

sharing information like consortial purchasing, collaborative remote storage, and collaborative purchasing have emerged. We have a challenge in how we measure such concepts.

Key aspects of collaborative relations may be described only in qualitative terms in the future. For example, in the recently published commemorative volume of ARL's 75<sup>th</sup> anniversary, *Celebrating Research*, the editors include library overviews and profiles for the rare and special collections available for use in research libraries.<sup>15</sup> The ARL Statistics and Assessment Committee members are moving forward with the challenge of constructing profiles for entire research libraries and rendering them as succinct descriptions that will be analyzed to determine the elements of standardized ways for measuring research libraries in both qualitative and quantitative terms.

The complexity of research libraries in the digital future is hard for us to capture in the beginning of the 21<sup>st</sup> century. We seek to define new ways for describing research libraries that will have the enduring value that has historically characterized the ARL Statistics.

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<sup>15</sup> Philip N. Cronenwett, Kevin Osborn, Samuel A. Streit, eds., *Celebrating Research: Rare and Special Collections from the Membership of the Association of Research Libraries* (Washington DC: ARL, 2007), <http://www.celebratingresearch.org/>.

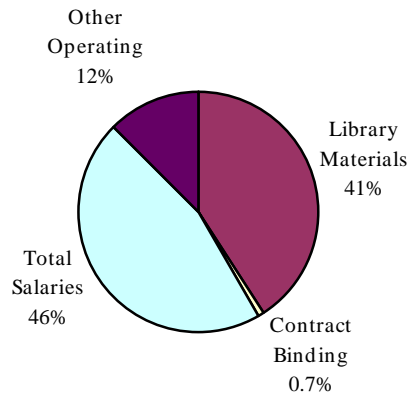
## RESEARCH LIBRARY TRENDS

*ARL Statistics 2005-06* is the latest in a series of annual publications that describe collections, staffing, expenditures, and service activities for the 123 members of the Association of Research Libraries (ARL). Of these, 113 are university libraries; the remaining 10 are public, governmental, and nonprofit research libraries. ARL member libraries are the largest research libraries in North America, representing 16 Canadian and 107 U.S. research institutions. The academic libraries, which comprise about 92% of the membership, include 14 Canadian and 99 U.S. libraries.

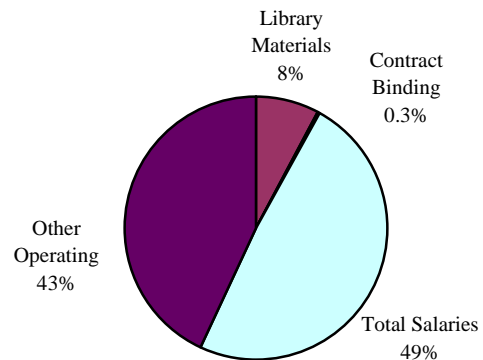
Statistics have been collected and published annually for the members of the Association of Research Libraries since 1961-62, and the data are available through an interactive Web interface. Prior to 1961-62, annual statistics for university libraries were collected by James Gerould, first at the University of Minnesota and later at Princeton University.<sup>16</sup> These data, covering the years 1907-08 through 1961-62, are now called the Gerould statistics.<sup>17</sup> The whole data series from 1908, which is available on the ARL FTP server,<sup>18</sup> represents the oldest and most comprehensive continuing library statistical series in North America.

ARL libraries are a relatively small subset of libraries in North America, but they do account for a large portion of academic library resources in terms of assets, budgets, and the number of users they serve. The total library expenditures of all 123 member libraries in 2005-06 was more than \$3.7 billion; from that, roughly \$2.84 billion was spent by the 113 university libraries and more than \$866 million by the nonuniversity libraries. The pie charts below show how the two types of libraries divide these expenditures differently.

**University Libraries**



**Nonuniversity Libraries**



<sup>16</sup> Kendon L. Stubbs and Robert E. Molyneux, *Research Library Statistics 1907-08 through 1987-88* (Washington, DC: ARL, 1990).

<sup>17</sup> Robert E. Molyneux, *The Gerould Statistics 1907/08 – 1961/62*. (Washington, DC: ARL, 1986), <http://fisher.lib.virginia.edu/gerould/>.

<sup>18</sup> <http://www.arl.org/stats/arlstat/mrstat.html>.

**Table 1**  
**Service Trends in ARL Libraries, 1991-2006**  
**Median Values for Time-Series Trends**

Year	ILL: Borrowed	Group Pres.	Participants In Pres.	Reference Trans. <sup>19</sup>	Initial Circ.	Total Circ.	Ratio of Init./Tot.	Total Staff	Total Students
(Libraries)	(103)	(84)	(82)	(79)	(36)	(80)	(34)	(105)	(103)
1991	10,397	508	7,137	125,103	296,964	509,673	1.26	271	18,290
1992	11,362	526	7,154	132,549	342,989	554,579	1.27	265	18,273
1993	12,489	616	7,688	136,115	343,293	568,628	1.32	262	18,450
1994	14,007	568	7,831	147,582	369,996	572,749	1.31	264	18,305
1995	14,472	687	8,461	147,023	347,144	578,989	1.32	267	18,209
1996	15,278	719	8,410	155,336	336,481	560,244	1.39	264	18,320
1997	16,264	687	9,218	149,659	348,157	542,438	1.37	273	18,166
1998	17,656	698	9,462	132,850	354,924	514,574	1.37	273	18,335
1999	18,942	711	9,406	128,696	300,923	514,087	1.38	277	18,609
2000	20,475	722	9,596	115,636	273,231	482,542	1.42	267	18,908
2001	21,902	669	10,121	104,409	265,195	467,277	1.48	269	19,102
2002	21,339	776	11,350	95,910	251,146	462,223	1.51	279	19,925
2003	22,146	806	12,516	89,150	248,689	479,733	1.57	277	21,132
2004	25,737	757	12,864	84,546	261,526	496,369	1.60	273	21,562
2005	25,729	803	13,782	65,168	250,971	473,216	1.58	267	22,047
2006	27,412	833	13,051	67,697	267,213	466,403	1.52	267	22,618
Avg annual % change	6.2%	3.1%	3.8%	-3.8%	-0.7%	-0.6%	1.2%	-0.1%	1.3%

