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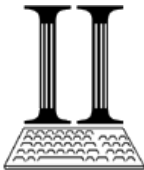
Procedures for the Evaluation Database,
Florida Electronic Library, Final Report
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INTRODUCTION

The goals of the ongoing Information Institute's work with the Florida Electronic Library (FEL) are: 1) improve the success by which the FEL meets information needs of residents of the state of Florida, the library community, and other users of the FEL; and 2) develop ongoing data collection and reporting strategies that evaluate the status and success of the FEL. These goals guided the research efforts of the Information Institute (II) of Florida State University throughout the development and implementation of the various phases of the work with FEL from 2004-2005, including *Evaluation Activities for the Florida Electronic Library, October 22, 2004 – August 7, 2005*[1] and the current FEL initiative (August 7 – September 30). These efforts have been presented in three stages and provide:

1. Guidance in the development of ongoing sustainable data collection and presentation strategies – see *Evaluation Activities for the Florida Electronic Library: Data Collection Strategies and Statistics - Interim Report, August 11, 2005*[2];
2. Feedback and analysis of FEL marketing efforts – see *Marketing the Florida Electronic Library: A Survey of Selected Local Library Manager Views Report, May 2005*[3];
3. An initial structure for data collection (Evaluation Database spreadsheet - attached to this report as Appendix A);
4. Examples of data analysis and data presentation using data contained within the evaluation database (Attached to this report as Appendix B), and
5. A set of procedures for the management of ongoing and future data collection efforts for the evaluation database (this draft final report).

Together, these three reports and two spreadsheets present a cumulative overview of Information Institute activities in the evaluation of the FEL over the past year (October 2004 – September 2005).

This report builds upon prior studies and provides input for the collection and management of evaluation data along with strategies for the ongoing assessment of the FEL. Implementation of procedures contained within this report provides future assessment and data presentation opportunities (annual reports, etc.) of the FEL. These assessment and data presentation opportunities will guide and inform the decision-making process for continued marketing efforts and development of the FEL.

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[1] Information Use Management and Policy Institute. (2004). *Evaluation Activities for the Florida Electronic Library, October 22, 2004 – August 7, 2005*. Tallahassee, FL: Florida State University, Information Institute.

[2] Information Use Management and Policy Institute. (2005)**.** *Evaluation Activities for the Florida Electronic Library: Data Collection Strategies and Statistics - Interim Report, August 11, 2005*. Tallahassee, FL: Florida State University, Information Institute.

[3] Information Use Management and Policy Institute. (2005). *Marketing the Florida Electronic Library: A Survey of Selected Local Library Manager Views, May 2005*. Tallahassee, FL: Florida State University, Information Institute.

DATA COLLECTION PROCEDURES

The purpose of data collection procedures is to provide guidance in the systematic development of coordinated data collection strategies. The results of data collection efforts will provide insight and describe the use, uses, and users (and other data as appropriate) of the various components[4] of the FEL for the Florida Department of Library and Information Services (FDLIS), Florida Library Network Council (FLNC), and other interested parties. Table 1 (below) provides an overview for developing a successful data collection effort.

Table 1: Data Collection Tasks, Responsibilities and Activities

Task	Task Name	Responsibilities	Activities
1	Management of the data collection process	A data collection manager: • Needs to be appointed or designated; • Has the primary responsibility of management of the overall data collection process; and • Establishes an advisory committee.	Management responsibilities would include: • The overall data collection process; • The determination, designation, and appointment of others within the process including work groups or committees involved in the data collection process; • The development of the budget, timeline, and tasking of the data collection process; and • Development, design, and implementation of a management information system.
2	Review of goals and objectives	Includes the data collection manager, the advisory committee and others as appropriate.	Need to reach consensus on: • The stated goals, objectives, and outcomes of the data collection process; and • Any necessary revisions to these goals, objectives, and outcomes as they occur with ongoing development and implementation of individual components.
3	Database elements	Establish a process to identify appropriate database elements for collection and obtain input from the advisory committee and others as appropriate.	Need to reach consensus on: • The initial data elements to be used in the data collection process; • Any necessary revisions as they occur; and • The addition of data collection elements as needed.
4	Development of schedule and timeline of data collection activities	Identify key data collection events, responsibilities, and schedule with input from the evaluation manager, the advisory committee, and others as appropriate.	Need to reach agreement on: • A schedule for data collection activities and events, • A timeline for implementation of the schedules and events, and • An evaluation process geared towards evaluating specific methods used and data collected in the data collection process (Table 2 below).
5	Data collection process	Implement data collection process.	These include: • Collection of data, • Oversight of data entry into the Evaluation Database; and • Revision of data collection process as needed to include addition of additional data elements within the Evaluation Database.

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[4] These components include: statewide databases, digital reference, statewide union catalog, the digital collections catalogue, and the LSTA Toolkit (outcomes assessment instructional site).

FEL Data Collection Procedure Recommendations

Members of the Information Institute met with representatives of FDLIS, FLNC, and representatives for each of the components of the FEL participating in data collection efforts throughout the time frame of the project and determined the initial database elements for each component. Additionally, staff of the Information Institute received data directly from FEL component representatives and created a spreadsheet for the data.

