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ABSTRACT

A data comparison was made between 33 rural libraries in Utah and the essentially rural bookmobile service maintained by the Extension Services Division of the State Library Commission of Utah. The comparison revealed that, in terms of cost per item circulated, bookmobile service was slightly more expensive. Using cost per capita served as a measure, bookmobile service was significantly more expensive. However, the bookmobiles were much more efficient in the amount of use that they obtained from each holding. They were also more effective in the number of volumes circulated per capita. (Author)

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**RURAL BOOKMOBILE SERVICE:
EFFICIENCY AND EFFECTIVENESS**

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**A Research Project
Submitted to the
Graduate Department of Library and Information Sciences
Brigham Young University
Provo, Utah**

**In Partial Fulfillment
of the Requirements of the
Master of Library Science Degree**

**by
Brent N. Jacobsen
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Approved:

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**RURAL BOOKMOBILE SERVICE:
EFFICIENCY AND EFFECTIVENESS**

Brent N. Jacobsen

ABSTRACT

Approximately 50,000,000 Americans still live in areas technically classified by the Census Bureau as rural. This represents a very significant proportion of the population in terms of library service. A search of available literature revealed that bookmobiles can indeed be very effective in circulating books in rural areas, but it also revealed that bookmobiles are expensive to buy and to operate. Most authorities agree that bookmobile service is more expensive than deposit stations or small part-time branches, but they also maintain that it is more effective and efficient. Regional and state libraries are often better able to sustain effective bookmobile service than sparsely settled counties or small communities. Federal funding has been of great significance in initiating and maintaining rural bookmobile service. Such aid is often directed through state library extension services.

A data comparison was made between thirty-three rural libraries in Utah and the essentially rural bookmobile service maintained by the Extension Services Division of the State Library Commission of Utah. The comparison revealed that, in terms of cost per item circulated, bookmobile service was slightly more expensive. Using cost per capita

served as a measure, bookmobile service was significantly more expensive. However, the bookmobiles were much more efficient in the amount of use that they obtained from each holding. They were also more effective in the number of volumes circulated per capita. In summary, while bookmobile service was found to be more effective and, in some respects, more efficient, it was also found to be relatively expensive.

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TABLE OF CONTENTS

ABSTRACT	11
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	vi
Chapter	
I. INTRODUCTION	1
II. LITERATURE SEARCH	4
The Rural Population	
Book Circulation Reports	
Cost	
County, Regional, and State Libraries	
Advantages, Disadvantages, and Alternatives	
III. RESEARCH METHODOLOGY	22
Sources of Data	
Procedure	
IV. DATA ANALYSIS: COMPARATIVE EFFICIENCY AND EFFECTIVE- NESS OF RURAL BOOKMOBILE SERVICE AND RURAL LIBRARY SERVICE IN UTAH	30
Cost per Circulation	
Cost per Capita Served	
Circulation per Capita Served	
Circulation per Holding	
V. SUMMARY AND CONCLUSIONS	40
SELECTED BIBLIOGRAPHY	44

LIST OF TABLES

Table	Page
1. Sample Annual Budget for Bookmobile Serving Rural Area . . .	13
2. Sample Annual Budget for Rural Bookmobile Service in New York	14
3. Number of Bookmobiles Owned by State Library Agencies: Fiscal Years 1956 and 1961	17
4. Bookmobile Service of the Utah State Library	26
5. Rural Libraries of Utah	28
6. Rural Library Expenditures	31
7. Rural Library Circulation	32
8. Cost per Circulation of Rural Libraries	33
9. Bookmobile Costs	33
10. Bookmobile Circulation and Cost per Circulation	34
11. Cost per Capita Served	35
12. Circulation per Capita Served	37
13. Circulation per Holding	38

CHAPTER I

INTRODUCTION

In 1905, the first horse-drawn bookwagon in the United States traveled the backroads of Washington County, Maryland.¹ In 1912, that unit was replaced by a motorized bookmobile.² Since that time, bookmobiles have proliferated at an accelerating pace in both urban and rural America. By 1937, there were sixty bookmobiles in the United States, mostly in the South. The number had jumped to 603 by 1950. There were 919 bookmobiles in operation in the United States in 1956 (455 of them in the South). County and regional libraries operated less than one-fourth of that number; states, cities, towns, and smaller agencies operated the rest. In 1956, the Library Services Act was passed. For the next seven years appropriations for this act greatly stimulated rural bookmobile service in the United States. By 1963, there were 1,400 bookmobiles in operation. The Library Services Act (hereinafter LSA) was replaced by the Library Services and Construction Act (hereinafter LSCA) in 1964. Funds from this act have increased bookmobile services in both urban and rural areas. In 1965, there were nearly 2,000 bookmobiles in operation.³

¹Harold Goldstein, "Introduction," Library Trends 9 (January 1961): 287.

²Eleanor Francis Brown, Bookmobiles and Bookmobile Service (Metuchen, N.J.: Scarecrow Press, 1967), p. 18.

³*Ibid.*, pp. 28-32.

Rural bookmobile service may consist of community or village stops, open country or crossroad stops, institutional stops, school stops, door-to-door stops at isolated homes, and others. Rural bookmobile service has not been without critics. In 1949, Dr. Oliver Garceau, a social scientist, criticized door-to-door rural bookmobile services as being uneconomical and not a social priority:

. . . In some of the very poorest counties, submarginal in almost every social service, bookmobiles have been making door-to-door stops for anyone who would agree to take a book. Worthy as these objectives are, it is hard to conceive of a less economical use of the library's inadequate income. Such retail service at the door can probably be socially justified at this time for very few services beyond the mail and electricity. . . . Many county commissions . . . are asking why the rural population cannot pick up their books with their cigarettes, their groceries, their liquor, and their moving picture shows on Saturday night.⁴

Is rural bookmobile service effective and efficient? This question will be examined in this paper. The effectiveness of an organization may be defined as "the degree to which it realizes its goals."⁵ In this study, the primary measure of effectiveness will be circulation or, more specifically, circulation per capita served. There are, of course, other measures of the effectiveness of library service. But circulation is the one measure that is most consistently reported. Efficiency may be defined as "the amount of resources used to produce a unit of output."⁶ The measure of efficiency that will be used most frequently in this paper is cost per item circulated.

There is relatively little literature dealing directly, in a

⁴Oliver Garceau, The Public Library in the Political Process (Boston: Gregg Press, 1972), p. 209.

⁵Amitai Etzioni, Modern Organizations, Foundations of Modern Sociology Series (Englewood Cliffs, N.J.: Prentice-Hall, 1964), p. 8.

⁶Ibid.

statistical way, with bookmobile service. There is, however, some published circulation and cost data. The literature search (Chapter II) of this paper will treat the following areas: (1) the possible influence of recent rural population trends on effective bookmobile service; (2) published reports of book circulation of rural bookmobiles; (3) the cost of bookmobiles and bookmobile operation; (4) the relative abilities of county libraries, multi-county or regional libraries, and state libraries to furnish effective rural bookmobile service; and (5) the advantages and disadvantages of rural bookmobile service, especially in comparison with alternative services.

Chapters III and IV will deal specifically with the effectiveness and efficiency of rural bookmobile service in Utah. Data will be presented and analyzed to illustrate the comparative efficiency and effectiveness of rural bookmobile service and fixed rural library service.

This paper will not be concerned with the design, construction, and facilities of bookmobiles. The staffing of bookmobiles and the nature of the book collection will also not be discussed. This paper will not deal with urban bookmobile service. Obviously, some definitions of the terms "urban" and "rural" will have to be established. Though there is considerable foreign literature on the subject of bookmobiles, this study will be limited to English language sources. Reference will be made to rural bookmobile service in England because of the relative success of British county bookmobile service. The application of these references to service in the United States may be limited because of differences in reading habits, library service, and population distribution.

CHAPTER II

LITERATURE SEARCH

The Rural Population

In 1950, the Bureau of the Census revised its definitions of the terms "urban" and "rural." According to the new definition, urban consisted of three main areas:

1. Places of 2,500 inhabitants or more incorporated as cities, boroughs, villages, and towns.
2. Densely settled urban fringe, whether incorporated or unincorporated, of urbanized areas.
3. Unincorporated places of 2,500 inhabitants or more.⁷

All other areas (with the exception of some special definitions for New England, New York, New Jersey, Pennsylvania, and Wisconsin) were considered to be rural. This definition of urban and rural will be modified in the chapters dealing with bookmobile service in Utah.

