

## **Appendix E**

### **Bibliographic System Cost Survey: Methods and Results**

#### Contents

- E.1 Introduction
  - E.2 Objectives
  - E.3 Method Overview
  - E.4 Data Analysis, Tabulation and Results
    - E.4.1 LLSAP Libraries
    - E.4.2 Non-LLSAP Libraries
  - E.5 Method Limitations
  - E.6 Recommended Strategies for Further Development
- 

#### **E.1 Introduction**

Illinois Regional Library System Directors and the Illinois State Library wanted to know how costs of bibliographic control and access systems compared between members of Regional Library Systems (RLS) that used a shared system versus those libraries running standalone systems. This information need was reflected in the following study question:

- What are the average costs for library automation in the regional systems' member libraries (all types)?

To answer this question the study team conducted a survey of libraries in all RLS requesting cost information. This appendix addresses the Bibliographic System Cost Survey as a data collection method and presents the results of the data analysis.

#### **E.2 Objectives**

Through the Bibliographic System Cost Survey, the study team intended to collect sufficient data to allow comparisons of direct and indirect costs of bibliographic system operations across all RLS, across four types of libraries, and for LLSAP and non-LLSAP libraries (i.e. those using shared systems and those operating standalone systems). Specifically, the data collection and analysis had the following objectives:

- Identify direct and indirect cost components that could be defined and used across all RLS, across four types of libraries, and for LLSAP and non-LLSAP libraries
- Obtain sample data that could be used to represent average library budgets across all RLS, across four types of libraries, and for LLSAP and non-LLSAP libraries
- Obtain sample data that could be used to represent average membership fees for LLSAP members and average standalone system license costs across all RLS, across four types of libraries
- Obtain sample data that could be used to represent total cost of bibliographic system operations across all RLS, across four types of libraries, and for LLSAP and non-LLSAP libraries
- Obtain a questionnaire response rate that could be used as representative data of across all RLS, across four types of libraries, and for LLSAP and non-LLSAP libraries
- Perform comparisons of cost data between LLSAP and non-LLSAP libraries, between types of libraries, and across RLS.

### E.3 Method Overview

The study team determined that a survey using a questionnaire would be an effective method to collect information related to the costs of operating and using bibliographic control and access systems. (See appendix F for a copy of questionnaires used.) Using the study question above as the starting point, the resulting questionnaire was intended to collect appropriate data to answer the following questions:

- What are the average direct costs for bibliographic systems in individual libraries with standalone systems, for LLSAPs, and for other non-LLASP consortia?
- What are the average direct costs for bibliographic services (e.g., loading records into a consortial catalog) provided by consortia to its members (both LLSAP and non-LLSAP)?
- For LLSAPs, what are indirect costs to LLSAP members and the Regional Library System associated with the consortial bibliographic systems, and the products and services based on those systems?

The survey process occurred in several phases during with the following occurred:

- RLS staff recommended a selection of member library as participants for the survey
- Selected RLS staff and librarians reviewed a draft of the survey questionnaire and provided the study team with comments
- Distribution of the survey questionnaire to identified RLS libraries
- Collection of completed survey questionnaires
- Data analysis of responses on the questionnaires.

During the RLS site visits, the study team requested that a person from the RLS, namely the lead technical person, LLSAP manager, business manager or equivalent person, serve as a contact person for the purposes of the survey. The contact person was responsible for making recommendations described below and to work with the recommended libraries in anticipating and completing the survey.

Each RLS contact person was given the document “zILLANE Data Collection Form: Recommended Regional Library System Libraries for Follow-up Data Collection” (a copy of this form is contained in Appendix X, Study Instruments). The contact person was to list a selection of RLS member libraries in each of several pre-determined categories and subcategories:

- LLSAP libraries (i.e., libraries using the RLS shared system) in the following subcategories
  - academic
  - public
  - school
  - other
- Non-LLSAP libraries (i.e., libraries using a standalone system) in the following subcategories
  - academic
  - public
  - school
  - other

The resulting list of libraries would serve as the sample that would receive the survey. The lists of recommended libraries were to be faxed or emailed to the study team prior to the end of April 2002.

