# Libraries by Size 


#### Abstract

Chapter 2 of Library Technology Reports (vol. 50, no. 4) looks at US academic libraries of all types grouped by total spending in 2012. Sharp differences in how badly non-serials spending has been hurt begin to show up in some size groups, with the smallest (and most volatile) groups showing the biggest drops in non-serials spending.


There is pretty clearly a problem with ongoing increases in serials prices, especially if you remove the handful of large libraries that have managed to achieve solid gains in other acquisitions.

But the damage is in the details. Some academic libraries have managed to pull off the balancing act. Most are dealing with sharp drops in non-serials acquisitions budgets, and many have significant losses in money available for anything except acquisitions. Here, we look at academic libraries across all categories, grouped by total budget size in $2012 .{ }^{1}$

## Larger Libraries

Larger libraries are defined as libraries that reported spending at least $\$ 1.5$ million in 2012, split into four smaller segments:

- libraries spending at least $\$ 25$ million
- libraries spending $\$ 10$ to $\$ 24.99$ million
- libraries spending $\$ 3.5$ to $\$ 9.99$ million
- libraries spending $\$ 1.5$ to $\$ 3.49$ million


## Libraries Spending at Least \$25 Million

The 40 libraries that spend at least $\$ 25$ million and

## About This Study

Libraries included are the 2,594 institutions that responded to the NCES Academic Libraries Survey in 2002 and 2012 and also appeared (sometimes with imputed figures) in the 2004, 2006, 2008, and 2010 surveys. All dollar amounts prior to 2012 are adjusted for inflation.

## Terms used

- Serials: spending on current serials, electronic or print
- Books or Books (etc.): spending on all acquisitions except current serials
- Remainder: total library budget minus acquisitions
- Serials \%, Books \%: percentage of total budget
- Total Change, Serials Change, Books Change, Remainder Change: percentage change from 2002 to 2012
- Q1: first quartile
- Q3: third quartile
- CC: Carnegie classifications
that responded throughout the decade (out of 41 that responded in 2012) served $1,256,866$ FTE students. These libraries include those at Yale University, the University of Southern California, Arizona State University, and the University of Utah (ALS 2012).

Key figures appear in table 2.1. Note that this group of libraries represents roughly one-quarter of all US academic library spending.

Many of these large libraries are doing their best

|  | Q1 | Median | Q3 | All | Dollars |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total | $\$ 27,501,938$ | $\$ 36,380,652$ | $\$ 43,769,062$ |  | $\$ 1,543,393,661$ |
| Serials | $\$ 8,490,409$ | $\$ 9,930,866$ | $\$ 11,348,334$ |  | $\$ 398,843,321$ |
| Books | $\$ 2,579,315$ | $\$ 4,032,614$ | $\$ 5,848,048$ |  | $\$ 210,372,951$ |
| Serials $\%$ | $23 \%$ | $27 \%$ | $31 \%$ | $26 \%$ |  |
| Books $\%$ | $9 \%$ | $11 \%$ | $15 \%$ | $14 \%$ |  |
| Total Change | $-3 \%$ | $5 \%$ | $15 \%$ | $7 \%$ | $\$ 103,894,904$ |
| Serials Change | $5 \%$ | $22 \%$ | $41 \%$ | $24 \%$ | $\$ 77,071,624$ |
| Books Change | $-16 \%$ | $-1 \%$ | $34 \%$ | $16 \%$ | $\$ 29,785,315$ |
| Remainder Change | $-11 \%$ | $-2 \%$ | $8 \%$ | $0 \%$ | $-\$ 2,962,035$ |

Table 2.1
Key figures: changes since 2002 for libraries spending $\$ 25$ million or more in 2012 (ALS 2002-2012)

|  | Q1 | Median | Q3 | All | Dollars |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total | $\$ 12,524,396$ | $\$ 15,717,840$ | $\$ 19,274,845$ |  | $\$ 1,632,427,618$ |
| Serials | $\$ 4,541,658$ | $\$ 5,680,599$ | $\$ 7,031,628$ |  | $\$ 597,087,569$ |
| Books | $\$ 974,571$ | $\$ 1,344,209$ | $\$ 2,058,978$ |  | $\$ 158,948,899$ |
| Serials $\%$ | $33 \%$ | $36 \%$ | $42 \%$ | $37 \%$ |  |
| Books $\%$ | $6 \%$ | $9 \%$ | $12 \%$ | $10 \%$ |  |
| Total Change | $-8 \%$ | $2 \%$ | $18 \%$ | $4 \%$ | $\$ 59,011,155$ |
| Serials Change | $5 \%$ | $25 \%$ | $49 \%$ | $31 \%$ | $\$ 142,826,540$ |
| Books Change | $-39 \%$ | $-19 \%$ | $16 \%$ | $-13 \%$ | $-\$ 23,122,401$ |
| Remainder Change | $-19 \%$ | $-6 \%$ | $7 \%$ | $-6 \%$ | $-\$ 60,692,985$ |

