



East Central Arkansas  
Regional Library

## **CROSS COUNTY LIBRARY**

**Space Needs Assessment**  
*based on*

**Connecticut State Library Public Library Space Needs  
Standards and Recommendations**

**Completed April 2016**

**Library Space Planning Guide Worksheet**

(use in conjunction with the Library Space Planning Guide)

**Step 1. Establish Service Population**

- a. Current local population: Use Dept of Health Estimates 17,284
- b. Projected local population at least 10 years from now 16,000  
Use CT State Data Center at University of Connecticut Projections  
 You may choose to factor in nonresident use in your population projection.
- c. Projected nonresident population to be served  
 Annual nonresident circulation (Ccard loans)   ( type 1 if not known)  
 Annual circulation (All)   (type 300 if not known)  
 % of total circulation        Projected non-residents
- d. **Service population** 16,000

**Step 2A. Collection Size**

**a. Physical Books:**

Existing physical book collections.....	26,600	
Current Net Additions (volumes added minus volumes withdrawn)		
Predicted Net Additions 10 years from now (negative # OK).....		
Estimate of minimum number of books in future library	26,600	
<b>Books that will need space now or in the future</b>	<b>26,600</b>	

**b. Physical Nonprint materials:**

Existing physical nonprint collections.....	5,000	
Current Net Additions (items added minus items withdrawn).....		
Predicted Net Additions 10 years from now (negative # OK).....		
Estimate of minimum number of non-print in future library	5,000	
<b>Non-Print that will need space now or in the future</b>	<b>5,000</b>	

**c. Periodicals:**

Existing number of periodical subscriptions.....	60	
Back periodicals titles kept in storage.....		

**Step 2B. Collection Space**

a. Books:	26,600	volumes			
Regular shelving	26,600	volumes ÷ 10 =	2,660	sq. ft.	
Compact shelving		volumes ÷ 25 =		sq. ft.	

- b. Nonprint materials:  items ÷ 10 =  sq. ft.
- c. Hard-copy periodicals on display  titles =  sq. ft.
- d. Periodicals stored:  titles x .5 x  average years retained =  sq. ft.
- e. TOTAL (a + b+ c + d)  sq. ft.

### Step 3. Public Electronic Workstations

- a. PAC's (stand-up):  PACs x 20 =  sq. ft.
- b. Electronic workstations:  electronic workstations x 45 =  sq. ft.
- b. Electronic workstations:  electronic workstations (mutple users) x 60 =  sq. ft.
- c. Microfilm reader/printer:  microfilm/reader printers x 35 =  sq. ft.
- d. TOTAL (a + b+ c )  sq. ft.

### Step 4. User Seating Space

User seating does not include the seats in conference rooms, meeting rooms, and staff work areas, unless the meeting rooms will be used for everyday library activities, such as quiet study or homework center. If a meeting room is available for everyday library activities, excluding meetings, a minimum of fifty percent of the hours that the library is open, ten percent of the meeting room seats could be used to meet the total seating requirement.

Minimum Number of Seats					
a. Number of seats	Projected populations under 10,000		7-10 seats/each 1,000 people		
	Projected populations over 10,000		5 seats/each 1,000 people		
Type in your service projected population (Step1d) below	Population ranges	Number of seats 10 (per 1,000 people)	Number of seats 8 (per 1,000 people)	Number of seats 7 (per 1,000 people)	Number of seats 5 (per 1,000 people)
	Less than 1,000				
	1,001 - 9,999				
16,000	10,000-				80

Population of 2,500 or less should have at least 20 seats.

# of seats (chart above),  
 minus  electronic workstations seats,  
 minus 10% of meeting room seating (if available daily for use)   
 Totals.....  seats  
 Add.....  # extra seats added, if needed  seats

b. Space for seats:  number seats x 30 =  sq. ft.

### Step 5. Staff Work Space

a. List stationary staff work areas and indicate if you will be using roaming circulation or information/reference stations:

Standard Circulation and Reference Desks (5) plus workroom/office spaces.

b.  stations x 150 =  sq. ft.  
 c.  roaming staff work stations X 50=  sq. ft.  
 d. Total  sq. ft.

### Step 6. Meeting Room Space

a. General meeting space  seats x 10 =  sq. ft.  
 Includes 100 sq. ft. speaker's podium/presentation area at the front of the room and 200 sq. ft. for storage for table and chairs.

b. Conference room space  seats x 25 =  sq. ft.  
 (total of all the conference room seats in all conference rooms)  
 Include conference rooms for community groups, gov't groups  
 Seats for audience (optional)   sq. ft.

c. Small study rooms  seats x 30 =  sq. ft.  
 Total of all the seats in all of the meeting rooms

d. Children's programming  seats x 10 =  sq. ft.  
 Space for story hours and storytelling  
 Includes 50 sq. ft. for program leader 200 square feet for kitchen and storage for chairs and tables.

e. Children's programming  seats x 25 =  sq. ft.  
 Space for crafts projects

f. Computer training lab  seats x 50 =  sq. ft.  
 Includes 80 sq. ft. for the trainer. 50 sq. ft. allows for multiple users.

g. TOTAL (a + b + c) =  sq. ft.

