



ASSOCIATION OF RESEARCH LIBRARIES
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October 4, 2007

TO: ARL Statistics and Assessment Committee

David Carlson (Southern Illinois Carbondale) 2006-2007
Joanne Eustis (Case Western Reserve) 2006-2007
Chris Filstrup (Stony Brook, SUNY) 2007-2009
Brinley Franklin (Connecticut) 2006-2008 (ARL Board Liaison)
Ruth Jackson (California, Riverside) 2007-2009
Judith Nadler (Chicago) 2006-2007
Louis A. Pitschmann (Alabama) 2007-2009
Bill Potter (Georgia) 2006-2008
Paul Wiens (Queen's) 2006-2008
Sandra Yee (Wayne State) 2006-2007

FROM:

Colleen Cook, Chair, Texas A&M University
Martha Kyriallidou, Director of Statistics and Service Quality Programs, ARL

Enclosed are the agenda and supporting documents for the ARL Statistics and Assessment Committee meeting that will take place from 8:00 a.m. to 10:00 a.m. on Wednesday, October 10, 2007, in the Salon G of the Washington Marriott Hotel, Washington DC.

The meeting will focus on reviewing the activities for the program, feedback on the implementation of the expenditures-focused index, the changes on the ARL Statistics survey regarding serials, plans to collect qualitative descriptive information from member libraries, and developments under way for the Organizational Climate and Diversity Assessment project led by the University of Maryland and MINES for Libraries™.

The committee chair, Colleen Cook, is meeting with the Steering Committee chairs and the chair of the Membership Committee to ensure that the Statistics and Assessment programmatic activities continue to serve the needs of ARL's strategic directions. Brinley Franklin is serving as an ARL Board member liaison to the Statistics and Assessment Committee.

We look forward to working with you in continuing to build the strong agenda of the Statistics and Assessment Committee in charting future directions that support ARL's strategic directions. We look forward to a productive meeting and your continuing engagement, input, direction and support.

**151st ARL Membership Meeting
ARL Statistics and Assessment
Wednesday, October 10, 2007
8:00 a.m. – 10:00 a.m.
Salon G
Washington Marriott Hotel
Washington, DC**

AGENDA

Welcome and introductions

- (a) Approval of Minutes from the 150th ARL Membership Meeting, ARL Statistics and Assessment Committee

Attachment a: Minutes from the 150th ARL Membership Meeting, ARL Statistics and Assessment Committee

- (b) ARL Board approved Task Force on New Ways of Measuring Collections Recommendations led to an implementation plan adopted by the ARL Statistics and Assessment Committee in May 2007.

Attachment b1: New Ways of Measuring Collections: An Action Agenda Adopted February 2007 and An Implementation Plan Adopted in May 2007

Attachment b2: Expenditures-focused index

Attachment b3: Statistics FAQ-October 2, 2007

Attachment b4: Areas for Building a Profile of Research Library Characteristics

- (c) Update on the status of current projects

Attachment c1: Statistics and Measurement Activities Grid, October 2007

- (d) Organizational Climate and Diversity Assessment project led by the U. of Maryland update

- (e) MINES for Libraries™: an update regarding a scalable pilot with EZproxy

Attachment e1: MINES for Libraries™ brochure

- (f) Other topics

150th ARL Membership Meeting
ARL Statistics and Assessment
Wednesday, May 23, 2007
8:00 a.m. – 10:00 a.m.
Plaza Room, Chase Park Plaza Hotel
St. Louis, Missouri

MINUTES

ARL Statistics and Assessment Committee Members

David Carlson (Southern Illinois Carbondale) 2006-2007
Joanne Eustis (Case Western Reserve) 2006-2007
Chris Filstrup (Stony Brook, SUNY) 2007-2009
Brinley Franklin (Connecticut) 2006-2008 (ARL Board Liaison)
Ruth Jackson (California, Riverside) 2007-2009
Judith Nadler (Chicago) 2006-2007
Louis A. Pitschmann (Alabama) 2007-2009
Bill Potter (Georgia) 2006-2008 (not present)
Paul Wiens (Queen's) 2006-2008
Sandra Yee (Wayne State) 2006-2007

The chair, Colleen Cook, convened the meeting, welcomed committee members and guests. Introductions were made. David Carlson called for approval of the minutes and Ruth Jackson seconded. The committee approved the minutes of the earlier meeting

The committee members focused the discussion on the Action Agenda Adopted by the ARL Board in February 2007 and the strategies for implementing a new index, the expenditures-focused index. Colleen Cook will be making a report at the business meeting on the implementation steps the Statistics and Assessment Committee is taking to move forward the ARL Board Action Agenda.

Colleen reported that we will be reporting to the membership that the current membership index remains as is – ARL will continue to calculate it and it will be available to the members through the members' only part of the ARL website. Individual libraries can continue to use it as they see fit and ARL can continue to use it for the deliberations of the membership committee.

ARL will be sending to the Chronicle through the Expenditures-Focused Index. The Expenditures-Focused Index includes four variables: Total Expenditures, Expenditures for Salaries for Professional Staff, Expenditures for Library Materials, and Professional plus Support Staff. The four variables together form a robust and valid measure of library investments. It is highly correlated to the ARL Membership Criteria Index (an attachment showing the correlations between the two indices over a number of years was provided to the committee members by Martha Kyrillidou). The Expenditures-Focused Index is not calculated based on the ARL founding members like the ARL Membership Criteria Index and it is not using logarithmic transformations. The committee also

advised that the Expenditures-Focused Index be calculated at least three years backwards to provide some historical perspective.

The committee members also discussed that the Expenditures-Focused Index is only one alternative approach proposed by the quantitative analysis conducted by Bruce Thompson for ARL. A three factor index will also be implemented and augmented as we develop new variables in the future months. Additional issues that we should consider to clarify in terms of how we are counting include shared storage, mass digitization, shared acquisitions, and access to digital materials.

The committee moved on by discussing the development of a profile. There are two lists of characteristics available to use for developing a rich description of a library's contribution: (a) the list that is available in the ARL Task Force report which is based on the qualitative criteria for membership and (b) the list that was developed by Yvonna Lincoln in her report to ARL. The Task Force report lists the elements that are important from ARL's principals for membership; Yvonna's list is based on the interviews she had with the ARL directors. There is an intersection between the two lists but also unique elements.

The Task Force report originally called for developing a two page qualitative profile. There is concern that input and descriptions will be all over the chart originally. The experience we have had with the collection of descriptions of the special collections for the 75th anniversary volume of Celebrating Research shows that it is challenging to provide consistent descriptions across institutions.

The committee members also discussed that the qualitative descriptions will form the basis for informing the development of additional quantitative measures that will feed into the three factor index which includes elements of (a) collections, (b) services and (c) collaborative arrangements. The qualitative profiles over time may suggest quantitative elements appropriate for augmenting the three factor index in particular in the areas of services and collaborative arrangements.