Available data for each of the database elements were collected for the time frame January 2004 – June 2005. The spreadsheet (Appendix A) containing the data collected for this time frame will be used by FDLIS in the creation of an Evaluation Database for the FEL. FDLIS will host the FEL Evaluation Database.

The following recommendations are based upon the data collection tasks, responsibilities, and activities presented in Table 1 (above):

Task 1: Management of the data collection process

1. A member of FDLIS will be appointed/assume the overall data collection manager position.
2. A member of FDLIS will be appointed to the position of database manager and will manage and oversee quality control of data entry into the evaluation database.
3. FLNC will serve as the advisory board for ongoing data collection efforts.
4. A representative of each FEL component will be responsible for data entry of selected data elements from the component directly into the FEL evaluation database (schedule to be addressed in task 4).

Task 2: Review of goals and objectives

1. The data collection manager will oversee meetings with the advisory committee to review and revise (if necessary) goals, objectives, and outcomes for individual components of the FEL.
2. The data collection manager along with the advisory committee will assess the degree data collected meets the goals, objectives, and outcomes of the FEL.
3. The data collection manager, along with the advisory committee will determine best use of the evaluation database for the: 1) evaluation of FEL components; 2) marketing efforts of the FEL; and 3) continued development of the FEL.

Task 3: Database elements

1. Initial database elements have been identified by the Information Institute based on meetings with FDLIS, FLNC, and representatives of each FEL component.
2. The data collection manager will regularly and as needed meet with FLNC; representatives of each FEL component; identified experts in the area of data usage, assessment, and dissemination; and others to review, revise or add to the types and kinds of data included within the evaluation database.

Task 4: Development of schedule and timeline of data collection activities

1. The data collection manager will meet initially with FLNC and representatives of each FEL component to determine a schedule for future meetings. Recommended schedule is:

    a. Quarterly meetings (which may include phone conferences);
    b. Meetings determined or initiated by specific events such as just before marketing campaign efforts, school kickoff events, etc.; and
    c. Meetings needed to address current events, activities, or issues that may directly affect the FEL on an as needed basis.

2. The data collection manager will meet with the database manager to develop scheduled meetings between the database manager and representatives of each FEL component responsible for data entry into the evaluation database.

3. The data collection manager will meet with the database manager and members of the Information Institute to review and initiate a data entry process (task 5 below) along with a schedule of review for the process.

4. The database manager may wish to meet with staff of the Information Institute to discuss and develop a quality control program for data entry that would include:

    a. Identification of potential issues that may affect quality control,
    b. Steps to take to ensure quality control,
    c. Steps to take to manage use of data should negative issues of quality control arise, and
    d. Timeline for initiating and implementing quality control guidelines.

5. The database manager will meet with representatives of each FEL component responsible for data entry to determine a timeline for data entry per component.

Task 5: Data collection process

1. Initial data collection unit is monthly for each data element within the evaluation database.
2. Database manager will implement steps to allow representatives of each FEL component access to the evaluation database for data entry purposes.
3. Representatives of each FEL component will enter data directly into the evaluation database on a regularly scheduled basis.
4. Database manager along with FEL component representatives and data collection manager if necessary will develop timeline for entry of data into database for each FEL component.
5. Database manager will create schedule for checking that data was entered according to data entry timeline and the quality of the data entered.

Security issues:

1. Database manager, along with the data collection manager will be responsible for data security issues within the server housing the evaluation database.
2. Database manager will be responsible for queries to access data as needed.
3. Data collection manager will be responsible, along with FLNC in determining access privileges to data contained within the evaluation database.
4. Data collection manager along with FLNC will be responsible for decisions regarding the collection, storage, and dissemination of data held within the evaluation database.
5. Data collection manager along with FLNC are responsible for decisions regarding privacy related issues affecting data collected within the evaluation database.

EVALUATION MANAGEMENT PROCEDURES

The purpose of evaluation management is to provide structured guidance throughout the systematic development of coordinated data collection strategies, data storage, data analysis, and the dissemination of results to relevant parties. Table 2 (below) provides an overview for developing a successful evaluation management effort.

Table 2: Evaluation Management Tasks

Task	Task Name	Task Activities	Task Details
1	Management and administration of evaluation	Evaluation manager has responsibility for ongoing FEL evaluation activities.	• Specific responsibilities and activities of the Evaluation Manager are determined and agreed upon, and • Clarify data collection activities will have specific time frames for implementation that will overlap other data collection activities.
2	Report generation	Reports need to be generated as soon as data collection activities and analyses are completed.	The reports should: • Be professionally done, • Have high impact, • Use clear and understandable graphics, • Be short and concise, and • Target general audiences and/or specific stakeholder groups.
3	Database design	FDLIS will review database design and the design of components.	A database will be created that can be used to organize evaluative statistics and related data sets. Design of this database should consider: • New and existing FEL statistics and data sets • A login mechanism • Report format and delivery
4	Dissemination	An information dissemination plan needs to be created to ensure that designated report recipients receive specific reports.	A dissemination plan ensures that specific reports are delivered to: • The key stakeholders for the specific reports, • The partners, etc. of the project, and • Any other interested parties such as scholars, politicians, etc.
5	Explanation	Report results need to be discussed regarding: • Implications, • Future efforts, • Refinements, etc.	Types of discussion may include: • Question and answer sessions, • Conferences, • Symposiums, or • Similar events.

