# Financing New Technologies, Equipment/Furniture Replacement, and Building Renovation: A Survey Report

Gary M. Shirk

This survey describes the methods that large academic and public libraries use to finance the implementation of new technologies, to replace equipment and furniture, and to renovate buildings. The range of methods used by libraries and the factors leading to their use are investigated. Approximately twenty different financing methods are used, but no library uses more than nine of these for any one area of expenditure. Operating funds are the principal source for capital expenditure.



ew librarians would deny the importance of financing capital expenditures in libraries. Constructing buildings and filling

them with library materials are, afterall, prerequisites for providing a full range of library services. However, in recent years as building programs become more difficult to initiate, libraries have become more interested in and concerned about the financing of other areas of capital expenditure, especially new technologies, equipment and furniture replacement, and building renovation. When the discussion among library managers and fiscal officers turns to financing new technologies such as cable television, satellite communications, microcomputers, etc. or more mundane projects like reupholstering furniture or adding air-conditioning to a nineteenth century building, more questions than answers are generated. What methods do similar libraries use to finance

these areas of capital expense? How do they determine which method to use? Are some methods better suited to one of the areas than to others?

Published literature on library financing yields few answers and the search for information is difficult and often unrewarding. Although access may be possible through subject terms such as "accounting and bookkeeping" or "grants-inaid," the researcher must access the literature through more general terms such as "automation," "information networks," "building for the handicapped," "tax or building campaigns," and "cable television."

General sources for information about capital financing and fund-raising in libraries surface readily. The *Bowker Annual* usually includes a section on legislation, funding, and grants. This section reports the library use of LSCA funds, general revenue sharing, and block grants. There

Gary M. Shirk is director, Approval Plan Division, Yankee Book Peddler, Contoocook, New Hampshire 03229. Formerly, Mr. Shirk was head of acquisitions at the University of Minnesota.

are also several accounts of federal support for libraries. 2.3.4 In "Extrainstitutional Funding: Management and Strategy for Survival," Boaz provides a brief introduction to fund-raising, particularly grants seeking. 5 Other sources such as Boss, 6 Corry, 7 and Waters 8 also provide valuable fund-raising insights. However, the literature does not report how libraries finance important, but not particularly newsworthy, capital expenditures.

This paper attempts to fill the gap by reporting the methods used by a selected group of large North American libraries to finance capital expenditures. Specific ob-

jectives of the survey were:

1. To provide a list of financing methods used by different types of libraries for three areas of capital expenditure: new technologies, equipment and furniture replacement, and building renovation.

To describe the factors which determine the financing method chosen.

3. To describe the methods most frequently used by different types of libraries for each of the three different areas of capital areas distant.

tal expenditure.

The survey describes the methods used by the responding libraries; it does not provide data to be generalized for all libraries. Any differences noted are therefore real differences among the reporting libraries. Hence, participating libraries can compare their financing methods with similar libraries. To permit comparisons among peer institutions the participating libraries are listed by group in Appendix A: Public, University—Private, and University—Public. Results for individual libraries are not presented.

#### METHODOLOGY

Survey packets were sent to 102 large libraries in the U.S. and Canada listed in the LAMA/LOMS Budget, Accounting, Costs and Finance Committee's 1980 publication *Library Business and Fiscal Officers Directory*. Each packet consisted of a cover letter, 2 pages of definitions, and a 2½ page questionnaire. The questionnaire was designed to be self-administered in approximately ten minutes by an informed library administrator or fiscal offi-

cer. The primary task of the respondent was to indicate all the financing methods that had been used in the past five years to finance new technologies, equipment and furniture replacement, and building renovation. To assist the respondent, the questionnaire listed eighteen potential methods and provided space for listing others. The respondent was also asked to indicate the type of library, the most frequently used methods for each of the three capital expense areas, the library's total annual budget, its equipment and furniture budget, and its building maintenance and repair budget. Lastly, space was provided for additional comments.

Seventy-seven of the libraries responded and the rate of return was high for all three types of libraries. Upon receipt, the questionnaires were coded and keypunched. Because inferential analysis had not been planned and could not be supported by the methodology, only simple tables were required. The Statistical Package for the Social Sciences was used for generating base tables. These were further summarized so that the results for each area of capital expenditure could be compared visually. Comments were summarized manually.