The committee members engaged in a discussion of how the qualitative profile will be used. Judith Nadler offered the perspective that a good profile can be used for public relations purposes with friends of the library and it may include quantitative elements in its description. For some libraries where collections are strong, they may want to emphasize that element. Others who may not have rich resources but do innovative things they may want to emphasize those aspects of their operations including collaborations with faculty. Libraries at the low end of the index tables may appear under a different light if some of their activities are brought forward in a descriptive qualitative way.

The interviews reported by Yvonna Lincoln showed that people feel strongly that we do not have a mechanism to report the collaborative arrangements that are reflective of the quality of our work. It was pointed out that the qualitative profile will not be used as a direct point by point comparison. It will highlight different features in the beginning.

We still need to think through the process of providing these descriptions. Ultimately we will want to answer the question of ‘what are the things we do that make us research libraries? What is unique and distinctive?’ Many of the important features are not unique to research libraries – for example, fundraising is a common activity across many libraries. Is the magnitude of the contribution important though? Can we describe the impact of libraries on academic success? Can we describe insights that we may gather in understanding how we are affecting academic outcomes? Randy Olshen pointed out that there is a shift on the focus from which library is the best to how can all of us get better. The committee members advised that we need to start somewhere and asked Colleen Cook and Brinley Franklin to discuss the strategy of developing descriptions further.

The discussion focused on discussing the changes in the annual ARL Statistics survey and in particular the new definition proposed for serials. Counting serial subscriptions has been very problematic because libraries report inflated counts due to multiple subscriptions to the same titles. This is not encouraging good management practices and it proves very problematic as these figures have been moving around in unusual and unexpected ways undermining the trust we have to the collections data. The committee members agreed that focusing on counting titles instead of subscriptions is a more meaningful count and it is moving libraries in the right direction. The priority will also be in reporting electronic over print and purchased items over items received for each title.

A number of institutions have offered to pilot test the new serials definitions to ensure its feasibility. Our goal is to get automated counts as much as possible using serials management software. Concerns about how the new numbers will affect the standing on the index can be addressed by the fact that we are making publicly available to the Chronicle is an Expenditures-Focused Index. ARL will also be developing a Q&A document as we move through the pilot activities.

The committee then discussed the impact of the new serials definitions in the supplementary statistics. As a result of implementing the new serials definition, we can eliminate many of the serials questions in the ARL Supplementary Statistics.

Another definition that we need to modify in the ARL Supplementary Statistics is the Volumes Held Collectively. The committee advised that this item include volumes purchased collectively.

The committee members reviewed a grid that presented the ARL tools and asked that ARL make that page available to the members and to the survey coordinators.

In response to the ARL Board’s interest for developing a timeline for implementing the Action Agenda, Colleen Cook and Martha Kyrillidou will put together a two page description describing the implementation agenda with a timeline that will carry us forward in the coming months.

Last, the committee briefly reviewed the Statistics and Assessment Grid of Activities and adjourned.

New Ways of Measuring Collections

An Action Agenda Adopted February 2007

1. Reserve use of the current membership criteria index for those occasions when it is needed for consideration of membership issues.
2. Implement an expenditure-focused index.
3. Use the new expenditure-focused index for any public reports, such as in the Chronicle of Higher Education.
4. Begin to develop a services-based index that combines the following three factors: collections, services, and collaborative relationships.
5. Revise definitions for collections-related data categories currently collected and experiment with a variety of new measures, including usage data, strength of collections, and service quality measures to develop a richer set of variables for potential inclusion in the three-factor alternative index (see above).
6. Collect qualitative data to develop a profile of ARL member libraries.

New Ways of Measuring Collections

An Implementation Plan by the ARL Statistics and Assessment Committee
May 2007

1. Expenditures-focused index

Starting with the 2005-06 data ARL will make publicly available the expenditures-focused index (total library expenditures, salaries and wages for professional staff, expenditures for total library materials, and number of professional plus support staff). The last three years of the expenditures-focused index will be distributed by email on the arl-directors list once 2005-06 data are final (estimated delivery time is early June 2007). The ARL membership criteria index will be available in the 'members only' part of the ARL website.

2. ARL Statistics 2006-07: Current serials definition is changing from the number of serial subscriptions to the number of unique/deduped titles. Counting a title should happen once across all formats and reported as electronic if available. An

implementation test will take place among committee member libraries in the summer of 2007. An early release of the ARL Statistics 2006-07 survey form to the survey coordinators will happen in June 2007. The official mailing of the survey forms will take place in September 2007.

Total number of current serials received, including periodicals

4a. Number of current serials <u>purchased</u>	(4a)	_____
4a.i Electronic	(4a.i)	_____
4a.ii Print and other formats	(4a.ii)	_____
4b. Number of current serials <u>received but not purchased</u>	(4b)	_____
4b.i Electronic	(4b.i)	_____
4b.ii Print and other formats	(4b.ii)	_____

(Exchanges, gifts, deposits, etc. See instructions.)

(Total serials received: 4.a + 4.b)

_____ (4)

Definition changes tracked:

Questions 4-5. Serials. Report the total number of unique serial titles, NOT SUBSCRIPTIONS, that you currently acquire. Do not include duplicate counts of serial titles. To the extent possible, report all government document serials even if housed in a separate documents collection. Verify the inclusion or exclusion of document serials in Question #. Exclude unnumbered monographic and publishers' series. Electronic serials acquired as part of a bundle or an aggregated package should be counted by title even if they are not cataloged as long as they are made accessible by the library. A serial is

- Deleted: subscriptions, not
- Deleted: 1
- Deleted: subscriptions and, t
- Deleted: 5
- Deleted: (e.g., Project MUSE, BioOne, ScienceDirect)

a publication in any medium issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely. This definition includes periodicals, newspapers, and annuals (reports, yearbooks, etc.); the journals, memoirs, proceedings, transactions, etc. of societies; and numbered monographic series.

In the case of consortial agreements, count under serials purchased only those titles for which the library pays directly from its budgeted expenditures. Count under 'serials purchased' only those titles for which your library pays even if partially paid from the library's budget. Report other titles that your library receives and does not pay for directly under 'serials received and not purchased'. If a purchased title includes electronic access to the title, count that title ONLY ONCE, (DEDUPED) for electronic only. If serials have been purchased through a consortium whose budget is centrally funded and independent from the library's budget, these serials should be reported under 'serials received and not purchased.'