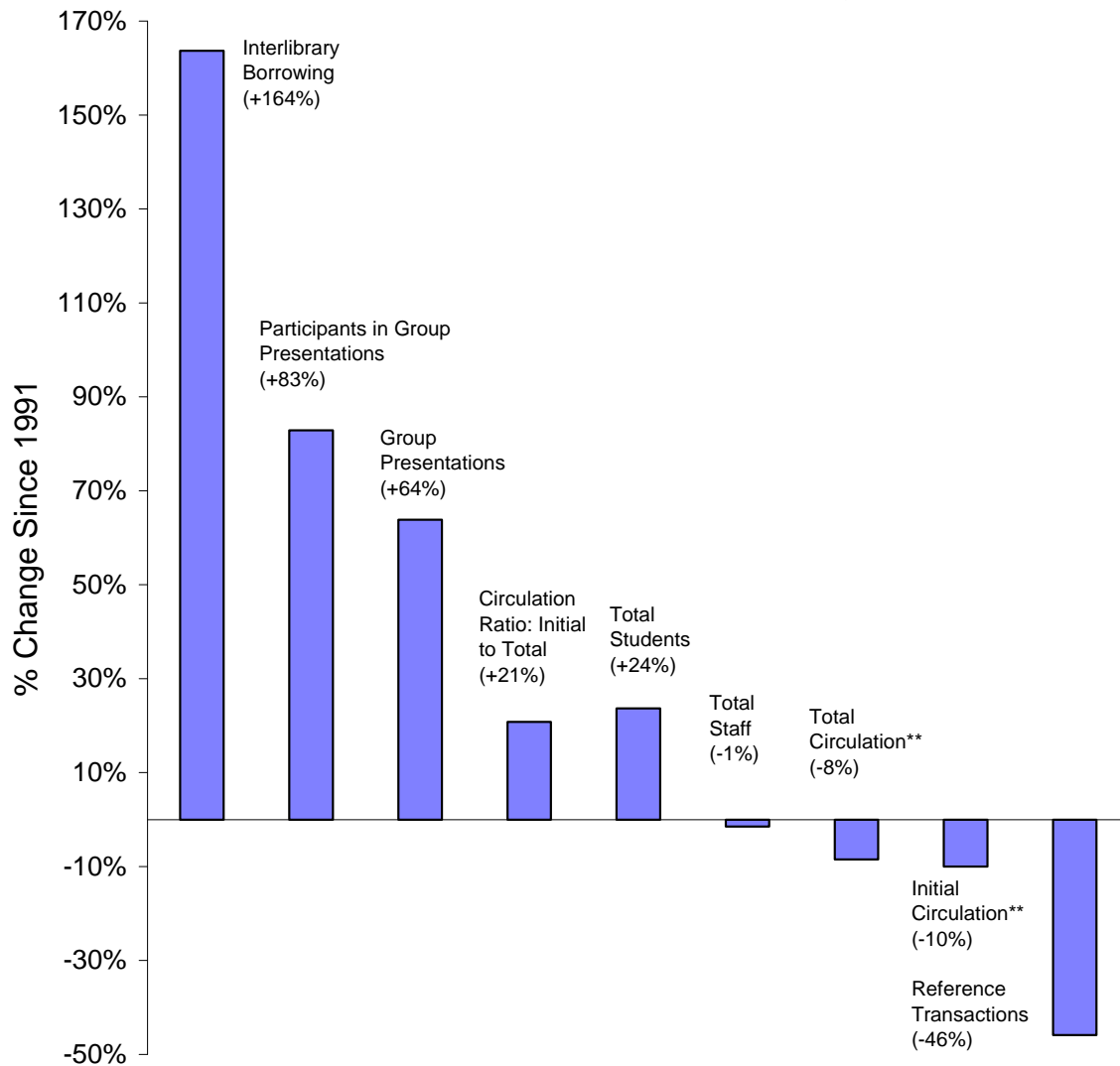
Table 1 presents data about select public service activities such as circulation (initial and total), reference transactions, library instruction (group presentations and participants in these presentations), and interlibrary borrowing and lending.

As seen in Graph 1, for the third time in the last five years, the median of group presentations increased to a record high, with 833 in 2005-06. Meanwhile, the number of participants in those presentations has leveled off at just over 13,000 participants for the typical research library. Perhaps of most interest that by 2006, about 45% of the presentations conducted in a typical ARL library had been added since 1991.

<sup>19</sup> Time series for Reference Transactions revised due to unavailable data.

Graph 1

## Service Trends in ARL Libraries, 1991-2006



\*\* Total Circulation includes Initial and Renewals but excludes Reserve Circulation

Source: *ARL Statistics 2005-06*, Association of Research Libraries, 2007

**Table 2**  
**Median Monograph and Serial Costs in ARL Libraries, 1986-2006**  
**Median Values for Time-Series Trends<sup>20</sup>**