Evaluation management of ongoing evaluation efforts is essential for the FEL project's continued development. Evaluation management provides a more comprehensive understanding with information on:

- How well the project is proceeding;
- How well the project meets intended goals, objectives, and outcomes;
- Degree to which the FEL is used and meets user needs;
- Use of committed resources; and
- Types of results from use of resources, ways user needs are met (or not met), and whether the results are desirable.

In addition, management of evaluation data provides a basis for FEL managers – FDLIS, FLNC, and representatives within each component – to report and communicate to the broader library, user, and political communities the progress and success of the FEL.

An evaluation management plan should include both formative and summative evaluation strategies.[5] Formative evaluation provides ongoing inputs, is used to monitor project activities, and provides information to decision makers to help them make adjustments to the project while it is in the planning and processing stages – before, during, and after implementation. Formative evaluation is an ongoing process. Summative evaluation generally occurs at the end of the project or at specific points of time within a long-term project, i.e. annually. Summative evaluation is intended to determine the degree to which goals and objectives were accomplished at specific points in time and to determine whether or not resultant outcomes were realized. Both formative and summative evaluation efforts are part of the evaluation management process and are necessary to monitor improvement of services.[6]

Evaluation management provides the means to not only collect but also to disseminate data in a way that will assist decision makers in managing and planning the FEL. While the main objective of all stakeholders is to create a better product, different stakeholder groups - ranging from public librarians and library patrons to local and state government officials - may have differing ideas of what services and projects will best meet user needs. Despite the development and implementation of a high quality evaluation management plan, different stakeholder groups can interpret evaluation data differently. With this in mind, serious discussion and long-term planning based on evaluation results gathered with the data collection instruments and methods are critical for continued success of the FEL project.[7]

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[5] For more on formative and summative evaluation, see Kim M. Thompson, Charles R. McClure, & Paul T. Jaeger, Evaluating Federal Websites: Improving E-government for the People. In Joey F. George, (Ed.). *Computers in Society: Privacy, Ethics & the Internet*. Upper Saddle River, NJ: Prentice-Hall, 2003 (pp. 400-412).

[6] Information Use Management and Policy Institute. (2004). *Measures and Statistics to Assess the Florida Electronic Library (FEL), October 2003*. Tallahassee, FL: Florida State University, Information Institute.

[7] Ibid.

Members of the Information Institute, along with representatives of FDLIS, FLNC, and representatives for each of the components of the FEL have participated in data collection efforts throughout the developmental and implementation stages of the FEL. The current project led to the creation of an initial evaluation database (Appendix A). Ongoing efforts to continue collecting data on a monthly basis, along with efforts to identify additional data elements (i.e. training session data, demographics, etc.) present the opportunity for the employment of an evaluation management process within FEL.

The following overview of management process tasks (from Table 2 above) provides input and recommendations for use of data collected through the development of an evaluation database (Table 1 above):

Task 1: Management and administration of evaluation activities

A member of FDLIS should assume the role of evaluation manager for the management and administration of all evaluation activities within the FEL. FLNC should serve as the advisory board. The evaluation manager, along with FLNC, experts within the area of evaluation, and other interested parties will:

- Develop guidelines for the responsibilities of the evaluation manager;
- Clarify data collection activities;
- Schedule data collection activities; and
- Schedule formative and summative evaluations.

The evaluation manager will oversee the evaluation process along with input from the advisory board.

Task 2: Report generation

Reports should be generated as data is collected (at pre-determined and scheduled times – probably quarterly) using both formative and summative strategies. For example, data collection has occurred for selected data elements with data collected for the most part from January 2004 – June 2005. Data collection efforts to date have been used to develop preliminary tables and charts representing quarterly aggregates of data. Once the evaluation database is created by FDLIS, quarterly aggregates of data can be added to existing graphs and/or included within new presentations of data to present quarterly representations of ongoing activities as they occur.

These ongoing representations can be used on a quarterly basis as part of a formative evaluation process to inform FDLIS, FLNC and other interested parties on current use and development of the FEL. Quarterly reports and updates would be included as part of an overall summative evaluation of annual activities.

Task 3: Database design

The initial collection of data has been presented within a spreadsheet for inclusion within the evaluation database (Appendix A). Initial design of the evaluation database will include prior collected data and provide the basis for ongoing data collection for the identified database elements. However, database design is part of an ongoing effort as well. Database design should be reviewed as part of a scheduled process.

Task 4: Dissemination

The evaluation manager, along with the advisory committee, selected experts within the field of evaluation, and other interested parties should develop an information dissemination plan. A dissemination plan will aide in the identification of specific stakeholders and other recipients of reports, create a schedule for the creation of reports and their release dates, identify the types of reports to generate, and provide the means to manage the release of reports.

