Security in Map Collections

CYNTHIA ANN EVERITT

M APS ARE A CULTURAL reflection on the environment and technology of a particular time.[1] As communicators of information, maps graphically mirror the nature of their topics at a given point in history. On a single topographic map, there are 100-200 million computer bits of information.[2] With increasing awareness of maps as information tools, particularly evident in such fields as environmental data handling and measurement, city planning, population studies, architecture, and anthropology, the present and future goals of map librarianship are becoming clearer. There is "a significant increase...in the number of libraries with separately administrated map collections...[and] in the number and variety of map users."[3] As of 1978 there were 743 major map collections in the United States and Canada.[4]

Related to this awareness of maps and stimulated growth of map collections, administrative decisions concerning staffing, budgeting and priority allotments must be considered. The economics of acquisition, access, retrieval, and control of maps are important areas of concern. As Walker has stated:

> The importance of maps in the library has often been underestimated. Contrary to popular belief, their usage is not restricted to geographers and historians. In this complex and interesting world, almost every field of human enterprise and activity has problems which are best solved by information presented on maps. And, like other library holdings, they are being consulted more and more by library users today. Librarians, too, have finally realized the importance of maps

Cynthia Ann Everitt is a free-lance librarian in Salt Lake City, and former Map Librarian, University of Texas at El Paso.

and are relying on them more heavily in their search for additional sources of information. They are discovering that maps are as necessary for reference purposes as the books: They clarify and supplement the written word, graphically illustrate the trend of current events, and by employing combinations of diverse symbols, also visualize many other important topics such as ethnic relationships; physical, social, and economic conditions; and historical, artistic, and literary development.[5]

Historically, maps have been rejected or jealously guarded. One example of map rejection stemmed from the influential Roman Catholic church of the Middle Ages. It was believed sinful to seek answers to questions about the universe and lands beyond the horizon. Since maps were often an excellent means of answering many exploratory questions, they were shunned by all but a few, who doubted the Church's teachings.[6] The military became associated with maps at a later date. These organizations felt it unwise to plot strategic military locations, targets or routes on maps, lest they fall into enemy hands. Thus, the leaders were afraid to make maps and even more wary of collecting and preserving them. Early sea charts to newly discovered areas were jealously guarded and often deliberately altered to lead others astray. Well into the nineteenth century, it was considered high treason to reveal information from official maps.[7]

Maps have also been a neglected part of the general library collection. Traditionally, maps have been regarded and handled as minor publications, being dealt with after all other materials have been considered. Dorothy Cornwell Lewis stated, "From the several viewpoints of medium, reproduction process, and subject matter, the colored map printed on paper is only one of many formats extant."[8] Maps differ greatly from books, largely in physical makeup. This alone is probably one of the greatest reasons maps are "the poor stepchildren of libraries." They do not lend themselves to display on open shelves; and the types of paper used for maps, their size, and their overall format add to preservation and security problems. Robert C. White wrote, "When standardized schemes for classifying books were adopted, little consideration was given to maps because map collections were small and presented no major problem, [but]...the physical form of a map and the nature of its information create special problems."[9] Maps have been considered a unique problem in libraries for so long that agreement over book or nonbook treatment of them has taken precedence over such matters as security measures for them.

Literature on General Library Security Systems

A search of the literature revealed little information on the subject of map library security and the problems involved. No sources mentioned map security specifically. Archival literature has briefly noted concern over loss of rare maps, but possibly this concern related to atlases (the bound volume again).[10] A myriad of materials exists discussing general library security for books and bound periodicals, but there was scant mention of nonbook security. The literature on general library security falls into four major categories: the rise in library losses, libraries' experiences with theft, commercial security systems available, and appraisal of systems currently installed.

Library thefts are acknowledged to be on the upswing. For example, Alice Bahr wrote:

> In the United States, where the nation's libraries contain an estimated 1.5 billion volumes, a loss of even 1% annually amounts to some 15 million books. Again, using an average cost of $15 to replace a missing book, the total annual replacement cost would be $225 million. This is more than 10% of what libraries spend annually. The 15 million volumes are almost 16% of the 95 million volumes added annually by the nation's libraries.
>
> And many of the items stolen from libraries are worth far more than $15. Rare books and manuscripts present an especially inviting target....
>
> Whether spurred on by love or greed, book theft has become a serious, costly problem and one that is not easily solved.[11]

To the author's knowledge, no published numerical reports or financial estimates of map loss have appeared.

