</tr>
<tr>
<td>D. Equipment Room</td>
<td>109</td>
</tr>
<tr>
<td>E. Telecommunications Room</td>
<td>110</td>
</tr>
<tr>
<td>F. Horizontal Pathways</td>
<td>110</td>
</tr>
<tr>
<td>G. Cabling and Outlets</td>
<td>111</td>
</tr>
<tr>
<td>H. Wireless</td>
<td>112</td>
</tr>
<tr>
<td>I. Workstation Connections</td>
<td>114</td>
</tr>
<tr>
<td>J. Workstation Equipment</td>
<td>114</td>
</tr>
<tr>
<td>K. Telephone System</td>
<td>115</td>
</tr>
<tr>
<td>L. Miscellaneous Electrical Equipment</td>
<td>115</td>
</tr>
<tr>
<td>M. Electrical Power</td>
<td>116</td>
</tr>
<tr>
<td>N. Recommended Resources</td>
<td>117</td>
</tr>
</tbody>
</table>

#### 9. Interior Design and Finishes

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. General Cleaning Protocols</td>
<td>119</td>
</tr>
<tr>
<td>B. Service Desks</td>
<td>120</td>
</tr>
</tbody>
</table>
### C. Seating 121
### D. Tables 123
### E. Plus-Friendly Spaces 124
### F. Lighting 125
### G. Windows 126
### H. Flooring 126
### I. Walls 127
### J. Color 128
### K. Equipment List 128
### L. Behavioral Aspects of Space 131
### M. Recommended Resources 135

#### 10. Entrepreneurial and Collaborative Spaces 137
   A. Makerspaces 137
   B. Coworking in the Library 141
   C. Technology Lending Library 142
   D. Musical Instrument Lending Library 143
   E. Tool Lending Library 143
   F. Seed Lending Library 144
   G. Open Educational Resources (OER) 145

#### 11. Shelving, Storage, and Materials Handling 147
   A. Conventional Stationary Stacks and Shelving 147
   B. Movable-Aisle Compact Shelving 150
   C. Automated Storage and Retrieval Systems 151
   D. Materials Handling Systems 152
   E. Remote Storage 153
   F. Storage and Distribution of Electronic Media 154

#### 12. Building Systems 157
   A. Acoustics 157
   B. HVAC (Heating, Ventilation, and Air-Conditioning Systems) 159
   C. Electrical Systems 163
   D. Lighting 164
   E. Plumbing and Restrooms 167
   F. Elevators and Escalators 169
   G. Internet of Things to Monitor and Control Building Systems 169
   A. General 173
   B. External Security 174
   C. Internal Security 174
   D. Fire Safety 175
   E. Disaster Planning 175
   F. Public Safety 177
   G. Public Health 178
   H. Recommended Resources 179

   A. Regular Routine Maintenance Considerations 181
   B. Building Materials 182
   C. Graffiti and Security 183
   D. Building Systems Preventive Maintenance 183
   E. Building Cleaning 185
   F. Custodial Facilities 188
   G. Groundskeeper Facilities 188
   H. Trash Enclosures 189
   I. Betterments and Improvements 189

   A. Construction Site Meetings 191
   B. Change Orders 192
   C. Building Acceptance 193
   D. Certificate of Occupancy 194
   E. Getting Ready for Occupancy 195
   F. Moving 195
   G. Post-Occupancy Evaluation 196

16. Groundbreaking and Dedication Ceremonies 199
   A. Planning 199
   B. Event Checklist 202

Bibliography 205
About the Author 223
Index 225

available at alastore.ala.org
Preface

The first edition of the Checklist of Library Building Design Considerations (referred to as the Checklist throughout) was published in July 1988 as a 75-page pamphlet by the Buildings and Equipment Section (BES) of the Leadership and Management Association (LAMA), a division of the American Library Association. The author was the chair of LAMA/BES at that time, and the pamphlet was a project that a committee distributed based on a manuscript produced by doctoral students in the School of Library and Information Studies at Texas Woman's University in 1983. The current edition of the Checklist, as well as the previous six editions, chronicle the evolution of the library building—and even of librarianship—over a 35-year period.

Good library service depends on three factors: 1) information of interest and value to users, 2) library staff to link users with the information resources of the library, and 3) a method or place to transfer the information from the library to users. This has been true since the first systematically organized libraries in the Middle East dating back to the seventh century BC, and up to the newest library opening today.

During the 35-year history of the Checklist, library service has changed greatly. In the 1980s, libraries were primarily places to house collections of print materials, where library users could access the collections with the help of library staff. Gradually libraries changed and evolved. Some print materials (primarily serials) evolved from a paper format to an electronic one, and bibliographic sources such as the card catalog and database search catalogs changed completely to electronic versions. The sharing of collections was enhanced by cooperatives, and a “last copy” policy enabled many libraries to effectively “cull” their in-library collections and use remote storage for materials that would be retrieved only when they were needed. Staff were even more valuable as a source for locating material acquisitions and helping with searches. Some of these changes created space in the library building for “other activities.”

There were now all sorts of other activities to fill the library, based on the needs of the community served by it, and libraries became a place where people could go for a
variety of reasons, some of them not even considered before 1980. An academic library might have, for example, a computer center with banks of computers for student and public use, and a study center that students could use between classes. A public library might have a center for community activities and events ranging from cooking classes to senior yoga sessions. Seminar spaces sprang up in all types of libraries that could be used for small group interactions, study sessions, and civic and cultural sessions. A library might have a “makerspace” where budding entrepreneurs could congregate to create all sorts of materials. These examples illustrate that the library was evolving from its traditional role as a warehouse of materials into more of a social space fueled by interactions and involvement.