## Table 2.2

Key figures: changes since 2002 for libraries spending $\$ 10$ to $\$ 24.99$ million (ALS 2002-2012)

|  | Q1 | Median | Q3 | All | Dollars |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total | $\$ 4,133,907$ | $\$ 5,011,400$ | $\$ 6,928,068$ |  | $\$ 1,227,289,968$ |
| Serials | $\$ 1,107,954$ | $\$ 1,636,187$ | $\$ 2,203,403$ |  | $\$ 379,716,030$ |
| Books | $\$ 203,392$ | $\$ 376,506$ | $\$ 614,802$ |  | $\$ 100,829,069$ |
| Serials $\%$ | $24 \%$ | $31 \%$ | $38 \%$ | $31 \%$ |  |
| Books $\%$ | $4 \%$ | $7 \%$ | $10 \%$ | $8 \%$ |  |
| Total Change | $-12 \%$ | $3 \%$ | $18 \%$ | $1 \%$ | $\$ 14,324,352$ |
| Serials Change | $-2 \%$ | $21 \%$ | $45 \%$ | $20 \%$ | $\$ 63,141,329$ |
| Books Change | $-54 \%$ | $-27 \%$ | $17 \%$ | $-23 \%$ | $-\$ 30,438,024$ |
| Remainder Change | $-17 \%$ | $-3 \%$ | $17 \%$ | $-2 \%$ | $-\$ 18,378,953$ |

Table 2.3
Key figures: changes since 2002 for libraries spending $\$ 3.5$ to $\$ 9.99$ million (ALS 2002-2012)

|  | Q1 | Median | Q3 | All | Dollars |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total | $\$ 1,859,046$ | $\$ 2,328,986$ | $\$ 2,854,599$ |  | $\$ 925,686,543$ |
| Serials | $\$ 323,969$ | $\$ 575,595$ | $\$ 846,289$ |  | $\$ 238,189,665$ |
| Books | $\$ 105,487$ | $\$ 167,613$ | $\$ 276,585$ |  | $\$ 82,517,332$ |
| Serials $\%$ | $16 \%$ | $26 \%$ | $34 \%$ | $26 \%$ |  |
| Books $\%$ | $5 \%$ | $8 \%$ | $11 \%$ | $9 \%$ |  |
| Total Change | $-12 \%$ | $0 \%$ | $17 \%$ | $-1 \%$ | $-\$ 6,013,680$ |
| Serials Change | $-9 \%$ | $23 \%$ | $65 \%$ | $21 \%$ | $\$ 40,526,937$ |
| Books Change | $-50 \%$ | $-27 \%$ | $8 \%$ | $-24 \%$ | $-\$ 26,445,203$ |
| Remainder Change | $-16 \%$ | $-2 \%$ | $18 \%$ | $-3 \%$ | $-\$ 20,095,414$ |

Table 2.4
Key figures: changes since 2002 for libraries spending $\$ 1.5$ to $\$ 3.49$ million (ALS 2002-2012)


Figure 2.1
Percentage change in median spending for libraries spending $\$ 25$ million or more in 2012 (ALS 2002-2012)


Figure 2.3
Percentage change in median spending for libraries spending $\$ 3.5$ to $\$ 9.99$ million (ALS 2002-2012)
to retain books spending-but half of them still saw some decrease. It would take $\$ 18,151,804$ to bring all 40 libraries back to at least 2002 figures for books and other acquisitions. But these are relatively moderate figures: only $18 \%$ of the libraries increased serials spending by $50 \%$ or more and $23 \%$ were down at least $25 \%$ for books spending, while $30 \%$ were up at least $25 \%$ for books spending.

Figure 2.1 is ominous at the right-hand side: after 2010, even these largest and generally healthiest of libraries could no longer keep increasing books spending, and the median fell slightly below 2002 levels. Meanwhile, serials prices just keep increasing.