How many people live in rural America? In 1950, the number was 54,478,961 or 36.0 percent of the total population. In 1960, there were 54,054,425 rural inhabitants. This represented an overall decrease of 0.8 percent in the total number of rural inhabitants. In 1960, 30.1 percent of the total population resided in rural areas. Between 1960 and 1970, the rural population declined slightly to 53,886,996, a decrease of 0.3 percent. In 1970, 26.5 percent of the total popula-

⁷U.S. Bureau of the Census, People of Rural America, by Dale E. Hathaway, J. Allan Beegle, and W. Keith Bryant, A 1960 Census Monograph (Washington, D.C.: Government Printing Office, 1968), pp. 5-6.

tion was classified as rural.⁸ These figures seem to indicate that there is still a migration from rural areas to urban areas and that some rural areas are becoming urbanized. Some have pointed out that this movement of people from rural areas to urban areas has increased the difficulty of providing rural library service.⁹ But the fact that over one-fourth of the population still resides in areas defined as rural indicates that adequate rural library service is still of great importance.

Only about 7 percent of the nation's population are still living on farms.¹⁰ This might indicate, as Gretchen Schenk has pointed out, that door-to-door bookmobile service to farms has become too impractical and inefficient.¹¹ One could argue, however, that these are the very people who need bookmobile service the most because of their isolation.

Approximately 10,000,000 people live in rural towns and villages of 2,500 or less. The remaining 43,000,000 rural dwellers live in "other rural" areas,¹² including less densely settled fringe areas, rural institutions, and isolated homes and farms. Eleanor Brown, Head of Extension Services at the Santa Ana Public Library

⁸U.S. Bureau of the Census, United States Census of the Population: 1970, Vol. I, Characteristics of the Population, pt A, Number of Inhabitants (Washington, D.C.: Government Printing Office, 1972), p. 42.

⁹Richard B. Sealock, "Changing Patterns of Library Service," Library Trends 9 (January 1961): 291.

¹⁰Brown, Bookmobiles, p. 40.

¹¹Gretchen Knief Schenk. "Evaluating Bookmobile Services," Wilson Library Bulletin 39 (April 1965): 687.

¹²U.S. Bureau of the Census, United States Census, p. 43.

in California, maintains that village or community bookmobile stops are the most effective, crossroads or general country stores are second best, school and institutional stops are next, and individual farm and home stops are least effective.¹³

Book Circulation Reports

The published circulation statistics for bookmobiles are quite impressive. As indicated before, there were 919 bookmobiles (urban and rural) in operation in the United States in 1956. These 919 bookmobiles reportedly accounted for one-eighth of the books circulated in the United States by public libraries during that year.¹⁴

An example of the success of rural bookmobile service was that of the Clermont County Public Library in Batavia, Ohio, during 1955 and 1956.¹⁵ The county had, at that time, an estimated population of 62,000. There were no large cities. The population of the largest town was about 3,500. The county seat had about 1,700 inhabitants. To some extent, the county was still an agricultural one. The bookmobile service was instituted in 1955 with ten school stops and twenty-eight neighborhood stops on a four-week cycle. During the last five months of 1955, 2,718 patrons were registered, and 20,678 books were loaned. In 1956, the bookmobile circulated 113,405 books and registered 6,725 patrons. Because of this success, funds were approved by the county to buy and operate a second vehicle.

¹³Brown, Bookmobiles, p. 113.

¹⁴Ibid., p. 32.

¹⁵Doris Wood, "Starting from Scratch," in Bookmobile Service Today, ed. Dorothy Strouse, PDL Reporter, no. 7 (Chicago: A.L.A., 1958), pp. 9-13.

In 1957, bookmobiles in Louisiana circulated more than 2,000,000 books. This amounted to one-fourth of the total books circulated by public libraries in the state.¹⁶

Another reported success was that of the Southern Adirondack Library System in northeastern New York. With the aid of an ISA grant, the Library Extension Division of the New York State Education Department provided a demonstration bookmobile for the system in 1959. Biweekly service to thirty-three rural communities was begun in January of 1959. After only seventy-five days of service, an average of 366 books were being loaned each day, a figure comparable to the daily circulation of the largest public library in the area. During the first ten months of service, 40,000 books were loaned.¹⁷

The Ramapo Catskill Library System of New York experienced similar success with a demonstration bookmobile between 1961 and 1963. The bookmobile was acquired by the state through ISA funds. It was obtained by the Ramapo Catskill Library System on a demonstration basis. It was assigned to Sullivan County, a rural resort area of 9,845 square miles with a population of about 45,000. There were eight small public libraries in the county with limited budgets, many nonprofessional staff members, and short hours of service. Bookmobile service began in October of 1961, with runs to all thirty-six communities. During the first month, 3,588 books were loaned. According to the bookmobile librarian, "It was immediately evident that the people of Sullivan County, who came in swarms, wanted and would use book-

¹⁶Kathryn Adams, "How to Organize a Mobile Library Service: Bookmobile Service in a Louisiana Demonstration Library," UNESCO Bulletin for Libraries 12 (August 1958): 200.

¹⁷Silas Townsend, "Bookmobiling in the Adirondacks," Bookmark 19 (December 1959): 73-74.

mobile service." In 1963, after the demonstration project, an intense publicity campaign was launched in the county to raise support for the purchase of a new bookmobile. The final result was that the county Board of Supervisors approved \$25,000 for the purchase of a new bookmobile and \$30,000 annually for the operation of the vehicle by the library system.¹⁸

The library system of Jamestown, New York, also reported successful rural bookmobile service. In 1965, the director of the system presented to the system board a study of library service in the two-county area served by the system. The report was entitled "The Unserved." It pointed out that, in their largely rural situation, the bookmobile was the answer for reaching people in smaller communities. His suggestion was approved by the board, and the system asked the state library for backing of a 1½-year demonstration project. The New York State Library provided a used bookmobile, a book collection of 20,000 volumes, and a grant of \$15,000. In January of 1966, biweekly bookmobile service to forty-one stops was begun. The program was an immediate "success" with 92,390 items loaned during the first year. In 1966, the library system received Appalachian and LSCA grants to purchase its own bookmobile. Over 100,000 items have been circulated every year since 1966.¹⁹

County bookmobile service in England has been quite successful. In 1935, the first English county library (Kent) instituted bookmobile

¹⁸Marion M. Milk and Mariruth Campbell, "Project Bookmobile," Bookmark 23 (January 1964): 95-97.

¹⁹Eugene Healy, "Bookmobiles: A Somewhat Closer Look," American Libraries 2 (January 1971): 73.

service. By 1952, there were sixty-six bookmobiles (or mobile libraries, as the British call them) in operation. The number increased to 199 in 1962 and to 315 in 1969. Circulation during the fiscal year 1965/66 was about 107,000 per vehicle.²⁰ It must be kept in mind, however, that English counties are, on the whole, more densely populated than counties in the United States and that Englishmen are said to be more avid readers than Americans.

The state of Utah has experienced considerable success with its state-sponsored bookmobile service. Between 1964 and 1969, the State Library Commission directed 98 percent of its ISCA Title I funds into the purchase and operation of bookmobiles. After demonstration periods in some of the counties, virtually all of those counties agreed to contract with the State Library Commission for bookmobile service. By 1967, there were thirteen state-owned bookmobiles in operation. Most of the counties served were sparsely populated. In 1967, total circulation from these bookmobiles was 955,348 or about 5.27 books per capita served. The Utah bookmobiles have been circulating about 1,000 to 1,300 books each during a working day.²¹ This may seem like a rather large number, but much of it was probably due to frequent school stops and to the use of volunteer help.

Such success stories seem to indicate that rural library service can indeed be effective. Unfortunately, failures are generally

²⁰Charles Ronald Eastwood, "County Library Transport, 1919-1969," Library Association Record 71 (December 1969): 356-57.