And suddenly things changed in 2020. The COVID-19 pandemic made libraries suspend some of their new social activities because of the dangers of face-to-face contact. In some cases, entry into the physical building was curtailed or limited, and spacing inside the building was increased to provide the correct “social distance.” Almost all users’ interactions with library staff became virtual through Zoom, and some form of this virtual communication may continue into the future. And in the meantime, the march toward electronic resources has continued, which allows users to access the library’s collections without even having to enter the building.

In the author’s subjective opinion, one positive aspect of the changes in library buildings over the last 35 years is that they have become more exciting and attractive, not only in the United States but throughout the world. Talented architects and designers have used their skills to create three-dimensional works of art on campuses and in public libraries that invite users in and make them want to stay. Kudos to those administrators who realize that architects can only be as creative as the client allows and who demand and expect exceptional design.

Changes in the Seventh Edition
All sections in the seventh edition of the Checklist have been reviewed, revised, and updated, and some of the major changes include:

☐ A revised format that continues to preserve aspects of the checklist style of the original publication, but now also includes an in-text narrative that provides introductions to sections, along with explanations.

☐ A new section dealing with the relationship between the client (the library and/or its political authority) and the architect and contractor based on a blog published by the California architectural firm of Wagstaff + Rogers Architects.

☐ A new list of recommended resources on building planning, including general guidelines and guidelines for academic, public, and school libraries.

☐ An expanded treatment of building addition considerations, building rehabilitation issues, and the preservation of existing historic buildings.

☐ A section dealing with virtual library considerations, as well as a fuller discussion of alternative library spaces.

☐ A new section dealing with site-safety issues.
An expanded section dealing with sustainable design and the role that LEED and the U.S. Green Building Council play in helping to plan buildings within the confines of a budget.

A brief discussion on how to improve indoor air quality to enhance protection against COVID-19 and other viruses.

An explanation of the importance of roofing materials in making the building energy-efficient.

Why inviting open spaces are helpful in inhibiting the transfer and spread of viruses.

A question as to whether parking should be discouraged by the library.

A list of safety equipment and tools if the library does provide a parking lot or garage.

A list of different types of recycling containers required for the variety of waste materials created in the library.

The chapter on the “Interior Organization of the Library Buildings” has a new introductory section dealing with how to reduce the risk of infectious viruses through increased ventilation.

Recommendations for coping with viruses and infectious diseases in meeting rooms and gathering spaces.

A new section on safe and shelter rooms to protect users and staff in case of natural disasters or violence in the library.

Revisions to the Americans with Disabilities Act (ADA) section, including additional background on the ADA, as well as guidelines to assist libraries in complying with the act’s rules and regulations.

A discussion of industry sources and standards for telecommunications, electrical, and miscellaneous equipment.

A review of suggested equipment and procedures to reduce the transfer of viruses in interior spaces.

A set of protocols for cleaning interior public service spaces and seating.

A new section on the storage and distribution of electronic media.

Suggested changes for heating, ventilation, and air conditioning (HVAC) to reduce the spread of airborne diseases.

An updated discussion of the remote control of building systems, including HVAC, lighting, electrical, irrigation, safety, and others.

A discussion of why flexibility in electrical design is needed because of constantly changing library floor plans.

A discussion of how the internet of things (IoT) will influence electrical design.

A discussion of the benefits of human-centric lighting.

A discussion of suggested design and protocols for gender-neutral restrooms.
A discussion that addresses the threat posed by people who are intent on doing physical harm to staff and users of the library.

A section on the actions that libraries can take to lessen the threat of disease transmission.

Additional suggestions on how to improve building cleaning.

A new section on library site meetings for the owner (library), contractor, and architect during construction.

A new section dealing with change orders during constructions, including what they are, why they occur, and how they should be handled.

A discussion of the suggested procedures and protocols needed during ground breaking, dedication, and other ceremonial events to protect against the spread of infectious diseases.

What These Changes Imply for Designing Libraries Today

Flexibility is key in planning a building. A new library building is designed to last for at least 20 to 30 years without major renovations, and during that time period, the services and functions of the library will change. Thus it is important to have few fixed walls and spaces, and to have HVAC, lighting, and electrical systems that can be easily repositioned.

Know the products and services your stakeholders want and need, and have the building designed to satisfy those needs. The mission of all types of libraries is constantly changing based on the changing needs of users, and it is vital to understand those needs because function should drive design.

Have windows that open to enhance natural ventilation; the best way to prevent the spread of diseases is fresh air. For a period, buildings were “tight” to preserve heat loss and gain, and while this is still important, it does not rank as high as human health.

“Sustainable design,” or ecologically friendly design, will become more important than ever, and libraries will have to do a cost-benefit analysis of implementing sustainable design, weighing its costs against its benefits.

Think about how your patrons will interact with library staff. The methods of staff-to-patron interaction changed during the pandemic, and several of those changes won’t be reversed completely.

Monitor developments in artificial intelligence (AI) and their possible impact on libraries and library buildings. AI can be either a disruptive or a promising development for libraries.

Balance the cost of the real estate, construction, and sustainability required to provide parking for individual cars.
Thanks

I would like to thank Anna Tatar and Margaret Kazmer, former colleagues at the San Diego Public Library, who always performed at the highest level of library professionalism, and who, along with Helga Moore, were instrumental in developing San Diego’s new Central Library. Without their efforts, there would not be a new main library in San Diego. The new Central Library is on the cover of this edition.