Eight RLS responded with completed forms within the specified deadline. One RLS provided partial information in anticipation of questions that were to be on the survey questionnaire. Three RLS responded after the deadline. The final completed form was received in early July 2002.

The study team drafted a questionnaire for the purpose of collecting cost data from the recommended libraries. Slightly different versions of the questionnaire were created for LLSAP members and non-LLSAP libraries. Prior to the distribution of the questionnaire, several of the RLS contact persons and several librarians chosen at random from the list of recommended libraries were asked to examine the

questionnaire and provide comments and feedback. Comments from both RLS staff members and librarians were incorporated into final drafts of both versions of the questionnaire. Copies of the several versions of the questionnaire are contained in Appendix X, Study Instruments)

Between May 1 and August 15th, the study team sent the survey questionnaire via email to 466 libraries in all 12 RLS. Recipients were asked to answer each question to the best of their knowledge, providing actual figures where possible. The recipients were asked to provide a completed questionnaire within two weeks of receiving the questionnaire via email.

As of August 15<sup>th</sup>, 105 usable responses (23%) were received and tabulated. Table 1 summarizes the number sent to each RLS and the number returned (usable).

**Table E.1  
Survey Participants**

RLS	LLSAP Libraries	Returned (Usable)	Non-LLSAP Libraries	Returned (Usable)	Total Sent	Total Returned (Usable)	% Returned
ALS	58	7	23	3	81	10	10%
CLS	12	2	27	0	39	2	2%
DLS	5	4	11	8	16	12	75%
HTLS	10	5	7	1	17	6	35%
LCLS	50	11	34	1	84	12	14%
LTLS	6	1	6	4	12	5	42%
NILS	0	0	17	7	17	7	41%
NSLS	57	2	29	3	86	5	6%
RPLS	23	8	12	3	35	11	31%
SHLS	36	15	25	4	61	19	31%
SLS	4	2	2	2	6	4	66%
RBLS	12	12	0	0	12	12	100%
TOTAL	273	69	193	36	466	105	

Eleven additional responses were unusable; questionnaires were considered not usable if:

- No library operations budget was provided (Seven cases)
- Question 1 was devoid of answers to any of its parts (one case)
- Total cost of operations as calculated below exceeded stated library budget (one case)
- Library operations budget was the only data provided (one cases)

Four additional respondents declined to participate in the survey. Approximately 7% of the emailed questionnaires were returned by email servers with various error messages, or with "out of office" responses.

Once in June and twice in July reminders were sent to the recipient libraries. Additionally, in July the RLS contact persons were asked to encourage libraries to complete the questionnaire. Four contact persons indicated that they had done so.

#### **E.4 Data Analysis, Tabulation and Results**

The study team entered data from the completed, usable questionnaires into a series of Microsoft Excel spreadsheets. Excel was used to process the numeric data and to generate simple descriptive statistics. Once the data were recorded in the Excel spreadsheet, and given the variation in the ways libraries reported the data, the study team made decisions on how to interpret and analyze the data.

### E.4.1 LLSAP Libraries

For the LLSAP libraries, the following questions were asked. Compilation of results from the questions is reported in associated tables.

- Question 1. If you pay an annual/monthly membership fee or other annual/monthly fees (maintenance, etc.) to your LLSAP
- Annual software license and/or maintenance agreement fee
  - Other annual fees
  - Annual hardware costs associated with the library automation system

If the respondent indicated costs for 1.a. only, that figure was used as the basis (direct cost) for comparing LLSAP membership fees to overall library budget. If the respondent included costs for 1.a. and either or both 1.b. or 1.c., the combination of all three figures was used as the basis for comparing LLSAP membership fees to overall library budget, unless the respondent indicated that 1.b. or 1.c. were included in 1.a. If the respondent indicated costs for either or both 1.b. or 1.c. only, both figures were combined and used as the basis for comparing LLSAP membership fees to overall library budget.