²¹Jules Mersel et al., An Overview of the Library Services and Construction Act--Title I (New York: R. R. Bowker Company, 1969), pp. 255-56.

not published in library literature. Most articles on bookmobiles are written by bookmobile librarians or administrators who have good news to report. "Success" and "failure" can be rather subjective terms. In at least one instance, a free gift of a bookmobile and books from the Indiana State Library was rejected by three counties (Daviness, Green, and Martin) after a three-year demonstration period from 1966 to 1969. Apparently none of the county commissioners was willing to support the estimated annual operation cost of \$26,000. One citizen group attempted, without success, to maintain the service.²² There are no published statistics regarding the effectiveness of service of this particular bookmobile demonstration project.

Cost

Some librarians have maintained that bookmobiles are at least as economical as branch libraries, or perhaps more so:

It seems incontestable that a bookmobile can reach more people economically than a branch library involving the same capital outlay and equivalent maintenance costs.²³

In terms of cost they [bookmobiles] are as economical as the small full-time branch, or more so, and they are much more efficient than the part-time service point.²⁴

In 1960, prices for single-unit bookmobiles, without air conditioning, ranged from \$7,000 to \$11,000 for 10 to 16-foot models

²²"Gift of Bookmobile and Books Rejected by Three Counties," Focus on Indiana Libraries 24 (March 1970): 51.

²³Stewart W. Smith, "Potentialities and Capabilities of Bookmobiles for Library Service," Library Trends 9 (January 1961): 298.

²⁴Charles Donald Eastwood, Mobile Libraries and Other Public Library Transport (London: Association of Assistant Librarians, 1967), p. 252.

to \$15,000 to \$23,000 for 22 to 29-foot models.²⁵ A 30-foot Gerstenslager bookmobile that sold for \$16,000 in 1961 sold for \$22,000 in 1966. Bookmobile prices have continued to rise in recent years in keeping with inflationary trends. In 1966, 30-foot luxury Gerstenslager bookmobiles sold for as much as \$30,000.²⁶ In 1966, the Jamestown, New York, library system decided to purchase the largest single-unit they could buy. It cost them \$30,500.²⁷ Trailers are less expensive, but not, perhaps, when one considers the cost of the tow vehicle. Lischka, another firm manufacturing bookmobiles, estimated the following 1966 prices for trailers (not including generators and most furnishings and equipment): (1) \$6,950 for a 25-foot, 3,500 volume trailer, (2) \$7,550 for a 32.5-foot, 5,250 volume trailer, and (3) \$8,230 for a 35-foot, 5,750 volume trailer. In 1966, Bro-Dart trailers, completely furnished and equipped, ranged from \$25,915 for 8 by 35 foot trailers to \$41,428 for 12 by 50 foot models.²⁸

Some libraries have attempted to save money by converting service vans or sportsvans into bookmobiles. In 1969, the Van Buren County Library in Michigan attempted to purchase the least expensive single-unit commercial bookmobile that they could find. The least expensive vehicle available cost \$8,300 and had a capacity of 1,200 volumes. This amount was \$2,300 beyond the library's capital expen-

²⁵Paul H. Wyer, "Selection of the Bookmobile," Library Trends 9 (January 1961): 333.

²⁶Brown, Bookmobiles, pp. 293-94.

²⁷Healy, "Bookmobiles: A Somewhat Closer Look," p. 73.

²⁸Brown, Bookmobiles, pp. 294-95.

diture budget for the year. Consequently, the library sought bids on vans. The low bid was \$3,345 for a 1969 Chevrolet Step Van. A local contractor converted the van to a bookmobile for \$900, for a total cost of \$4,270. The converted van had a capacity of 1,400 volumes.²⁹ In 1971, the Coastal Plain Regional Library of Tifton, Georgia, converted a sportsvan camper into a bookmobile carrying 800 volumes and with a potential capacity of 1,000 volumes. The total cost was about \$5,600.³⁰ Such converted vans are obviously restricted in space and volume capacity.

Operation costs naturally vary with the size of the bookmobile, the size of the staff, distances traveled, and other factors. Between 1955 and 1959, Minnie J. Little, Bookmobile Librarian and Assistant Librarian of the King County Public Library, Seattle, conducted a survey of bookmobile operating expenses, both urban and rural. The survey was sponsored by the American Library Association. Questionnaires were sent to bookmobile administrators, asking for annual fixed and variable costs. Fixed costs included depreciation, interest, license, insurance, labor (librarian, driver-clerk, and other clerks), industrial insurance, retirement, and social security. Variable costs included gasoline and oil, repairs and maintenance, tires and tire expense, damage repairs not reimbursed, tolls, and "other." According to the study, the average annual fixed costs (excluding labor) for twenty-five bookmobiles during the five-year period was \$974. The average annual variable costs for thirty-three bookmobiles

²⁹Curt Bohling, "Story of a Bookmobile," Michigan Librarian 35 (June 1969): 10-11.

³⁰"Camper Becomes Bookmobile for Georgia Librarians," Library Journal 97 (February 1, 1972): 450.

amounted to \$837.³¹

As with the cost of bookmobiles, operating costs have increased considerably. Eleanor Francis Brown, in Bookmobiles and Bookmobile Service (1967), gives some sample annual operating budgets for rural bookmobiles (see Tables 1 and 2). The sample budgets are apparently not exceptional cases. For example, the estimated annual budget (fiscal year 1972/73) of bookmobile service in Tippecanoe County, Indiana, was \$38,000.³² Even though many bookmobiles may not involve

TABLE 1

SAMPLE ANNUAL BUDGET FOR BOOKMOBILE SERVING RURAL AREA³³

I.	Books (approximately 1600 volumes)	\$8,000	
II.	Salaries:		
	Bookmobile librarian . . .	\$6,000 (professional)	
	Driver-Clerk	\$5,800	
	Clerk	\$4,200	
	Estimate - Retirement and Social Security, 16%	\$2,688	\$19,488
III.	Operating Expenses:		
	Rent and utilities for bookmobile hdqtrs.	\$700	
	Insurance, license	\$500	
	Publicity	\$500	
	Library supplies	\$300	
	Travel, professional conferences.	\$500	\$2,500
IV.	Automotive Expenses:		
	Gas and oil at \$100/mo. . .	\$1,200	
	Repairs - contingency . . .	\$500	
	Depreciation - 12% yearly on initial investment of \$20,000	\$2,400	\$4,100
	Total.		\$34,088

³¹Minnie J. Little, "Budgeting the Operation Cost of Bookmobiles," Library Trends 9 (January 1961): 341-47.

³²"Indiana Bookmobile Service Wins Court Test," Library Journal 96 (October 1, 1971): 3075.

³³Brown, Bookmobiles, pp. 306-7.

TABLE 2

SAMPLE ANNUAL BUDGET FOR RURAL BOOKMOBILE SERVICE IN NEW YORK³⁴

I. Books: Approximately 1600 volumes, average cost of \$6.00 per volume	\$9,600
II. Salaries:	
Bookmobile Librarian - Prof. Sen.	
Grade I	\$6,600
Driver-Clerk - full-time	\$6,000
Clerk - full-time	\$4,800
Page - part-time	\$810. . \$20,710
III. Operating Expenses:	
Rent and utilities for bookmobile headquarters	\$1,200
Insurance	\$500
Library Supplies	\$500
Publicity	\$500
Travel, professional conferences	\$500 . . \$3,400
IV. Automotive Expenses:	
Gas and oil and servicing at \$100 per month	\$1,200
Repairs - Contingency	\$500
Depreciation - 12% yearly on initial outlay of \$20,000	\$2,400 . . \$4,100
Total	\$37,810

so large a staff as indicated in the sample budgets, it is nevertheless evident that rural bookmobiles are quite expensive to operate

Despite the expense, most of the librarians writing on the subject maintain that rural bookmobiles are on an economically sound basis:

I am firmly convinced that bookmobiles are on solid ground with respect to justification of their cost. They are expensive to buy and operate, just as they are limited in ability. But in partially rural areas like our counties, not to mention ghettos, Indian reservations, urban developments, Appalachian poverty pockets, company towns, and the thousands of villages throughout the land, their flexibility can do wonders.³⁵

³⁴Ibid., p. 307.

³⁵Healy, "Bookmobiles: A Somewhat Closer Look," p. 73.

County, Regional, and State Libraries

Rural counties which often need bookmobile service the most are frequently the least able to provide such service. Their tax base is often too small to provide an adequate income for the purchase and maintenance of bookmobile service. For this reason, it has been suggested that state backing is in order: "Bookmobiles are most useful in rural areas where local government is least able to fund this or any other adequate library service, so state backing makes sense."³⁶ Eugene Healy, the author of the above quotation, has suggested that this state aid might be in the form of a state-sponsored depreciation allowance.³⁷

Most state libraries maintain extension services. One of the prime purposes of such extension services has been the promotion of rural bookmobile service. ISA funds for demonstration bookmobile projects were often channeled through state libraries. The same holds true for LSCA funds.

