20 April 1993
Journal Entry 13

In my last journal entry I said I hoped to be able to share some photographs of finished projects from Calcasieu Parish. That was premature. Whereas three of the smaller projects are installed, the next several projects have been somewhat slow in their completion. Photographs will accompany the next installment.

I have wanted to share the following analysis with you for some time. The subject of how many square feet various furniture items consume has been in debate for as long as I have been in practice. Each building consultant uses different coefficients, and the capacities of completed projects often differ from those originally programmed.

My wife and partner, Andrea, and I have been working for a few years with the Library Administration and Management Association (a division of the American Library Association) Buildings and Equipment Section's Functional Guidelines for Physical Space Requirements Committee. The committee members, who include building consultants, library directors, and facility managers, have hoped that the results would be published and available by now. Unfortunately, only a first draft of the “Functional Guidelines for Physical Space Requirements” is presently being circulated. It's an excellent start.

Since this document is not readily available, I thought that an empirical analysis of the thirteen Calcasieu Parish libraries whose design and construction we have been following in this column might be helpful. This should give an accurate range of square footage and capacity figures that you might use in making very preliminary projections for your own facilities, assuming they are to serve similar populations and have similar missions.

Four points bear mentioning:
- The Americans with Disabilities Act has inadvertently done the world of facility design a big favor. Since the act spells out aisle widths and egress rules for wheelchairs, the amount of space around furniture items that we, as space planners, have always advocated now must be allocated. The ADA does have significant impact on space projections.
- The impact of technological and assistive devices such as public access terminals, CD-ROM units, printers, fax machines, and copiers, and of recycling containers has been extreme, and building programs must include adequate space projections for each unit.
- We feel that many common library furniture items are often specified too small. For examples see chart below.
- Sufficient floor space must allotted for queuing at service desks, for groups gathering to enter, for browsing, for children's energy fields, for accommodation of book trucks and strollers, and for personal distance (the space between patrons at lounge seats, for example). Beyond calculating the physical space a piece of furniture consumes it is important to consider how equipment is used and how people work.

Table 1 lists the results of my audit of the capacities of the Calcasieu Parish library system. It illustrates how variable libraries can be in terms of space utilization, and it provides a cross section of capacities one might expect for a variety of library sizes. Keep in mind that each of these libraries would be termed efficient rather than commodious.

If you have a need to outline a preliminary program for an addition or a new facility, and you have a goal for capacity of user seats or collection size, you can interpolate from the table the net square footage you might require. Or, if you are interested in knowing the average space consumption per double-face shelving unit and user seat (including technology stations), the numbers in table 2 may be helpful. They were established by dividing the net square feet of public space by the number of units achieved. As you can

<table>
<thead>
<tr>
<th>Item</th>
<th>Sizes we recommend</th>
<th>Sizes used elsewhere</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-place adult table</td>
<td>72&quot; x 48&quot; or 72&quot; x 42&quot; minimum</td>
<td>72&quot; x 36&quot; or even 60&quot; x 30&quot;</td>
</tr>
<tr>
<td>Carrel</td>
<td>48&quot; x 30&quot; or 42&quot; x 30&quot; minimum</td>
<td>36&quot; x 24&quot;</td>
</tr>
<tr>
<td>Four-place children's table</td>
<td>48&quot; x 48&quot; or 42&quot; x42&quot; minimum</td>
<td>36&quot; x 36&quot;</td>
</tr>
</tbody>
</table>
see, the larger projects often require more floor area per unit of shelving or seating. This is because the traffic aisles typically need to be greater to accommodate an increased number of patrons expected at any one time and because of the need to respond to the scale of the building.

Once again, there is no substitute for detailed programming. But, let's assume that a member of your board of directors pops in and wants an immediate estimate of the size of a library to accommodate fifty double-face shelving sections and forty user seats, including public terminals. You might round off the averages in table 2 and come up with the following calculations:

50 shelving sections @ 50 square feet = 2,500 square feet
40 seats and terminals @ 85 square feet = 3,400 square feet

You could then quickly approximate the net area of the public portion of such a facility at 5,900 square feet. You might also look at this column in the February and March issues to review the various floor plans and see how their layouts and capacities might be analogous to your board member's agenda. Of course, any special rooms, staff work areas, and non-assignable spaces such as toilets, corridors, and mechanical and electrical rooms must be added to the above estimate.

By now, I'm sure you are hanging on my every number, so I'll share just a few more handy rules of thumb.

The average space for all the Calcasieu public meeting rooms, set up in rows of chairs, is twelve square feet per seat, plus 15 percent additional area for storage rooms and kitchens. If the rooms are set up in rows of tables seminar-style, the average is twenty-five square feet per seat.

Typically we allow the following programming coefficients for seating:
- 30 square feet per user at a four-place table
- 35 square feet per user at an individual carrel
- 50 square feet per user in a lounge seat

Always be careful using averages; they are a bit like describing an individual in terms of average height and weight. Each library, like each person, is unique.

Have a wonderful summer. Please think positive thoughts for Library Director Lynda Lee Carlb erg and her staff as they move into twelve of the thirteen completed projects. Our accounts of this epic occupancy will greet you in the next installment.