## Libraries Spending \$10 to \$24.99 Million

Of 103 libraries spending $\$ 10$ to $\$ 24.99$ million that


Figure 2.2
Percentage change in median spending for libraries spending $\$ 10$ to $\$ 24.99$ million (ALS 2002-2012)


Figure 2.4
Percentage change in median spending for libraries spending $\$ 1.5$ to $\$ 3.49$ million (ALS 2002-2012)
responded in 2012, 101 (98\%) are included in this report. Those 97 libraries served $2,556,903$ FTE students in 2012. These libraries include those at the University of Iowa, University of Colorado Boulder, Santa Clara University, and Villanova University (ALS 2012).

Key figures appear in table 2.2. This group of libraries represents slightly more than one-quarter of all US academic library spending.

Most of these libraries have suffered significant drops in non-serials acquisitions and some drop in other spending. To restore all libraries to at least 2002 figures (plus inflation) for books and other acquisitions would require an increase of $\$ 50,184,976$ almost one-third as much as they spent in 2012.

Not quite half ( $47 \%$ ) of these libraries cut at least $25 \%$ of books (etc.) spending, with $18 \%$ cutting half or more, while $22 \%$ gained at least $25 \%, 13 \%$ half or

|  | Q1 | Median | Q3 | All | Dollars |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total | $\$ 635,882$ | $\$ 837,930$ | $\$ 1,083,063$ |  | $\$ 709,755,644$ |
| Serials | $\$ 63,813$ | $\$ 119,104$ | $\$ 220,329$ |  | $\$ 124,577,237$ |
| Books | $\$ 44,102$ | $\$ 67,958$ | $\$ 106,470$ |  | $\$ 66,684,616$ |
| Serials $\%$ | $8 \%$ | $15 \%$ | $24 \%$ | $18 \%$ |  |
| Books $\%$ | $5 \%$ | $8 \%$ | $12 \%$ | $9 \%$ |  |
| Total Change | $-18 \%$ | $-2 \%$ | $17 \%$ | $-5 \%$ | $-\$ 37,633,045$ |
| Serials Change | $-24 \%$ | $12 \%$ | $60 \%$ | $12 \%$ | $\$ 13,288,590$ |
| Books Change | $-56 \%$ | $-31 \%$ | $7 \%$ | $-28 \%$ | $-\$ 26,028,161$ |
| Remainder Change | $-17 \%$ | $-2 \%$ | $19 \%$ | $-5 \%$ | $-\$ 24,893,474$ |

Table 2.5
Key figures: changes since 2002 for libraries spending $\$ 500,000$ to $\$ 1.49$ million (ALS 2002-2012)

|  | Q1 | Median | Q3 | All | Dollars |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total | $\$ 306,474$ | $\$ 358,108$ | $\$ 419,387$ |  | $\$ 186,807,662$ |
| Serials | $\$ 24,904$ | $\$ 46,291$ | $\$ 74,924$ |  | $\$ 28,284,344$ |
| Books | $\$ 18,460$ | $\$ 30,595$ | $\$ 45,000$ |  | $\$ 18,054,958$ |
| Serials $\%$ | $7 \%$ | $13 \%$ | $20 \%$ | $15 \%$ |  |
| Books $\%$ | $5 \%$ | $9 \%$ | $12 \%$ | $10 \%$ | $-\$ 17,876,261$ |
| Total Change | $-23 \%$ | $-6 \%$ | $15 \%$ | $-9 \%$ | $\$ 2,990,686$ |
| Serials Change | $-30 \%$ | $2 \%$ | $71 \%$ | $12 \%$ | $-\$ 10,718,419$ |
| Books Change | $-61 \%$ | $-38 \%$ | $-4 \%$ | $-37 \%$ | $-710,148,522$ |
| Remainder Change | $-21 \%$ | $-4 \%$ | $19 \%$ | $-7 \%$ |  |

Table 2.6
Key figures: changes since 2002 for libraries spending \$250,000 to \$499,999 (ALS 2002-2012)

|  | Q1 | Median | Q3 | All | Dollars |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total | $\$ 93,061$ | $\$ 139,396$ | $\$ 192,816$ |  | $\$ 74,454,530$ |
| Serials | $\$ 4,225$ | $\$ 10,000$ | $\$ 22,990$ |  | $\$ 8,338,687$ |
| Books | $\$ 4,720$ | $\$ 10,963$ | $\$ 20,701$ |  | $\$ 7,798,455$ |
| Serials $\%$ | $4 \%$ | $8 \%$ | $15 \%$ | $11 \%$ |  |
| Books $\%$ | $4 \%$ | $8 \%$ | $14 \%$ | $10 \%$ | $-\$ 17,391,880$ |
| Total Change | $-32 \%$ | $-13 \%$ | $17 \%$ | $-19 \%$ | $-\$ 694,175$ |
| Serials Change | $-51 \%$ | $-6 \%$ | $75 \%$ | $-8 \%$ | $-\$ 5,620,799$ |
| Books Change | $-72 \%$ | $-40 \%$ | $28 \%$ | $-42 \%$ | $-\$ 11,076,899$ |
| Remainder Change | $-29 \%$ | $-10 \%$ | $19 \%$ | $-16 \%$ |  |