An excellent example of the successful use of federal and state funds for the maintenance of rural bookmobile service is the state of Utah.³⁸ This has already been alluded to. The Utah State Library Commission has been responsible for administering LSCA funds in Utah. Much of Utah's rural population, at least in the mid-1960s, was unserved by libraries. The rural population was thinly dispersed over large areas. It was concluded by the State Library Commission that the only way to provide adequate library

³⁶Ibid., p. 76.

³⁷Ibid.

³⁸Mersel, An Overview, pp. 23, 251-63.

service was through the use of bookmobiles. Consequently, between 1964 and 1969, 98 percent of LSCA funds were directed into bookmobile service. As of 1969, there were thirteen bookmobiles being operated by the state.

County library incomes in most of the state's twenty-nine counties were quite low in the 1960s. Incomes of \$10,000 or less were not uncommon. Bookmobile demonstrations using LSCA and state funds were conducted in seventeen of the twenty-nine counties (as of 1969). Demonstrations were conducted for one to two-year periods, with the state providing the vehicle, the personnel, and the books. At the end of the demonstration periods, the counties had three options: (1) they could contract with the state for continuing service (from \$1,000 to \$15,000 per year depending on the financial condition of the county); (2) they could take over the service with the county being fully responsible for the service; or (3) they could elect to have the service removed from the county.

As an indication of the success of the program, all of the seventeen counties chose to continue the service. Sixteen of the counties chose to contract with the state for continuation of the service. One county, San Juan, elected to purchase the bookmobile and maintain the service on its own. It has been maintained that there has been an increase in tax support, both locally and on a state-wide basis, for existing local libraries and for the state library as a direct result of public interest aroused by the bookmobiles.³⁹

A less-recent example of state aid for local bookmobile

³⁹Ibid., p. 259.

service was the Kentucky Bookmobile Project of 1954.⁴⁰ In this project \$300,000 was raised by donation for the purchase of eighty-four bookmobiles for participating localities. Another \$200,000 was allocated by the Kentucky State Legislature for the purchase of books. An additional \$300,000 was guaranteed by local communities and counties for operating expenses. Some 600,000 books were donated in a state-wide drive. Since 1954, Kentucky has continued to be a leading state in the number of bookmobiles in operation. Table 3 indicates the number of bookmobiles owned by state library agencies in 1956 and 1961. The significant increase between 1956 and 1961 was certainly due, in part, to ISA funds.

TABLE 3

NUMBER OF BOOKMOBILES OWNED BY STATE LIBRARY AGENCIES:
FISCAL YEARS 1956 AND 1961⁴¹

Area	Total bookmobiles, 1961		Bookmobiles owned, States reporting both in 1956 and 1961			
	No. of States reporting	No. of bookmobiles	No. of States reporting in 1956	Increase 1956-1961	1956	1961
Total, including Kentucky	40	284	18	45	165	210
Total, excluding Kentucky	39	182	17	43	65	108
North Atlantic	9	28	5	5	16	21
Great Lakes and Plains . .	10	44	4	10	10	20
Southeast (including Kentucky)	9	170	8	27	138	165
Southeast (excluding Kentucky)	8	68	7	25	38	63
West and Southwest	12	42	1	3	1	4

⁴⁰David Horace Clift, "Kentucky Bookmobile Project," Library Journal 79 (October 15, 1954): 1870.

⁴¹U.S. Office of Education, State Library Extension: Resources and Services, 1950-61, by Nathan M. Cohen (Washington, D.C.: Government Printing Office, 1966), p. 15.

For counties that have insufficient incomes of their own to operate bookmobile service, multi-county or regional libraries may offer a solution. In some instances, single counties have purchased bookmobiles and then have offered bookmobile service to neighboring counties by contract.⁴² A significant proportion of LSA and LSCA funds have been directed toward the establishment of regional libraries. Under such systems, member communities and counties pool their resources so as to offer better library service to the region as a whole. For example, the 1972-73 edition of the American Library Directory lists eight reporting regional libraries for the state of Alabama. The eight regional libraries include twenty-four counties. These eight regional libraries were operating thirteen bookmobiles.⁴³ It is quite likely that many of these counties could not individually offer bookmobile service.

Advantages, Disadvantages, and Alternatives

The most frequently discussed alternative to the bookmobile is the deposit station (referred to in England as the "village centre"). Such deposit collections are, in effect, small branch libraries located in towns and villages. They usually consist of several hundred volumes which are periodically rotated with different titles from a central library. These stations are often in rented or donated quarters, are open for limited hours, and are usually staffed by nonprofessional volunteers. For larger towns, there is the alternative of the

⁴²"Indiana Bookmobile Service Wins Court Test," p. 3075.

⁴³American Library Directory, 1972-73 (New York: R. R. Bowker, 1972), pp. 3-15.

regular branch library. Such branches may also lack professional staff.

Eleanor Brown has written this concerning one advantage of the bookmobile over deposit stations or branches:

One value of good mobile service over the old system of delivering packed boxes of books to a station or branch, is the readers' advisory service provided by the professional bookmobile librarian.⁴⁴

Not all bookmobiles, however, are staffed with professional librarians. Brown goes on to list several other advantages of the bookmobile: (1) it saves patron transportation costs to permanent facilities; (2) it has a certain appeal or dramatic effect; (3) its periodicity makes it "special"; and (4) it is used more intensively than branches, not at a higher total circulation but at a higher rate per hour.⁴⁵

Brown also lists some disadvantages of the bookmobile: (1) the size of the collection, (2) limited reference service, (3) cannot provide tables and chairs, (4) insufficient time for browsing, (5) infrequency of visits, (6) crowded conditions, and (7) greater cost than small deposit stations or very small branches in rented quarters.⁴⁶ Despite these disadvantages, she nevertheless highly recommends the use of bookmobiles, especially in sparsely settled areas.⁴⁷

Others have also concluded that deposit collections and poor quality branches are not as desirable as bookmobiles:

⁴⁴Brown, Bookmobiles, p. 50.

⁴⁵Ibid., pp. 51-52.

⁴⁶Ibid., pp. 54-55.

⁴⁷Ibid., p. 48

. . . deposit collections, reading centers, substandard libraries run by volunteers, book trailers--are just as costly as bookmobiles, inferior in service rendered and not as flexible.⁴⁸

It has now been generally accepted that, in rural areas [in England], the mobile library is considerably more efficient than the village centre which it has now almost completely replaced.⁴⁹

C. R. Eastwood, in his book Mobile Libraries and other Public Library Transport (1967), identifies eight advantages of the mobile library over small village centers with part-time service: (1) a larger displayed collection with wider subject coverage, (2) maintained more regularly, (3) serves a larger population because of its mobility, (4) has a more rapid turnover or circulation of books, (5) can reach more isolated areas, (6) has a qualified librarian, (7) can offer a better request service, and (8) has a small stock of reference books.⁵⁰

Eastwood goes on to list four main disadvantages: (1) high aggregate cost, though the cost per book circulated is about the same as that for any other professional library service; (2) interruption by bad weather; (3) inconveniently timed, usually daytime hours only; and (4) limited choice of books.⁵¹

Americans are traditionally not avid readers. The bookmobile has the advantage in that it actively seeks out patrons.⁵² With the stationary library, most of the initiative rests with the patron.

⁴⁸Healy, "Bookmobiles: A Somewhat Closer Look," p. 75.

⁴⁹Eastwood, "County Library Transport," p. 356.

⁵⁰Eastwood, Mobile Libraries, pp. 54-54.

⁵¹Ibid., p. 54.

⁵²Healy, "Bookmobile: A Somewhat Closer Look," p. 75.

Books by mail has been suggested as an alternative to bookmobile service, especially in isolated areas: ". . . books by mail might provide even better service at a lower cost in some sparsely settled or remote areas."⁵³ Others, however, have criticized mail order service because its cost per circulated item is supposedly higher than for other forms of service, because the circulation turnover rate is slow, because of the limited choice of books, and because it discriminates against the less well-off rural dwellers.⁵⁴ As with stationary library service, most of the initiative rests with the patron in mail order service.