- Deleted: Q4a
- Deleted: subscriptions to
- Deleted: reported under Q15b (expenditures for serials).
- Deleted: Q4a
- Deleted: and subscriptions
- Deleted: subscriptions
- Deleted: Q4b (
- Deleted:)
- Deleted: subscription
- Deleted: subscription twice: once for the print version and once for
- Deleted: the
- Deleted: version
- Deleted: Q4b.
- Deleted: ¶
Do not include the full-text serials from such indexing/abstracting products as Wilson Social Sciences Abstracts Full Text, Lexis-Nexis, ABI/INFORM, and other indexes with access to the full text of articles. These full-text titles are counted in the ARL Supplementary Statistics. ¶

3. ARL Supplementary Statistics 2006-07

Eliminate the following questions from the supplementary survey:

1. Number of electronic journals purchased. (1) _____
2. Number of electronic "full-text" journals purchased. (2) _____
3. Number of electronic journals not purchased. (3) _____
4. Number of electronic reference sources. (4) _____
7. Expenditures for current electronic journals purchased. (7) _____
8. Expenditures for electronic "full-text" journals. (8) _____
9. Expenditures for electronic reference sources. (9) _____

Modify "volumes held collectively" to include not only volumes withdrawn from the local collection, but also those volumes for which the cost was shared at the time of purchase

20. Volumes Held Collectively (20) _____

The defining criterion is that the library has devoted financial resources for the purchase of these items and is taking responsibility for their availability through participation in a cooperative that supports shared ownership. The library demonstrates commitment to the shared storage facility by supporting the consortium financially through a legally binding arrangement. Include here volumes originally held and now withdrawn from the local collection because they are held in a "shared" remote storage facility starting with volumes that have been transferred during fiscal year 2005-06. Include volumes purchased collectively where the cost is shared at the time of purchase. Exclude volumes held collectively because they are held by other organizations such as the Center of Research Libraries (CRL) that are supported by membership dues and determination on whether to maintain membership may vary from year to year.

4. Collect qualitative data to develop a profile of ARL member libraries.

The members of the Statistics and Assessment Committee will undertake an implementation test collecting descriptive qualitative information for profiling key aspects/features of a library's operations. The profile will be based upon input from the membership as reflected in the interviews conducted and analyzed in 2006 by Yvonna Lincoln including the qualitative criteria in the ARL's Principles of Membership. Upon successful completion of the 2007 phase, we expect that every ARL member library will be asked to contribute a similar description of their operations in 2008.

In addition to the development of the profile, these qualitative descriptive data will be analyzed to identify additional variables to enhance a three-factor index measuring collections, services, and collaborations. Additional variables will be proposed, developed and tested in future data collection activities as they are determined to be useful based upon existing knowledge as well as newly gained insights from the analysis of the qualitative profile information.



ASSOCIATION OF RESEARCH LIBRARIES

July 18, 2007; Revised August 15, 2007; Revised October 4, 2007

To: Directors of ARL Libraries
 From: Colleen Cook, Chair, ARL Statistics and Assessment Committee
 Martha Kyriallidou, Director, ARL Statistics and Service Quality Programs
 Re: 2005-06 ARL indices (principal component scores)

The 2005-06 ARL Membership Criteria Index with its associated index formula and the new Expenditures-Focused Index and its formula are attached. Beginning in 2005-06, the ARL Membership Criteria Index will be available only on the ***Members Only section of the ARL website***. ARL will make the Expenditures-Focused Index publicly available. Please note that both indices include only university library members of ARL.

The recommendations regarding the development and dissemination of these indices were made by the Task Force on New Ways of Measuring Collections, chaired by Brinley Franklin (University of Connecticut) and approved by the ARL Board in February 2007. A presentation on these changes was made at the May Membership meeting in St. Louis. The ARL Statistics and Assessment Committee has developed an agenda to implement other recommendations. For example, starting in 2006-07 revisions are being made to the ARL Statistics annual survey to incorporate new ways of counting serials (electronic and print). For more information, see: www.arl.org/stats/aboutstats/tfnewways.shtml.

Membership Criteria Index

The Membership Criteria Index is a summary measure of relative size among the university library members of the Association and the sole purpose of its development was to serve as an indicator for membership that is quantitative in nature. The index is composed of five quantitative data elements that have been the historical variables in which ARL university libraries most resemble one another, and does not attempt to measure a library's services, quality of collections, or success in meeting the needs of users. Some large anomalies in the index rankings from year to year may be explained by the qualitative evidence provided in the form of footnotes to the survey, especially data associated in the exclusion or inclusion of branch libraries from year to year or data reported related to electronic resources.

Information about index scores from earlier years as well as Excel versions of the index tables will be available at: <http://www.arl.org/membersonly/gov/arlindex/>. The Principles and Procedures for Membership in the Association of Research Libraries can be found at: <http://www.arl.org/stats/qualcov.html>. For more information on the ARL Membership Committee agenda, please contact Julia Blixrud, Assistant Executive Director, External Relations <jblix@arl.org>.

Expenditures-Focused Index

The Expenditures-Focused Index was developed through a multi-year factor analysis of all ARL statistics data as an alternative to the membership criteria index and reflects the investments made in research libraries. It, too, represents only quantitative data and does not measure a library's services, quality of collections, or success in meeting the needs of users. This index is composed of four quantitative data elements that are part of the historical data elements in which ARL university libraries most resemble one another and is highly correlated with the membership criteria index.

If you have any questions regarding the ARL Membership Criteria Index, the Expenditures-Focused Index, or any other aspect of the ARL Statistics and Measurement Program, please contact Martha Kyriallidou <martha@arl.org>. Thank you for your continuing support and contributions to the ARL Statistics and Measurement data gathering.

Revised October 4, 2007

**Principal Component Scores
ARL Membership Criteria Index, 2005-06**

Attached is the ARL membership criteria index for 2005-06, arranged in alphabetic order. The index is a summary measure of relative size among the university members of the association. The index scores are rounded to two decimal places, which may give the appearance of identical scores (and thus ranks) for some institutions; in fact, when the complete principal component score is calculated, it is extended to at least five places. Each institution has a unique result and place in the rank order.

The five variables used in the index were determined by factor analysis of 22 variables originally and represent the elements in which ARL university libraries most resemble one another.* The index does not attempt to measure a library's services, quality of collections, or success in meeting the needs of users. In comparing any individual library to ARL medians or other ARL members, evaluations must always be made within the context of local goals and characteristics.

The index is calculated using five data elements:
 number of volumes held
 number of volumes added (gross)
 number of current serials received
 total operating expenditures
 number of professional plus support staff

* Note: The 5-variable index was adopted as a membership criterion in May 1987 by the ARL membership. Previous membership criteria were based on a 10-variable index, which had been adopted by the membership in May 1980. The elements used in the 10-variable index were: (1) number of volumes held, (2) number of volumes added (gross), (3) number of microform units held, (4) number of current serials received, (5) expenditures for library materials, (6) expenditures for binding, (7) total salary and wage expenditures, (8) other operating expenditures, (9) number of professional staff, and (10) number of support staff.