Individual libraries have reported their experiences with theft in the literature. Also to be found are library evaluations of commercial systems, and reports on final selection of a system, usually with an update and further justification for purchasing the system chosen.[12]

Reviews of commercial systems currently on the market make up the third and largest area of literature. The number of different security systems being sold to libraries has actually diminished in the last four years. However, the total number of installations in libraries has increased. Presently, six companies are actively selling theft-detection systems to libraries: Checkpoint Systems, Inc.; Gaylord Brothers; General Nucleonics, Inc.; Knogo Corporation; Library Bureau; and 3M.[13]

The final category is overall surveys or appraisals of the extent to which these security systems deter theft of library materials.[14] Evaluation of theft-control programs is still in a state of flux. It was hoped, by

reviewing these systems, that exploitation of a present security method or technique could be developed by map librarians. However, the author discovered no such possibilities. In general, libraries that have invested in security systems have been satisfied with the results. Many found that the system paid for itself within a couple of years as a result of loss reduction. Appraisals of the effectiveness of commercial security systems have been mixed. Bahr says:

> Current users are aware—and future users should be alerted to the fact—that none of the commercially available systems is foolproof. With every system, patrons can locate and remove the sensitized tag from a book, thus preventing an alarm from being triggered. Patrons can also foil most systems by carrying out a magnet near the book, thus interfering with the proper reception of a signal by the sensing screens. Some librarians undoubtedly feel that even with these short-comings, the electronic systems create a psychological deterrent to theft and show patrons the library is intent on reducing losses....Additionally, electronic surveillance equipment is not a feasible means of protection for special collections such as rare books, manuscripts, maps and some archives.[15]

The most surprising omission on the topic of security occurred in the field of map librarianship itself. There is no mention of security by Drazniowsky, Larsgaard, Nichols, or Post, considered authorities in map librarianship.[16] When pressed for the reason for this omission, Mary Larsgaard stated her opinion to be that no one knows how widespread the problem of map security is, all the factors involved, or how to cope with it on a librarywide, much less universal, basis.[17]

Purpose of the Study

For this survey, the word *map* is defined as: "a graphic representation, usually on a plane surface and at an established scale, of natural and artificial features on the surface of a part or the whole of the earth or other planetary body."[18] The term *security* refers to measures taken to guard against theft or mutilation.

This survey of map library security and its unique problems evolved from personal observation, experience and concern. This topic has been raised by several map librarians in personal interchange as well as at meetings. Unique security characteristics, dilemmas and procedures facing map librarians throughout the United States and Canada were revealed through the survey.

The increase of all types of library losses is more apparent today than ever before. The rise of map usage and the attitude of the map

librarian to patron access and satisfaction is vital in light of budget cuts and high replacement costs. Since maps physically differ from books in size, durability and format, protection of these valuable nonbook reference tools is not the same as that for regular library materials. However, library security systems have traditionally been based on the bound volume. Because of maps' physical differences and the number of maps in university collections, the design of present security systems does not serve flat maps well. Thus, there arise particular problems of map security not found in the regular library setting. This study attempted to pinpoint these problems and discover how map librarians deal with them. Of basic concern were specialized procedures devised to give flat maps adequate protection within the environment of the university map collection.

Three basic assumptions by the author led to this investigation: (1) although a majority of university libraries have commercial general security systems, these systems do not protect flat maps adequately; (2) methods to curtail map loss in various university libraries have been attempted; and (3) map library security is neglected under current procedures, circulation policies, and functions of the university map library housing more than 50,000 maps.

The study investigated: (1) commercially designed security systems developed for books, and the extent of successful modification of these systems to protect flat maps; (2) map collections in open or closed stack areas; (3) the effect of a written circulation policy on map loss; (4) limitations of staffing and hours of service for the protection of maps; and (5) location of map collections in relation to campus and/or library security points. Flat sheet maps, in single, series, multiple, or set format, were the only type of map considered in this survey. The primary purpose of this study was to determine the attitudes, opinions and perceptions of map librarians regarding unique security problems; the study did not include other library materials.