**Table E.2**  
**LLSAP Members: Average Direct Costs and Average Direct Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Direct Costs	Average Percent of Budget
Academic	11	\$ 413,697	\$ 10,304	2%
Public	41	\$ 541,736	\$ 15,488	3%
School	12	\$ 68,590	\$ 3,329	5%
Special	5	\$ 284,357	\$ 2,445	1%
Total	69			

The direct costs calculated above, and amounts supplied for the following questions (indirect costs) were combined to arrive at a figure used to represent total annual cost of bibliographic system operations.

- Question 3. Annual staff costs attributable to support the library automation system (can include full-time or part-time staff for systems administration, cataloging, or other necessary tasks to operate the library automation system)
- Total staff costs attributable to the library automation system

Forty libraries reported costs for question 3. The average percent of budgets attributable to staff costs for these respondents is somewhat skewed because they are a subset of the sixty-six overall respondents. The figures for the public libraries are particularly skewed as the respondents reflect a preponderance of large libraries with several dedicated staff, and two libraries that reported unusually high figures for staff costs. The investigators attempted to verify the costs for these two libraries.

**Table E.3**  
**LLSAP Members: Average Automation Staff Costs and Average Automation Staff Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Automation Staff	Average Percent of Budget
Academic	8	\$ 260,284	\$ 14,855	5%
Public	28	\$ 572,003	\$ 92,169	16%
School	5	\$ 81,563	\$ 8,150	10%
Special	3	\$ 95,000	\$ 13,333	14%
Total	44			

It was found that public libraries have a much higher percentage of their budget attributed to automation staff costs than other library types. However, this may be attributable to the two libraries in question.

- Question 4. Annual cost of purchasing bibliographic records for the library automation system (can include OCLC cataloging costs, purchasing MARC records from third-party vendors, etc.) not included in #1 above (annual/monthly membership fee).

Eighteen libraries reported costs for question 4. The average percent of budgets attributable to entering bibliographic records for these respondents is somewhat skewed (particularly for schools) because they are a subset of the sixty-six overall respondents. There was no significant pattern detectable among the percentages, due to the negligible amounts compared to average budget size. While the average budget size is very skewed because of a preponderance of large libraries with budgets well in excess of the median, the effect on average percent of budget appears to be negligible.

**Table E.4**  
**LLSAP Members: Average Bib Records Costs and Average Bib Records Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Adding Records	Average Percent of Budget
Academic	6	\$ 271,453	\$ 2,950	1%
Public	10	\$ 1,059,910	\$ 4,270	<1%
School	1	\$ 115,000	\$ 180	0%
Special	5	\$ 284,357	\$ 3,043	1%
Total	22			

It was found that for most library types, the average cost of adding bibliographic records was similar. The figure reported for school libraries is unreliable, as only one responded, and that response may be anomalous.

- Question 5. Total annual telecommunication costs (T1, etc.) associated with the library automation system not included in #1 above

Thirty-three libraries reported costs for question 5. The average percent of budgets attributable to telecommunications costs are negligible, although schools, with the smallest average budget show the largest percent of budget. It can be seen that for the three types of libraries that answered, average telecommunication costs are very similar, but the impact on budget is significantly larger for school libraries.

**Table E.5**  
**LLSAP Members: Average Telecommunications Costs and Average Telecommunications Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Telecommunications	Average Percent of Budget
Academic	2	\$ 291,865	\$ 2,450	<1%
Public	30	\$ 535,811	\$ 2,689	<1%
School	2	\$ 24,737	\$ 2,610	11%
Special	0	NA	NA	0%
Total	34			

It was found that telecommunication costs were similar in the three types of libraries that reported.