⁵³Irwin O. Sexton, "Bookmobile Operations and the Library System," Library Trends 9 (January 1961): 306.

⁵⁴Eastwood, Mobile Libraries, p. 21.

CHAPTER III

RESEARCH METHODOLOGY

Sources of Data

The data on bookmobile service and fixed rural library service in Utah were obtained from two sources: (1) the Annual Reports of the State Library Commission of Utah (entitled: Utah Public Library Service) and (2) the personnel of the State Library Commission of Utah. Data were collected for a period of six years, from 1967 to 1972.

The Annual Reports of the State Library Commission contain data on the State Library's services and on all public libraries in Utah. The Extension Division of the State Library Commission operates all of the bookmobiles used in the data analysis in the following chapter. Data on the population served by the bookmobiles, on the holdings of bookmobile headquarter collections, and on the circulation of the bookmobiles were obtained from the Annual Reports. All data on fixed rural libraries, including holdings, circulation, population, and expenditures, were extracted from the annual Reports. The accuracy of the data analysis is necessarily dependent on the accuracy of the information provided by the State Library and by local public libraries. Some attempt will be made in the data analysis to determine the magnitude of error in the data of the Annual Reports.

Cost data on bookmobile service were obtained from the budget officer or accountant of the State Library. This included total bookmobile expenditures, book processing costs, and administrative costs

Estimation was involved in determining processing and administrative costs, as shall be explained next.

Procedure

The first problem to arise was the fact that total bookmobile expenditure figures as determined by the State Library did not include any allowance for book processing costs. This is, of course, understandable inasmuch as all bookmobile books are processed by the Technical Services Division, not by the Extension Services Division. Consequently, the cost of processing bookmobile books is included in the report of the Technical Services Division.

It is practically impossible to accurately determine the costs of processing bookmobile books alone because they are included with all other books processed (i.e., books for the blind, for the state collection, for state institutions, for state agencies, for public libraries, and for schools). The head of the Technical Services Division estimated that bookmobile books generally take only about 10 percent of the division's total processing time. This low estimate is primarily due to the fact that there are generally many multiple copies, with one or more copies going to each of the bookmobile headquarter collections. The total cost for book processing in fiscal year 1971-72 was \$76,442; 10 percent of that figure is \$7,644. There were 19,226 books processed during that year. That works out to just about \$.40 per book. Processing costs have reportedly been decreasing with the advent of automated ordering and automatic typewriters to type multiple copies of cards. The accountant suggested an average cost per book over the five fiscal years of about \$.50. Consequently, processing costs per book of \$.56, \$.52, \$.48, and \$.44 were assigned

to the other four years. These figures are used in the succeeding chapter to determine total annual processing costs. They are, admittedly, rather crude estimates. The improvements in processing costs per book may not have been incremental. It seems likely that improvements occurred only with the addition of each new process, procedure, or machine. However, some inaccuracy here was not considered to be of great significance. The average annual processing cost for bookmobile books for the five years was only about \$10,500, whereas the average total cost for bookmobile operations (including book processing and administration) was about \$390,000 per year.

Administrative costs were not apportioned out to the various divisions in the Annual Reports. Consequently, bookmobile administrative costs also had to be estimated. The accountant of the State Library estimated that about 40 percent of his time, of the state librarian's time, and of a secretary's time was devoted to bookmobile matters along with a very small percentage of the utilities of the State Library. Using these estimates, \$22,996 was spent on bookmobile administration during the 1972-73 fiscal year. Salaries of the above-mentioned staff members have been increasing about 5 percent each year. Utilities may also have increased during previous years, though perhaps by a smaller percentage. Using \$22,996 as a base figure, the administrative costs for previous years were determined by using the following formula and working backwards in time:

$$X + .05X = \text{administrative costs of following year}$$

where X = administrative costs of any given year

The costs obtained with this formula are also estimates. But, once again, the amount of error was not considered very significant in

comparison with an annual total cost figure of \$390,000. It is interesting to note, as evidenced in the literature search, that administrative costs are seldom included in bookmobile cost calculations or estimations.

The annual bookmobile operation cost figures of the Extension Services Division include the following: books; salaries for librarian-drivers, supervisors, and clerks; retirement and social security; rent and utilities for bookmobile headquarters; license; publicity; library supplies; travel to professional conferences; gas and oil; repairs; and capital outlay (including new bookmobiles). There is no insurance, and no depreciation allowance is included in the operation cost figures. Depreciation is a real cost, though bookmobiles may not depreciate as rapidly as some might expect. The State Library might benefit from including depreciation in its budgets.

The total annual cost figure for bookmobile service was obtained simply by adding the book processing, administrative, and operation costs together. From these total cost figures, cost per circulation and cost per capita served were obtained by using the circulation and population data provided by the Annual Reports. Unfortunately, population and circulation data were provided only on a calendar year basis in the Annual Reports. Consequently, fiscal year figures were obtained by dividing the calendar year figures in half and adding the halves of preceding and succeeding years. Once again, this method involves some estimation and some inaccuracy.

Bookmobile circulation per capita served and circulation per holding were determined directly from the data in the Annual Reports. These were calculated on a calendar year basis for the six years.

The population figures were taken from the 1960 and 1970 census statistics. As such, they are estimates (except, perhaps, for 1970). Some estimation may have been involved in the determination of holdings.

All fourteen of the bookmobiles operated by the Extension Services Division between 1967 and 1972 have been included in this study. These bookmobiles and the counties served by each are shown in Table 4. Many of the bookmobiles serve at least one community of 2,500

TABLE 4

BOOKMOBILE SERVICE OF THE UTAH STATE LIBRARY

Book-mobile no.	Counties Served					
	1967	1968	1969	1970	1971	1972
1		Rich Oneida (Idaho)				
2	Box Elder Oneida (Idaho)	Box Elder	Box Elder	Box Elder	Box Elder	Box Elder
3	Millard	Millard	Millard	Millard	Millard	Millard
4	Rich Daggett		Rich Oneida (Idaho)	Rich Oneida (Idaho)	Rich Oneida (Idaho)	Rich Oneida (Idaho)
5	Washing- ton Iron	Washing- ton Iron	Washing- ton Iron	Washing- ton Iron	Washing- ton Iron	Washing- ton Iron
6	Piute Kane Garfield	Piute Kane Garfield	Piute Kane Garfield	Piute Kane Garfield	Piute Kane Garfield	Piute Kane Garfield
7	Tooele	Tooele	Tooele	Tooele	Tooele	Tooele
8	Weber	Weber	Weber	Weber	Weber	Weber
9	Sanpete	Sanpete	Sanpete	Sanpete	Sanpete	Sanpete
10	Weber	Weber	Weber	Weber	Weber	Weber
11	Sevier Wayne	Sevier Wayne	Sevier Wayne	Sevier Wayne	Sevier Wayne	Sevier Wayne
12	Davis	Davis	Davis	Davis	Davis	Davis
13	Davis	Davis	Davis	Davis	Davis	Davis
14	Duchesne	Duchesne Daggett	Duchesne Daggett Uintah	Duchesne Daggett Uintah	Duchesne Daggett Uintah	Duchesne Daggett Uintah
15						San Juan
Total Counties Served	17	17	18	18	18	19

inhabitants or more. If one abides strictly by the Census Bureau's definitions of urban and rural, such service could not be classified as rural. However, most of the bookmobiles serve predominantly rural areas, and all serve some rural areas. Consequently, it was decided to include all of the bookmobiles in this study. The four bookmobiles serving Weber County and Davis County do serve fringe areas that would technically be classified as urban. The Weber bookmobiles, for example, are allowed to operate outside of a two-mile radius from the Weber County Library in Ogden. These four bookmobiles, particularly the Weber bookmobiles, do tend to circulate more books than the others, thus inflating the results somewhat. Unfortunately, urban and rural data could not be separated for these bookmobiles.