For this study, the author identified approximately 230 collections that house over 50,000 maps. These were selected from a larger list of 743 map collections listed in the third edition of *Map Collections in the United States and Canada*. A further reduction to sixty-three university map libraries was then made, and a copy of the questionnaire sent to each (see Appendix A). A cover letter was sent with the questionnaire to each librarian. A list of the libraries surveyed appears in Appendix B.

This investigation was not a random sample; rather, the author attempted to poll opinions, experiences and reactions to sheet map loss in the university library situation from map librarians thought most

likely to be knowledgeable in this area. Questions also covered: length and type of training of the map librarian; how map loss is deterred in individual collections; staffing; service hours; physical floor plan of the collection; whether a commercial general library security system is in operation; and librarians' personal perceptions concerning flat map loss. Many questions were open-ended and required detailed responses about the present situation of map security in each library.

Collected information was coded and compared with the other questionnaires in the survey. Frequencies of certain answers, librarians' opinions, and emerging patterns were used to interpret the data.

Analysis of the Data

There were thirty-seven responses to the sixty-three questionnaires mailed—59 percent of the total. Twenty-six out of these (or 70 percent) replied that their library had a general security system installed. Of those twenty-six, eight librarians reported they had modified the general system to protect maps. The only method of security attempted was placement of magnetic strips somewhere on the flat map, sometimes disguised. One librarian reported that his institution was experimenting with a new, spray-on coating that will trigger an alarm, but results will not be available for another year.

Opinions concerning the degree of map loss ranged from "negligible" to "a severe problem," with 68 percent feeling that map loss in their particular collection was "not a great problem." Table 1 groups the responses according to degree of loss. A number of librarians mentioned that local topographic and geologic maps were their greatest loss by theft. Twenty-nine reported that U.S. or Canadian topographic quadrangle maps from official national series were lost more than other types of maps. Following closely was loss of general geologic and road maps.

In regard to circulation and map loss, nineteen respondents (51 percent) reported they have and enforce a written circulation policy at this time, but seven of those claiming to have a written policy failed to enclose them for review. Four other libraries reported their map circulation policy was part of "general library regulations." The most noticeable similarities among the twelve available policies were: fines ranging from twenty-five cents a day to five dollars a week or more for overdue maps; a replacement fee required in case of map loss or poor condition upon return to the map room; local topographic maps not being loaned; and use of photocopying services offered in lieu of outside circulation. Thirty-three libraries allow maps to circulate outside the

library; however, this includes "selected" or "restricted" conditions regarding what type of map leaves the room, who the borrower is, and length of loan period.

TABLE 1
SERIOUSNESS OF MAP LOSS

Extent of Problem	Descriptive Terms Used	Percentage Responding
Insignificant	negligible not significant	8
Low	not a problem not serious very few lost almost nil low but increasing very little theft low rate of loss minimal not very	68
Moderate	less than before moderately serious 25 sheets per year	16
High	a severe problem relatively high great loss of very serious nature	8

The question concerning just how and to what extent the circulation policy affects map loss brought a flood of mixed responses. Two schools of thought on this topic are: (1) if maps are allowed to circulate, temptation to steal them is lowered; and (2) a noncirculating policy does much to control and protect the collection. Opinions of fifteen librarians on the subject are given in Appendix C.

On the subject of floor plan and map loss, 54 percent felt the floor plan affects map loss; and 27 percent felt it had a negative effect, citing open stacks and browsing through map cases as an invitation to map loss. On the positive side, 27 percent of the librarians felt that controlled access to both the map room and storage cases was a great deterrent to map theft. Seventeen (46 percent) saw no effect of their floor plan on map loss whatsoever. Seventy-two percent felt that staffing and hours the map area was open to the public influenced not only degree of loss, but also public relations and patron attitudes toward the map room,

service and attempts to provide materials requested.