Table 2.7
Key figures: changes since 2002 for libraries spending less than \$250,000 (ALS 2002-2012)
more. Fully $35 \%$ increased serials spending by half or more.

Note in figure 2.2 that at least half of the libraries started suffering books spending losses immediately. The pain eased slightly from 2010 to 2012 (from - 21\% to $-19 \%$ ), but at the expense of remainder spending.

## Libraries Spending \$3.5 to \$9.99 Million

Of 224 libraries spending $\$ 3.5$ to $\$ 9.99$ million responding in 2012, 218 (97\%) appear here. Those 218 libraries served 2,534,896 FTE students 2012. Key figures appear in table 2.3. These libraries include those at San Diego State University; University of Nevada,

Reno; Cal State, San Bernardino; and Tennessee State University (ALS 2012).

Table 2.3 shows that most of these libraries lost more than a quarter of books spending, but that's typical of overall damage. Slightly more than half of these libraries (52\%) suffered at least a $25 \%$ cut in books (etc.) acquisitions, with $31 \%$ losing half or more, while $21 \%$ gained at least $25 \%$. It would require an additional $\$ 48,605,522$, or close to half of total books spending, to restore all libraries to at least 2002 levels.

The most significant difference between figure 2.2 and figure 2.3 is that at the median point, these libraries had relatively modest cuts in books (etc.) spending until 2008-but drastic cuts since then.


Figure 2.5
Percentage change in median spending for libraries spending $\$ 500,000$ to $\$ 1.49$ million (ALS 2002-2012)


Figure 2.7
Percentage change in median spending for libraries spending less than $\$ 250,000$ (ALS 2002-2012)

## Libraries Spending \$1.5 to \$3.49 Million

Of 412 libraries spending $\$ 1.5$ to $\$ 3.49$ million and responding in the 2012 survey, 391 (95\%) appear here. Those 391 libraries served 2,712,461 FTE students in 2012. Key figures are in table 2.4. This group includes libraries at Rutgers University-Camden, New York Institute of Technology, Hinds Community College, and Monroe Community College (ALS 2012).

The percentage and change figures are surprisingly close to those in table 2.3, with one significant exception: the top quartile for serials change is much higher, at $65 \%$. A full third of these libraries spent at least $50 \%$ more on serials in 2012 than in 2002, with $14 \%$ at least doubling spending, while $15 \%$ cut serials spending by $25 \%$ or more. Unfortunately, $54 \%$ cut books spending by $25 \%$ or more (and $25 \%$ cut it by half or more), with only $17 \%$ managing a $25 \%$ or more


Figure 2.6
Percentage change in median spending for libraries spending $\$ 250,000$ to $\$ 499,999$ (ALS 2002-2012)
increase. To bring all libraries cutting books spending back to 2002 levels would require $\$ 39,676,035$.

With the reminder that figure 2.4 shows median spending changes (half the libraries did worse, half did better), what's striking here is the general uniformity across time: serials kept climbing while books kept falling (a little faster in recent years).

## Smaller Libraries

Most academic libraries are relatively small. I've broken the remaining 1,516 libraries (just over two-thirds of the total) into three groups by spending levels:

- libraries spending $\$ 500,000$ to $\$ 1.49$ million
- libraries spending $\$ 250,000$ to $\$ 499,999$
- libraries spending less than $\$ 250,000$


## Libraries Spending \$500,000 to $\mathbf{\$ 1 . 4 9}$ Million

Of 918 libraries reporting spending \$500,000 to \$1.49 million in 2012, 808 (88\%) appear here. (Smaller libraries and institutions tend to be more volatileappearing and disappearing more frequently.) The 808 libraries served 3,210,044 FTE students in 2012. Libraries in this group include those at Saint Anselm College, the University of New Hampshire School of Law, Piedmont Community College, and Arkansas State University-Beebe (ALS 2012).