A similar situation was encountered in deciding which fixed public libraries should be considered as rural. The Census Bureau's definition of less than 2,500 inhabitants would exclude all but the smallest libraries in the state. It was felt that such a restriction might lessen the comparability of bookmobiles and fixed rural libraries. A modified definition of urban and rural was established. Municipal libraries serving a population of more than 5,000 were excluded. On this basis, the following municipal libraries were excluded: American Fork, Brigham City, Cedar City, Murray, Orem, Price, Provo, Salt Lake City, Spanish Fork, Springville, and Tooele. County libraries whose patronage was primarily from cities significantly larger than 5,000 were excluded. This included Cache County, Davis County, Salt Lake County, and Weber County libraries. Libraries with their own bookmobile service were also left out. This included San Juan County, Salt Lake County, and Salt Lake City libraries. (San Juan County gave up its

independent bookmobile service in 1972 and returned to a contractual service with the State Library.) Table 5 lists the municipal and county libraries that were selected as rural, along with the 1960 and 1970 populations of the city or county.

TABLE 5
RURAL LIBRARIES OF UTAH

Library	Population--1960	Population--1970
Beaver County	4,331	3,800
Garland	1,119	1,187
Tremonton	2,115	2,794
Hyrum		2,340
Lewiston	1,336	1,244
Richmond	977	1,000
Smithfield	2,512	3,342
Helper	2,459	1,964
Kaysville	3,608	6,192
Roosevelt	1,812	2,005
Emery County	5,546	5,137
Panguitch	1,435	1,318
Grand County	6,345	6,688
Parowan	1,486	1,900
Nephi	2,566	2,699
Kanab	1,645	1,621
Delta	1,576	1,610
Fillmore	1,602	1,411
Morgan County	2,837	3,983
Ephraim	1,801	4,409
Manti	1,739	2,127
Mt. Pleasant	1,572	1,516
Monroe	955	918
Richfield	4,412	4,471
Salina	1,618	1,494
Park City	1,366	1,193
Uintah County	7,927	12,684
Lehi	4,377	4,659
Payson	4,237	4,501
Pleasant Grove	4,772	5,327
Wasatch County	5,308	5,863
Hurricane	1,215	3,682
Washington County	9,020	9,987
Totals	95,626	115,066

Population served figures for both bookmobiles and rural libraries are taken from the Annual Reports. The Annual Report

figures are based on Census Bureau statistics. Such statistics are not, of course, accurate for each year. However, the total change in rural population between 1960 and 1970 was not dramatic. Hopefully, any population inaccuracies should apply equally to bookmobile and public library statistics.

The expenditure statistics of the fixed rural libraries were taken directly from the Annual Reports. Such expenditure statistics are supposed to be comprehensive, including salaries, money spent on collections, capital outlay, and "other." All capital outlay expenses were left in because all capital outlay sums, including the costs of new bookmobiles, were included in total bookmobile costs. Only about three libraries out of thirty-three had capital outlays of over \$1,000 in any given year. For those that did have sums over \$1,000, most were only slightly over that figure. The largest single sum was \$6,200 spent by the Uintah County Library in 1967.

Annual cost per circulation, cost per capita, circulation per capita, and circulation per holding statistics for fixed rural libraries were not determined by averaging the individual statistics for each library. Instead, costs, circulation, and holdings were totaled for all thirty-three libraries for each year. Computations were based on those totals.

CHAPTER IV

DATA ANALYSIS: COMPARATIVE EFFICIENCY AND EFFECTIVENESS OF RURAL BOOKMOBILE SERVICE AND RURAL LIBRARY SERVICE IN UTAH

Cost per Circulation

As indicated in the literature search, many supporters of rural bookmobile service have maintained that such service is at least as efficient as that of small rural libraries. One measure of efficiency is cost per item circulated. This measure will be calculated first for rural libraries and then for bookmobiles, followed by a comparison of the two.

Table 6 indicates the total annual expenditures of the thirty-three libraries for each of the calendar years. It should be noted that total expenditures for the libraries has increased every year. The percent of increase has not, however, been overly dramatic. The increase between 1967 and 1968 was only about 4 percent. The increases for 1969, 1970, 1971, and 1972 were 16 percent, 7 percent, 3 percent, and 4 percent respectively. Except for the increase of 16 percent, the increases were hardly much more than the pressures of inflation would demand. Another item of interest is the extremely low expenditures of most of the libraries. Almost half of the libraries spent less than \$4,000 for any of the six years. Even a cursory examination will explain why expenditures were so low. The most obvious reason is the low budgets approved by local officials. Almost all of the libraries

TABLE 6

RURAL LIBRARY EXPENDITURES

Library	Annual Expenditures					
	1967	1968	1969	1970	1971	1972
Beaver Co.	6,494	6,591	7,496	7,867	8,070	8,602
Garland	2,781	1,307	2,805	2,823	2,935	3,048
Tremonton	3,810	4,307	4,766	4,186	5,634	5,400
Hyrum				10,442	2,009	2,139
Lewiston	2,005	2,121	1,903	2,537	2,246	2,121
Richmond	1,875	2,263	2,209	2,219	2,206	2,255
Smithfield	5,669	4,705	5,759	5,708	13,633	7,200
Helper	2,335	2,750	2,865	2,628	2,586	2,973
Kaysville	10,200	10,219	9,270	10,500	11,100	11,500
Roosevelt	1,486	1,998	2,808	2,361	2,422	2,380
Emery Co.	8,632	8,839	7,689	8,524	8,524	9,200
Panguitch	1,653	1,779	1,844	2,546	2,418	2,829
Grand Co.	6,970	8,522	15,808	15,025	18,215	19,837
Parowan	6,023	5,293	8,726	7,048	6,791	7,117
Nephi	2,868	3,013	3,068	3,326	3,125	3,203
Kanab	1,469	2,542	3,127	3,380	2,879	2,898
Delta	1,753	1,754	1,754	1,754	2,108	2,802
Fillmore	3,019	2,093	2,667	2,982	3,335	4,016
Morgan Co.	6,393	8,390	8,396	8,386	9,446	9,009
Ephraim	8,078	8,548	9,155	8,523	9,737	11,497
Manti	3,230	4,851	4,761	6,416	4,571	4,655
Mt. Pleasant	3,060	3,505	10,295	3,685	3,310	2,883
Monroe	1,143	1,220	1,116	1,089	1,155	1,137
Richfield	4,211	3,918	6,354	7,654	5,752	6,486
Salina	2,010	2,057	1,914	2,236	1,935	2,317
Park City	1,469	1,424	1,428	1,386	2,058	1,700
Uintah Co.	17,000	11,024	10,831	11,534	13,982	13,800
Lehi	4,368	4,584	5,042	6,323	5,683	6,299
Payson	4,135	4,278	4,976	5,341	5,971	6,725
Pleasant Grove	4,188	3,910	4,021	4,496	3,863	4,483
Wasatch Co.	8,102	12,742	12,239	12,723	13,620	16,317
Hurricane	2,853	2,391	2,681	3,723	4,088	4,889
Washington Co.	14,755	17,194	18,410	19,969	18,965	21,383
Totals	\$154,037	\$160,232	\$186,183	\$199,340	\$204,372	\$213,100

rely on part-time, nonprofessional help. Collections are small and acquisitions are few. The thirty-three libraries acquired a total of 15,575 new books in 1967, 18,904 in 1968, 24,254 in 1969, 22,326 in 1970, 23,968 in 1971, and 25,951 in 1972. The situation is improving, at least in regard to acquisitions.

Table 7 shows the circulations for each library for each year and the total items circulated by all thirty-three libraries each year.