On the question of alternative protection activities other than a general library security system, fifteen (40 percent) of the librarians polled attempted to protect map collections in other ways. They reported locking up high-risk maps and offering photocopying services for geological, recreational, travel, and topographic maps of local interest. Nineteen librarians (51 percent) indicated that no steps were taken to deter theft, but gave no explanation. Cataloging the collection to obtain some control, providing more photocopying machines, and adding more staff to improve control of traffic and access to the collection were some of the suggestions mentioned for security improvements.

In regard to the librarian's length of employment in the map library, 29 percent surveyed had worked six to ten years at their particular institutions, with over-ten-year veterans following with 24 percent. The next largest group were those who had been at the same location less than one year; they made up 18 percent of those surveyed. Eleven percent represented the three- to five-year employment group. Table 2 compares librarians' judgment of loss seriousness with years of service. The lack of correlation between job experience and judgment of the seriousness of map loss indicated that these two factors are independent variables. Table 3 illustrates the overall responses to the various questions.

TABLE 2
LIBRARIAN'S JUDGMENT OF LOSS SERIOUSNESS IN RELATION TO YEARS EMPLOYED

Years Employed	High	Moderate	Low	Insignificant
Less than 1	1	1	4	—
1- 2	—	—	3	—
3- 5	1	—	3	1
6-10	1	2	9	—
over 10	—	1	5	2

Conclusions and Recommendations

Although a majority of the libraries reporting have commercial security systems, little attention has been given to modify or exploit that system to serve maps more adequately. Methods such as photocopying

TABLE 3
Responses to Questionnaire

Response	Frequency of response (% total)
Library has a commercial security system	70
Seriousness of map loss "not a great problem"	19
There is loss of topographic quadrangle maps of a local area	39
A written circulation policy is used	51
Floor plan affects loss:	
negatively	27
positively	27
no effect	17
Staffing and hours of service affect loss	72
Other ways used to protect maps aside from general library security system	40
Number of years employed at present institution:	
more than 10	24
6-10	29
3- 5	11
less than 1	18
Number of questionnaires mailed: 63	
Number of questionnaires returned: 37	
Overall response rate	59

services, tighter control and liberal circulation policies are frequently used in an attempt to curtail theft of flat maps. Map library security may not be greatly neglected under current library procedures and functions; however, this study indicated that more attention and interchange between libraries is needed to explore and expose the topic completely. Unless a periodic, accurate inventory is taken of a collection, control and knowledge of map loss is impossible. Control must be established, and map loss estimates made on sound, factual judgment rather than intuition. Estimates based on guesswork, work experience and/or intuition have been proved to be 7-10 percent below actual figures.[19] Map librarians need far better control and more accurate statistics of map loss before the problem can be solved. Before the ramifications of map loss on budget, administration and public relations can be dealt with, the extent of overall collection loss must be realized. Related to this is the area of location of uncataloged maps and maps in storage areas. These materials often disappear without a trace, much less a record of their existence. For some reason, the cataloging time gap for maps is much

longer than for books and uncataloged materials have usually not yet been inventoried.

Related to estimation of loss and its curtailment is the dilemma of protection of library materials versus patrons' needs. At the heart of the matter are the two opposing philosophies of open versus closed access to maps. Overall, the data analyzed in the survey reflected a concern by map librarians that locking maps up did not attract or satisfy patrons. Service to the university community seemed to be the paramount issue. If a few maps were lost in the process of browsing or outside circulation, they were apparently expendable, and some map loss was considered a "necessary evil." Once again, the map library community is urged to keep track of replacement figures and costs.

There is great potential in the area of map security, an area that has been neglected not only by library administrators and planners, but by map librarians themselves. We need to address such topics as: map security directly related to map loss in various library settings; methods and techniques for flat map inventory; more efficient ways to catalog and describe maps; statistical studies in areas of specific types of map loss; open versus closed access to maps; education of the patron in map preservation and use; investigation into ways to curtail topographic map loss; circulation or noncirculation of maps; and patron satisfaction in obtaining and using maps. Results of the new "spray-on alarm" method should be followed up. Studies, investigations, and exchanges between map librarians are badly needed. Consideration of those topics will greatly assist in narrowing the gap between available information on security and losses and its applications to the map library situation.