Key figures appear in table 2.5. Note the sharp drop in serials spending percentage from previous tables; it's fair to assume that these libraries are involved in fewer Big Deals, but they're still affected by rapid increases in serials prices.

Most of these libraries failed to keep up with inflation in general. It may not be surprising that many of
them cut serials spending ( $24 \%$ by $25 \%$ or more)—but nowhere near as much as they cut books and other acquisitions. Extreme cases include $30 \%$ of libraries losing at least half of books funding ( $56 \%$ lost at least $25 \%$ )—but also $13 \%$ increasing books spending by half or more ( $19 \%$ by $25 \%$ or more). To restore cuts in non-serials acquisitions would require \$36,993,719.

As shown in figure 2.5, the median increase in serials spending is considerably lower than for larger libraries, but the median decrease in books spending is lower-that is, a higher percentage. Given the likelihood that smaller institutions can't cut very much out of the remaining budgets after acquisitions, this makes sense given flat overall budgets: with serials spending almost twice as high as books, the percentage change in books is likely to be twice as much (in the other direction) as for serials. Here again, book cuts have been getting steeper in recent years.

## Libraries Spending \$250,000 to \$499,999

Continuing the theme of smaller and more volatile, $84 \%$ (514) of the 612 libraries that reported spending $\$ 250,000$ to $\$ 499,999$ in 2012 appear here. Those 514 libraries served 1,015,470 FTE students in 2012. Key figures appear in table 2.6. Libraries include those at Anoka-Ramsey Community College, Salus University, Stratford University, and Iowa Wesleyan College (ALS 2012).

Most of these libraries failed to keep up with inflation. Indeed, $29 \%$ cut serials spending by at least $25 \%$, while $32 \%$ increased it by at least half ( $19 \%$ doubling or more). Unfortunately, $62 \%$ cut at least $25 \%$ from books and other acquisitions, 39\% cutting at least half-but $17 \%$ managed to increase books spending by $25 \%$ or more. (One out of five lost at least $25 \%$ of remainder spending, but $22 \%$ gained at least $25 \%$.) It would take $\$ 13,600,477$ to restore all libraries to at least 2002 books spending levels (plus inflation).

As shown in figure 2.6, while libraries in this size range saw dramatic increases in serials prices between 2000 and 2002, spending didn't increase much more than inflation over the next decade-but the damage already done, and other budgetary pressures have resulted in continuing and, recently, dramatically worse cuts in other acquisitions.

## Libraries Spending Less Than \$250,000

The smallest libraries are also, not surprisingly, the most volatile by far: only $53 \%$ (522) of the 976 libraries spending less than $\$ 250,000$ and responding in the 2012 survey appear in this report. The 522 libraries served 469,158 students in 2012. Key figures appear in table 2.7. Libraries include those at American InterContinental University South Florida, North Central Michigan College, Yo San University of Traditional

Chinese Medicine, and Southern Career College (ALS 2012).

This is the only size group of libraries where books spending almost equaled current serials and where, overall, serials spending decreased (ever so slightly), but the amount spent is tiny in either case-and what it would take for all libraries to get back to 2002 books (etc.) levels, $\$ 7,506,896$, is almost equal to what's left.

Most of these libraries took sizable hits compared to inflation, and while most spent somewhat less on serials, most spent a lot less on books. Specifically, $43 \%$ cut serials spending by $25 \%$ or more, including $27 \%$ that cut it in half, while $30 \%$ increased serials spending by half or more. On the books (etc.) side, $58 \%$ lost at least $25 \%$, including $42 \%$ cut by half or more-and $26 \%$ increased books spending by $25 \%$ or more. Nearly one-third (32\%) lost at least $25 \%$ of remainder budgets, while $21 \%$ gained at least $25 \%$.

There's not a lot to say about figure 2.7; for more than half of these libraries, spending was down across the board, albeit with a tiny increase in serials spending through 2006-but books fell sharply and fairly steadily, falling even faster after 2008.

## Summary

The smallest libraries took the biggest hits to non-serials acquisitions budgets in percentage terms, and most couldn't even maintain current serials spending very well. Only the largest libraries managed (overall) to avoid any significant cuts to books budgets-and even there, the most recent changes (from 2010 to 2012) suggest that this can't last.

## Note

1. Data is from US Department of Education, National Center for Education Statistics, "Academic Library Data Files" for 1996-2012, http://nces.ed.gov/surveys/libraries/aca_data.asp; hereafter cited in text as ALS 1996-2012.