I also appreciate the support I received from Patrick Hogan and Rachel Chance at ALA Editions. Publishing with ALA Editions has been a pleasure over the years, and I hope to continue this mutually productive relationship for many years to come.
Building, Planning, and Architecture

Building a new library or renovating an existing library building is one of the most significant decisions that any institution can make. Significant because it requires money, time, expertise, and patience. Funding is the key, and if sufficient funds are not available there is no building project. Some building projects require decades, from the realization of the need for an improved library building to the dedication of the new facility. Most of that delay is due to difficulties in obtaining financing or to a lack of political will on the part of decision-makers. Knowing what the library needs to meet its information mission, and translating those needs into a physical space, is the duty of the planning team that will guide the building project, so select the best team possible. And make sure you have a team, and not just a collection of talented individuals. Finally, patience is necessary because you will have setbacks, you will encounter people you find irritating, and unexpected events will occur that may not always be pleasant. But when the ribbon is cut for the new facility, all the irritants you experienced will disappear and you will rejoice in helping to make the new facility a reality.

A. Indicators of Dissatisfaction with Existing Facilities

There are triggers that signal that it is time to consider remodeling an existing library building or constructing a new one. The need for a new or renovated space is not always obvious because library staff and users are in the building daily, and the need for improvement is not noticeable if you are familiar with it. Some of the indicators of the need for a change include:

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Has the mission of the library changed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Has the population served by the library increased or decreased?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Have the demographics of the population served by the library changed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Has the library formed a partnership or alliance with another institution that requires a change in the physical building?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

available at alastore.ala.org
5. Are there problems with the physical condition of the building (outdated systems, inflexible floor plans, ADA problems, difficulty in installing technology)?  

6. Does the existing building hinder the delivery of good service?  

7. Is there enough space for the products and services the library offers?  

8. Has the mix of products and services offered by the library changed, causing a need to reevaluate the physical space?  

9. Does the physical building have the required infrastructure to accommodate current and future technology?  

10. In order to accommodate the growth of library collections, have seats been exchanged for stacks? This tends to be less likely for most libraries, as bound volumes are being exchanged for electronic serials and e-books.  

11. Is the library considering storing its book collections in compact shelving or in an off-site storage facility?  

12. Is the atmosphere of the library pleasing for customers and staff?  

13. Why and what is the need to increase physical security and/or safety for users and staff?  

Comments:  
_________________________________________________________________________  
_____________________________________________________________________________________

B. Institutional Planning Team

The planning process is key to the final success of the building project, and planning works best with the talents and experience of a wide variety of stakeholders. It is usually best to keep the planning team small, but inclusive of major stakeholders.

1. Has an institutional library planning team been formed?  

2. Who are the members of the library planning team? Is/are there  
   a) A representative of the legal owner (university, school city, etc.)?  
   b) A library representative?  
   c) User representatives (faculty, students, citizens, etc.)?  
   d) Other representatives with technical skills such as engineering, legal, financial, architectural, buildings, and so on?  
   e) Representatives of the local or the campus building department?  
      Having building officials as part of the committee may eliminate the need for changes made later because the planned building does not meet the local codes.  
   f) Others (Friends of the Library, library committee members, and so on)?
3. Will the architect hold a charrette for all members of the library planning team? A charrette is essentially a design workshop where designers, residents, developers, city officials, university representatives, planners, and other stakeholders come together to envision what the planners hope a new library will accomplish.

4. What roles will members of the library planning team play:
   a) Advising (gathering and disseminating information about the project)?
   b) Innovating (suggesting new ideas or new ways to tackle old problems)?
   c) Promoting (“selling” the project to interested stakeholders)?
   d) Developing (assessing and developing ideas for practical implementation)?
   e) Maintaining (ensuring that an infrastructure is in place so that the team can work with maximum efficiency)?
   f) Linking (coordinating all work roles to ensure maximum cooperation and interchange of ideas, expertise, and experience)?

5. Who will be the spokesperson and chief contact for the institution on the project? It is vital that only one person speak and make decisions for the institution during all stages of the building process.

   Comments: ___________________________________________________________________________________

6. How will conflict be resolved on the building project?

   Comments: ___________________________________________________________________________________

7. Who will make the final decisions on design, space allocations, costs, and change orders?

   Comments: ___________________________________________________________________________________

C. Determining Space Needs

The role of libraries is changing from the storage and access of library materials to serving as an interactive center for information, experiences, and knowledge. This change from a static center to a dynamic hub modifies the spaces required to support the new role.

For example, according to OCLC, print circulation in U.S. academic libraries has declined by 74 percent since 2004. The decline of print collections, the use of compact shelving and/or book retrieval systems, the growth of electronic media, concern for healthy building hygiene, changes in the role the library plays in the campus or community, and many other factors make planning for the size and function of future library services challenging.