Task 5: Explanation of reports

It is important that reports not only be generated and released according to a dissemination plan, but also that the results be presented and discussed. Report results should be discussed regarding implications of findings or results, types of future efforts that should be considered, and for refinement of the ongoing evaluation efforts.

RECOMMENDED NEXT STEPS

1. Appoint Evaluation Database Manager

2. Continue Development of the Evaluation Database

   - Creation of the evaluation database for the FEL by FDLIS;
   - Continuation of data collection by FDLIS beginning with July 2005 data; and
   - Implementation of the data collection process presented within this report (FDLIS, FLNC, representatives of each FEL component, interested parties, etc.)

3. Conduct Marketing/User Survey – The Information Institute will conduct a second marketing/user survey of the FEL in the spring of 2006

4. Implementation of the evaluation management process presented above (FDLIS, FLNC, representatives of each FEL component, interested parties, etc.).

5. Continued evaluation of selected components of the FEL.

Note: Appendix A and B (below) are copies of the original excel spreadsheets in table format. The original excel files will be given to FDLIS to aide in the transfer of data to the new evaluation database.

Appendix A:

Database Spreadsheet: Sheet 1

Florida Electronic Library (FEL) Monthly Statistics per Component Element

	WebTrends				FEL Gale				
	Total Visits	Visitors	Visits by Referring Domain	Page Views	Total Sessions	Total Full-Text Down-loads	Total Searches	Total Retrievals	
2004									
January	17,058	10,629	9,013	60,301	123,972	417,297	301,584	636,327	
February	14,412	8,524	7,765	48,490	213,410	1,033,346	490,653	1,560,485	
March	15,409	9,096	7,831	71,699	189,765	808,514	470,235	1,210,476	
April	12,445	7,322	6,138	59,304	73,041	83,116	273,471	147,719	
May	11,052	6,506	5,116	41,837	87,098	236,440	247,545	357,134	
June	11,106	6,292	5,498	41,260	131,201	353,358	462,757	565,738	
July	11,583	6,370	5,374	34,882	123,038	327,080	428,420	523,518	
August	9,626	5,584	4,569	19,602	64,961	145,609	184,114	220,364	
September	8,666	5,172	4,097	27,471	126,422	362,267	536,234	335,257	
October	13,118	7,373	5,793	55,526	175,843	543,021	477,264	790,668	
November	13,178	7,186	5,837	358,347	189,598	648,797	502,050	929,923	
December	11,333	6,100	4,695	742,534	81,657	207,717	222,447	306,942	
2005									
January	14,309	7,681	6,301	562,265	104,736	226,725	286,185	339,500	
February	16,161	8,491	9,048	285,442	48,351	56,727	124,420	80,877	
March	16,489	8,594	8,765	126,158	49,451	64,127	132,295	90,375	
April	16,774	8,762	6,802	122,280	50,872	66,097	136,360	91,938	
May	18,086	8,020	5,955	117,373	36,324	39,955	91,345	57,373	
June	15,075	8,216	7,979	115,537	33,098	35,671	82,823	51,510	
July									
August									
September									
October									
November									
December									
2006									
January									
February									
March									
April									
May									
June									
July									

Database Spreadsheet: Sheet 2

Florida Electronic Library (FEL) Monthly Statistics per Component Element

	Union Catalog			Courier Service		PALMM		Virtual Reference	
	SUS and PL's	Consortiums	Total Searches	Total Sent Per Month	Total Received	Total PALMM Home Page Visits	Number of Searches (PALMM)	Total Sessions	Total Participating Libraries
2004									
January	4,369	4,029	8,398	26,197	26,723	n/a	n/a	721	6
February	5,944	5,479	11,423	26,689	26,734	n/a	n/a	735	4
March	8,670	7,075	15,745	40,707	33,885	n/a	n/a	901	n/a
April	7,360	6,240	13,600	30,714	30,741	n/a	n/a	863	n/a
May	8,341	7,064	15,405	26,919	26,961	n/a	n/a	761	2
June	9,664	8,142	17,806	29,169	n/a	n/a	n/a	914	4
July	9,124	7,097	16,221	28,732	28,449	n/a	n/a	870	3
August	8,748	6,828	15,576	26,643	26,478	n/a	n/a	882	n/a
September	8,921	7,307	16,228	23,393	23,981	n/a	n/a	753	3
October	11,587	9,321	20,908	29,900	29,628	462	462	943	n/a
November	9,660	7,617	17,277	27,907	26,890	910	910	979	n/a
December	7,551	5,764	13,315	26,422	n/a	1,046	1,046	975	n/a
2005									
January	10,022	7,782	17,804	29,063	28,508	847	1,672	1,130	2
February	10,754	7,766	18,520	28,834	28,554	804	1,205	1,313	3
March	n/a	n/a	n/a	33,559	32,540	824	1,176	1,401	2
April	n/a	n/a	n/a	28,010	28,473	989	1,888	1,217	2
May	n/a	n/a	n/a	25,756	25,068	1,100	2,720	1,025	n/a
June	n/a	n/a	n/a	23,750	23,050	1,099	1,011	n/a	1
July									
August									
September									
October									
November									
December									
2006									
January									
February									