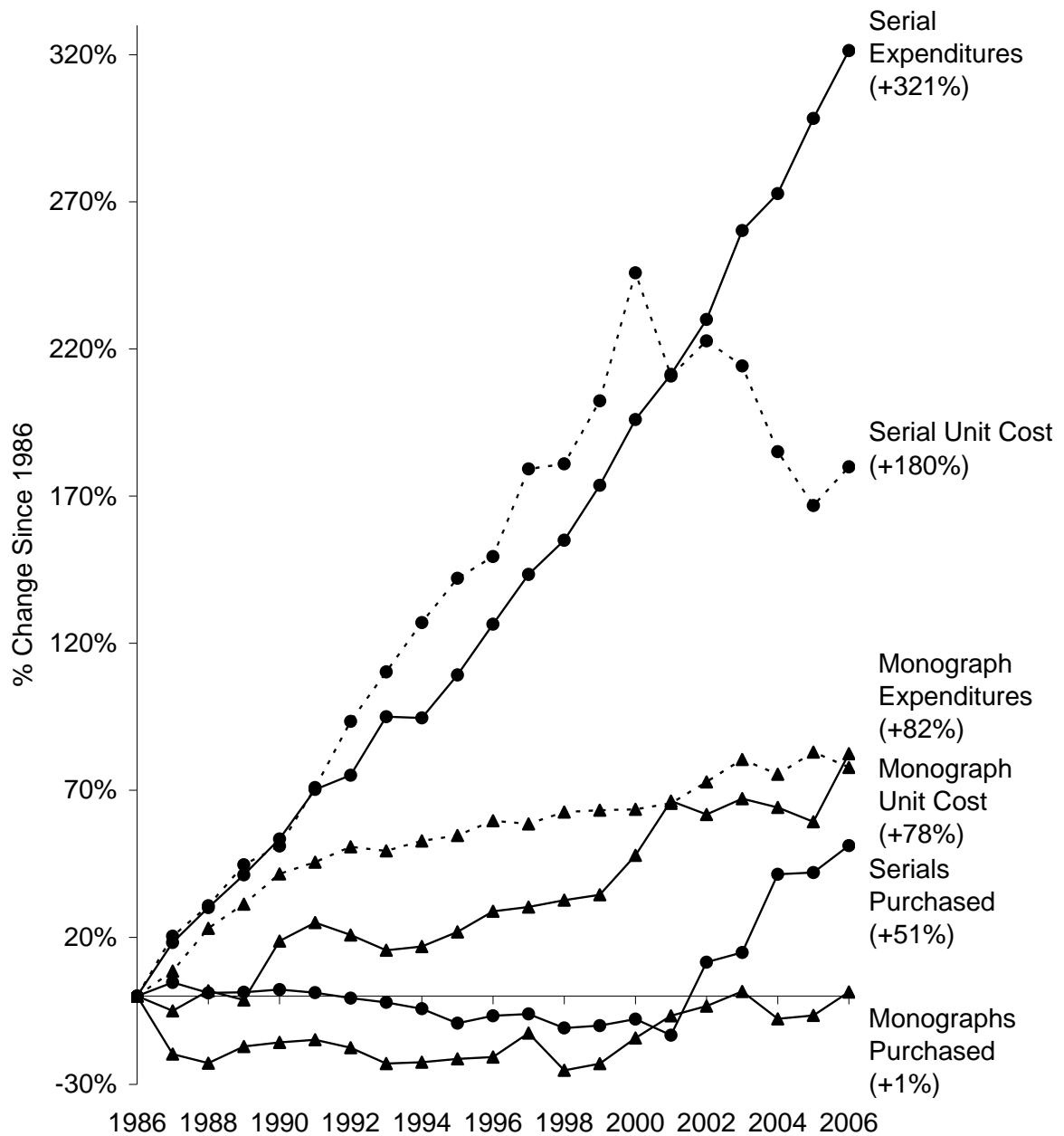
Year	Serial Unit Cost	Serial Expenditures	Monograph Unit Cost	Monograph Expenditures	Serials Purchased	Monographs Purchased
(Libraries)	(36)	(100)	(57)	(97)	(36)	(58)
1986	\$89.81	\$ 1,496,775	\$ 29.28	\$ 1,120,645	15,775	32,679
1987	\$108.12	\$ 1,769,960	\$ 31.76	\$ 1,064,484	16,514	26,240
1988	\$117.41	\$ 1,947,559	\$ 36.03	\$ 1,141,226	15,948	25,238
1989	\$129.95	\$ 2,113,976	\$ 38.44	\$ 1,106,073	15,983	27,082
1990	\$135.61	\$ 2,296,910	\$ 41.44	\$ 1,330,747	16,128	27,546
1991	\$153.46	\$ 2,548,687	\$ 42.60	\$ 1,400,738	15,962	27,843
1992	\$173.69	\$ 2,620,832	\$ 44.14	\$ 1,353,865	15,673	26,947
1993	\$188.79	\$ 2,918,569	\$ 43.74	\$ 1,295,807	15,441	25,188
1994	\$203.87	\$ 2,912,495	\$ 44.72	\$ 1,309,807	15,099	25,341
1995	\$217.38	\$ 3,131,033	\$ 45.27	\$ 1,365,575	14,320	25,707
1996	\$223.98	\$ 3,389,118	\$ 46.73	\$ 1,444,015	14,723	25,911
1997	\$250.74	\$ 3,642,541	\$ 46.42	\$ 1,460,234	14,820	28,576
1998	\$252.28	\$ 3,816,497	\$ 47.59	\$ 1,486,764	14,063	24,447
1999	\$271.51	\$ 4,095,934	\$ 47.78	\$ 1,506,651	14,192	25,173
2000	\$310.62	\$ 4,430,812	\$ 47.87	\$ 1,657,349	14,541	28,024
2001	\$279.07	\$ 4,660,349	\$ 48.48	\$ 1,864,023	13,682	30,494
2002	\$289.84	\$ 4,939,225	\$ 50.61	\$ 1,812,826	17,594	31,578
2003	\$282.20	\$ 5,392,007	\$ 52.83	\$ 1,873,157	18,115	33,208
2004	\$256.01	\$ 5,580,157	\$ 51.36	\$ 1,839,412	22,311	30,155
2005	\$239.58	\$ 5,962,446	\$ 53.57	\$ 1,784,841	22,404	30,546
2006	\$ 251.38	\$ 6,307,292	\$ 52.04	\$ 2,044,272	23,849	33,145
Avg annual % change	5.3%	7.5%	2.9%	3.1%	2.1%	0.1%

Serial unit costs have been increasing much faster than inflation for almost two decades, as is detailed in Table 2 and Graph 2. For the third year in a row, the unit cost of serials declined and more and more serial subscriptions became available to libraries.

In informal conversations held with some ARL libraries, it seems that the inclusion of electronic serials in the counts of serial subscriptions purchased caused an increase in purchased serials—often, for a relatively small addition to the base subscription price, some publishers provide access to electronic resources for an additional 10 or 20% surcharge. Such arrangements played a role in the revision of the serial-counting practices in the ARL Statistics (see “From Serial Subscriptions to Serial Titles,” above).

<sup>20</sup> Time series for Serials Expenditures, Monograph Expenditures, Monographs Purchased, and Monograph Unit cost were revised due to unavailable data.

Graph 2  
**Monograph and Serial Expenditures**  
**in ARL Libraries, 1986-2006\***



Source: ARL Statistics 2005-06, Association of Research Libraries, Washington, D.C.

\*Includes electronic resources from 1999-2000 onward.