1. Have the library staff and administration met to decide the mission and long-term vision of the library? Space allocations and needs should be based on the vision and mission of the library.
2. Has a library building consultant been hired to help the library with its planning?
   □ □ □

3. Has a building program been prepared that details the space needs, adjacencies, and unique functions and features of the proposed building?
   □ □ □

4. Has the library building consultant prepared the building program, or advised staff on preparing the program?
   □ □ □

5. What will be the useful life of the new building? Most building changes should accommodate the library for a period of approximately twenty years.
   Comments: ____________________________________________

6. If a building change is planned that is an interim solution, how will this impact future needs?
   Comments: ____________________________________________

7. What existing programs will be discontinued in the new building?
   Comments: ____________________________________________

8. What new programs will be added in the new building (services like makerspaces, labs, artificial intelligence, and so on)?
   Comments: ____________________________________________

9. What will be the growth or decline of staff over the next twenty years?
   Comments: ____________________________________________

10. How will the service population change over the next twenty years?
    Comments: ____________________________________________

11. What changes will take place in the size of the collection over the next twenty years? Will it increase or decrease? Will this cause a growth or decline of shelving?
    Comments: ____________________________________________
12. What will be the mix of the collection over the next twenty years? Will print and media be replaced by electronic collections?

Comments: __________________________________________

________________________________________________________________________

_____________________________________________________________________________________

13. What will be the growth or decline of the library's seating requirements over the next twenty years?

Comments: __________________________________________

________________________________________________________________________

_____________________________________________________________________________________

14. What technology will be required to support library programs over the next twenty years?

Comments: __________________________________________

________________________________________________________________________

_____________________________________________________________________________________

15. In estimating the size of the new building, consider the following space-planning tools:

a) **Space estimating.** How much library space is needed to support current and future programs? Plan to add up all the library spaces that will be needed based on the programs and activities that the library wants to undertake in the new building. The total of all spaces equals the ideal size of the new building or expansion.

Comments: __________________________________________

________________________________________________________________________

_____________________________________________________________________________________

b) **Benchmarking.** What is the size of the library buildings in similar institutions? It is valuable to have a database of 10 similar libraries that may be consulted not only for facility size, but also for other measurable aspects of library space. If you can’t measure it, you can’t manage it.

Comments: __________________________________________

________________________________________________________________________

_____________________________________________________________________________________

c) **Standards and guidelines.** What do library association, regional, state, and other guidelines and standards call for as far as space guidelines?

Comments: __________________________________________

________________________________________________________________________

_____________________________________________________________________________________

d) **Budget.** What can the library afford? This is sometimes the deciding factor.

Comments: __________________________________________

________________________________________________________________________

_____________________________________________________________________________________
D. Joint Use Considerations

The benefit of joint use is that efficiencies may occur when two types of libraries combine, like the San José State University Library and the San José Public Library. Generally, most joint use facilities function well if they are planned to accommodate the needs of both libraries. In many cases, the genesis for joint use comes from political leaders rather than library staff.

1. Is there another organization and/or department on the campus or community that might offer synergy to the library by sharing facilities?

2. Is there another library or other organization that might offer potential synergy for a joint use facility?

3. Do the missions of the libraries considering a joint facility have enough commonalities to enhance the chances of success?

4. Are there possible efficiency and cost savings by having a joint facility?

5. Can the quality and quantity of service be improved for both libraries through a joint facility?

6. If a joint facility is agreed to, has a joint interagency agreement been negotiated?

7. Have the following factors been considered in the agreement:
   a) Governance? A written agreement is strongly recommended, and the agreement should list the parties entering into the agreement. The agreement should provide a clear demarcation of responsibilities.
   b) Funding? Make sure that the financial responsibilities of each party are placed in the agreement; include not only capital costs, but operational expenses as well.
   c) Ownership of assets? In the agreement, define the ownership of assets (assets can include items such as equipment and book collections), and come to terms with how ownership will be decided if the agreement is terminated.
   d) Hours of operation? The agreement should list the hours of operation of both libraries, and if either partner has restrictions on use.
   e) Staffing? The local staffing requirements for both types of libraries should be met because the combined facility is two libraries sharing a common space, and each library may require different certification or licensing.
   f) Volunteers? Some libraries rely on youth and parent volunteers, and the other library may not use as many volunteers.
   g) Collections? Care must be taken to develop collections that are responsive to the needs of both libraries’ sets of users.
   h) Changes? How will changes in any of the above policies be determined? The agreement must be flexible enough to allow modifications as conditions change.
i) *Termination of the agreement?* If for some reason a termination is desired in the future, the agreement should list the terms of termination.

## E. Selecting a Library Building Consultant

The role of a building consultant is to translate the space needs of the library into a document that the architect can use to design a building. The document created is the building program, and it is like a “cookbook” for the architect. Building consultants document the library’s needs, and architects translate those needs into spaces.

1. Is there someone on the staff who has the necessary planning knowledge and experience of the functional needs and requirements of library buildings? If not, a library building consultant should be retained.

2. Has the consultant been retained at the very start of the building planning process so that he or she can take part in every step of the project?

3. Is the consultant listed in the Library Consultant List (www.libraryconsultants.org/index.html)?

4. Does the consultant have broad and diverse technical experience in planning new library buildings, renovations, and additions, and the conversion of other buildings into library buildings?

5. Does the consultant have the organizational and record-keeping skills needed to document and respond to key events and activities during the project?

6. Does the consultant have the personal characteristics, experience, and skills necessary to assist a library in its unique planning and building needs?

7. Does the consultant have the written and verbal communication skills required to interact with all stakeholders?

8. Does the consultant have the political skills necessary to listen and respond to the concerns of all who may have a stake in the building project?

9. Does the consultant have the ability to explain a point of view and to persuade others of the importance of carrying out the consultant’s recommendations?

10. Will the consultant provide advice on the selection of the architect and other members of the building’s technical planning team?

11. Is the consultant’s schedule flexible enough for him or her to be available for meetings with the library’s planning committee when required?