Appendix B: Examples of Use of Evaluation Database Data

1. WebTrends
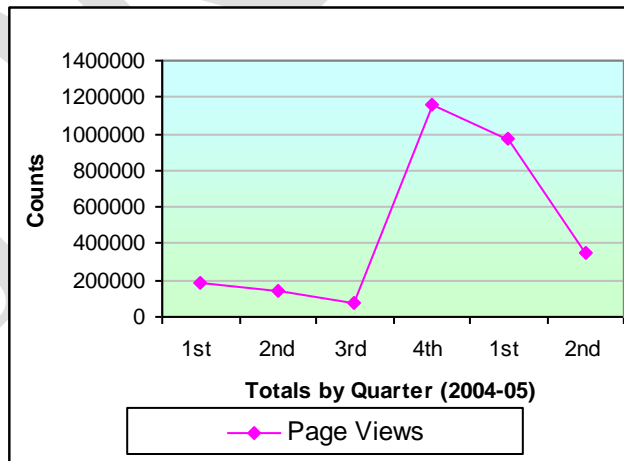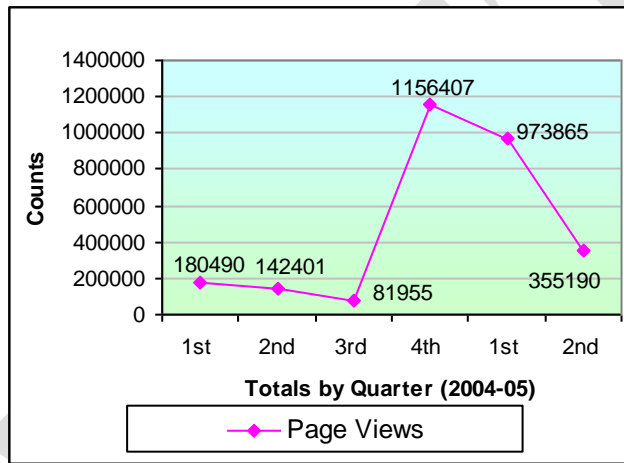
Table 1.1: WebTrends Quarterly Statistics per Data Element

	Quarters	Visitors	Total Visits
2004	1st	28249	46879
	2nd	20120	34603
	3rd	17126	29875
	4th	20659	37629
2005	1st	24766	46959
	2nd	24998	49935
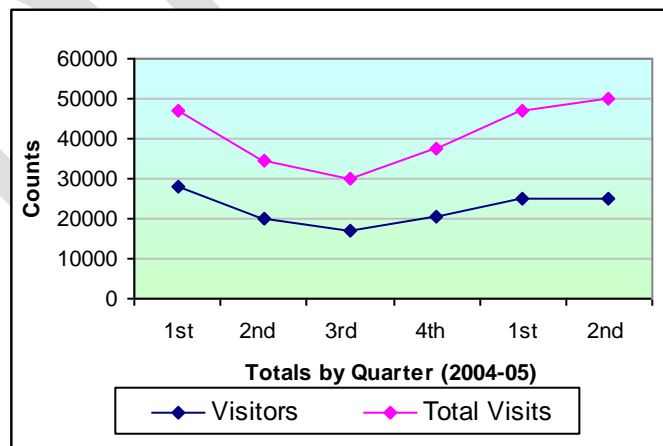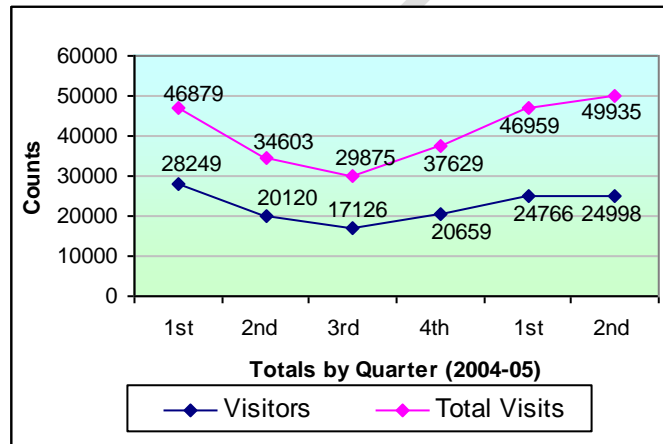
WebTrends (continued)

Table 1.2: WebTrends Quarterly Statistics per Data Element

	Quarters	Page Views
2004	1st	180490
	2nd	142401
	3rd	81955
	4th	1156407
2005	1st	973865
	2nd	355190

WebTrends (continued)