**Table 3**  
**Supply and Demand in ARL Libraries, 1986-2006**  
**Median Values for Time-Series Trends<sup>21</sup>**

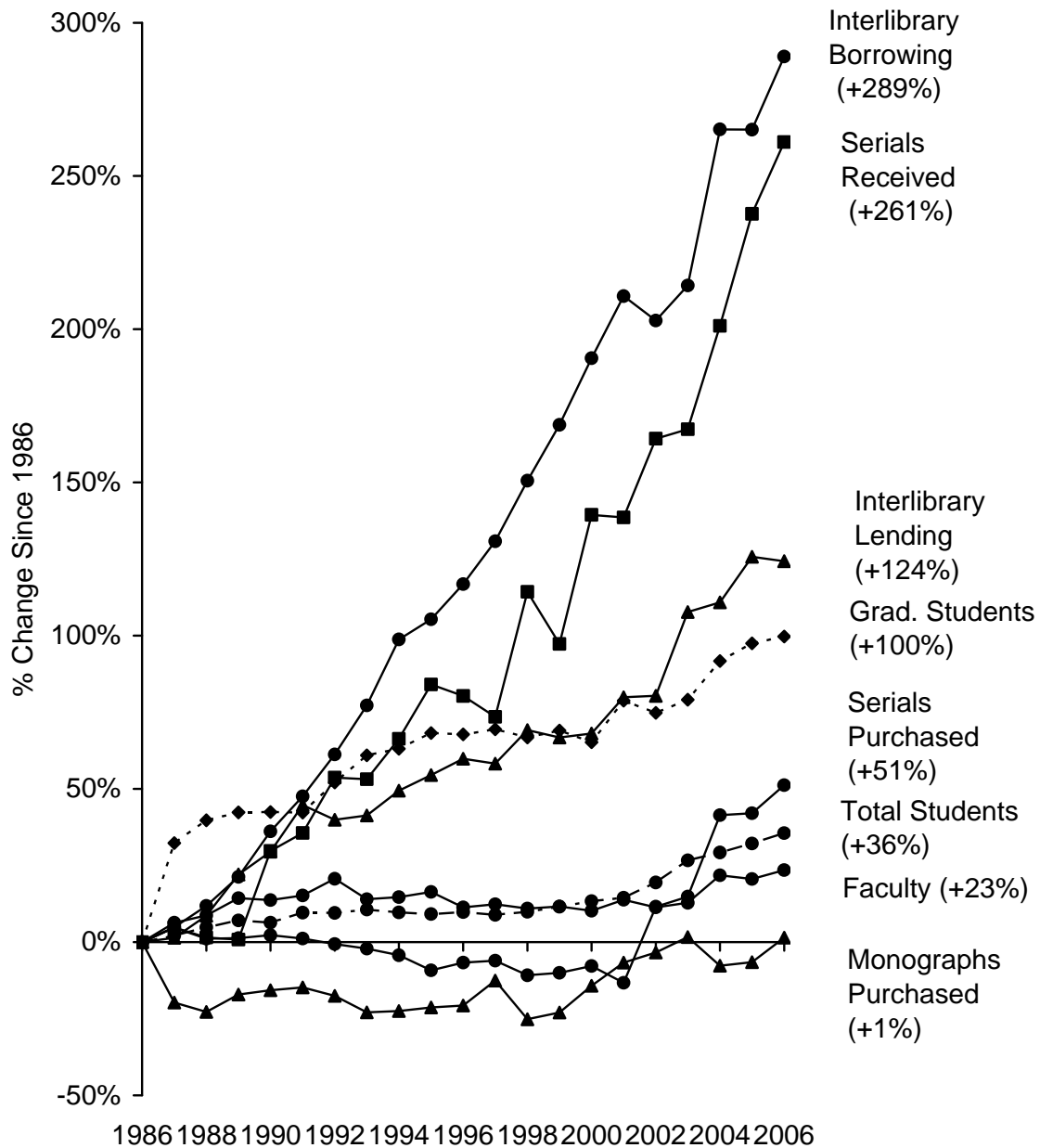
Year	ILL: Borrowed	ILL: Lended	Graduate Students	Teaching Faculty	Total Students	Serials Purchased	Serials Received	Monographs Purchased
(Libraries)	(103)	(103)	(104)	(101)	(103)	(36)	(36)	(58)
1986	7,047	16,092	2,327	1,124	16,684	15,775	3,318	32,679
1987	7,387	16,318	3,078	1,195	17,029	16,514	3,477	26,240
1988	7,881	17,476	3,251	1,222	17,485	15,948	3,367	25,238
1989	8,547	19,638	3,312	1,285	17,866	15,983	3,345	27,082
1990	9,595	20,837	3,314	1,278	17,745	16,128	4,304	27,546
1991	10,397	23,285	3,310	1,295	18,290	15,962	4,500	27,843
1992	11,362	22,514	3,539	1,356	18,273	15,673	5,100	26,947
1993	12,489	22,740	3,745	1,281	18,450	15,441	5,082	25,188
1994	14,007	24,039	3,794	1,289	18,305	15,099	5,518	25,341
1995	14,472	24,864	3,914	1,308	18,209	14,320	6,107	25,707
1996	15,278	25,720	3,904	1,251	18,320	14,723	5,983	25,911
1997	16,264	25,463	3,942	1,263	18,166	14,820	5,757	28,576
1998	17,656	27,223	3,880	1,247	18,335	14,063	7,111	24,447
1999	18,942	26,837	3,933	1,255	18,609	14,192	6,546	25,173
2000	20,475	27,044	3,844	1,239	18,908	14,541	7,944	28,024
2001	21,902	28,950	4,159	1,279	19,102	13,682	7,915	30,494
2002	21,339	29,021	4,067	1,251	19,925	17,594	8,769	31,578
2003	22,146	33,421	4,167	1,268	21,132	18,115	8,871	33,208
2004	25,737	33,934	4,461	1,369	21,562	22,311	9,991	30,155
2005	25,729	36,325	4,595	1,355	22,047	22,404	11,203	30,546
2006	27,412	36,035	4,647	1,388	22,618	23,849	11,980	33,145
Avg annual % change	7.0%	4.1%	3.5%	1.1%	1.5%	2.1%	6.6%	0.1%

Table 3 and Graph 3 show that the number of non-purchased serials received by the average ARL library increased by an annual average of 6.6% since 1986. This category consists of a number of types of serials, including government documents, electronic serials made available free of charge with the purchase of print counterparts, and open access journals. Interlibrary borrowing and lending, which showed a marked growth in the last decade, seem to be stabilizing.

In 2005-06 the median subscriptions reached a new high in the history of the time series, and monographs purchase rose above 1986 levels for the second time in the last nineteen years.

<sup>21</sup> Time series for Monographs Purchased were revised due to unavailable data.