- Question 6. Annual costs associated with training, travel or other activities in support of the operation of the library automation system not included in #1 above

Thirty-five libraries reported costs for question 6. The average percent of budgets attributable to training, travel and similar costs are negligible, although schools, with the smallest average budget show the

largest percent of budget. It can be seen that for the libraries that answered, average training, travel and other related costs are very similar.

**Table E.6**  
**LLSAP Members: Average Training and Related Costs and Average Training and Related Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Training, Travel etc.	Average Percent of Budget
Academic	7	\$ 275,823	\$ 166	<1%
Public	26	\$ 556,968	\$ 596	<1%
School	3	\$ 30,243	\$ 600	2%
Special	2	\$ 112,500	\$ 500	<1%
Total	38			

It was found that training and travel costs are similar for all four types of libraries.

Question 7. Other annual costs associated with the library automation system. Please label the cost and provide a dollar figure for the annual cost. These costs might include indirect or overhead costs such as rent and utilities, or other costs such as contract services that are attributable to the library automation system and if those costs were of an ongoing nature, such as bar-codes, supplies and similar, those costs were included as well.

Due to the wide and varied nature of costs reported in this category, no attempt was made to derive a comparison. Costs that were obviously one-time expenses, such as "new server" were not included in this calculation.

The reported costs in questions 1, 2, 4, 5, 6 and 7 were summed for each library to determine total cost of automation operations, and averaged by library type. Further, the average total cost of operations was compared against average budget size for each library type to determine the average total cost of operations as the percentage of budget for each library type.

**Table E.7**  
**LLSAP Members: Average Total Costs and Average Total Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Operations	Average Percent of Budget
Academic	11	\$ 413,697	\$ 21,934	5%
Public	41	\$ 541,736	\$ 48,349	9%
School	12	\$ 68,590	\$ 7,741	11%
Special	5	\$ 284,357	\$ 12,141	4%
Total	69			

It was found that public libraries have the highest total cost of operations, but given that they also have the highest average budget, the impact of total cost of operations was less than that compared to school libraries. Although school libraries had the smallest average budgets and smallest average total cost of operations, the percent of budget was the highest of the four types of libraries.

**Table E.8**  
**LLSAP Members: Summary Table**

Type	Budget (n=69)	Direct Costs (n=69)	Indirect Costs (n=69)	TCO* (n=69)	Automation Staff (n=44)	Adding Records (n=22)	Telco Charges (n=34)	Training, Travel etc. (n=38)
Ac	\$ 413,697	\$ 10,034	\$11,900	\$ 21,934	\$ 14,855	\$ 2,950	\$ 2,450	\$ 166
Pu	\$ 541,736	\$ 15,488	\$32,861	\$ 48,349	\$ 92,169	\$ 4,270	\$ 2689	\$ 596
Sc	\$ 68,590	\$ 3,329	\$4,412	\$ 7,741	\$ 8,150	\$ 180	\$ 2,610	\$ 600
Sp	\$ 284,357	\$ 2,445	\$9,696	\$ 12,141	\$ 13,333	\$ 3,043	\$ NA	\$ 500

\*TCO – total cost of automation operations

#### E.4.2 Non-LLSAP Libraries

For the non-LLSAP libraries, the study team combined the costs listed in the following questions to arrive at a figure used to represent the total annual cost of bibliographic system operations.

- Question 1. If you pay an annual license fee or pay an annual maintenance fee to your system vendor
- Annual software license and/or maintenance agreement fee
  - Annual hardware costs associated with the library automation system

**Table E.9**  
**Non-LLSAP Members: Average Direct Costs and Average Direct Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Direct Costs	Average Percent of Budget
Academic	7	\$ 820,547	\$ 14,036	2%
Public	13	\$ 1,489,919	\$ 23,078	2%
School	12	\$ 61,829	\$ 2,806	5%
Special	4	\$ 127,967	\$ 17,863	14%
Total	36			

It was found that special libraries have the highest average percent of budget devoted to direct automation costs.