Table 1.3: WebTrends Quarterly Statistics per Data Element

	Quarters	Visits by Referring Domain	Unique Visitors	Visits
2004	1st	24609	28249	46879
	2nd	16752	20120	34603
	3rd	14040	17126	29875
	4th	16325	20659	37629
2005	1st	24114	24766	46959
	2nd	20736	24998	49935
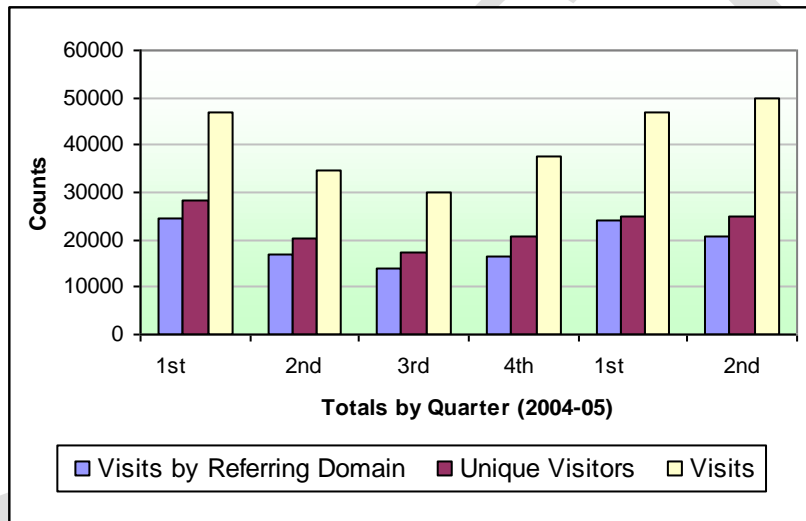
2. Union Catalog

Table 2: Union Catalog Quarterly Statistics per Data Element

	Quarters	SUS and PL's	Consortiums	Total Searches
2004	1st	18983	16583	35566
	2nd	25365	21446	46811
	3rd	26793	21232	48025
	4th	28798	22702	51500
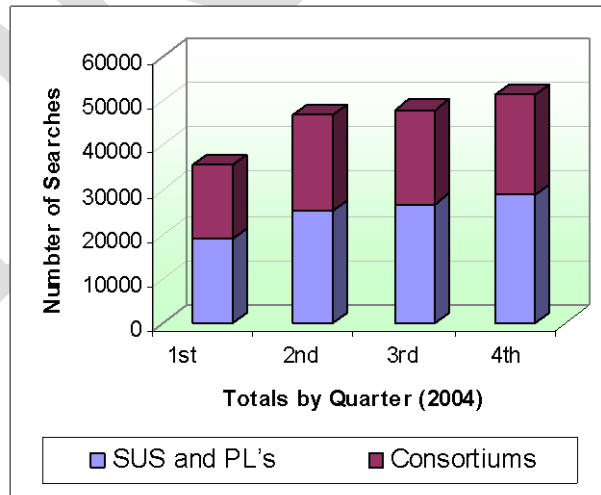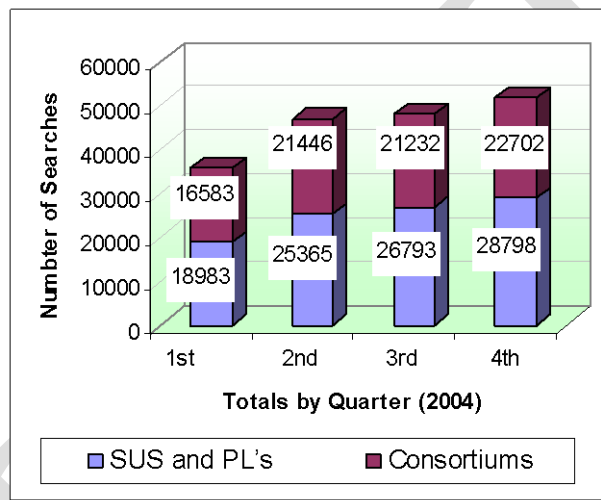
Note: 2005 data not available (received) at time of this report

3. Courier Service

Table 3.1: Courier Service Quarterly Statistics per Database Element

	Quarters	Total Sent	Total Received
2004	1st	93593	87342
	2nd	86802	n/a
	3rd	78768	78908
	4th	84229	n/a
2005	1st	91456	89602
	2nd	77516	76591
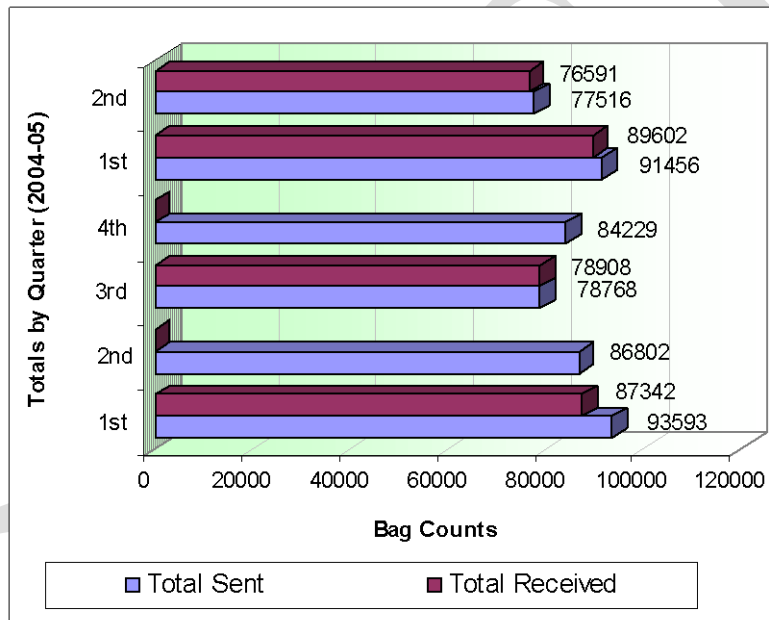
Courier Service (continued)