Graph 3  
**Supply and Demand**  
**in ARL Libraries, 1986-2006\***



Source: ARL Statistics 2005-06, Association of Research Libraries, Washington, D.C.

\* Serial and monograph data includes electronic materials from 2000 onward.



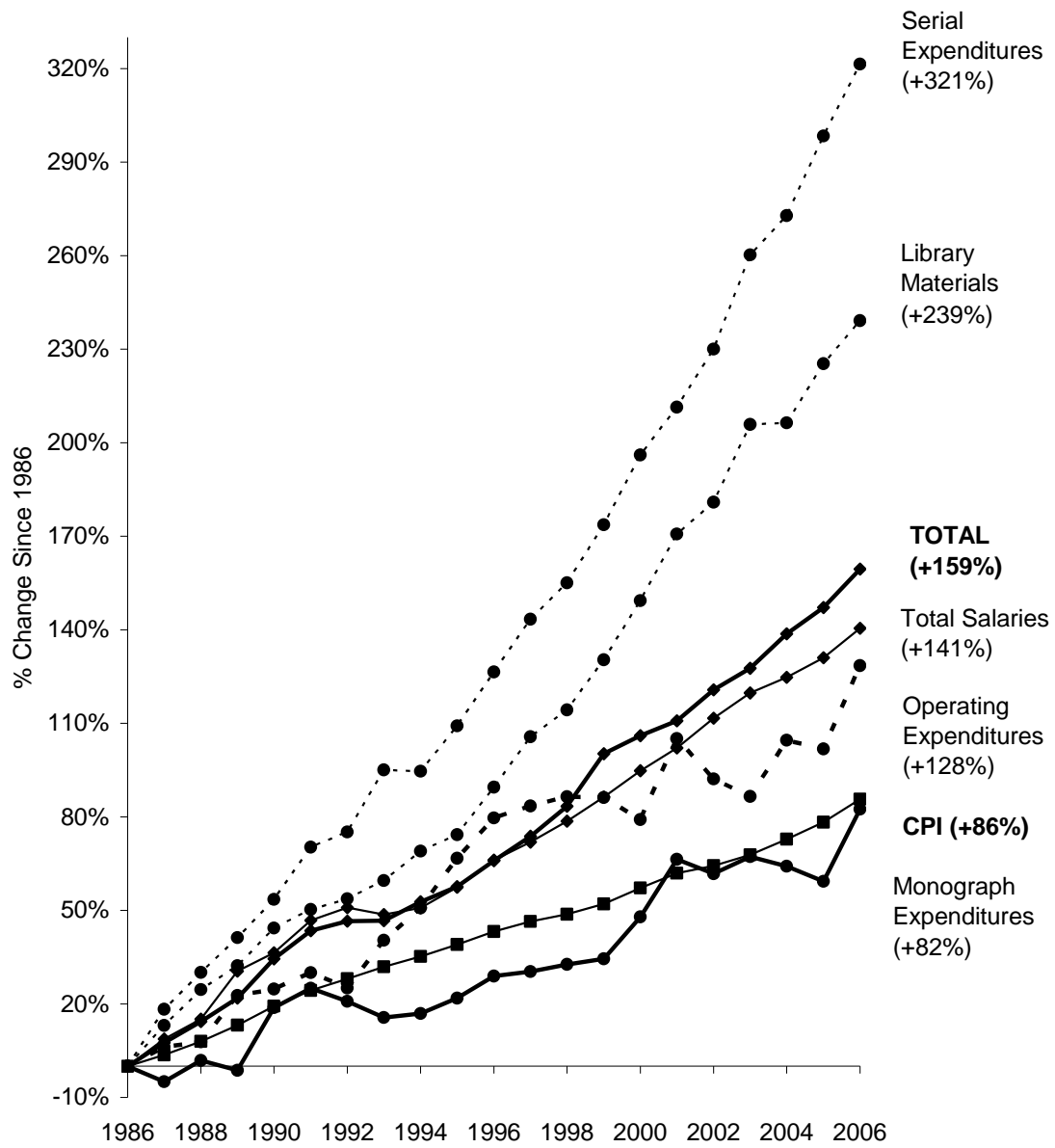
**Table 4**  
**Expenditure Trends in ARL Libraries, 1986-2006**  
**Median Values for Time-Series Trends – Unadjusted dollar figures<sup>22</sup>**

Year	Library Materials	Serial Exp.	Monograph Exp.	Total Salary	Operating Exp.	Total	CPI
(Libraries)	(105)	(100)	(97)	(104)	(104)	(105)	
1986	2,705,297	1,496,775	1,120,645	4,011,436	1,111,914	8,361,092	109.6
1987	3,058,479	1,769,960	1,064,484	4,361,646	1,180,167	8,990,001	113.6
1988	3,369,896	1,947,559	1,141,226	4,618,335	1,198,674	9,557,623	118.3
1989	3,577,405	2,113,976	1,106,073	5,236,292	1,364,558	10,183,315	124.0
1990	3,903,358	2,296,910	1,330,747	5,469,333	1,386,618	11,241,022	130.7
1991	4,064,344	2,548,687	1,400,738	5,885,814	1,445,735	11,990,794	136.2
1992	4,156,510	2,620,832	1,353,865	6,050,222	1,390,245	12,249,150	140.3
1993	4,316,674	2,918,569	1,295,807	5,962,470	1,561,122	12,265,696	144.5
1994	4,572,276	2,912,495	1,309,807	6,047,803	1,676,701	12,767,348	148.2
1995	4,715,203	3,131,033	1,365,575	6,312,770	1,853,586	13,171,893	152.4
1996	5,126,482	3,389,118	1,444,015	6,664,021	1,997,233	13,870,378	156.9
1997	5,562,742	3,642,541	1,460,234	6,893,582	2,039,957	14,526,674	160.5
1998	5,795,223	3,816,497	1,486,764	7,163,979	2,072,903	15,329,371	163.0
1999	6,232,365	4,095,934	1,506,651	7,476,532	2,069,887	16,737,261	166.6
2000	6,744,281	4,430,812	1,657,349	7,811,403	1,991,852	17,221,441	172.2
2001	7,322,507	4,660,349	1,864,023	8,106,666	2,280,493	17,620,048	177.5
2002	7,599,249	4,939,225	1,812,826	8,488,255	2,136,616	18,456,038	180.1
2003	8,273,171	5,392,007	1,873,157	8,813,191	2,073,913	19,030,188	183.9
2004	8,286,431	5,580,157	1,839,412	9,015,741	2,274,878	19,953,776	189.4
2005	8,801,962	5,962,446	1,784,841	9,268,364	2,243,592	20,663,012	195.4
2006	9,174,734	6,307,292	2,044,272	9,647,695	2,540,171	21,694,210	203.5
Avg annual % change	6.3%	7.5%	3.1%	4.5%	4.2%	4.9%	3.1%

Operating expenditures, including many automation expenditures, have doubled since 1986, but during the last five years have remained at relatively stable levels of investment. The total salary expenditures median has increased only slightly over the past four years. Monograph expenditures continue to increase. The annual consumer price index (CPI), included in Graph 4, provides a comparative reference for the increases in library expenditures.