**ARL MEMBERSHIP CRITERIA INDEX
Five-variable Formula for ARL Principal Component Score**

log refers to natural log (ln)

Formula for 2005-06 (34 founding members)

.464397 x log of volumes held
 + .411688 x log of volumes added (gross)
 + .447313 x log of current serials
 + .497755 x log of total library expenditures
 + .491581 x log of total professional plus support staff
 - 28.282155

Revised October 4, 2007

Attachment b2

ARL MEMBERSHIP CRITERIA INDEX, 2005-06
(Based on Five ARL Variables and Analysis of 34 ARL University Founding Members)

Rank	Institution	Index	Rank	Institution	Index
87	ALABAMA	-1.61	48	MIAMI	-0.81
13	ALBERTA	0.49	6	MICHIGAN	1.15
36	ARIZONA	-0.47	44	MICHIGAN STATE	-0.67
38	ARIZONA STATE	-0.58	16	MINNESOTA	0.41
108	AUBURN	-2.21	77	MISSOURI	-1.40
67	BOSTON	-1.20	85	MIT	-1.52
76	BOSTON COLLEGE	-1.39	33	MONTREAL	-0.38
47	BRIGHAM YOUNG	-0.80	68	NEBRASKA	-1.22
21	BRITISH COLUMBIA	0.11	79	NEW MEXICO	-1.41
60	BROWN	-1.12	17	NEW YORK	0.32
4	CALIF., BERKELEY	1.27	20	NORTH CAROLINA	0.16
50	CALIF., DAVIS	-0.85	29	NORTH CAROLINA STATE	-0.28
49	CALIF., IRVINE	-0.85	31	NORTHWESTERN	-0.37
7	CALIF., LOS ANGELES	0.77	64	NOTRE DAME	-1.15
90	CALIF., RIVERSIDE	-1.62	94	OHIO	-1.75
41	CALIF., SAN DIEGO	-0.65	25	OHIO STATE	-0.06
75	CALIF., SANTA BARBARA	-1.37	42	OKLAHOMA	-0.66
109	CASE WESTERN RESERVE	-2.27	62	OKLAHOMA STATE	-1.13
18	CHICAGO	0.23	96	OREGON	-1.88
51	CINCINNATI	-0.90	24	PENNSYLVANIA	-0.03
63	COLORADO	-1.14	15	PENNSYLVANIA STATE	0.44
102	COLORADO STATE	-2.04	26	PITTSBURGH	-0.10
3	COLUMBIA	1.40	19	PRINCETON	0.21
57	CONNECTICUT	-1.05	65	PURDUE	-1.18
8	CORNELL	0.69	82	QUEEN'S	-1.50
70	DARTMOUTH	-1.23	105	RICE	-2.09
101	DELAWARE	-2.01	81	ROCHESTER	-1.48
22	DUKE	0.07	28	RUTGERS	-0.27
39	EMORY	-0.63	95	SASKATCHEWAN	-1.87
30	FLORIDA	-0.31	54	SOUTH CAROLINA	-0.96
61	FLORIDA STATE	-1.13	37	SOUTHERN CALIFORNIA	-0.52
84	GEORGE WASHINGTON	-1.52	89	SOUTHERN ILLINOIS	-1.62
59	GEORGETOWN	-1.10	107	SUNY-ALBANY	-2.19
43	GEORGIA	-0.67	71	SUNY-BUFFALO	-1.30
98	GEORGIA TECH	-1.98	103	SUNY-STONY BROOK	-2.04
113	GUELPH	-2.98	93	SYRACUSE	-1.71
1	HARVARD	2.40	78	TEMPLE	-1.41
73	HAWAII	-1.31	56	TENNESSEE	-1.04
86	HOUSTON	-1.60	11	TEXAS	0.52
112	HOWARD	-2.60	27	TEXAS A&M	-0.26
72	ILLINOIS, CHICAGO	-1.30	52	TEXAS TECH	-0.91
9	ILLINOIS, URBANA	0.69	5	TORONTO	1.25
12	INDIANA	0.50	99	TULANE	-2.00
32	IOWA	-0.38	46	UTAH	-0.76
91	IOWA STATE	-1.65	58	VANDERBILT	-1.07
35	JOHNS HOPKINS	-0.43	23	VIRGINIA	-0.01
45	KANSAS	-0.73	97	VIRGINIA TECH	-1.89
111	KENT STATE	-2.42	14	WASHINGTON	0.45
55	KENTUCKY	-1.01	104	WASHINGTON STATE	-2.05
74	LAVAL	-1.33	40	WASHINGTON U.-ST. LOUIS	-0.64
69	LOUISIANA STATE	-1.23	110	WATERLOO	-2.34
80	LOUISVILLE	-1.47	83	WAYNE STATE	-1.50
88	MANITOBA	-1.61	66	WESTERN ONTARIO	-1.19
53	MARYLAND	-0.92	10	WISCONSIN	0.57
92	MASSACHUSETTS	-1.67	2	YALE	1.63
34	MCGILL	-0.42	100	YORK	-2.01
106	MCMASTER	-2.17			

Revised October 4, 2007

**Principal Component Scores
ARL Expenditures-Focused Index, 2005-06**

Attached is the ARL Expenditures-Focused Index for 2005-06, arranged in alphabetic order. The index scores are rounded to two decimal places, which may give the appearance of identical scores (and thus ranks) for some institutions; in fact, when the complete principal component score is calculated, it is extended to at least five places. Each institution has a unique result and place in the rank order.

The four variables used in the index were determined by multi-year factor analysis of all ARL statistics data as an alternative to the membership criteria index and reflects the investments made in research libraries. This index is composed of four quantitative data elements that are part of the historical data elements in which ARL university libraries most resemble one another and is highly correlated with the membership criteria index. The index does not attempt to measure a library's services, quality of collections, or success in meeting the needs of users. In comparing any individual library to ARL medians or other ARL members, evaluations must always be made within the context of local goals and characteristics.

The index is calculated using four data elements:

- Total library expenditures
- Salaries & Wages Professional Staff
- Total Library Materials Expenditures
- Professionals plus Support Staff

Note: For more information on the ARL Expenditures-Focused Index, see Bruce Thompson's 'Some Alternative Quantitative Library Activity Descriptions/Statistics that Supplement the ARL Logarithmic Index,' October 6, 2006. See: www.arl.org/stats/aboutstats/tnnewways.shtml

**ARL EXPENDITURES-FOCUSED INDEX
Four-variable Formula for ARL Principal Component Score**

Formula for 2005-06 (113 ARL members)

$$\begin{aligned}
& 0.00000006119392015832 \times \text{total library expenditures} \\
+ & 0.00000001806714174886 \times \text{salaries for professional staff} \\
+ & 0.00000001912771226462 \times \text{expenditures for library materials} \\
+ & 0.00000000000058918254 \times \text{total professional plus support staff} \\
- & 1.839521
\end{aligned}$$

Revised October 4, 2007

ARL EXPENDITURES FOCUSED INDEX, 2005-06
 (Based on Four ARL Variables and Analysis of 113 ARL Members)