TABLE 7

RURAL LIBRARY CIRCULATION

Library	Annual Circulation					
	1967	1968	1969	1970	1971	1972
Beaver Co.	34,054	35,213	34,403	33,392	34,307	28,933
Garland	1,106	1,199	1,898	1,136	2,216	2,286
Tremonton	17,158	18,078	19,388	18,952	20,964	19,484
Hyrum				9,672	15,263	16,454
Lewiston	11,397	9,589	8,630	9,083	9,360	9,926
Richmond	1,660	2,885	2,230	3,087	2,942	2,588
Smithfield	20,323	20,410	20,250	18,858	18,661	18,868
Helper	15,246	13,856	13,892	15,558	14,336	14,806
Kaysville	42,863	47,552	48,697	47,755	43,390	52,995
Roosevelt	2,918	5,371	8,102	9,248	7,954	7,933
Emery Co.	19,355	54,207	45,260	36,392	33,432	63,647
Panguitch	2,680	716	3,695	4,673	4,373	3,829
Grand Co.	26,217	29,382	32,081	32,075	28,818	30,008
Parowan	17,367	14,676	25,446	32,790	33,549	33,614
Nephi	6,250	6,105	6,459	6,495	5,383	5,044
Kanab	6,335	6,916	7,000	5,313	3,426	3,773
Delta	2,583	2,580	2,482	2,482	4,020	4,180
Fillmore	12,524	11,601	10,133	10,437	9,867	11,289
Morgan Co.	40,530	51,185	39,474	46,454	49,532	50,246
Ephraim	6,884	6,585	10,637	11,456	12,168	11,213
Manti	7,614	7,236	6,750	6,870	5,892	6,199
Mt. Pleasant	3,620	3,305	3,600	3,689	4,322	4,505
Monroe	4,096	3,886	4,437	4,842	5,736	5,005
Richfield	16,548	15,371	16,260	20,955	18,519	18,155
Salina	10,943	11,931	10,311	10,439	12,154	11,861
Park City	2,878	2,332	2,530	2,669	2,567	2,623
Uintah Co.	23,048	25,818	25,119	28,865	29,865	28,881
Lehi	11,489	30,403	15,849	18,878	18,255	18,736
Payson	13,501	14,788	16,528	19,812	17,582	17,769
Pleasant Grove	17,591	18,348	17,137	19,788	18,640	18,664
Wasatch Co.	30,443	28,258	29,731	26,781	27,313	25,162
Hurricane	17,900	18,650	16,530	16,530	12,790	12,857
Washington Co.	44,518	28,424	28,074	31,708	38,468	34,389
Totals	492,449	546,856	533,013	567,134	566,184	595,922

Except for 1969 and 1971, total circulation figures have improved each year. The increases in circulation may be related to increases in population, increases in expenditures, or increases in acquisitions. The sample size (six years) was considered too small to attempt to determine any statistical correlations.

Using the totals from Table 6 and Table 7, the cost per circulation for each year can be determined. The results are presented

in Table 8. With the exception of 1968 and 1972, the cost per circulation of the rural libraries has been increasing. Generally speaking, expenditures have been increasing at a more rapid rate than circulation. The average cost per circulation for the six years was \$.338.

TABLE 8

COST PER CIRCULATION
OF RURAL LIBRARIES

Item	1967	1968	1969	1970	1971	1972
Total Cost	\$154,037	\$160,232	\$186,183	\$199,340	\$204,372	\$213,100
Total Circulation	492,449	546,856	533,013	567,134	566,184	595,922
Cost/Circulation	\$.313	\$.293	\$.349	\$.351	\$.361	\$.358

Bookmobile costs are presented in Table 9 on a fiscal year basis. The total cost for each year is the sum of the total bookmobile operation costs (i.e., the total expenditures of the Extension Services Division), the estimated administrative costs, and the esti-

TABLE 9

BOOKMOBILE COSTS

Item	1967-68	1968-69	1969-70	1970-71	1971-72
Total Bookmobile Operation Costs	\$321,110	\$366,363	\$342,313	\$357,053	\$404,995
Administrative Costs	\$18,017	\$18,918	\$19,864	\$20,857	\$21,900
Book Processing costs					
Books Purchased	18,307	38,835	22,275	10,268	19,226
Cost/Book	\$.56	\$.52	\$.48	\$.44	\$.40
Total Processing Cost	\$10,252	\$20,194	\$10,692	\$4,518	\$7,620
Total Cost	\$349,388	\$405,475	\$372,869	\$382,428	\$434,585
Number of Bookmobiles	13	13	13	13	14
Cost per Bookmobile	\$26,875	\$31,190	\$28,682	\$29,418	\$31,072

mated book processing costs. The substantial increases in cost in 1968-69 and 1971-72 are probably due to the extension of service to new counties (Uintah in 1968-69 and San Juan in 1971-72) and to the

acquisition of new bookmobiles. Table 9 reveals that the State Library has been erratic in its acquisition of bookmobile books, with the number varying from a high of 38,835 in 1968-69 to a low of 10,268 in 1970-71. Also included in Table 9 is the average annual cost for operating a bookmobile. These figures substantiate some of the estimates in Chapter II regarding the annual cost for operating a standard bookmobile. It is not unreasonable to expect to spend as much as \$30,000 annually for each bookmobile.

Circulation totals for the bookmobiles for the six calendar years and for the five fiscal years are shown in Table 10, along with the cost per circulation for each fiscal year. Circulation

TABLE 10

BOOKMOBILE CIRCULATION AND
COST PER CIRCULATION

Item	1967	1968	1969	1970	1971	1972
Circulation (calendar year)	955,348	1,010,147	1,006,113	1,006,073	996,082	1,001,449
Circulation (fiscal year)	982,747	1,008,130	1,006,093	1,001,077	998,765	
Total Cost	\$349,388	\$405,388	\$373,869	\$382,428	\$434,585	
Cost/Circulation	\$.356	\$.402	\$.371	\$.382	\$.435	

for the five fiscal years has averaged about 1,000,000 volumes. That is a reasonably impressive figure for thirteen or fourteen bookmobiles.

The average cost per circulation for bookmobiles was \$.388 for the five years. This figure is \$.05 higher than that for rural library service. However, the difference does not seem so great as to seriously challenge previously quoted assertions by some librarians that rural bookmobile service is at least as efficient as small rural library service.

Cost per Capita Served

In terms of cost per capita served, bookmobile service is significantly more expensive than rural library service. This is shown in Table 11. The average cost per capita over the six year

TABLE 11

COST PER CAPITA SERVED

	1967	1968	1969	1970	1971	1972
Rural Libraries:						
Population Served	95,626	95,626	95,626	115,066	115,006	115,006
Cost	\$154,037	\$160,232	\$186,183	\$199,340	\$204,372	\$213,100
Cost/Capita	\$1.61	\$1.68	\$1.95	\$1.73	\$1.78	\$1.85
Bookmobiles:						
Population Served (calendar year)	181,287	154,217	178,033	155,546	144,233	150,158
Population Served (fiscal year)	167,752	166,125	166,790	149,889	147,196	
Cost	\$349,388	\$405,475	\$372,869	\$382,428	\$434,585	
Cost/Capita	\$2.08	\$2.44	\$2.24	\$2.55	\$2.95	

period was \$1.78 for the rural libraries, whereas the figure for bookmobile service over a five-year period was \$2.45. This does not mean, of course, that the rural populace itself was paying more for bookmobile service than for fixed library service. The counties served by bookmobiles have actually been paying only a small proportion of the total cost (generally around one-fourth of the total). Most of the cost is borne by federal and state funding.

One can conjecture why bookmobile service is slightly more expensive than fixed library service in terms of cost per circulation and significantly more expensive in terms of cost per capita served. The most obvious reason is the difference in salaries. The bookmobile driver-librarians have more professional training and usually work full-time. In addition, there are supervisors and headquarter clerks.

In contrast, most of the rural libraries are operated by part-time, nonprofessional people. In 1970, the thirty-three rural libraries paid \$106,031 in salaries--an average of \$3,213 per library. Those same libraries employed, according to the Annual Report, ninety-one part-time and full-time staff members. The average salary in those libraries in 1970 was \$1,165. Another factor that might account for some of the cost difference is the acquisition rate. As indicated before, the acquisition of books for bookmobiles has been erratic. Except for 1969 and 1971, the bookmobiles have acquired more new books per existing holding than the rural libraries. Major capital outlays occur more frequently with bookmobiles inasmuch as they have to be replaced, comparatively speaking, more often. Some of the variable costs of bookmobile operation (gasoline and oil, repairs and maintenance, and tire expense) may account for a portion of the cost difference. Whatever the reasons, bookmobile service is not inexpensive in comparison with fixed rural libraries.

Circulation per Capita Served

Probably the most frequent measure of public library effectiveness is circulation per capita served. The circulation per capita served of the Utah bookmobiles was somewhat higher than that of the rural libraries for each of the six years (see Table 12). The average annual circulation per capita served of the rural libraries was 5.25, whereas that of the bookmobiles was 6.25. The figure for bookmobiles was about 19 percent higher. Circulation per capita figures for rural libraries were higher in the late 1960s than in the early 1970s. In actuality, this is probably due to the inaccuracy of using 1960 population data.