<sup>22</sup> Time series for Serial Expenditures and Monograph Expenditures were revised due to unavailable data.

Graph 4  
**Expenditure Trends**  
 in ARL Libraries, 1986-2006



**TABLE 5**  
**Resources per Student in ARL University Libraries, 1986-2006**  
**Median of Ratio Values for Time-Series Trends<sup>23</sup>**

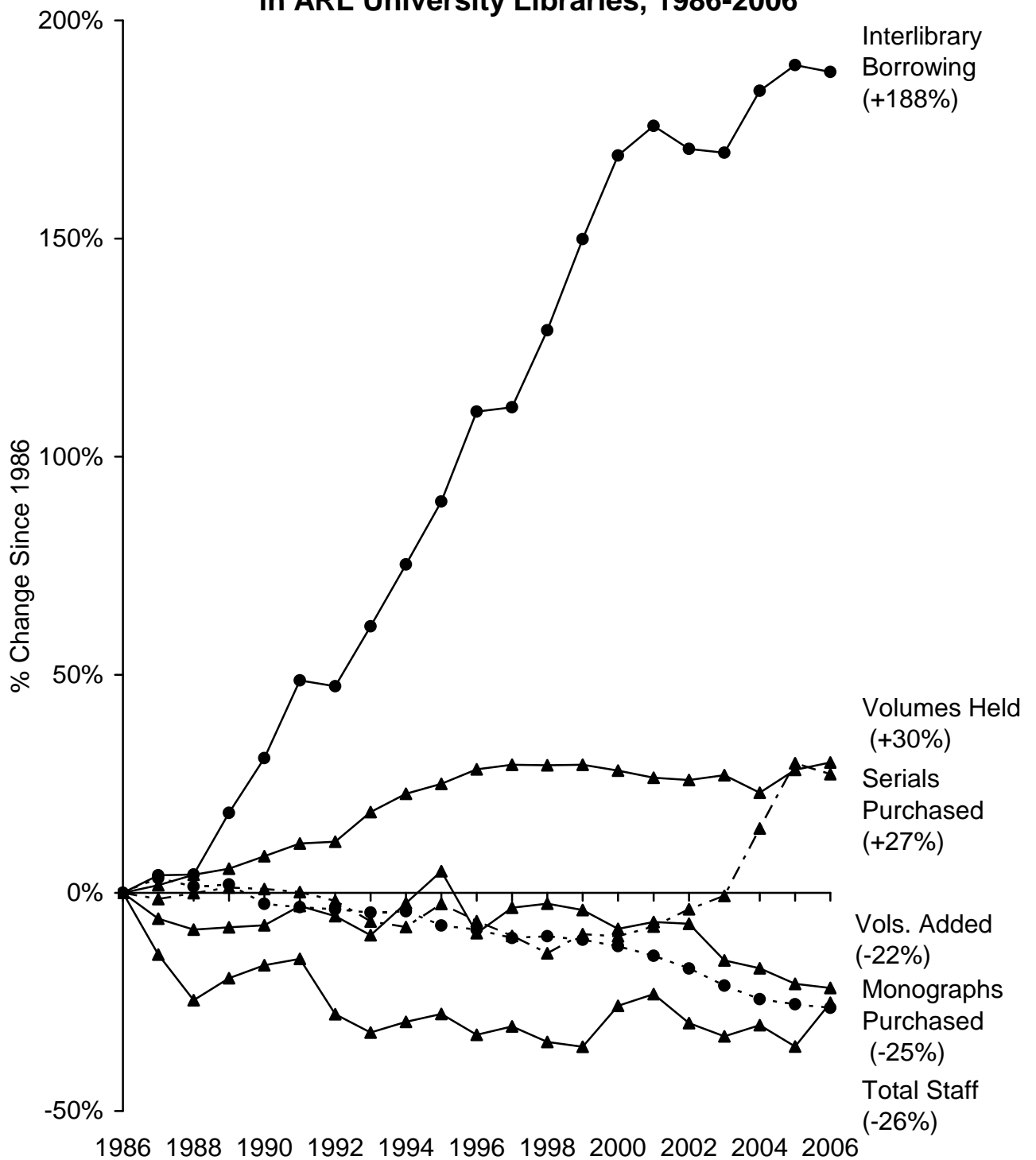
Year	ILL: Borrowed	Volumes Held	Volumes Added (Gross)	Total Staff	Serials Purchased	Monographs Purchased
(Libraries)	(102)	(103)	(103)	(103)	(36)	(57)
1986	0.42	123.18	4.17	0.0159	0.85	2.20
1987	0.44	125.31	3.92	0.0164	0.84	1.88
1988	0.44	128.27	3.82	0.0161	0.85	1.66
1989	0.50	130.04	3.84	0.0162	0.86	1.77
1990	0.55	133.51	3.86	0.0155	0.86	1.83
1991	0.63	137.11	4.04	0.0154	0.85	1.86
1992	0.62	137.68	3.95	0.0153	0.84	1.58
1993	0.68	146.02	3.76	0.0152	0.80	1.49
1994	0.74	151.20	4.07	0.0152	0.79	1.55
1995	0.80	154.00	4.37	0.0147	0.83	1.59
1996	0.89	158.10	3.78	0.0145	0.80	1.48
1997	0.89	159.40	4.03	0.0142	0.77	1.52
1998	0.97	159.24	4.06	0.0143	0.73	1.44
1999	1.05	159.37	4.00	0.0142	0.77	1.42
2000	1.13	157.74	3.82	0.0139	0.77	1.63
2001	1.16	155.71	3.89	0.0136	0.79	1.69
2002	1.14	155.04	3.87	0.0131	0.82	1.54
2003	1.14	156.41	3.52	0.0125	0.85	1.47
2004	1.20	151.49	3.45	0.0120	0.98	1.53
2005	1.22	157.93	3.30	0.0118	1.10	1.42
2006	1.22	160.05	3.26	0.0117	1.08	1.64
Avg annual % change	5.4%	1.3%	-1.2%	-1.5%	1.2%	-1.4%

Table 5 and Graph 5 show that per-student borrowing activity through interlibrary loan has continued to increase, and libraries are borrowing three times more items on a per-student basis than they did 20 years ago.<sup>24</sup> Additionally, over the 20-year period since 1986, ARL libraries are acquiring 25% fewer monographs per student, but 27% more serials. Libraries also reported fewer staff per student in 2006 as compared to 1986: in 2006, there was a median number of 11.7 total staff per 1,000 students, compared to the 1986 figure of 16 per 1,000.