Rank	Institution	Index	Rank	Institution	Index
91	ALABAMA	-0.74	47	MIAMI	-0.10
27	ALBERTA	0.40	7	MICHIGAN	1.76
33	ARIZONA	0.22	46	MICHIGAN STATE	-0.09
40	ARIZONA STATE	0.04	15	MINNESOTA	0.91
108	AUBURN	-0.91	98	MISSOURI	-0.77
65	BOSTON	-0.39	55	MIT	-0.25
74	BOSTON COLLEGE	-0.53	34	MONTREAL	0.20
43	BRIGHAM YOUNG	-0.08	87	NEBRASKA	-0.66
29	BRITISH COLUMBIA	0.40	70	NEW MEXICO	-0.47
67	BROWN	-0.44	11	NEW YORK	1.12
5	CALIF., BERKELEY	2.27	17	NORTH CAROLINA	0.71
60	CALIF., DAVIS	-0.34	37	NORTH CAROLINA STATE	0.08
75	CALIF., IRVINE	-0.53	36	NORTHWESTERN	0.13
6	CALIF., LOS ANGELES	1.78	56	NOTRE DAME	-0.25
93	CALIF., RIVERSIDE	-0.75	104	OHIO	-0.85
41	CALIF., SAN DIEGO	0.02	22	OHIO STATE	0.54
78	CALIF., SANTA BARBARA	-0.55	61	OKLAHOMA	-0.34
92	CASE WESTERN RESERVE	-0.75	101	OKLAHOMA STATE	-0.80
24	CHICAGO	0.49	103	OREGON	-0.85
49	CINCINNATI	-0.11	20	PENNSYLVANIA	0.63
68	COLORADO	-0.45	8	PENNSYLVANIA STATE	1.64
105	COLORADO STATE	-0.85	31	PITTSBURGH	0.31
3	COLUMBIA	2.39	13	PRINCETON	1.04
44	CONNECTICUT	-0.08	42	PURDUE	-0.07
10	CORNELL	1.16	86	QUEEN'S	-0.65
79	DARTMOUTH	-0.55	85	RICE	-0.62
83	DELAWARE	-0.58	77	ROCHESTER	-0.54
18	DUKE	0.65	28	RUTGERS	0.40
25	EMORY	0.43	90	SASKATCHEWAN	-0.73
35	FLORIDA	0.16	64	SOUTH CAROLINA	-0.38
89	FLORIDA STATE	-0.71	23	SOUTHERN CALIFORNIA	0.53
54	GEORGE WASHINGTON	-0.24	94	SOUTHERN ILLINOIS	-0.76
45	GEORGETOWN	-0.08	109	SUNY-ALBANY	-0.94
52	GEORGIA	-0.15	62	SUNY-BUFFALO	-0.36
110	GEORGIA TECH	-0.98	95	SUNY-STONY BROOK	-0.76
111	GUELPH	-1.00	88	SYRACUSE	-0.68
1	HARVARD	5.83	72	TEMPLE	-0.50
81	HAWAII	-0.57	50	TENNESSEE	-0.13
84	HOUSTON	-0.59	9	TEXAS	1.17
113	HOWARD	-1.12	30	TEXAS A&M	0.36
73	ILLINOIS, CHICAGO	-0.52	57	TEXAS TECH	-0.27
16	ILLINOIS, URBANA	0.79	4	TORONTO	2.32
21	INDIANA	0.54	96	TULANE	-0.77
38	IOWA	0.06	53	UTAH	-0.20
82	IOWA STATE	-0.58	51	VANDERBILT	-0.13
32	JOHNS HOPKINS	0.24	19	VIRGINIA	0.63
58	KANSAS	-0.31	100	VIRGINIA TECH	-0.80
112	KENT STATE	-1.06	14	WASHINGTON	0.97
63	KENTUCKY	-0.38	106	WASHINGTON STATE	-0.85
76	LAVAL	-0.53	26	WASHINGTON U.-ST. LOUIS	0.43
107	LOUISIANA STATE	-0.87	99	WATERLOO	-0.77
71	LOUISVILLE	-0.48	59	WAYNE STATE	-0.32
69	MANITOBA	-0.46	80	WESTERN ONTARIO	-0.56
48	MARYLAND	-0.11	12	WISCONSIN	1.12
97	MASSACHUSETTS	-0.77	2	YALE	3.71
39	MCGILL	0.05	66	YORK	-0.43
102	MCMASTER	-0.84			

Revised October 4, 2007

Statistics FAQ

October 2, 2007

Serials

Q. What prompted the decision to change to counting serial unique titles?

A. The former instructions for reporting serials were that libraries report the total number of subscriptions, not titles, but electronic serials acquired as part of an aggregated package (such as MUSE or IDEAL) were to be counted by title. Directors and other staff have expressed concern that the serials count was problematic since many libraries engaged in multiple consortia arrangements were reporting multiple subscriptions to the same titles. The Statistics and Assessment Committee determined that a new way of counting serials focusing on titles would provide better descriptive data reflecting the true scope of the content provided by research libraries. In the electronic environment once you own a title, it is accessible by all your users so a more authentic descriptive statistic for the scope of the content is titles rather than subscriptions. A unique title count favors broader coverage. Duplication of those titles through packages, aggregations, bundles, etc. is more a management issue.

Q. What is meant by deduplication?

A. Deduplication means to count each title only once. If a title appears in both print and electronic and a library has acquired it through several different providers, it would still be counted as one title.

Deduplication also applies to reporting titles across libraries. If, for example, a member has law, medical, and main libraries, the titles should be deduplicated across those libraries. Report unique titles to law, report unique titles to medical, and report the remaining unique titles to main.

Q. Why is electronic version of a serial considered the primary version?

A. It is expected that as serials move to electronic form and become the version of record, a count for electronic titles is more reflective of what is important to our users.

Q. Is there a difference in counting a serial title for which we have an extensive run or those for which we have current issues only?

A. No, all titles are counted equally.

Q. How should we count bundles/packages/aggregations?

There are a variety of ways electronic serials can be provided:

- Electronic journal is single paid subscription (i.e., has no print counterpart)
- Electronic journal comes free with a paid print subscription
- Electronic journal costs extra with a paid print subscription
- Electronic journal is part of an aggregated package purchased by the library

- Publisher or third-party package in which all titles are available in full
- Publisher or third-party package in which not all titles are available in full
- Electronic journal is part of a package purchased by the library in collaboration with other parties (other campus libraries, local consortium, regional network, etc.)
 - Publisher or third-party package in which all titles are available in full
 - Publisher or third-party package in which not all titles are available in full

In all cases, each unique title is counted only once and if available in both print and electronic, it should be reported as electronic.