## Step 7. Special-Use Space

Item	Number	Multiply	sq. ft.	Total
Dynamic digital signage	2	x	10	20
Bulletin board	2	x	9	18
Display case	2	x	50	100
Handouts (free-standing)	2	x	20	40
Map file	1	x	35	35
Microfilm cabinets	1	x	10	10
Newspaper rack	1	x	25	25
Paperback rack	2	x	35	70
Photocopier	2	x	50	100
Staff lockers	10	x	4	40
Staff lounge/break rm. # of seats	8	x	25	250
ADD OTHER-----				
SUB-TOTAL (1)				708

### Other Special-Use Spaces

These spaces are more difficult to calculate. You may be able to use calculations used previously to help make an estimate for necessary square feet. Examples:

- \* Book collection space - # of books divided by 10
- \* Seats require an average of 30 sq. ft. each
- \* A table and 4 chairs requires 120 sq. ft.
- \* Electronic workstations 45 sq. ft.

1. Popular Materials Display Areas	Sq. Ft. Required:	100
2. Café	Sq. Ft. Required:	150
3. Maker-space / Digital Lab	Sq. Ft. Required:	150
4. Gallery (for art displays, etc.)	Sq. Ft. Required:	500
5. Creation studio for audio/video production	Sq. Ft. Required:	
6. Local History and Genealogy Room	Sq. Ft. Required:	250
7. Literacy Volunteers Room	Sq. Ft. Required:	
8. Job or Homework Center	Sq. Ft. Required:	250
9. Area for the Friends of the Library	Sq. Ft. Required:	250
10. Community Information Center	Sq. Ft. Required:	
11. Collection Sorting Space for RFID	Sq. Ft. Required:	
12. Centralized Communications Center (data and network)	Sq. Ft. Required:	100

13. Outdoor space (designed for specific uses)

No Sq. Ft. Required!

14. Other special-use spaces

Sq. Ft. Required:

**Total**

### Step 8. Flexible-Use Space

Think about whether you have identified spaces above that might be combined into one space. If you have designed space with the necessary layout, infrastructure, technology, and mobile furniture to accommodate more than one library activity then you may be able to reduce the sq. ft. calculations you have made above by combining two or more identified library spaces.

### Step 9. Non-Assignable Space

a. Collection space (from Collection Space 2B.e.)

3,250
2,030
720
1,950
3,640
2,458

Public electronic workstations (from 3d.)

User seating space (from 4b.)

Staff work space (from 5b.)

Meeting room space (from 6d.)

Special-use space (from 7.)

b. SUBTOTAL

14,048
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c. Divide (SUBTOTAL) by 4

3,512
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### Step 9. Putting It All Together

a. Collection space (from Collection Space 2B.e.)

3,250
2,030
720
1,950
3,640
2,458
3,512
17,560

b. Public electronic workstations (from 3d.)

c. User seating space (from 4b.)

d. Staff work space (from 5d)

e. Meeting room space (from 6d.)

f. Special-use space (from 7.)

g. Non-assignable space (from 8c)

**h. GROSS AREA NEEDED (a+b+c+d+e+f+g) in Sq. Ft.**

**Some Helpful Benchmarks**

***Square Feet Per Service Population***

1.6 Square feet per capita - Library Serving Projected Population under 10,000

1.5 Square feet per capita - Library Serving Projected Population 10,000 to 20,000

1.35 Square feet per capita - Library Serving Projected Population 20,000 to 50,000

1.15 Square feet per capita - Library Serving Projected Population over 50,000

Your Service Population is **16,000**

Your Project is  per square feet

***Book Volumes Per Square Feet***

5 book volumes per square feet maximum

Your Project is  books per square feet

**Division of Library Development, Connecticut State Library, 2014**

## **Formula Explanations**

### **Formula for projecting nonresident population to be served:**

1. Divide nonresident circulation transactions by the total circulation transactions (this percentage equals the ratio of nonresident population to local population)
2. Multiply that percentage by the projected local population figure.

### **Traditional Guideline for Minimum Book Volumes Per Service Populations**

(provided here for reference only)

Population	1,000	2,500	5,000	10,000	15,000	25,000	50,000	75,000	100,000
Books	8,000	14,375	24,250	41,000	54,000	82,500	135,000	180,000	260,000

**Formula for Books** - To estimate the square feet of space needed to house the library book collections with aisles, divide the total projected collection by 10.

For compact book storage divide by 25.

**Formula for Non-print Materials** (DVDs, Audio Books, various formats, Music CDs, playaways, etc.) - To estimate the square feet of space needed to house these library collections, divide the total projected collection by 10.