<sup>23</sup> All time-series in this table have been revised due to unavailable data.

<sup>24</sup> This overall trend should not be interpreted rigidly, as it negates the varying experiences of individual libraries.

Graph 5  
**Resources per Student  
 in ARL University Libraries, 1986-2006**



<sup>1</sup> For more information on the ARL Statistics Interactive Edition, see Martha Kyrillidou, "To Describe and Measure the

**Table 6**  
**Electronic Materials Expenditures**  
**In ARL University Libraries, 2005-06**

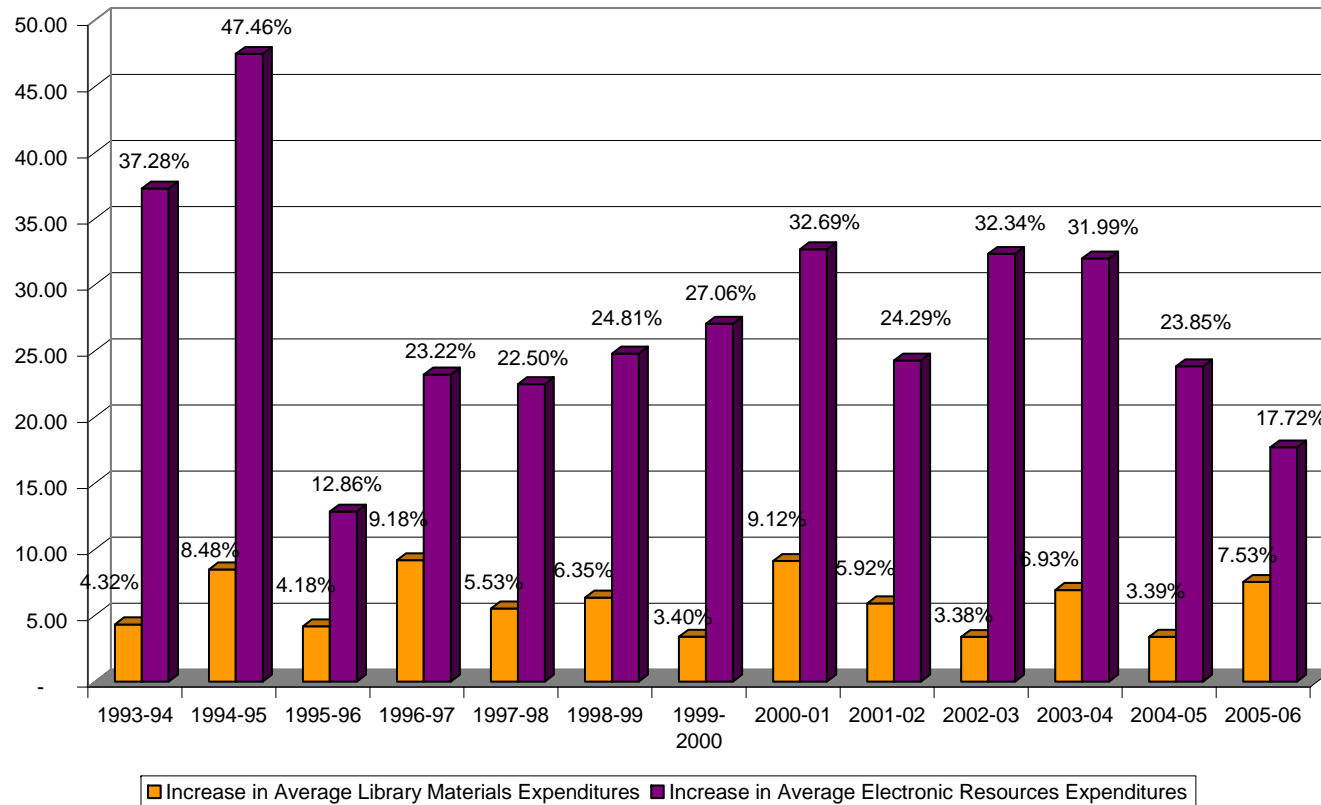
	Sum	Number Reporting
Expenditures for Computer Files (one-time/monographic purchase)	\$48,793,981	102
Expenditures for Electronic Serials	\$383,472,634	108
Expenditures for Bibliographic Utilities, Networks, etc. (Library)	\$26,016,318	102
Expenditures for Bibliographic Utilities, Networks, etc. (External)	\$15,946,247	83
Expenditures for Hardware and Software	\$68,808,319	104
Expenditures for Document Delivery/Interlibrary Loan	\$13,425,430	107

Table 6 contains data on several items which previously had been collected only in the *ARL Supplementary Statistics*. These data are especially useful because they reflect monies spent on all electronic serials, while the *ARL Statistics* categories of “serials purchased” and “serials expenditures” include only those journals which provide full-text electronic versions to their subscribers. The Expenditures for Electronic Serials time series may be viewed as an alternative to the Serials Purchased series, both figures reflecting in their own way the influence the electronic serial is gaining in the modern research library.

Not only have electronic materials expenditures grown sharply in the past decade, they have grown at a rate far exceeding that of library materials expenditures overall. As shown in Graph 6, in every year of the last decade electronic materials expenditures have grown sharply, anywhere between two and ten times faster than materials expenditures have.

The average ARL university library now spends just under 41% of its materials budget on electronic materials (Tables 7A and 7B), and 23 ARL libraries report that they spent more than 50% of their materials budget on electronic materials (see Rank Order Table 20).