Q. Within an aggregation/bundle/package, can we count a ceased title?

A. Yes, as long as the title is being purchased with current funds.

Q. Within a currently purchased (perhaps through consortia) aggregation/bundle/package, can we count a title we previously held but subsequently unsubscribed?

A. Yes, as long as the title is being purchased with current funds.

Q. How do we count titles that are received free along with paid titles?

A. If you cannot separate the purchased and not purchased component, all titles may be reported as paid titles.

?Q. How do we count successive entry titles?

A. Within aggregations, each title is counted as a unique title.

?Q. How do we count ceased electronic titles since they will never be bound?

A. Unless your catalog or serial records can distinguish them and as long as access is still being provided, they can be counted as received but not purchased titles.

Q. How should we count embargoed titles?

A. If the title is currently purchased, it would be counted as a unique electronic title. If the title is available in print and embargoed electronic, it would still be one electronic title.

Q. Can JSTOR titles be counted?

A. Yes, the serial title count should include unique serial titles currently purchased. If there is an ongoing expenditure for JSTOR, the titles can be purchased (it can be expected that many of these titles will duplicate held print versions).

Q. Can titles included in full-text indexing and abstracting services be counted?

Yes, if payments are currently made to acquire the indexing and abstracting service the titles included in these services can be counted as unique titles.

Q. Can open access titles be counted?

A. Yes, if records for the titles are included in the library's catalog. The titles would be counted as received, not purchased.

Q. How should databases acquired through standing orders be counted?

A. Databases that do not include full-text titles would be counted as one (e.g., Gale, ABC Clío).

Q. What will be the relationship between unique titles and serials expenditures?

A. That is not known at this time. The current time series is not expected to be maintained. Upon analysis of this year's data, relationships between the data will be determined.

Monographs

Q. How are electronic books to be counted?

A. Count those e-books owned by and for which there is a catalog record in the library catalog.

Q. How do we count government documents that are held in federal depositories?

A. If there are records in your catalog, you may count them as volumes held (they are open access titles).

?Q. Can we count those titles in our catalog that are for collections we do not own, but to which we provide access (CRL, international or local partners)?

A. No.

Integrating Resources

Q. How should we count integrating resources?

A. Since integrating resources are relatively new, our definitions for them are still not firm. In general, however, one-time purchases should be counted as monographs and continuing purchases should be considered serials.

Expenditures

Q. How do we count one-time payments for backfiles?

Attachment b3

A. There is no change in the instructions. Backfile payments should be recorded as other library materials (15c).

Q. What capital expenditures can be included in operating expenditures (19)?

A. Temporarily reallocated funds from other budget lines during a specific fiscal year may be included as operating expenditures. One-time capital expenditures like a major renovation or a new building should not be included

Expenditures-Focused Index

Q. Will the definition for professional staff used to construct the expenditures-focused index be tightened?

A. No, the current definition works across many ARL institutions in a satisfactory fashion and it correlates highly with all the expenditures figures included in the Expenditures-Focused Index. The Expenditures-Focused Index was determined through factor analysis of all the ARL Statistics variables and it led to the inclusion of four variables: total expenditures, expenditures for library materials, expenditures for professional staff and professional plus support staff. The Expenditures-Focused Index correlates highly with the ARL Membership Criteria Index.

Areas for building a profile of research library characteristics

Excerpt from report by Yvonna Lincoln in "Research Libraries as Knowledge Producers: a Shifting Context for Policy and Funding" Final Technical Report to the Task Force on New Ways of Measuring Collections, Association of Research Libraries

Those services, preservation and digitization efforts, and collection issues which they felt might be most amenable to metric development included:

- evidence of flexibility, "agility," and "fluidity" of resources
- evidence of engagement with external development and fundraising efforts, especially in order to enhance flexibility of fiscal resources
- shifts in staff skills in hiring and professional development
- the addition of data collection, analysis and management personnel, who can demonstrate conclusively who is using the library and what resources are being utilized
- evidence of connections with teaching faculty to design coursework, identify new materials (particularly primary resources), and design of assessments of student learning targeted to the new materials and teaching forms
- evidence of consortial arrangements
- unique collections, and artifacts, artwork, decorative objects, and other materials not normally classified as part of the overall collections. "Uniqueness" of holdings is, they felt, likely to become more, not less, important in the future, and so metrics which take account of non-text and non-digital "objects" should be included.
- the attention to bringing online previously uncatalogued historical holdings, documents and other "hidden collections"
- innovative administrative and budgetary efficiencies
- some contributions to faculty productivity
- the creation of social frameworks and various intellectual networks, however that is accomplished, and
- space reallocations and redesign which create new forms of working space for new forms of both student and faculty work.

Metrics which they did not feel were, or could be yet, captured well, if at all, even with narrative description included:

- creating the collective, "public" good while preserving and reusing assets
- generating new knowledge
- aiding and abetting diversification of the student body
- demonstrating the library's contributions to student outcomes, student learning, and/or graduate success. Although no one said so directly, the deans and directors intuitively know that this is a causal chain which is extremely fragile and tenuous, and they have too little data to even begin to hazard a guess here.

ARL Statistics and Assessment

Review of 2007 Activities, Projects and Priorities as of October 2007

Areas of activity	Underway and Planned	Accomplished in 2007
<p>1. Statistics and Assessment Committee</p>	<ul style="list-style-type: none"> • Statistics and Assessment follow up activities to the ARL Board/Task Force recommendations including calculation of alternative quantitative indices and planning additional qualitative work. • Revise the annual ARL statistics surveys and definitions. Identify action items such as changing the “number of electronic journals purchased” to the “number of unique (i.e., de-duplicated) electronic serials titles received” and modifying “Volumes Held Collectively” to include not only volumes withdrawn from the local collection, but also those volumes for which the cost was shared at the time of purchase. Clarify terminology for including capital expenditures. • Pilot testing of new definitions for ARL Statistics. • Pilot testing of qualitative data collection for describing research library contributions. • Celebrating 100 years of ARL Statistics. • Sustain communication with liaisons to external organizations such as ALA, NISO, SCOUNL and LIBER. 	<ul style="list-style-type: none"> • Task Force on New Ways of Measuring Collections recommendations informed by consultants’ reports about alternative quantitative and qualitative metrics accepted by ARL Board. Presented Task Force recommendations and Statistics Committee implementation plan to ARL membership at May meeting • Calculated ARL expenditures-focused index and provided it to the membership. • Provided ARL expenditures-focused index to the Chronicle of Higher Education in lieu of ARL Membership Criteria Index. Recalculated tables in October. • Statistics and Assessment Committee discussed Task Force on New Ways of Measuring Collections recommendations and developed Implementation Plan. • Provided a framework for the tools currently available, goals and cycle of operation as requested by the Committee as the ARL Assessment Toolkit. • Scheduled workshops as well as December 4, 2007 webcast to review definitions for collecting statistics, particularly serials counts and expenditures. • Presented implementation plan at the ARL

Accomplishments since May 2007 ARL Membership Meeting noted in purple.