References

1. For their help and guidance in this project, acknowledgment is made to Dr. Maurice P. Marchant, Brigham Young University School of Library and Information Sciences; Barbara Cox, Dr. Donald Curry and Dr. Richard Travis, University of Utah; Susan Mortensen, Utah State Historical Society; Dr. Benjamin Laning Everitt; and M.L. Larsgaard.

2. Cobb, David A. "Maps and Scholars," *Library Trends* 25:824, April 1977.

3. Ibid., p. 819.

4. Carrington, David K., and Stephenson, Richard W., comps. *Map Collections in the United States and Canada: A Directory.* 3d ed. New York, Special Libraries Association, 1978, p. vii.

5. Walker, Barbara. "Maps." *In* Frances E. Kaiser, ed. *Handling Special Materials in Libraries.* New York, Special Libraries Association, 1974, p. 69.

6. Mortensen, Susan A. "A Written Map Acquisition Policy: The Standardized Compared with Actual Map Library Practices." MLS research project, Brigham Young University, 1972, p. 6. (unpublished)

7. Ibid., p. 7.

8. Lewis, Dorothy C. "Maps: Problem Children in Libraries," *Special Libraries* 35:75, March 1944.

9. White, Robert C. "The Ideal Arrangement for Maps in a Library," *Special Libraries* 50:154, April 1959.

10. "Archival Security Surveys," *Archival Security Newsletter*, no. 6, July 1976; and Kinney, John M. "Archival Security and Insecurity," *The American Archivist* 38:493-97, Oct. 1975.

11. Bahr, Alice H. *Book Theft and Library Security Systems, 1978-79*. White Plains, N.Y., Knowledge Industry Publications, 1978, p. 4. *See also* "Book Theft on the Upswing; Security Tried," *Library Journal* 100:2203, Dec. 1, 1975; "Library Security: Books Thefts Are Up," *Library Journal* 100:352, Feb. 15, 1975; and Griffith, J.W. "Library Thefts: A Problem That Won't Go Away," *American Libraries* 9:224-27, April 1978.

12. *See, for example*, Burns Security Institute. *National Survey on Library Security*. Briarcliff Manor, N.Y., 1973; "Tough Security Measures Adopted by Research Libraries," *Library Journal* 101:764, March 15, 1976; and Holtman, Eugene. "The Security Problem," *Michigan Librarian* 39:5-6, Autumn 1973.

13. *See, for example*, Billings, Rolland G. "Electronic Protection of Library Materials," *Media Spectrum*, vol. 3, no. 3, 1976, pp. 14-15; Bommer, Michael, and Ford, Bernard. "A Cost-Benefit Analysis for Determining the Value of an Electronic Security System," *College & Research Libraries* 35:270-79, July 1974; Fuller, Florine and Glaus, Irene. "To Have or Not to Have a Security System," *Tennessee Librarian* 26:41-44, Spring 1974; Roberts, Graham, and Martin, Patricia. "Electronic System Prevents Book Theft," *American School & University* 46:19, Aug. 1974; and Schwab, Bernard. "Security Systems: How Do They Work and How Do You Decide on One?" *Wisconsin Library Bulletin* 73:127-28, May 1977.

14. *See, for example*, Cooper, Douglas W. "Library Security: An Administrative Overview," *North Carolina Libraries* 32:9-17, Winter 1974; Knight, Nancy H. "Theft Detection Systems for Libraries: A Survey," *Library Technology Reports* 12:575-690, Nov. 1976; and "60-College Security Study Finds Few Satisfied," *Library Journal* 93:1848, May 1, 1968.

15. Bahr, op. cit., p. 112.

16. *See* Drazniowsky, Roman, comp. *Map Librarianship: Readings*. Metuchen, N.J., Scarecrow Press, 1975; Larsgaard, Mary. *Map Librarianship: An Introduction*. Littleton, Colo., Libraries Unlimited, 1978; Nichols, Harold. *Map Librarianship*. Hamden, Conn., Linnett Books, 1976; and Post, J.B., ed. "Map Librarianship," *Drexel Library Quarterly* vol. 9, no. 4, Oct. 1973.