- Question 4. Staff costs attributable to support the library automation system (can include full-time or part-time staff for systems administration, cataloging, or other necessary tasks to operate the library automation system, but not circulation or ILL)
- Total staff costs attributable to the library automation system

Twenty-one libraries reported costs for question 4. The average percent of budgets attributable to entering bibliographic records for these respondents is somewhat skewed because they are a subset of the sixty-six overall respondents.

**Table E.10**  
**Non-LLSAP Members: Average Automation Staff Costs and Average Automation Staff Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Automation Staff	Average Percent of Budget
Academic	5	\$ 974,861	\$ 85,538	9%
Public	10	\$ 1,799,867	\$ 88,886	5%
School	2	\$ 139,000	\$ 20,000	14%
Special	4	\$ 127,969	\$ 20,300	16%
Total	21			

Question 5. Costs of purchasing bibliographic records for the library automation system (can include OCLC cataloging costs, purchasing MARC records from third-party vendors, etc.)

Twenty libraries reported costs for question 5. The costs reported for school libraries are probably lower due to that type of library having smaller average collections. The figure reported for special libraries is unreliable, as only one responded, and that response may be anomalous.

**Table E.11**  
**Non-LLSAP Members: Average Bib Records Costs and Average Bib Records Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Adding Records	Average Percent of Budget
Academic	5	\$ 1,000,526	\$ 13,211	1%
Public	8	\$ 2,301,028	\$ 11,823	<1%
School	6	\$ 106,966	\$ 1,635	2%
Special	1	\$ 120,600	\$ 800	<1%
Total	20			

Question 6. Total telecommunication costs associated with the library automation system

Eight libraries reported costs for question 6. The average percent of budgets attributable to telecommunications costs are negligible, although schools, with the smallest average budget show the largest percent of budget. It can be seen that for the three types of libraries that answered, average telecommunication costs are very similar, but the impact on budget is significantly larger for school libraries.

**Table E.12**  
**Non-LLSAP Members: Average Telecommunications Costs and Average Telecommunications Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Telecommunications	Average Percent of Budget
Academic	1	\$ 309,400	\$ 3,047	1%
Public	6	\$ 2,801,417	\$ 3,740	<1%
School	1	\$ 271,000	\$ 12,876	5%
Special	0	NA	NA	NA
Total	8			

It was found that telecommunications costs for these libraries are similar to those that are LLSAP members. However, the sole academic and sole school responses should be treated with reservation.

Question 7. Costs associated with training, travel or other activities in support of the operation of the library automation system

Seventeen libraries reported costs for question 7. The average percent of budgets attributable to training, travel and similar costs are negligible, although schools, with the smallest average budget show the largest percent of budget. It can be seen that for the libraries that answered, average training, travel and other related costs are very similar.

**Table E.13**  
**Non-LLSAP Members: Average Training and Related Costs and Average Training and Related Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Training, Travel etc.	Average Percent of Budget
Academic	7	\$ 681,387	\$ 1,086	<1%
Public	4	\$ 2,950,139	\$ 3,156	<1%
School	5	\$ 119,678	\$ 1400	1%
Special	1	\$ 120,600	\$ 200	<1%
Total	17			

The figure reported for special libraries is unreliable, as only one responded, and that response may be anomalous.

Additionally, if respondents listed costs for the following question:

Question 8. Other costs associated with the library automation system. Please label the cost and provide a dollar figure for the cost. These costs might include indirect or overhead costs such as rent and utilities, or other costs such as contract services that are attributable to the library automation system and if those costs were of an ongoing nature, such as bar codes, supplies and similar, those costs were included as well.

Due to the wide and varied nature of costs reported in this category, no attempt was made to derive a comparison. Costs that were obviously one-time expenses, such as "new server" were not included in this calculation.

The reported costs in questions 1, 4, 5, 6, 7 and 8 were summed for each library to determine total cost of automation operations, and averaged by library type. Further, the average cost of operations was compared against average budget size for each library type to determine the average total cost of operations as the percentage of budget for each library type.