TABLE 12

CIRCULATION PER CAPITA SERVED

	1967	1968	1969	1970	1971	1972
Rural Libraries:						
Circulation	492,449	546,856	533,013	567,134	566,184	595,922
Population						
Served	95,626	95,626	95,626	115,066	115,066	115,066
Circulation						
per Capita						
Served	5.15	5.72	5.57	4.93	4.92	5.18
Bookmobiles						
Circulation	955,348	1,010,147	1,006,113	1,006,073	996,082	1,001,449
Population						
Served	181,287	154,217	178,033	155,546	144,233	150,158
Circulation						
per Capita						
Served	5.27	6.55	5.65	6.47	6.91	6.67

There are several reasons why bookmobile circulation per capita served was somewhat better than that of rural libraries. The bookmobiles make school stops which provide periods of more intensive use. On the other hand, rural libraries may not be adjacent to schools and may not cater as much to school-age patrons. The bookmobile provides neighborhood service thus eliminating the transportation problem for many patrons. Patrons may be willing to travel a short distance to a bookmobile, whereas they may be unwilling to travel greater distances to fixed libraries. As indicated before, the Utah bookmobiles are more likely to have a higher percentage of newer, more timely books. This also might contribute to increased circulation. There may be a significant statistical correlation between acquisition and circulation but the sample size (six years) is too small to work with. The quality of service may be another factor. A person with more professional training can presumably be of more assistance in bringing the patron and desired books together.

The population figures for bookmobile service in Tables 11 and

12 are, like the acquisition figures, surprisingly uneven. The increases between 1968 and 1969 and between 1971 and 1972 can be explained by the extension of service to new counties (Uintah in 1969 and San Juan in 1972). But the substantial drops between 1967 and 1968, 1969 and 1970, and 1970 and 1971 cannot be so easily accounted for. One can only surmise that service was withdrawn from certain areas.

Circulation per Holding

Perhaps the most revealing figure of comparative efficiency is that of circulation per holding. Table 13 gives the statistics regarding circulation per holding for bookmobiles and for fixed rural libraries. For the fixed rural libraries, the average annual circula-

TABLE 13

CIRCULATION PER HOLDING

	1967	1968	1969	1970	1971	1972
Rural Libraries:						
Circulation	492,449	546,856	533,013	567,134	566,184	595,922
Holdings	339,021	347,768	352,523	374,877	373,056	399,493
Circulation per Holding	1.45	1.57	1.51	1.51	1.52	1.49
Bookmobiles:						
Circulation	955,348	1,010,147	1,006,113	1,006,073	996,082	1,001,449
Holdings	206,468	233,190	238,103	255,791	255,107	259,728
Circulation per Holding	4.63	4.33	4.23	3.93	3.90	3.86

tion per holding over the six years was 1.51. The average circulation per holding for the bookmobiles was 4.15. Bookmobile books are, on the whole, being used nearly three times as much as fixed library books. The bookmobiles are getting more efficient use out of the books they have. Again, the currentness of the bookmobile collections may be a key factor.

It should be pointed out, however, that circulation per holding figures for bookmobiles have been steadily decreasing as holdings have increased. Increases in circulation have not kept pace with increases in holdings. The circulation per holding figures for rural libraries have remained relatively constant.

The figures regarding rural library holdings are hopefully not too inaccurate. At the end of 1971, the thirty-three libraries had holdings amounting to 373,056 items. In 1972, 25,951 items were added, and 8,648 items withdrawn. Simple arithmetic yields an expected total of 389,359 items for the end of 1972. But the thirty-three libraries reported holdings of 399,493 in the Annual Report. The libraries had somehow acquired an additional 10,134 items. In this case the percentage of error is not too great (less than 3 percent), but one would hope for greater accuracy in a determination that requires nothing beyond the ability to add and subtract.

CHAPTER V

SUMMARY AND CONCLUSIONS

During the past two decades, the rural population of the United States has decreased only slightly in total number of inhabitants. As a percentage of the total population, the rural population has decreased more rapidly. However, more than 50,000,000 Americans (about 25 percent of the population) still live in areas classified as rural. This represents a very significant proportion of the population in terms of library service. As of 1961, approximately 18,000,000 Americans were without library service.⁵⁵ Many of these were rural Americans. The percentage of Americans living on farms has decreased to such an extent (7 percent of the population) that some librarians have questioned the feasibility and efficiency of door-to-door bookmobile service. However, there still seems to be general support among interested librarians for bookmobile service to rural towns and villages, fringe areas, institutions, and schools.

The reports in library literature of rural bookmobile service are encouraging. Some rural bookmobiles have circulated more than 100,000 volumes per year. But there appears to be something of a bias in the literature in that only the successes and not the failures are recorded.

The question of whether rural bookmobile service is efficient

⁵⁵Brown, Bookmobiles, p. 38.

and effective can only be answered in a comparative sense. While most authorities seem to agree that bookmobiles are more expensive than deposit stations and small part-time branches, they also seem to agree that bookmobiles are more efficient and effective than such stations and branches.

Bookmobiles are expensive to purchase and to operate. Recent inflationary trends have undoubtedly not helped the situation. Between 1967 and 1972, rural bookmobile service in Utah appears to have been just as expensive as fixed rural library service in terms of cost per item circulated. In fact, it was slightly more expensive. In terms of cost per capita served, it was even more expensive. Some of the factors which contributed to the expense of bookmobile service in Utah have been mentioned: higher salaries, more acquisitions, and more frequent major capital outlays (e.g., the State Library purchased seven bookmobiles between 1965 and 1971⁵⁶).

Even though rural bookmobiles in Utah may not have been economically more efficient than fixed rural libraries, they appear to have been significantly more efficient in obtaining greater use out of each holding. The circulation per holding figure for the Utah bookmobiles was nearly four times that of fixed rural libraries. One possible cause has been indicated--the currentness of the bookmobile collections.

The Utah bookmobiles were also more effective than the fixed rural libraries in circulating books. The circulation per capita served was almost 20 percent higher for bookmobiles during the

⁵⁶Val L. Ball, "A History of Bookmobile Library Service in the State of Utah" (L.I.S. Project, Brigham Young University, 1971), p. 39.

six years. Several contributing factors have been suggested: the currentness of the collection, periods of intensive use occasioned by school and neighborhood stops, and the presence of staff with more professional training. Bookmobiles have been quite effective in Utah, but one must also be aware of the costs involved to have such effective service.

Many rural counties, with small tax bases, cannot afford to purchase bookmobiles or to maintain adequate bookmobile service. In such situations, state aid or the formation of regional libraries are potential solutions. The importance of federal funds, usually directed through state library extension services, can hardly be overemphasized. In 1972, the Utah State Library received a total of \$119,509 from eighteen contracting counties (excluding Oneida). In May of 1973, the Utah State Library Commission calculated that those same counties would have to pay \$261,813 in order to maintain bookmobile service. Much of the increase was probably due to cutbacks in federal funding. It remains to be seen just how much the counties will be willing and able to meet higher contractual costs.

Some have cautioned about excess optimism regarding bookmobile potentialities. Stewart W. Smith, Director of the St. Louis County Library, has warned that bookmobile service is not worth instituting if the units are too small, if collections are too inflexible, if the library administration is not fully supportive, and if the geographical situation does not warrant such services.⁵⁷

It has also been pointed out that bookmobile service is primarily a support to permanent library facilities, not a substitute:

⁵⁷Smith, "Potentialities and Capabilities," p. 302.

The bookmobile should be viewed as an adjunct to, rather than a substitute for, branch or central libraries. As such it has its place.⁵⁸

The bookmobile is an adjunct and no more to the services of its parent institution; in fact, as an adjunct it may have its main raison d'etre, going out of use as permanent service centers arise to replace partial facilities.⁵⁹

Although good bookmobile service is certainly preferable to poor fixed service, the purpose of this study has not been to prove that bookmobiles should replace small rural libraries. The literature search and the Utah experience both seem to indicate that bookmobile service can be effective and efficient, but it should not be regarded as a panacea.

More statistical studies concerning the efficiency and effectiveness of rural bookmobile service are needed, including studies about cost per capita served, cost per item circulated, circulation per capita served, and circulation per holding. Accurate data are essential. Some estimation was involved in the calculation in this study. The results would naturally have been more meaningful if less estimation had been necessary.

⁵⁸Ibid., p. 297.

⁵⁹Harold Goldstein, "Bookmobiles in the Libraries of Tomorrow," Library Trends 9 (January 1961): 374.

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