12. Is the consultant available by telephone, surface mail, or electronic communication to answer questions and provide guidance when his or her physical presence is not required?
F. Choosing an Architect

Architects configure the client’s needs, wants, and dreams into built space for library users and staff, and the architect may also be responsible for creating an architectural symbol for the library. The building consultant and architect will be part of a library’s life for two to four years, and the following should be considered in architect selection.

1. Does the library staff play a major role in the selection of the architect?

2. Has the group responsible for selection of the architect developed selection criteria?

3. Does the architectural selection process include:
   a) Announcement of the proposed project in an official publication used by the client organization, or in the general press?
   b) Issuance of requests for proposals and/or information?
   c) Submittals by interested architectural firms?
   d) Provision of standardized forms so that a uniform evaluation of architectural firms can be used during the evaluation process?
   e) Evaluation of the firms based on the selection criteria developed by the group responsible for selection of the architect?
   f) Interviews with the “short list” of firms that the selection group has decided best meets the selection criteria?
   g) A tour of the site or facility organized prior to the final selection of the architectural firm? It may be appropriate for the tour to be arranged prior to the short-listing process, or it may be considered more appropriate to delay the tour until after a short list is determined.
   h) Ranking of the top firms to identify the best-qualified ones?
   i) Selection of the top-ranked firm based on the interview discussions and the selection criteria?
   j) Notification of unsuccessful firms, and a debriefing as to why they were not selected?

4. While not necessarily recommended, does the selection process involve:
   a) A limited or open architectural competition?
   b) A design/build competition?
   c) Bidding among various competitors?

5. Is the architectural firm an individual, partnership, corporation, or a joint venture?

6. Will the person who presents for the architectural firm be involved in the project?

7. Is the architect or architectural firm registered to practice in the state?

8. Is the architect of record registered to practice in the state?
9. Are all key personnel and sub-consultants from the architect’s office who are involved in the project identified? □ □ □

10. Are the architect’s support team members identified: the landscape architect, civil engineer, structural engineer, acoustic engineer, mechanical engineer, electrical engineer, ADA compliance officer, and any other key specialists involved in the project? □ □ □

11. Does the architectural team have the required support equipment—CAD, 3D modeling, renderings in-house, and so on? □ □ □

12. Are all members of the architect’s support team part of the firm, or does the architect retain them as sub-consultants? □ □ □

13. Can the architect’s organization provide enough resources to devote sufficient time and energy to the project? □ □ □

14. Does the architect have experience in working with public agencies? □ □ □

15. Does the architect have prior experience in designing libraries? In some cases, it may be advantageous to have an architect who has not worked on a library building. □ □ □

16. If the architect has not worked with libraries, does the architect have a plan to become knowledgeable about the library’s needs? This may require a library building consultant, preferably one retained by the client. □ □ □

17. Is the architect an empathetic listener, one who is willing to understand the library’s needs? □ □ □

18. Will the architect place the library’s needs before design considerations? □ □ □

19. Does the architect’s workload allow the firm to devote adequate time to the project? □ □ □

20. Does the architect have solid reference reports from past clients? □ □ □

21. In projects completed by the architect:
   a) Did the projects come in at or under budget? □ □ □
   b) Did the projects come in on time? □ □ □
   c) What was the extent of change orders in number and dollars? □ □ □
   d) If there were change orders, has it been determined whose fault they were? (Not all change orders are the architect’s fault.) □ □ □
   e) What litigation has occurred against the architect? □ □ □
   f) What litigation has occurred against the architect’s former clients by the architect? □ □ □

22. Does the architect have the written and verbal communication skills required for interacting with all stakeholders? □ □ □

23. Does the architect have the political skills necessary to listen and respond to the concerns of all external and internal building-project stakeholders? □ □ □

available at alastore.ala.org
About the Author

William Sannwald is a full-time faculty member in the Fowler College of Business at San Diego State University and works as a library building and administrative consultant. He was an assistant to San Diego’s city manager and was the city’s manager of library design and development from 1997 to 2004. Prior to that, he was city librarian of the San Diego Public Library. He has worked in public libraries in Illinois, Minnesota, Michigan, and California. Sannwald received his bachelor’s degree in economics from Beloit College in Wisconsin, an MBA degree from Loyola University in Chicago, and an MALS degree from Dominican University in Illinois. He has presented papers at national and international conferences and is the author of a number of books and articles on library architecture and management. The San Diego chapter of the American Institute of Architects presented him with their highest award, the Irving Gill Award, for his contributions to library architecture, and he received the San Diego design community’s Ruocco Award for his contributions to urban architecture. During his career, Sannwald has been involved in the construction of more than fifty library buildings as either a consultant or owner’s representative in the United States, Great Britain, Angola, Greece, and the United Arab Emirates. He was elected to the International Federation of Library Systems’ Standing Committee for Library Buildings and Equipment for 2007–2011.