#### RESULTS

Generally, the survey instrument posed few difficulties for the respondents. However, two problems emerged. First, despite the inclusion of brief definitions for most of the terms used, some respondents (Canadian librarians in particular) found some of the wording unusual or ambiguous. Second, the complexity and variety of financial reporting systems made comparisons based upon total annual budgets, equipment and furniture budgets, and building maintenance and repair budgets virtually impossible. Nevertheless, the comments suggest that building maintenance is usually included in the parent institution's budget while equipment repair is usually the responsibility of the library.

## Financing Methods Used

All eighteen financing methods listed in

**TABLE 1**FINANCING METHODS, BY TYPE OF EXPENSE AND TYPE OF LIBRARY

		New Techr	ologies			Equipmen	t/Furniture			Building F	Renovation	
Method	Public Lib. (%)	Univ: Pub. (%)	Univ: Priv. (%)	Total (%)	Public Lib. (%)	Univ: Pub. (%)	Univ: Priv. (%)	Total (%)	Public Lib. (%)	Univ: Pub. (%)	Univ: Priv. (%)	Total (%)
Operating funds	95.2	89.7	52.9	83.1	90.4	92.3	52.9	83.1	76.2	71.8	29.4	84.4
Special state or federal												
approp.	19.0	30.8		20.8	19.0	17.9	5.9	15.6	14.3	25.6	5.9	18.2
Federal grants	52.4	33.3	17.6	35.1	57.1	17.9		24.7	23.8	2.6		6.5
State grants	42.9	10.3		16.9	23.8	12.8		13.0	9.5	5.1	5.9	6.5
Private foundation grants	28.6	17.9	52.9	28.6	28.5	12.8	29.4	20.8	9.5	2.6	17.6	7.8
Special purpose tax levies					4.8			1.3		2.6		1.3
Publicly sold bonds	9.5	2.6		3.9	14.3	5.1		6.5	19.0	5.1	5.9	9.1
User fees/charges	14.3	35.9	35.3	29.9	23.8	15.4	23.5	19.5	14.3	5.1	11.8	9.1
Library fines	14.3	5.1	11.8	9.1	38.1	5.1	11.8	15.6	23.8		17.6	10.4
Gifts, bequests,						4 6 6						
endowments	23.8	15.4	58.8	27.3	38.1	23.1	47.1	32.5	19.0	15.4	41.2	22.4
Depreciation reserve			17.6	3.9		5.1	17.6	6.5	4.8	7.7	5.9	5.2
Land/building sales	4.8	2.6		2.6	4.8	2.6		2.6	4.8	2.6		2.6
Equipment sales	4.8	7.7	5.9	6.5	4.8	12.8	5.9	9.1	4.8	2.6		2.6
Book sales	4.8	2.6	5.9	3.9	23.8	5.1	17.6	13.0	4.8		11.8	3.9
Loans from parent							The World					3500
institutions	4.8	5.1	7.6	7.8	4.8	2.6	29.4	9.1		5.1	11.8	5.2
Loans from others	4.8	2.6		2.6	4.8	2.6		2.6	4.8	out of the same		1.3
Lease/payback plans	4.8	5.1		3.9		7.7	11.8	6.5				
Coop. purchasing		7.7	11.8	6.5		2.6	5.9	2.6				
Other	9.5	10.3	41.2	16.9	19.0	10.3	35.3	18.2	14.3	10.3	47.1	19.5
Reporting libraries										Les de la constante de la cons		
(Number)	21	39	17	77	21	39	17	77	21	39	17	77

the questionnaire had been used by some libraries in the past five years. Over 80 percent used operating funds for all three areas of expenditure, and approximately 25 percent reported using gift funds for each of the three areas. Other financing methods are used with less frequency and vary by expenditure type (table 1). While 35 percent reported use of federal grants for new technologies, only 25 percent used this source for equipment or furniture replacement and just 7 percent used it for building renovation. The usage of foundation grants paralleled federal grants: 29 percent, 21 percent, and 8 percent respectively. User fees, a very different source of funding, followed the same distribution: 30 percent, 20 percent, and 9 percent respectively.

Public and private institutions use some funds differently. For example, in new technologies and equipment and furniture more than 90 percent of public libraries and public university libraries used operating funds while only 53 percent of the private university libraries did. On the other hand, almost 60 percent of private university libraries used gift funds for new technologies while less than 25 percent of the public institutions used this source. This difference in the use of gift

funds can also be observed in the areas of building renovation and equipment and furniture replacement.

Public libraries and university libraries, both public and private, differ in their use of financing methods. Forty-three percent of public libraries used state grants for new technologies while only 10 percent of the public university libraries did. However, 35 percent of the university libraries used user fees for new technologies, but just 14 percent of the public libraries did so. In building renovation and equipment and furniture replacement there are no clear differences between public and university libraries.