**Formula for Periodicals** - To determine the square feet of space needed to house periodicals,



use the following formulas:

Current issues of periodicals housed on display-type shelving will require one sq. foot per issue. For Back issues of hard copy periodicals, multiply by the number of titles of back periodicals by 0.5, and then multiply that product by the average number of years to be retained.

<i>Example:</i>	<i>sq. ft.</i>
<i>30,000 volumes ÷ 10</i>	<i>3,000</i>
<i>2,000 non-print items ÷ 10</i>	<i>200</i>
<i>50 current periodicals =</i>	<i>50</i>
<i>10 hard copy back periodicals x</i>	
<i>0.5 x 5 years</i>	<i>25</i>
<b>TOTAL COLLECTION SPACE</b>	<b>3,275</b>

### **Formula for Workstations, etc.**

Formula for stand-up PACs-To estimate the square feet of space needed for PAC workstations, multiply the number of PAC workstations by 30.

Formula for electronic workstations- To estimate the square feet of space needed, multiply the number of electronic workstations by 45 for single user and 60 for multiple users on one computer.

Formula for microfiche or microfilm reader/printer-To estimate the square feet of space needed, multiply the number of microfiche and microfilm reader/printer workstations by 35.

<i>Example:</i>	<i>sq. ft.</i>
<i>4 PACs x 20</i>	<i>80</i>
<i>6 electronic workstations x 45</i>	<i>270</i>
<i>5 electronic workstations multiple users</i>	<i>300</i>
<i>1 microfilm reader/printer x 35</i>	<i>35</i>
<b>TOTAL PUBLIC WORKSTATIONS</b>	<b>685</b>

### **Formula for Seating**

To estimate the square feet of space needed to provide adequate user seating, do the following:

1. Subtract the number of public electronic workstations that have permanent computer station seats from the projected number of seats (Public electronic workstation seats square feet included in Step 3.)
2. Subtract the number of meeting room seats, if applicable
3. Add additional seats, if needed, especially if you are anticipating high use of personal electronic devices
4. Multiply the remaining number of seats by 30.

*Example:*

*75 projected seats - 15 public electronic workstation seats = 60 projected seats*  
*60 user seats x 30 = 1,800 sq. ft.*

### Formula for Work Areas

To estimate the square feet of space needed for staff work areas, multiply the number of work areas by 150.

*Example:*

*# of work areas = 10 (10 x 150) = 1500 sq. ft.)*

*(Four work areas at circulation/information [1 at check in/registration, 1 at check-out, 1 at book sorting, 1 at information] 2 in librarian's office [office and meeting table], 1 in children's area, 3 in technical services)*

Additional temporary staff or volunteers should be considered in estimating staff work space.

### Formula for Meeting Room Space

For seating in a program setting, multiply 10 square feet by the number of seats plus another 100 square feet for a speaker's podium/presentation area at the front of the room. Kitchen and storage for chairs and tables will require an additional 200 square feet.

For seating at a conference table, multiply 25 square feet by the number of seats and 10 square feet per seat for any additional seating for an audience.

For seating for small study rooms, multiply 30 square feet per seat.

For seating in a children's program area, allow 10 square feet per seat plus another 50 square feet at the front of the room for the program leader. Kitchen and storage for chairs and tables will require an additional 200 square feet.

Seating in an information commons can also be used as a computer training lab. Allow 50 square feet per station, plus another 80 square feet at the front of the room for the trainer per station. (an allowance of 50 square feet reserves the option of seating two per station).

*Example:*

<i>a. General meeting room: 100 seats</i>	<i>Sq. Ft.</i>
<i>x 10 = 1000 + 300 sq. ft. for a speaker</i>	
<i>and storage =</i>	<i>1300</i>
<i>b. Conference room: 25 seats x 25 =</i>	<i>625</i>
<i>10 Seats for audience 5 x 10 =</i>	<i>50</i>
<i>c. Small study rooms (3 rooms</i>	
<i>with 2 seats) = 6 seats x 30 =</i>	<i>180</i>
<i>d. Children's program area (story hour)</i>	
<i>15 seats x 10 + 50 sq. ft. (program leader)</i>	
<i>+ 200 sq. ft. (storage) =</i>	<i>400</i>
<i>e. Children's program area (craft area):</i>	
<i>13 seats x 25 = 325 + 50 sq. ft.</i>	
<i>(program leader) =</i>	<i>375</i>
<i>TOTAL MEETING ROOM SPACE</i>	<i>2,930</i>

**Special-use spaces** will vary depending on the library's needs. To help determine square footage you can sometimes use formulas for collection space and user seating space.

Special-use space additional needs

*Example:*

			<i>Sq Ft.</i>
<i>Local history room</i>			
<i>1000 Books</i>	<i>+</i>	<i>10</i>	<i>100</i>
<i>2 vertical files</i>	<i>x</i>	<i>10</i>	<i>20</i>
<i>1 table with four chairs</i>	<i>x</i>	<i>120</i>	<i>120</i>