**Table E.14**  
**Non-LLSAP Members: Average Total Costs and Average Total Costs as Percent of Average Budget**

Library Type	N	Average Budget	Average Total Cost of Operations	Average Percent of Budget
Academic	7	\$ 820,547	\$ 86,546	11%
Public	13	\$ 1,489,919	\$ 91,118	6%
School	12	\$ 61,829	\$ 9,753	16%
Special	4	\$ 127,967	\$ 138,536	30%
Total	36			

**Table E.16**  
**Non-LLSAP Members: Summary Table**

Type	Budget (n=36)	Direct Costs (n=36)	Indirect Costs (n=36)	TCO* (n=36)	Automation Staff (n=21)	Adding Records (n=20)	Telco Charges (n=8)	Training, Travel etc. (n=17)
Ac	\$ 820,547	\$ 14,036	\$72,510	\$ 86,546	\$ 85,538	\$ 13,211	\$ 3,047	\$ 1,086
Pu	\$ 1,489,919	\$ 23,078	\$68,040	\$ 91,118	\$ 88,886	\$ 11,823	\$ 3,740	\$ 3,156
Sc	\$ 61,829	\$ 2,806	\$ 6,947	\$ 9,753	\$ 20,000	\$ 1,635	\$ 12,876	\$ 1400
Sp	\$ 127,967	\$ 17,863	\$20,673	\$ 38,536	\$ 20,300	\$ 800	NA	\$ 200

\*TCO – total cost of automation operations

**Table E.15**  
**Master Summary of Averages**

Type	Budget	Direct Costs	Indirect Costs	TCO*	TCO as Percent of Budget	Automation Staff	Adding Records	Telco Charges	Training, Travel etc.
Academic LLSAP	\$ 413,697 (n=11)	\$ 10,034 (n=11)	\$11,900 (n=11)	\$ 21,934 (n=11)	5% (n=11)	\$ 14,855 (n=8)	\$ 2,950 (n=6)	\$ 2,450 (n=2)	\$ 166 (n=7)
Academic Non	\$ 820,547 (n=7)	\$ 14,036 (n=7)	\$72,510 (n=7)	\$ 86,546 (n=7)	11% (n=7)	\$ 85,538 (n=5)	\$ 13,211 (n=5)	\$ 3,047 (n=1)	\$ 1,086 (n=7)
Public LSLAP (n=40)	\$ 541,736 (n=41)	\$ 15,488 (n=41)	\$32,861 (n=41)	\$ 48,349 (n=41)	9% (n=41)	\$ 92,169 (n=28)	\$ 4,270 (n=10)	\$ 2,689 (n=30)	\$ 596 (n=26)
Public Non	\$ 1,489,919 (n=13)	\$ 23,078 (n=13)	\$68,040 (n=13)	\$ 91,118 (n=13)	6% (n=13)	\$ 88,886 (n=10)	\$ 11,823 (n=8)	\$ 3,740 (n=6)	\$ 3,156 (n=4)
School LLSAP	\$ 68,590 (n=12)	\$ 3,329 (n=12)	\$4,412 (n=12)	\$ 7,741 (n=12)	11% (n=12)	\$ 8,150 (n=5)	\$ 180 (n=1)	\$ 2,610 (n=2)	\$ 600 (n=3)
School Non	\$ 61,829 (n=12)	\$ 2,806 (n=12)	\$ 6,947 (n=12)	\$ 9,753 (n=12)	16% (n=12)	\$ 20,000 (n=2)	\$ 1,635 (n=6)	\$ 12,876 (n=1)	\$ 1,400 (n=5)
Special LLSAP	\$ 284,357 (n=5)	\$ 2,445 (n=5)	\$9,696 (n=5)	\$ 12,141 (n=5)	4% (n=5)	\$ 13,333 (n=3)	\$ 3,043 (n=5)	NA	\$ 500 (n=2)
Special Non	\$ 127,967 (n=4)	\$ 17,863 (n=4)	\$20,673 (n=4)	\$ 38,536 (n=4)	30% (n=4)	\$ 20,300 (n=4)	\$ 800 (n=1)	NA	\$ 200 (n=1)