17. Larsgaard to Everitt, Jan. 9, 1979.

18. Larsgaard, Mary. "A Brief Glossary of Map Terms." In *Map Librarianship*, op. cit., p. 276.

19. Bahr, op. cit., p. 14.

Additional References

Knight, Nancy H. "Library Security Systems Come of Age," *American Libraries* 9:229-32, April 1978.

Library Security Newsletter. Haworth Press, 149 Fifth Ave., New York, N.Y. 10010, 1975- .

Murphy, Marcy, and Johns, Claude J., Jr. *Handbook of Library Regulations*. New York, Dekker, 1977.

Oppenheim, Abraham M. *Questionnaire Design and Attitude Measurement*. New York, Basic Books, 1966.

Payne, Stanley L. *The Art of Asking Questions* (Studies in Public Opinion, no. 3). Princeton, N.J., Princeton University Press, 1951.

Reber, Jan R., et al. *Manual on Library Security*. Southport, Conn., Security Perception Unlimited, 1975.

Sharp, Harold S., ed. *Readings in Special Librarianship*. New York, Scarecrow Press, 1963.

Appendix A
Survey Questionnaire

The purpose of this survey is to investigate map library security and the unique difficulties faced in dealing with security in map libraries. The topic concerns only flat sheet maps, *not* atlases or bound volumes.

1. Does your university library have a commercialized security system?
   _____ Yes _____ No If the answer is yes, have you attempted to use it to protect maps? _____ Yes _____ No If Yes, please explain what you have done. If not, why not?

2. How serious is map loss in your library? (Use the back if necessary)

3. Are any particular geographic areas or types of maps reported lost more than others? If so, please explain which ones.
   _____ Topographic _____ Geologic _____ Thematic _____ Road
   _____ Rare _____ Other (Which ones?)

4. Does your library have a written circulation policy for maps?
   _____ Yes _____ No If yes, please enclose a copy.

5. Do you circulate maps outside of the map library? _____ Yes _____ No
   In your estimation, how (if at all) does your circulation policy affect the loss of maps?

6. Do you feel the floor plan of your department affects map loss?
   _____ Yes _____ No In what ways?

7. Do you feel map loss is curtailed by staffing patterns and hours of service?
   _____ Yes _____ No Please explain.

8. Have special methods or techniques been undertaken to protect your map collection besides those used for protecting the library collection in general?
   _____ Yes _____ No If so, please explain.

9. What, in your opinion, would improve your present system of map library security?

10. How long have you been employed as head map librarian at your particular institution? _____ Less than 1 year _____ 1-2 years _____ 3-5 years
    _____ 6-10 years _____ over 10 years

11. Have you received any specific training in working with maps? _____ Yes
    _____ No Please explain what type of training.

12. May I quote you in this study? _____ Yes _____ No
13. Do you wish the results of this study mailed to you for $1.00? (covers cost of copying and postage) _____ Yes _____ No
    name: _____
    address: _____

Thank you for your time and consideration.

Appendix B
Libraries Receiving Questionnaire

Arizona State University Library,
  Tempe

University of Arizona Library, Tucson
Map Collection

University of California—Berkeley
General Library—Map Room

University of California—San Diego
Documents, Maps and Microform
  Dept.

Business, Economics Reference Dept.
California State University Library,
  Long Beach

Map Library
University of California—Los Angeles

Map Library
California State University—North-
  ridge

Geography Dept.—Map Library
San Diego State University

McHenry Library, Map Collection
University of California—Santa Cruz

Map Library
University of Colorado—Boulder

Arthur Lakes Library
Colorado School of Mines, Golden

Geology Library
Yale University, New Haven,
  Conn.

Map Library
University of Florida Library, Gaines-
  ville

Map Library
P. Gilbert Memorial Library
Georgia Institute of Technology,
  Atlanta

Map Collection—University of
  Hawaii Library, Honolulu

Map Library, Social Science Section
University of Idaho Library, Moscow

Boise State University—Map Section
Boise, Ida.

Morris Library, Science Division Map
  Library
Southern Illinois University, Carbon-
  dale

Library—Map Section
University of Illinois at Chicago
  Circle

Map Collection
Northwestern University Library
Evanston, Ill.