Statistics and Assessment • Review of 2007 Activities, Projects and Priorities as of October 2007

<i>Areas of activity</i>	<i>Underway and Planned</i>	<i>Accomplished in 2007</i>
<p>2. StatsQUAL™ A gateway to library assessment tools</p>	<ul style="list-style-type: none"> • Continue development of the gateway for the integrated StatsQUAL™ platforms (ARL Statistics and migration of LibQUAL+® in the new environment by January 2008, testing of LibQUAL+® Lite). • Planning new languages in LibQUAL+® for 2008: Japanese, Spanish, Estonian; planning new types in LibQUAL+® for 2008: European Parliament, National Library of Estonia, French and Swiss academic libraries. • Analyze DigiQUAL™ data to determine how they are being used by UTOPIA and other digital libraries. • Administer MINES for Libraries™ at the University of Iowa (2007-2010); at the University of Macedonia, Thessaloniki, Greece (2007-2008); presentation at Rutgers University (July 1, 2007); explore a global solution to EZproxy for MINES for Libraries™. 	<p>Business Meeting in May and ARL Survey Coordinators meeting in June.</p> <ul style="list-style-type: none"> • <i>LibQUAL+® data collected from more than 150,000 library users across 218 institutions from January to May 2007; awarded four in-kind grants for 2008: Arkansas State University Mountain Home, Norma Wood Library; The College of the Bahamas Library System; Meharry Medical College Information Center Library; University of Dallas, William A. Blakley Library.</i> • Tested LibQUAL+® Analytics – a tool for libraries to mine their institutional LibQUAL+® data across user groups and across time identifying trends in service quality ratings and implemented changes resulting from the January to May testing period. • Organized LibQUAL+® international events in the UK and South Africa. • Presented findings from DigiQUAL™ at the Northumbria Conference on Performance Measurement and Metrics. • Developed a two-year technology roadmap to plan for the next generation of technology that will support the StatsQUAL™ and LibQUAL+® activities. • Revised ARL Statistics data entry interface to allow comparison of changes from year to year

Statistics and Assessment • Review of 2007 Activities, Projects and Priorities as of October 2007

<i>Areas of activity</i>	<i>Underway and Planned</i>	<i>Accomplished in 2007</i>
2. StatsQUAL™, continued.		<p>and more control over the final data submission by the local ARL institutions.</p> <ul style="list-style-type: none"> • Working on new interface to incorporate changes in the ARL Statistics 2006-2007 survey. • Initiated MINES for Libraries™ at the University of Iowa; drafted contract with the U. of Macedonia (Greece); produced MINES brochure; met with EZ proxy developer, Chris Zagar, to explore the application of MINES through EZ proxy. • Service Quality Evaluation Academy held in New Orleans with Colleen Cook, Dawn Thistle and Bruce Thompson.
3. Effective, Sustainable and Practical Assessment	<ul style="list-style-type: none"> • Implications for future assessment activities to be reviewed by Statistics and Assessment Committee and the Steering Committee for Research, Teaching and Learning. • Proceedings from the Library Assessment Conference in Thessaloniki, Greece, June 2005, to be published in both bilingual and monolingual editions. • Library Assessment Conference planned to take place at the University of Washington August 4 through 6, 2008. • “Valuation and Evaluation: International Developments in Library Assessment” conference planned as an IFLA post conference in Montreal on August 18 and 19, 	<ul style="list-style-type: none"> • Visiting Program Officers Jim Self (Virginia) and Steve Hiller (Washington) continue to work with six libraries: <ul style="list-style-type: none"> - U. of Miami, - U. of North Carolina Chapel Hill, - U. of Idaho, - U. of Cape Town, - U. of North Carolina Greensboro, - U. of South Carolina in 2007 implementing “Effective, Sustainable and Practical Assessment.” • A review of the “Effective, Sustainable and Practical Assessment” Service is offered in a paper presented at the Library Assessment conference and more recently at a second paper at the Evidence-Based Library and Information Practice conference.

Statistics and Assessment • Review of 2007 Activities, Projects and Priorities as of October 2007

	2008.	<ul style="list-style-type: none"> Cancelled Montreal event due to a conflict with another IFLA post-conference.
Areas of activity	Underway and Planned	Accomplished in 2007
3. Effective, Sustainable and Practical Assessment, continued.	<ul style="list-style-type: none"> Operating libraryassessment.info blog. Hosting Library Assessment Forum meetings in conjunction with ALA meetings. Planning a meeting for ARL Library Assessment Professionals in conjunction with ALA midwinter in Philadelphia on January 11, 2008. 	<ul style="list-style-type: none"> Proceedings from the Charlottesville conference published. Library Assessment Conference website is under libraryassessment.org; conference planning committee was established and finalized call for proposals; call for proposals was issued.
4. Human Resources	<ul style="list-style-type: none"> National Study on the Future of Librarians in the Workforce has started collecting data. ARL staff is contributing to survey design, methodology, and dissemination. ARL is one of several partners collaborating with UNC-Chapel Hill School of Information and Library Science. ARL representatives serving on the project Advisory Board are: <ul style="list-style-type: none"> - Carla Stoffle (Arizona), - Gary Strong (UCLA), - John Price Wilkin (Michigan), and - Martha Kyrillidou (ARL) <i>and on Statistical - Advisory Board.</i> Annual Salary Survey 2005-2006 collected additional demographic data currently being analyzed by Stanley Wilder (Rochester). Currently collecting data for ARL Annual 	<ul style="list-style-type: none"> The Academic Library Survey part of the National Study on the Future of Librarians planned to launch in May 2007. "The New Library Professional" by Stanley Wilder (Rochester) was published in the Chronicle of Higher Education on February 23, 2007; Wilder's article "The ARL Youth Movement" to appear in ARL BMR #254. The ARL Annual Salary Survey print publication is being reprinted due to incorrect data for Beginning Salaries for Law and Health Science libraries. OCDA (Organizational Climate and Diversity Assessment) data are currently being analyzed and institutional reports being prepared. A partners' meeting is taking place on Oct 9; a

Statistics and Assessment • Review of 2007 Activities, Projects and Priorities as of October 2007

	Salary Survey 2007-2008 using a new web data submission interface.	call for proposals for participation in 2008 is underway; branding of OCDA under the StatsQUAL™ platform is underway.
Areas of activity	Underway and Planned	Accomplished in 2007
4. Human Resources, continued.	<ul style="list-style-type: none"> OCDA (Organizational Climate and Diversity Assessment) survey currently taking place as a pilot across five ARL libraries: Arizona, Connecticut, Iowa, Kansas, and Texas A&M. ARL established a data ownership agreement with the University of Maryland to implement an organizational development and diversity climate survey across a group of ARL libraries. Initial presentation of aggregate results took place June 25, 2007. 	
5. E-Metrics	<ul style="list-style-type: none"> Monitor developments within NISO regarding the development of SUSHI. Monitor developments with Project COUNTER, the ScholarlyStats project, and other external efforts aiming at the development of decision support systems for libraries. 	<ul style="list-style-type: none"> Web Development with XML workshop offered on May 21-24 in collaboration with Amigos and seasoned XML developers from the libraries of Brown University, the University of Virginia, and the Virginia Foundation for the Humanities. Survey coordinators meetings addressed developments in counting usage of electronic resources with a presentation from Nancy Turner (Syracuse) on "E-Metrics Services and ARL Statistics" in January http://www.libqual.org/documents/admin/NancyTurner.ppt and a follow up presentation by Robert C. Ferguson (Washington State) in June.