Roughly 17 percent of all libraries used methods not listed in the questionnaire. A list of these methods is presented in table 2. Although generalization is risky, private university libraries seem to rely upon more entrepreneurial sources than the public institutions; and public university libraries appear more entrepreneurial than public libraries.

## Frequency of Method Use

Operating funds are clearly the most frequently used source for all three expenditure areas by all types of libraries reporting: 73 percent for new technologies; 79

TABLE 2
OTHER FINANCING METHODS USED, BY TYPE OF LIBRARY

Public Library	University: Public	University: Private
Unrestricted five-year tax levy	Capital grants from provincial government	Special church appropriations
Friends of the library purchases	Gifts/purchase of surplus inventory	Non-recurring allotments from university for capital expense
City capital outlay fund appro- priation (equipment for new buildings only)	Campus wide competition for special equipment funds	Fees from other institutions for providing shared access and other services
Special county appropriations	Plant funds (rented mineral rights)	Photocopy income
	Sale of university owned utili- ties	University physical plant funds through planning pro- posals
	Capital funds raised by the university through private subscription	Special University funds for specific purposes
		Capital improvement reserve

**TABLE 3**FINANCING METHODS MOST FREQUENTLY USED, BY TYPE OF EXPENSE AND TYPE OF LIBRARY

		New Techr	nologies			Equipmen	t/Furniture			Building F	Renovation	
Method	Public Lib. (%)	Univ: Pub. (%)	Univ: Priv. (%)	Total (%)	Public Lib. (%)	Úniv: Pub. (%)	Univ: Priv. (%)	Total (%)	Public Lib. (%)	Univ: Pub. (%)	Univ: Priv. (%)	Total (%)
Operating funds Special state or federal	75.0	85.7	47.1	73.0	75.0	91.7	52.9	78.7	66.7	65.6	28.6	59.1
approp.	5.0	2.9		2.7	5.0	2.8		2.7		18.8		9.1
Federal grants	10.0	2.9		4.1	5.0			1.3	5.6			1.5
State grants									5.6	3.1	7.1	4.5
Private foundation grants			11.8	2.7	5.0		11.8	4.0			14.3	3.0
Special purpose tax levies												
Publicly sold bonds	5.0			1.4	5.0			1.3	11.1			3.0
User fees/charges		2.9	5.9	2.7								
Library fines											7.1	1.5
Gifts, bequests,												
endowments	5.0		5.9	2.7			11.8	2.7			21.4	4.5
Depreciation reserve			5.9	1.4						3.1		1.5
Land/building sales												
Equipment sales												
Book sales			5.9	1.4		2.8		1.3				
Loans from parent												
institutions		2.9	5.9	4.1								
Loans from others												
Lease/payback plans							5.9	1.3				
Coop. purchasing												
Other		2.9	11.8	4.1	5.0	2.8	17.6	6.7	11.1	9.4	21.4	12.1
Reporting libraries										A CONTRACTOR		
(Number)	20	35	17	74	20	36	17	75	18	32	14	66

# TABLE 4

#### FACTORS DETERMINING CHOICE OF FINANCING METHOD, BY TYPE OF LIBRARY

Public Library	University: Public	University: Private
Availability	Availability	Availability
Operating budget level	Univ. admin. policy	Type of project
City, county policies	State laws and regulations	Amount required
Amount required	Amount required	Univ. admin. policy
State library priorities	Type of project	Fund-raising success
Probability of approval	Operating budget level	Operating budget level
	Eligibility	U.S. government grant policy
	Probability of approval	
	Source interest in the project	
	Restrictions on funds	

percent for equipment and furniture replacement; and 59 percent for building renovation funds (table 3). Within expenditure types, a lower percentage of private university libraries cite operating funds as the most frequently used source than do the public counterparts.

Five financing methods (special purpose tax levies, sales of land/buildings, sales of equipment, loans, and cooperative purchasing) were not cited as "most frequently used" by any library. Private university libraries use more financing methods.

# Choice of Method\*

The availability of funds was the most frequently cited factor by all types of libraries for the choice of a particular financing method (table 4). Three other factors emerged as important for all types of libraries: (1) city, county, or university policies, (2) amount of funds required for the project, and (3) operating budget level. The type of project was cited as important by university libraries but was not mentioned by public libraries. Not surprisingly, state laws and regulations appeared frequently to affect the choices for public university libraries but were not critical

factors for either public libraries or private university libraries.