Table 3.2: Courier Service Quarterly Statistics per Database Element

	Quarters	Total Sent	Total Received
2004	1st	93593	87342
	2nd	86802	n/a
	3rd	78768	78908
	4th	84229	n/a
2005	1st	91456	89602
	2nd	77516	76591
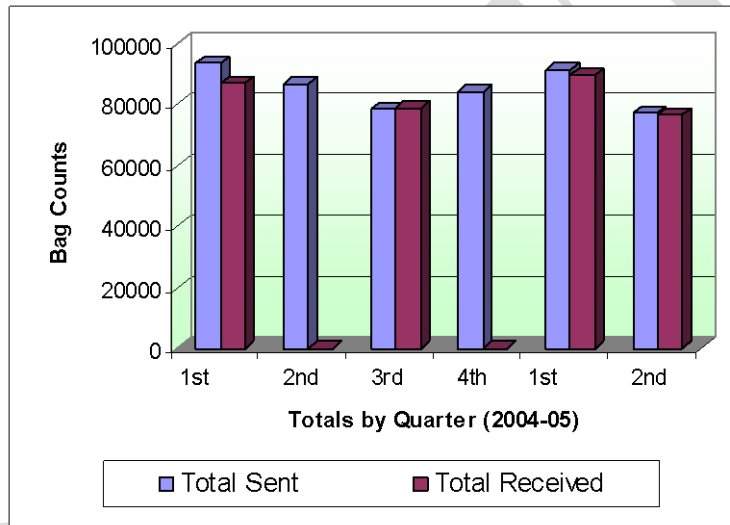
Florida on Florida – PALMM
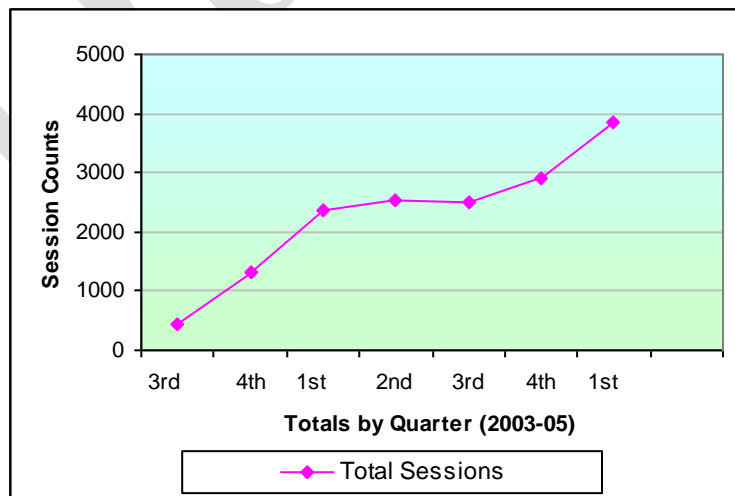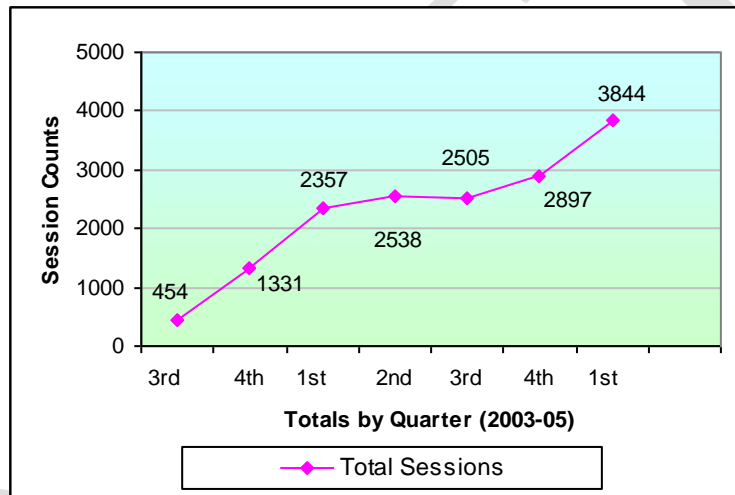
Table 4: PALMM Quarterly Statistics per Database Element