Sannwald teaches a variety of upper division undergraduate and MBA courses in the management department at San Diego State University’s Fowler School of Business. He was selected as the most influential management professor and received the Outstanding Faculty Award in the Business School. In 2017 he received the Teaching Excellence Award from his peers. In 2022, he was selected as the first Glazer Outstanding Lecturer Fellow, which includes a generous stipend funded through private gifts.
buildings, new (cont’d)
post-occupancy evaluations of, 196–197
pride of ownership of, 18
recommended guides for, 15
site selection for, 25–31, 34
twenty-year useful life of, xvi, 4–5
Buildings and Equipment Section (BES), xiii

C
cabling and wiring, 58–59, 107–111, 116, 117
California Department of Public Health (CDPH), 119–120
California Digital Library, 24
carbon dioxide, 40, 160
carpeting, 89, 123, 127, 186
carrels and study rooms, 69–70, 71, 101–102, 116, 122, 166, 187
catalogs, 22, 60, 72, 102, 142, 143, 144, 154
Centers for Disease Control and Prevention (CDC), 55–56, 85, 121, 124, 181
Clovis-Carver Public Library, 173
Clean Water Act, 35
cleaning protocols, 119–120, 137, 179, 181, 185–189
certificates of occupancy, 194
clocks, 77, 129
client/architect/contractor relationships, 10–11
clocks, 77, 129
Clovis-Varver Public Library, 173
collaborative spaces, 64–65, 70, 141–142
collections
decline of print, 3
planning considerations for, 5, 6, 17
shelving and storage of, 2, 23, 84, 147–155
special, 16, 67–69, 154
weeding of, 22
color, use of, 72, 127, 128, 134, 183
community notices, 77
community planning issues, 1, 26–28
community planning considerations for, 5, 6, 17
companion animals, 105
computer labs, decline of, 62
conference rooms, 71, 73–75, 124, 128, 141–142, 166, 187
Constructing Library Buildings That Work (Schlipf), 15
construction managers, 11
construction process, 191–197. See also buildings, new
construction staging areas, 18, 29
consultants
on feng shui, 134
on library building, 4, 7, 8, 9, 14
on telecommunications systems, 107
who are sub-consultants of architects, 9, 45, 78
contractors
post-occupancy evaluation of, 197
relationships with, 10–11, 191–193
selection process for, 13–14
collaborated digital lending, 155
controls and operating mechanisms, 95, 97, 98
core facilities, 139
cost estimates, 11
COVID-19
2020 response to, xiv, 21
and ceremony planning, 199–200
and conference rooms, 73, 74–75
and meeting rooms, 73–75
and meeting rooms, 73–75
and post-occupancy evaluations, 196–197
and printing requirements, 55, 200
and ventilation, xvi, 39, 55, 73, 126, 135, 199–200
coveting spaces, 141–142
“Creating a Safe Campus” (Baker), 31
creations, 141–142
cost estimates, 11
cost estimates, 11
cost estimates, 11
disinfectants, 181, 185
soft, 77–78
displays, 77–78
drivers, as service animals, 104–105
drivers, as service animals, 104–105
drivers, as service animals, 104–105
drivers, as service animals, 104–105
donations, 82
doors, 51, 56, 92–93, 94, 108, 109, 158
downstream processing, 140
drinking fountains, 72, 74, 76, 94–95, 100, 167, 186
duplex outlets, 109–110, 116, 164
dust control, 181
dehallucinated.
E
Ebooks, 21, 22, 147, 154–155
eGranary Digital Library, 23
electric vehicles (EVs), 35
Electrical Construction & Maintenance (journal), 107
electrical outlets, 49, 75, 81, 107, 109–110, 111, 116, 163–164
electronic media storage, 154–155
entrance facilities (EFs), 108–109
entrances, 49, 56, 87, 89, 93–94, 165, 181, 193
evergreen facilities, 137–141
environmental considerations, 19, 20, 25, 30, 33–42
Environmental Protection Agency (EPA), 119, 135, 181
equipment lists, 128–131
equipment rooms, 108–110, 111
escalators and stairs, 90–91, 169
Espresso Book Machines, 142
evaluations, post-occupancy, 196–197
 evaporative coolers, 42, 162
events, 199–204
Ex Libris, 155
expansions, 17, 18–19, 170, 195. See also renovations
Experience Economy (Pine and Gilmore), 133, 135
exterior considerations, 39, 45–54, 80, 166, 174, 183, 189
F
facilities maintenance, 181–189
faculty carrels, 69–70, 122
available at alastore.ala.org
Farley, Luke J., 192