#### Range of Methods

The range of methods used by any one library to finance the three types of capital expenditure is limited. No library used more than nine of the nineteen financing methods for any area of expenditure in the past five years (table 5). Over 60 percent used no more than three of the methods. The average number of methods used drops from over 3.0 for new technologies and equipment and furniture replacement to just over 2.0 for building renovation. In all areas of expenditure, the average number of methods used was highest for public libraries and least for public university libraries.

#### CONCLUSION

This paper has reported the results of a survey of financing methods used by seventy-seven North American libraries. Although the methodology chosen for the survey does not permit conclusions about libraries generally, we can draw conclusions about the responding libraries, and we can compare one library's situation to the group of institutions listed in Appen-

<sup>\*</sup>Respondents were asked to list the factors which determined their choice of financing method for any of the three areas of capital expenditure. The author standardized the terminology for the factors, divided them by type of responding library and listed them in order of frequency of citation.

RANGE OF FINANCING METHODS USED, BY TYPE OF EXPENSE AND TYPE OF LIBRARY

		New Tec	hnologies			Equipment	/Furniture			Building Re	enovation	
Range of Methods	Public Lib. (%)	Univ: Pub. (%)	Univ: Priv. (%)	Total (%)	Public Lib. (%)	Univ: Pub. (%)	Univ: Priv. (%)	Total (%)	Public Lib. (%)	Univ: Pub. (%)	Univ: Priv. (%)	Total (%)
10 thru 19												
7 thru 9	9.5	2.6		3.9	19.0	7.9		9.2	9.5			2.6
thru 6	28.6	31.6	35.3	31.6	23.8	18.4	35.3	27.7	14.3	13.2	17.6	14.5
thru 3	61.9	65.8	64.7	64.5	57.1	73.7	64.7	67.1	71.4	76.3	9.02	73.7
None (or no												
response)												
Average number												
of methods	3.33	3.03	3.29	3.17	4.00	5.66	2.94	3.09	2.48	1.74	2.12	2.03
Reporting												
(Number)	21	38	17	92	21	38	17	92	21	38	17	92

dix A. Four general conclusions can be reached:

- Approximately twenty different financing methods are used by the reporting libraries to finance new technologies, equipment and furniture replacement, and building renovation; but no library uses more than nine for any one area of expenditure.
- 2. A combination of parent organization policy and local, state, or federal regulations may be the most important limitation on the number of methods used.
- 3. Most participating libraries choose operating funds for financing these capital expenses. As one respondent commented, "so far we have been blessed with enough funds from regular income sources (tax levy and city/county service contracts) that we have not had to turn to special methods to fund new technologies, equipment, etc."

4. Given the wide range of financing methods, it seems that there are no significant obstacles to the array of financing methods that libraries have available to them.

These are reassuring conclusions if the traditional sources of library income, operating budgets in particular, become insufficient to fund new technologies, equipment and furniture replacement, and building renovation. If you are a library administrator or fiscal officer, you may have more financing alternatives than you thought. Ask yourself: If peer libraries have used a particular financing method, why can't your library? Is your library's dependence upon operating funds a realistic posture for the next decade? If your library uses three or fewer financing methods, how are peer institutions able to use two to three times as many? Are the obstacles you see in using new financing methods truly insurmountable? If necessity is the mother of invention, perhaps the survey results presented in this paper can assist in the birth of a stronger financial structure for your library.

#### REFERENCES

- "Part 2: Legislation, Funding, and Grants" in The Bowker Annual of Library and Book Trade Information, 28th ed. Comp. and ed. by Joanne O'Hare (New York: Bowker, 1982), p.167–256.
- James W. Fry, "LSA and LSCA, 1956–1973: A Legislative History," Library Trends 24:7–26 (July 1975).
- F. W. Goudy, "HEA Title II-C Grant Awards: A Financial Overview from FY 1978-79 through FY 1981-82," Journal of Academic Librarianship 8:264-69 (Nov. 1982).
- E. B. Stanford, "Federal Aid for Academic Library Construction: A Retrospective Review of the Higher Education Facilities Act of 1963," Library Journal 99:112–15 (Jan. 15, 1974).
- Martha T. Boaz, "Extra-institutional Funding: Management and Strategy for Survival," in Martha T. Boaz, ed., Current Concepts in Library Management (Littleton, Colo.: Libraries Unlimited, 1979), p. 226-46.
- Richard W. Boss, Grant Money and How to Get It: A Handbook for Librarians, (New York: Bowker, 1980).
- Emmett Corry, Grants for Libraries: A Guide to Public and Private Funding Programs and Proposal Writing Techniques, (Littleton, Colo.: Libraries Unlimited, 1982).
- R. L. Waters and V. F. Kralisz, "Financing the Electronic Library: Models and Options," Drexel Library Quarterly 17:107–20 (Fall 1981).