MINES for Libraries™

Use MINES for Libraries™ to find out which specific electronic resources are being used, users' demographic characteristics, location at time of use, and their purpose of use.

Measuring the **I**mpact of **N**etworked **E**lectronic **S**ervices (MINES for Libraries™, or MINES) is an online, transaction-based survey that collects data on user demographics and the purpose of use of electronic resources. It is a point of use survey technique that integrates usage data about subscription resources with usage data about non-subscription resources such as digital collections, open access journals, pre-print and post-print servers, and institutional repositories, to give an inclusive picture of the library's supported networked electronic resources. MINES is a valid and reliable method for assessing networked electronic resources usage.

MINES employs a Web-based user survey methodology that "mines" digital content usage to determine users' demographics, location of virtual library use, and purpose of use. A short survey, as few as 3-5 questions, is delivered at the point of use of an e-journal, database article, or digital collection or service. With this single tool, libraries can measure the use of commercially available digital content, electronic resources served via consortial arrangement or portals, and digital collections mounted on library servers.

MINES collects valid survey data not available through vendor-supplied statistics, and can help libraries understand more about their networked electronic resources' usage. It can help determine who is using the resources by status (e.g., undergraduate) or by affiliation (e.g., School of Business). Knowing the locations from where networked services are being used enables librarians to plan user support services accordingly. Determining purpose of use permits academic librarians to identify which category of electronic resources contribute most to their institutions' primary missions of instruction/education, funded research, patient care, public service, and other activities. The survey is valuable in the refinement of collection development and service decisions. MINES provides reliable data to help librarians and administrators assess the impact of digital resources and services.

MINES addresses the need for libraries to demonstrate outcomes and library contributions to teaching, learning, and research. MINES is managed by the Association of Research Libraries (ARL), which has a long-standing role in the development and application of performance measures, statistics, and management tools.

With **MINES for Libraries™** you can:

- Measure the value and impact of digital content
- Determine how specific user populations apply digital content to their work, based on demographic and purpose of use analyses
- Identify where library use originates in the networked environment and tailor services accordingly
- Gather digital collections use data to justify increased funding for digital content, to make more informed collection development decisions and to better justify collection management choices
- Assign a monetary value for the amount of an academic library's networked service costs that support funded research, instruction, patient care, public service, and other activities
- Assert the impact of networked electronic resources and services on teaching, learning, and research



"In the print environment, online public access catalogs provided only limited management information about circulating materials. In-house library collections usage statistics were unreliable. Journal use surveys, based on self-reported checklists or re-shelving counts, were unconvincing. In truth, we never completely understood how print collections were used. The digital content environment affords libraries unprecedented opportunities to measure, assess, and analyze networked services use."

Brinley Franklin, Vice Provost for University Libraries, University of Connecticut, MINES co-developer



How does **MINES for Libraries™** work?

Each participating library or consortium has some options in the method of implementation. MINES is a Web-based transactional survey that is presented to the user as the first digital resource is selected for viewing. Users are only queried once per online session, while data is tracked to reflect the use of multiple resources. The MINES protocol recognizes and addresses the problem of non-respondents to Web surveys and represents a random sample, allowing institutions to make inferences about the population. Ideally, the survey is administered in real time over the course of a year in periodic two hour time blocks using a random moments sampling plan, however different time periods can be utilized.

MINES requires brief responses from users on 3-5 questions:

- Status and affiliation of user
- Purpose of use (instruction, research, etc.)
- Other local questions are optional

Data collected automatically by the MINES protocol includes:

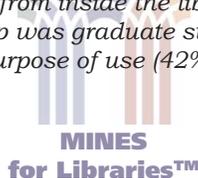
- IP (or location value based on IP)
- Date and time
- The target resource(s), e.g., specific ejournal(s) or database(s) used

The participating library or consortium is responsible for implementing the survey's technical infrastructure, so that a comprehensive sampling plan can survey all electronic services users, regardless of their point of entry (OPAC, Library Web, etc.). ARL will provide advice and recommendations for setting up the library's assessment infrastructure to increase the number of potential survey respondents. Some successful local assessment infrastructures have included IP validating scripts, scripts generating links for databases and journals, and OpenURL technologies. Two of the more comprehensive assessment infrastructures involve placing the survey at the campus router or using EZproxy*, a widely adopted, re-writing proxy server. Any library running EZproxy can locally implement an application that presents the MINES survey to networked users as they initiate a session and captures networked services usage both locally and remotely during the sampled time periods.

ARL will provide advice on the local setup and local questions, validate and analyze the data, and prepare a final report. At the conclusion of the survey period, the library or consortium will receive an analysis that provides insights on the impact of networked electronic services by analyzing the use of digital resources and identifying the demographics and purpose of use. In addition to a final printed report, a Web analysis interface is also available.

The fee for MINES for Libraries™ ranges from \$7,000 to \$15,000 per year, depending on the nature of the implementation (length of time) and the final report (Web, print or both) options.

MINES has been administered at 40 North American libraries since 2003, and more than 100,000 networked services uses have been surveyed. According to a sample of the findings, at main libraries in the U.S. 64% of over 25,000 uses surveyed were by remote users, outside the library; this percentage rose to almost 80% for academic health sciences library uses. The highest digital resources usage from inside the library was by undergraduates 43%; outside the library, but still on campus, the largest user group was graduate students (40%). In a sample from a large academic consortium, coursework was the most common purpose of use (42%), followed by sponsored research (26%).



For additional information, link to:

<http://minesforlibraries.org>

To inquire about MINES contact:

Martha Kyrillidou, Director
ARL Statistics and Service Quality Programs
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Tel: 202-296-2296

MINES for Libraries™ has been developed by Brinley Franklin, Vice Provost for University Libraries, University of Connecticut and Terry Plum, Assistant Dean for Technology and Director of the Simmons Graduate School of Library and Information Science at Mount Holyoke College. MINES is part of the Association of Research Libraries (ARL) StatsQUAL™ toolkit, including LibQUAL+® and DigiQUAL+™

*EZproxy is authored by Chris Zagar, Useful Utilities, www.usefulutilities.com.