Federal Communications Commission (FCC), 115
Federal Emergency Management Agency (FEMA), 35, 84, 85, 179
feng shui, 134
fire safety, 36, 169, 175, 185
fixed seating, 101–102, 103
flagpoles, 49–50
flooring, 59, 88–89, 126–127, 138, 186
flush-outs, 40
fountains, drinking, 72, 74, 76, 94–95, 100, 167, 186
freight elevators, 51, 77, 169
friends of the Library groups, 82–83, 202
furniture
chairs and seating, 64, 72, 101–102, 103, 121–123, 124
for plus-sized users and staff, 124–125
tables, 52, 68, 75, 101–102, 123
upholstery for, 121, 123, 128
G
Games, 66, 142
gender-neutral restrooms, 76, 168
Gilmore, James H., 133, 135
glasses and goggles, 137, 141
governance, in joint use, 6
graffiti, 48, 183
Green Building Councill, 33–34, 38, 43
green roofs, 41
greenfield sites, 25, 36
greywater, recycled, 36, 37
groundbreaking ceremonies, 199–204
groundskeeper facilities, 188
grout
hybrid work schedules, 178
HVAC systems
and air quality, 39–40
and COVID-19, xvi, 39, 55, 73, 126, 135, 159–160, 178
maintenance of, 184
and ozone depletion, 37–38
and public health, 55–56, 178
for remote storage sites, 153
sound levels of, 159
and sustainability, 42
I
IGI Global, 21
Indoor air quality, 39–40
industry standards, 107
See also COVID-19
information commons, 62–63
injuries, avoiding, 52, 73, 80, 153
innovating, role of, 3
inspections, 194
Institute for Human Centered Design, 105
institutional planning teams, 1, 2–3, 7
Interim Standards for Small Public Libraries (PLA), 15
interior design and finishes, 12, 65, 119–135
interior organization, 55–85
internal security, 174–175
International Federation of Library Associations (IFLA), 24
International Sign Association, 54
internet of things (IoT), 169–170
i+5 magazine, 168
J
Joint use considerations, 6–7
K
Kazmer, Margaret, xvii
kitchens, 74, 82, 187
Kroski, Ellyssa, 16
L
laboratories, 62–63, 67, 139–140
land, selecting. See site selection
landscaping, 31, 35, 36, 45–47, 174, 183
Latimer, Karen, 24
LCETD Institute for Civil Engineers, 169
Leadership and Management Association (LAMA), xiii
LED lighting, 41, 164
LEED certification, 33–34, 43
Legorreta, Ricardo, 20
lending libraries, 23, 142–144
librarians. See staff
libraries
academic (see academic libraries)
digital, 23, 24, 154–155
joint use of, 6–7
lending, 23, 142–144
mission and vision of, 1, 3, 6
public (see public libraries)
role of, 3
school (see school libraries)
as shelters, 84–85, 176
virtual, 21–22
Library Building Awards, 11
library building consultants, 4, 7, 8, 9, 14
Library Consultant List, 7, 14
library service, evolution of, xiii–xiv
Library Spaces for 21st-Century Learners (Sullivan), 16
library stores, 83–84
Libris Design Project, 150
lifts and elevators, 51, 77, 91–92, 124, 159, 167, 169
lighting, 31, 40–41, 74, 125–134, 164–166, 174, 184–185
linking, role of, 3
Lippincott, Joan K., 15
literacy centers, 70–71
loading docks and delivery, 51–53, 54
lobbies, 186
location considerations, 27–28. See also site selection
lounge areas, 82, 83, 157, 187
lounge chairs, 64, 66, 122, 123, 125
M
maintaining, role of, 3
maintenance considerations, 181–189
“Make a Plan” (FEMA), 179
makerspaces, 16, 17–141
Makerspaces in Practice (Kroski), 16
Managing Facilities for Results (Bryan), 16
materials, sustainable, 38–39, 182
materials handling systems, 152–153
McAllen Public Library (Texas), 20
McMillan Pazdan Smith Architects, 31
media production labs, 67
meeting rooms, 73–75, 84, 102–103, 187
meetings, on-site, 191–192
“Mitigating COVID-19” (Berendes and Rasberry), 85
molecular biology labs, 140
Moore, Helga, xvii
movable-aisle shelving, 150–151
moving, to new spaces, 195–196
multimedia facilities, 63, 65–67
musical instrument lending libraries, 143
N
National Association to Advance Fat Acceptance (NAFAA), 135
“National School Library Standards” (AASL), 16
native plants, 35, 36, 37
natural disasters, 31, 84–85, 175–177, 179
Navitas Capital, 169
Nelson, Sandra, 16
New Libraries in Old Buildings (Hauke et al.), 24
The New Planning for Results (Nelson), 16
New York City College of Technology, 62
New York Public Library, 20, 22
Niess, Robert, 24
noise considerations, 52, 70, 71, 76, 82, 121, 127, 157–159