	Quarters	Home Page Visits	Searches
2004	4th	2418	2418
2005	1st	2475	4053
	2nd	3188	5619
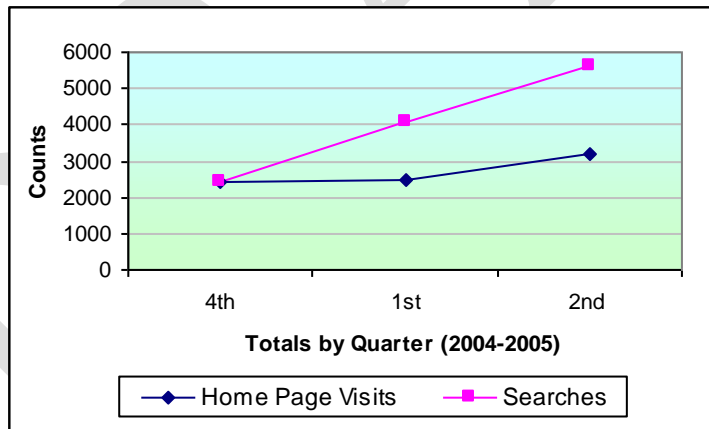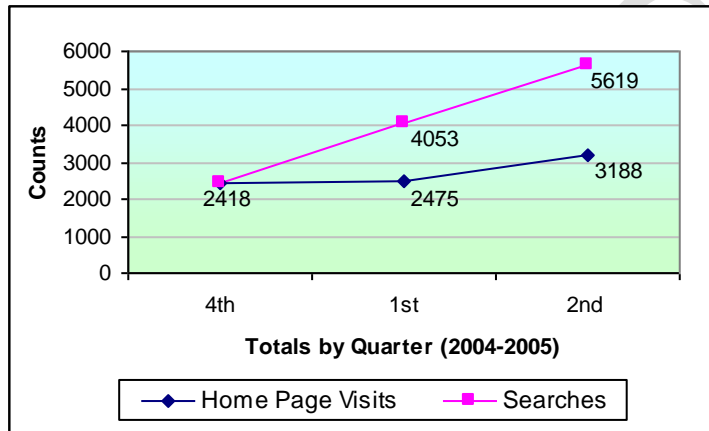
5. Virtual Reference

Table 5.1: Virtual Reference Quarterly Statistics per Database Element

	Quarters	Total Sessions
2003	3rd	454
	4th	1331
2004	1st	2357
	2nd	2538
	3rd	2505
	4th	2897
2005	1st	3844

Virtual Reference (continued)

Table 5.2: Total Sessions by Library Type from January 2005 – June 2005

	Total Number of Sessions by Library Type
Special Libraries	4
School Libraries	48
Academic Libraries	1156
Public Libraries	2216
Askalibrarian.org*	3016
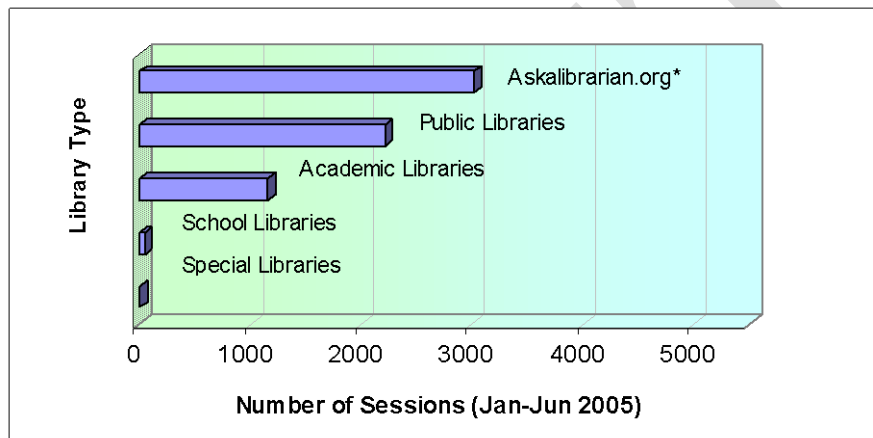
Virtual Reference (continued)

Table 5.3: Total Participating Libraries by Type from July 2003 – June 2005

Total Participating Libraries by Type	
Special Libraries	2
School Libraries	2
Academic Libraries	41
Public Libraries	41
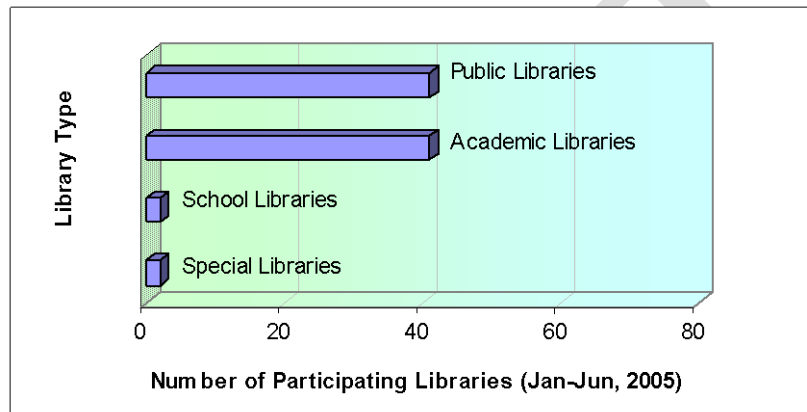
Virtual Reference (continued)

Table 5.4: Number of Participants Trained and Number of Sessions by Fiscal Year

	Number of Sessions	Number Participants Trained
Oct. 2002 - Sep. 2003	22	220
Oct. 2003 - Sep. 2004	41	406
Oct. 2004 - May 2005	9	94