Geography and Map Library
Western Illinois University,
Macomb

Map and Geography Library
University of Illinois Library,
  Urbana-Champaign

Map Collection
University of Iowa Library, Iowa City

Kenneth R. Spencer Research Library
University of Kansas—Map Library
Lawrence

Audio-Visual and Map Room
Milton S. Eisenhower Library
Johns Hopkins University,
Baltimore

Harlan Hatcher Graduate Library—
  Map Room
University of Michigan, Ann Arbor

O.M. Wilson Library—Map Division
University of Minnesota,
Minneapolis

Documents Division—Library
University of Montana, Missoula

Map Library, Geology Library
Princeton University
Princeton, N.J.

Maps Library
University of Nevada—Reno

Map Collection—Special Collections
  Dept.—Zimmerman Library
University of New Mexico,
Albuquerque

Science Library Map Room
State University of New York—Bing-
  hamton

Map Room—Columbia University,
New York

Library
North Dakota State University, Fargo

Science Division Map Library
Minot State College, Minot, N.D.

Geology Branch Library
University of North Dakota,
Grand Forks

Map Library
University of Oregon—Eugene

Science Library, Map Room
Joint University Libraries, Nashville

Geology Library
University of Texas—Austin

Map Room
Texas A & M University Library,
College Station

Maps Section—Library Annex
University of Texas at El Paso

Maps Section
Harold B. Lee Library
Brigham Young University,
Provo, Utah

Map Collection—Marriott Library
University of Utah, Salt Lake City

Map Library
Western Washington State College,
Bellingham

Map Center
University of Washington Libraries,
Seattle

Simpson Geography Research Center
University of Wisconsin—Eau Claire

Map and Air Photo Library
University of Wisconsin—Madison

Maps Library
University of Calgary
Calgary, Alberta

University Map Collection
University of Alberta—Edmonton

Map Collection—Library of Social
  Sciences
Simon Frazer University, Burnaby,
  B.C.

Library—Map Division
University of British Columbia,
Vancouver

University Map Collection
McPherson Library
University of Victoria, B.C.

Map and Atlas Collection—Library
University of Manitoba, Winnipeg

Map Library, McMaster University
Hamilton, Ont.

Mackintosh-Corey Hall Library
Queen's University, Kingston, Ont.

Dept. of Geography, Map Library
University of Western Ontario,
  London

Geography Dept. Map Library
Carleton University, Ottawa, Ont.

Map Library—Morisset Library
University of Ottawa, Ont.

Map Library—J.P. Roberts Library
University of Toronto

La Bibliothèque, C.P.
École Polytechnique
Montreal, Quebec

University Map Collection,
  Dept. of Geography
McGill University, Montreal

Bib. Général Cartothèque
Université Laval, Quebec

Map Library, Division of Social
  Sciences
University of Regina, Sask.

Appendix C

Comments Concerning Circulation

Librarian's Comment	Years Employed	Map Loss Judgment	Collection Size
circulation cuts down loss	3-5	very little	93,134 maps
restricted circulation keeps loss low	less than 1	not a problem	60,000
no circulation of maps would increase theft	over 10	not very serious	116,596
making maps available decreases theft and/or loss	6-10	very low rate	71,000
no outside circulation definitely cuts down our loss	3-5	not serious	163,000
if maps were noncirculating, even more would be stolen	6-10	severe problem	71,000
noncirculation saves our maps from loss and abuse	over 10	very low	176,245
keeps our loss below others, with their noncirculating policies	over 10	not very serious	150,000
no outside circulation greatly cuts down on loss	1-2	less now than when we did circulate outside the building	110,000
circulation policy cuts down our loss	6-10	very little	55,000
only the noncirculating maps disappear	less than 1	relatively high	55,000
our system of restricted circulation does much to protect the collection	less than 1	not very serious	80,000
our circulation policy makes theft less necessary	less than 1	not very serious	72,000
our liberal circulation policy helps to inhibit map loss	less than 1	not very serious	56,000
if maps can be borrowed legitimately, temptation to steal is reduced	1-2	not serious	152,000

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