**Graph 6**  
**Yearly Increases in Average:**  
**Electronic Resources vs. Total Materials Expenditures, 1993-2006**



**TABLE 7A**  
**ELECTRONIC RESOURCES AND MATERIALS EXPENDITURES IN ARL UNIVERSITY LIBRARIES, 1992-2002**

	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000*	2000-01	2001-02*
<b>a. Computer File Expenditures (monographic/onetime)</b>										
<b>Total</b>	14,147,625	20,132,553	22,030,727	24,639,822	8,013,055	11,189,103	10,848,219	14,727,984	15,297,096	16,748,194
<b>Average</b>	172,532	236,854	247,536	262,126	87,098	122,957	121,890	161,846	159,345	167,482
<b>Median</b>	148,158	212,936	217,988	219,178	47,932	52,311	54,024	98,657	72,070	82,566
<b>N</b>		85	89	94	92	91	89	91	96	100
<b>b. Electronic Serial Expenditures</b>										
<b>Total</b>	N/A	N/A	11,847,577	15,170,971	40,956,696	49,497,141	67,124,554	84,343,868	117,415,618	154,418,679
<b>Average</b>	N/A	N/A	188,057	194,500	401,536	494,971	639,281	818,873	1,118,244	1,429,803
<b>Median</b>	N/A	N/A	156,754	172,805	355,922	426,722	571,790	736,317	992,067	1,272,965
<b>N</b>			63	78	102	100	105	103	105	108
<b>c. Total Electronic Resources (Total a+b)</b>										
<b>Total</b>	14,147,625	20,132,553	33,878,304	39,810,793	50,512,984	60,686,244	77,972,773	99,071,852	132,712,714	171,166,873
<b>Average</b>	172,532	236,854	349,261	394,166	485,702	594,963	742,598	943,541	1,252,007	1,556,062
<b>Median</b>	148,158	212,936	278,404	332,128	420,741	495,011	645,495	931,210	1,129,298	1,377,874
<b>N</b>	82	85	97	101	104	102	105	105	106	110
<b>Total Library Materials Expenditures**</b>										
<b>Total</b>	393,271,073	425,287,651	526,496,347	571,145,986	642,123,715	664,600,663	727,623,160	773,321,519	828,778,808	910,930,849
<b>Average</b>	4,795,989	5,003,384	5,427,797	5,654,911	6,174,266	6,515,692	6,929,744	7,364,967	7,818,668	8,281,189
<b>Median</b>	4,242,887	4,527,122	4,714,384	4,975,353	5,529,606	5,643,070	5,991,177	6,545,146	7,028,134	7,566,727
<b>N</b>	82	85	97	101	104	102	105	105	106	110
<b>Electronic Resources Expenditures as a Percent of Total Materials Expenditures</b>										
<b>Average</b>	3.60	4.75	6.39	6.83	7.76	8.85	10.56	12.88	16.25	19.60
<b>Median</b>	N/A	4.45	5.33	6.42	7.51	8.29	10.18	12.75	14.80	18.15
<b>N</b>	82	85	97	101	104	102	105	105	106	110
<b>Expenditures for Bibliographic Utilities, Networks, etc. (External)</b>										
<b>Total</b>	N/A	N/A	N/A	N/A	\$3,827,348	4,695,737	7,442,962	9,523,348	14,655,078	20,373,560
<b>Average</b>	N/A	N/A	N/A	N/A	\$136,691	142,295	201,161	250,614	311,810	424,449
<b>Median</b>	N/A	N/A	N/A	N/A	\$120,096	128,795	145,280	204,598	198,289	336,690
<b>N</b>					28	33	37	38	47	48

\*In a recent review of past Supplementary Statistics data, some figures previously published in these columns were found to be incorrect and subsequently revised.

\*\*Figures reflect Materials Expenditures only from those institutions that reported nonzero figures for Total Electronic Resources.

**TABLE 7B**  
**ELECTRONIC RESOURCES AND MATERIALS EXPENDITURES IN ARL UNIVERSITY LIBRARIES, 2002-2006**

	2002-03	2003-04	2004-05	2005-06
<b>a. Computer File Expenditures (monographic/onetime)</b>				
<b>Total</b>	\$23,275,683	\$32,098,404	\$38,744,076	\$48,793,981
<b>Average</b>	\$225,978	\$314,690	\$372,539	\$478,372
<b>Median</b>	\$111,266	\$191,148	\$210,576	\$336,338
<b>N</b>	103	102	104	102
<b>b. Electronic Serial Expenditures</b>				
<b>Total</b>	\$205,300,292	\$269,601,241	\$328,166,027	\$383,127,163
<b>Average</b>	\$1,849,552	\$2,450,920	\$3,038,574	\$3,547,474
<b>Median</b>	\$1,649,361	\$2,348,463	\$2,824,962	\$3,349,709
<b>N</b>	111	110	108	108
<b>c. Total Electronic Resources (Total a+b)</b>				
<b>Total</b>	\$228,575,974	\$301,699,645	\$366,910,103	\$431,921,144
<b>Average</b>	\$2,059,243	\$2,718,015	\$3,366,147	\$3,962,579
<b>Median</b>	\$1,775,865	\$2,705,847	\$3,144,841	\$3,792,873
<b>N</b>	111	111	109	109
<b>Total Library Materials Expenditures**</b>				
<b>Total</b>	\$950,275,167	\$1,016,121,605	\$1,031,619,722	\$1,109,340,878
<b>Average</b>	\$8,561,038	\$9,154,249	\$9,464,401	\$10,177,439
<b>Median</b>	\$7,707,153	\$8,276,175	\$8,662,668	\$9,156,974
<b>N</b>	111	111	109	109
<b>Electronic Resources Expenditures as a Percent of Total Materials Expenditures</b>				
<b>Average</b>	25.02	31.33	37.46	40.93
<b>Median</b>	22.01	29.81	37.53	43.14
<b>N</b>	111	111	109	109
<b>Expenditures for Bibliographic Utilities, Networks, etc. (External)*</b>				
<b>Total</b>	\$21,470,716	\$17,420,520	\$16,082,790*	\$15,930,476
<b>Average</b>	\$438,178	\$335,010	\$349,626*	\$318,610
<b>Median</b>	\$250,000	\$94,837	\$149,396*	\$143,649
<b>N</b>	49	52	46*	50

\*\* Figures reflect Materials Expenditures only from those institutions that reported nonzero figures for Total Electronic Resources.