\*TCO – total cost of automation operations

It was found that:

- The statistics for special libraries are much different from the other three types of libraries. This may be due to the low response rate for this type.
- Academic and school libraries that are not LLSAP members contribute a much greater percentage of their budget toward automation costs compared to their LLSAP counterparts.
- Non-LLSAP public library members reported a lower overall percentage of budget going toward automation costs compared to their LLSAP counterparts. However, this data is skewed by a preponderance of non-LLSAP public libraries with multi-million dollar budgets. These large libraries may be benefiting from considerable economy of scale.
- School libraries report a much greater percentage of their budget toward automation costs compared to other types of libraries.
- Excluding special libraries, LLSAP member libraries report total automation costs are one to three times that of direct automation costs.
- Excluding special libraries, non-LLSAP member libraries report total automation costs are two to five times that of direct automation costs.
- Automation staff costs account for a majority of indirect automation costs.
- Schools were the only type of library to show telecommunications costs greater than one percent of their overall budget. These costs were 5% for non-LLSAP libraries and 11% for LLSAP members, although both figures suffer from a low response rate.

## E.5 Method Limitations

The primary limitation of this data collection method is the overwhelming complexity and diversity of the population of libraries. It is unlikely that any more than a few of the hundreds of libraries surveyed plan, budget, and account for bibliographic system operations cost in exactly the same manner. Furthermore, while some libraries may share common definitions of bibliographic system operations costs, some

libraries pay those costs out of their own budgets, and others have some costs assumed by a larger corporate body. As an example, some librarian's salaries are paid out of a budget other than that attributed to the library. Thus many such libraries reported no staff costs for bibliographic system operations. As a result, the cost components identified for the study were necessarily broad and subjective, which limits results to equally broad findings.

A second limitation is that for both LLSAP and non-LLSAP libraries, initial hardware costs, and in the case of non-LLSAP libraries, initial purchase price of the automated system have not been factored in. The investigators intended to factor these costs into the total cost of operations for non-LLSAP member libraries by prorating those costs over the number of years the system has been in place. However, this was not done because the response rate to the questions that addressed these costs was poor at best. Reasons libraries could not provide such costs included:

- "I don't remember"
- "The system was not purchased directly by the library"
- "That was all handled by the person before me"
- "Our contract prohibits revealing that information"

## **E.6 Recommended Strategies for Further Development**

As with any study, hindsight reveals areas that can be expanded upon to produce better results. In the case of this study, the following strategies are recommended for further development:

- Expand the study to include libraries above and beyond those recommended by the LLSAP contact persons. At the minimum, the sample pool should include all LLSAP members in all RLS. In addition an intensive effort should be made to enlarge the pool of non-LLSAP members of all categories. Ideally the study should include at least four times the current number of respondents.
- Reexamine specific areas that need further study. Primarily, more detail and clearer definitions are needed with regard to indirect costs. A methodology should be developed which includes a further refinement of cost definitions and a set of guidelines that can be given to libraries to calculate those costs. Such a methodology would include ideas for how to account for staff time attributable to automation system operations, what constitutes annual hardware costs, etc. Also, now that fee structures and other billings passed to members are better understood, clearer definitions of direct costs should be developed.
- Conduct a similar study among the members of the ILCSO, CSS and LINC alternative consortia members, using the same points of comparison, cost components, etc, but altered to suit the nature of those libraries.
- Any further development should be done with visible backing and marketing from the ISL as well as the RLS themselves. Perhaps the study could be expanded or repeated with some form of incentive.
- Any further study should be supported with additional interfaces and reporting mechanisms such as web survey sites with interactive forms, in order to facilitate and ease the burden on respondents. Such sites and aids should be temporarily incorporated as links on each RLS website in addition to any site central to the entity that undertakes the study.