O
obesity, accommodating, 124–125
Occupational Safety and Health Administration (OSHA), 168
OCLC, 3, 24, 159–160
ODA Architecture, 45
offices and workrooms, 80–81, 128, 158, 187
open educational resources (OER), 145
Opening the Book, 15
openness vs. seclusion, 12, 71, 175
outlets, 49, 73, 81, 107, 109–110, 111, 116, 163–164
outsourcing, 22
OverDrive, 154
ownership of assets, 6

P
panic rooms, 85
parking, 29, 35, 47–48, 87–88, 166, 185
patience, need for, 1
patrons
improving the experience of, 133
with service animals, 104–105
trainings for, 67, 140, 141
who are blind or visually impaired, 63, 89, 99, 104
who are plus-sized, 124–125
personal items, 81, 82, 188
pest control, 68, 182
Pew Research Center, 147
PHCP Pros, 167
Pine, B. Joseph, 133, 135
planning
community issues in, 1, 26–28
for disasters, 31, 84–85, 175–177, 179
for groundbreaking ceremonies, 199–201
need for flexibility in, xvi
recommended resources on, 14–16
roles in, 3
teams for, 1, 2–3, 7
plants, native, 35, 36, 37
plumbing and restrooms, 72, 76, 95–97, 125, 127, 167–168, 184, 188
plus-friendly spaces, 124–125
post-occupancy evaluations, 196–197
power outlets, 49, 75, 81, 107, 109–110, 111, 116, 163–164
“The Practice Guide to Running a School Library Design Charrette” (Hughes), 16
preservation of older buildings, 20–21
print, preferences for, 147
print circulation, decline of, 3
privacy concerns, 64, 71, 81, 108, 121, 168, 170
promoting, role of, 3
public art, 78–79
public health, 55–56, 119–120, 178–179. See also COVID-19
public libraries
accessibility in, 29
contractor selection by, 13
in converted buildings, 20
recommended resources for, 15–16
Public Library Association (PLA), 15–16
public safety, 31, 177–178
public transportation, 28, 29, 34, 47, 56, 87–88
punch lists, 193
Q
QR codes, 77, 124
quiet study spaces, 70
R
radio frequency (RF) surveys, 113
rainwater, 36, 46, 47, 49
ramps, 48, 67, 89–90
rare books, 67–68, 174, 175
Rasberry, Catherine, 85
reading rooms, 67–68, 158, 186
recycled bins, 53, 186, 187
recycled content, as building materials, 38, 39
recycled greywater, 36, 37
reference desks, 59–62, 103, 121
remote storage, 23, 153–154
renovations, 1–2, 15, 18–21, 170, 195, 199
requests for proposals (RFPs), 8, 14, 78
renovations, 1–2, 15, 18–21, 170, 195, 199
reserve books, 69, 152
restrooms, 72, 76, 82, 95–97, 125, 127, 167–168, 188
RFID tags, 142, 143, 151, 152–153, 154
Rogers, Eric, 10
roles, on planning teams, 3
rooms, 36, 41, 44, 49, 162, 183–184
room capacity, 73, 103
roving staff, 62, 120
self-checkout, 57, 58, 65, 121, 124
self-service, 12, 79, 120, 121, 152
service animals, 104–105
service desks, 57–62, 102, 120–121
shelving and storage, 2, 23, 84, 147–155, 186–187
shootings, 31, 85, 173, 175
sidewalk appeal, 45
signage, 50, 54, 76, 79–80, 88, 95, 99–101, 103
silent study spaces, 70
sinks, 97, 183, 187, 188
site meetings, 191–192
site selection, 25–31, 34–36
“The Six Subsystems of a Structured Cabling System” (Anixter), 117
size considerations, 29. See also site selection
Snale, Maura, 62
smoking, 39
social distancing, xiv, 64, 73, 120, 121–122, 123, 178
solar panels, 30, 38, 41, 49
sound levels, recommended, 138
sound-masking systems, 158
space estimating, 5
space planning, 3–5, 14–16
speakers, at events, 201, 203
special collections, 16, 67–69, 154
special libraries, resources for, 16
spokespersons, 3
stacks. See shelving and storage
staff
hybrid work schedules for, 178
injury to, 52, 73, 80, 133
parking spaces for, 47–48
personal items of, 81, 82, 188
psychological preparation of, 195
roving vs. desk, 62, 120
training for, 54, 134, 170, 176, 177
value of, xiii
who are plus-sized, 124–125
workstations used by, 28, 71, 80–81, 114–115, 116, 164, 195
staff areas
elevators in, 77, 124, 169
entrances to, 49, 56, 165
kitchens in, 82, 187
lighting of, 166
lounges in, 82, 83, 157, 187
noise considerations for, 52, 82, 158–159
visibility of, 12
staffing requirements, 6, 18
staging areas, 18, 29, 52
stairs and escalators, 90–91, 169

available at alastore.ala.org
stakeholders, xvi, 2–3, 9
Standards for Distance Learning and Library Services (ACRL), 15
Standards for Libraries in Higher Education (ACRL), 15
Standards Reference Guide (Anixter), 108, 110
star topology, 111
Stavros Niarchos Foundation Library, 20
Steelcase, 64
storage
interior, 84, 147, 149, 151–152
remote, 23, 153–154
stormwater management, 36, 37, 49, 52, 53, 89, 90
Structured Cabling Standards and Practices (Hubbell-Premise), 117
study rooms and carrels, 69–70, 71, 101–102, 116, 122, 166, 187
Sullivan, Margaret, 16
Sunon Global, 65
Sustainable Cities & Society (journal), 19
sustainable design, xvi, 33–43
T
tables, 52, 68, 75, 101–102, 123
task lighting, 123, 125, 164, 165
Tatar, Anna, xvii
teams, for planning, 1, 2–3, 7
technology lending libraries, 142–143
teens, areas for, 71–72, 124
telecommunications systems, 107–117
telephones, 100–101, 115, 128, 129
temperature settings, 40, 68, 109, 153, 162
termination of agreements, 7
Texas Woman’s University, xiii
text telephones (TDDs), 100, 129
thermostats, 42, 160, 163
toilets, 37, 95–97, 125, 167–168, 184, 188
tool lending libraries, 143–144
traffic patterns, 12, 64, 148, 158
training
for library users, 67, 140, 141
for staff, 54, 132, 170, 176, 177
transgender individuals, 76, 168
transportation, public, 28, 29, 34, 47, 56, 87–88
transit, 34
trash enclosures, 53, 188–189
U
Under Construction (newsletter), 192
universal design guidelines, 11–13
University of Michigan, 23, 201
University of Nevada at Reno, 138
upholstery, 121, 123, 128
upstream processing, 140
urinals, 37, 97, 167–168
U.S. Access Board, 105
U.S. Department of Energy, 164
U.S. Department of Justice, 105
U.S. Green Building Council, 33–34, 38, 43
vaccination requirements, 55, 200
variable-speed drive (VSD) motors, 42, 163
vegetation, adapted, 35, 36, 37, 49, 52, 53, 89, 90
ventilation
and air quality, 39–40
and COVID-19, xvi, 39, 55, 73, 126, 135, 159–160, 178
See also HVAC systems
virtual events, 200, 202
virtual libraries, 21–22
See also COVID-19
visible content, 63, 89, 99, 104
voice over Internet Protocol (VoIP), 115
workrooms and offices, 80–81, 128, 158, 187
workstations
electrical power for, 111, 114, 116, 164
for staff, 58, 71, 80–81, 114–115, 116, 164, 195
X
xeriscaping, 46
Y
young adult facilities, 71–72, 124
Z
Zoom, service through, xiv, 21, 178