# APPENDIX A: LIST OF SURVEY PARTICIPANTS

#### Public Libraries

- 1. Brooklyn, N.Y.
- 2. Buffalo & Erie County, Buffalo, N.Y.
- 3. Cleveland, Oh.
- 4. Contra Costa County, Pleasant Hill, Calif.
- 5. Cuyahoga County, Cleveland, Oh.
- 6. Dallas, Tex.
- 7. Fresno County, Fresno, Calif.
- 8. Jefferson Parish, Metairie, La.
- 9. King County, Seattle, Wash.
- 10. Memphis & Shelby County, Memphis, Tenn.
- 11. Miami, Fla.
- 12. Milwaukee, Wis.
- 13. Montgomery County, Rockville, Md.
- 14. Prince George's County, Hyattsville, Md.
- 15. San Bernardino, Calif.
- 16. San Diego, Calif.
- 17. San Diego County, San Diego, Calif.
- 18. San Francisco, Calif.
- 19. Seattle, Wash.
- 20. St. Louis County, St. Louis, Mo.
- 21. Tulsa City-County, Tulsa, Okla.

#### Universities: Private

- 1. Brigham Young University, Provo, Utah
- 2. University of Chicago, Chicago, Ill.
- 3. Columbia University, New York, N.Y.
- Cornell University, Ithaca, N.Y.
   M.I.T., Cambridge, Mass.
- 6. New York University, New York, N.Y.

- 7. Northwestern University, Evanston, Ill.
- 8. University of Notre Dame, Notre Dame, Ind.
- 9. University of Pennsylvania, Philadelphia, Pa.
- 10. University of Pittsburgh, Pittsburgh, Pa.
- 11. Princeton University, Princeton, N.J.
- 12. University of Rochester, Rochester, N.Y.
- 13. Stanford University, Stanford, Calif.
- 14. Syracuse University, Syracuse, N.Y.
- 15. Vanderbilt University, Nashville, Tenn.
- 16. Washington University, St. Louis, Mo.
- 17. Yale University, New Haven, Conn.

#### Universities: Public

- 1. University of Alberta, Edmonton Alberta, Canada
- 2. Arizona State University, Tempe, Ariz.
- 3. University of California, Berkeley, Calif.
- 4. University of California, Riverside, Calif.
- 5. University of Cincinnati, Cincinnati, Oh.
- 6. University of Colorado, Boulder, Colo.
- 7. Colorado State University, Fort Collins, Colo.
- 8. Florida State University, Tallahassee, Fla.
- 9. University of Georgia, Athens, Ga.
- 10. University of Hawaii, Honolulu, Hawaii
- 11. University of Houston, Houston, Tex.
- 12. University of Illinois, Urbana, Ill.
- 13. Indiana University, Bloomington, Ind.
- 14. Iowa State University, Ames, Iowa
- 15. University of Kentucky, Lexington, Ky.
- 16. University of Maryland, College Park, Md.
- 17. University of Massachusetts, Amherst, Mass.
- 18. McMaster University, Hamilton Ontario, Canada
- 19. University of Michigan, Ann Arbor, Mich.
- 20. Michigan State University, East Lansing, Mich.
- 21. University of Minnesota, Minneapolis, Minn.
- 22. University of Missouri, Columbia, Mo.
- 23. University of New Mexico, Albuquerque, N.Mex.
- 24. University of North Carolina, Chapel Hill, N.C.
- 25. Ohio State University, Columbus, Oh.
- 26. Penn State University, University Park, Pa.
- 27. Purdue University, West Lafayette, Ind.
- 28. Queen's University, Kingston Ontario, Canada
- 29. Rutger's University, New Brunswick, N.J.
- 30. Southern Illinois University, Carbondale, Ill.
- 31. State University of New York, Buffalo, N.Y.32. State University of New York, Stony Brook, N.Y.
- 33. Temple University, Philadelphia, Pa.
- 34. University of Tennessee, Knoxville, Tenn.
- 35. Texas A & M University, College Station, Tex.
- 36. University of Washington, Seattle, Wash.
- 37. Wayne State University, Detroit, Mich.
- 38. University of Western Ontario, London Ontario, Canada
- 39. University of Wisconsin, Madison, Wis.