Delta Cost Project
at American Institutes for Research

Revenues:
Where Does the Money Come From?

A Delta Data Update
2000–2010

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Revenues: Where Does the Money Come From?

A Delta Data Update, 2000–2010

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This is one in a series of data briefs developed by the Delta Cost Project at AIR using data from the *IPEDS Analytics: Delta Cost Project Database 1987–2010*, which was released on August 14, 2012, by the U.S. Department of Education, National Center for Education Statistics. The intent of these briefs is to update key tables and figures from *Trends in College Spending: Where does the money come from? Where does it go? What does it buy?*[1]

This data brief focuses on institutional revenues between 2000 and 2010, with particular attention paid to changes between 2009 and 2010. To understand how revenue patterns may have shifted, this brief looks at the following revenue metrics:

- Total operating revenues by major sources
- The interaction between net tuition revenues and state and local appropriations, which are the primary funding sources for the academic mission at public institutions
- Patterns of tuition discounting and the differences between sticker price, gross tuition revenues, and net tuition revenues

All the Delta measures are reported in 2010 constant dollars and adjusted for changes in enrollments by dividing revenues per full-time equivalent (FTE) student enrollment. A table presenting FTE enrollment changes is included in the supplemental table section of this update.

Primary Findings on Revenues, 2000–2010

Figure 1 shows changes in major revenue sources over time.

- **Community colleges continued to suffer revenue declines in 2010,** as total operating revenues per student declined by 7 percent, or approximately $1,000 per FTE student from 2009 to 2010. Community colleges are also the only public institutions where total operating revenues per student were lower than they were a decade earlier. Enrollments in community colleges continued to grow in 2010, increasing by 9 percent over 2009 enrollments. Thus, the growth in enrollment without growth in overall revenues accounts for some of the declines in revenues per student.
- Operating revenues per student increased by 8 percent in public research universities from their 2009 levels, resulting from gains in all revenue categories except state and local appropriations. Total operating revenues per student increased slightly in public master's institutions (1 percent) and were basically stable in bachelor's institutions.
- State and local appropriations continued their decade-long decline, decreasing by 24 percent in research universities, 24 percent in master's institutions, 20 percent in bachelor's colleges, and 20 percent in community colleges. Net tuition revenues increased slightly in all types of public institutions from 2009 to 2010, but not enough to account for the declines in state appropriations. Over the prior decade, however, overall tuition increased in public four-year institutions by an amount greater than what would have been needed to cover losses in state appropriations. This measure shows considerable fluctuation from year to year.

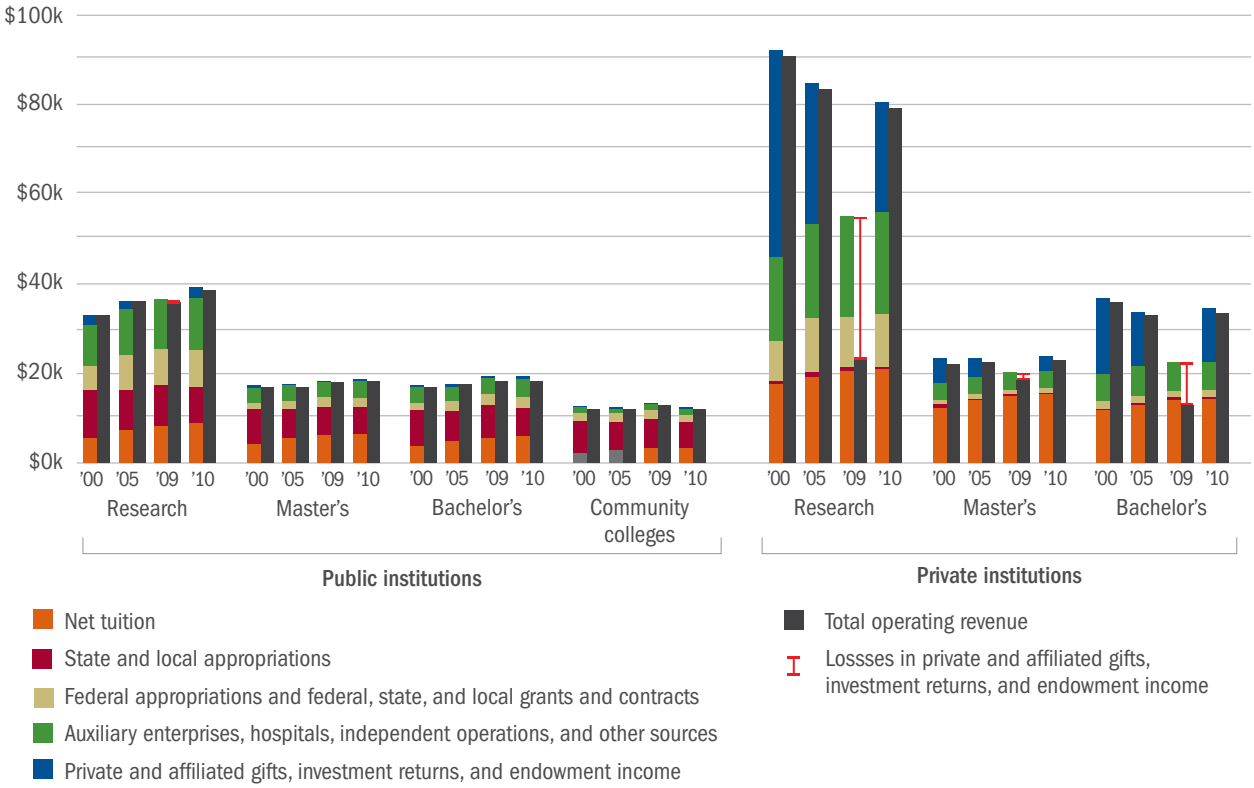
[1] See http://deltacostproject.org/resources/pdf/Trends2011_Final_090711.pdf.

- **Investment returns for nonprofit private institutions rebounded in 2010 as financial markets began to recover.** All three types of private college and universities experienced significant gains in private gifts, investments, and endowments from 2009 to 2010. Private research universities experienced a particularly large gain, $24,000 per FTE student in 2010, after a loss of $31,000 per FTE student in 2009.
- Among public institutions, research universities are the only type with any significant endowment income. Gains in 2010 offset the losses experienced in 2009.

Figure 1

Community college revenues continued to decline in 2010. Private institutions saw a rebound in private gifts, investments, and endowment income.

Total revenues per FTE student, AY 2000–2010 (in 2010 dollars)



Source. IPEDS Analytics: Delta Cost Project Database 1987–2010, 11-year matched set.

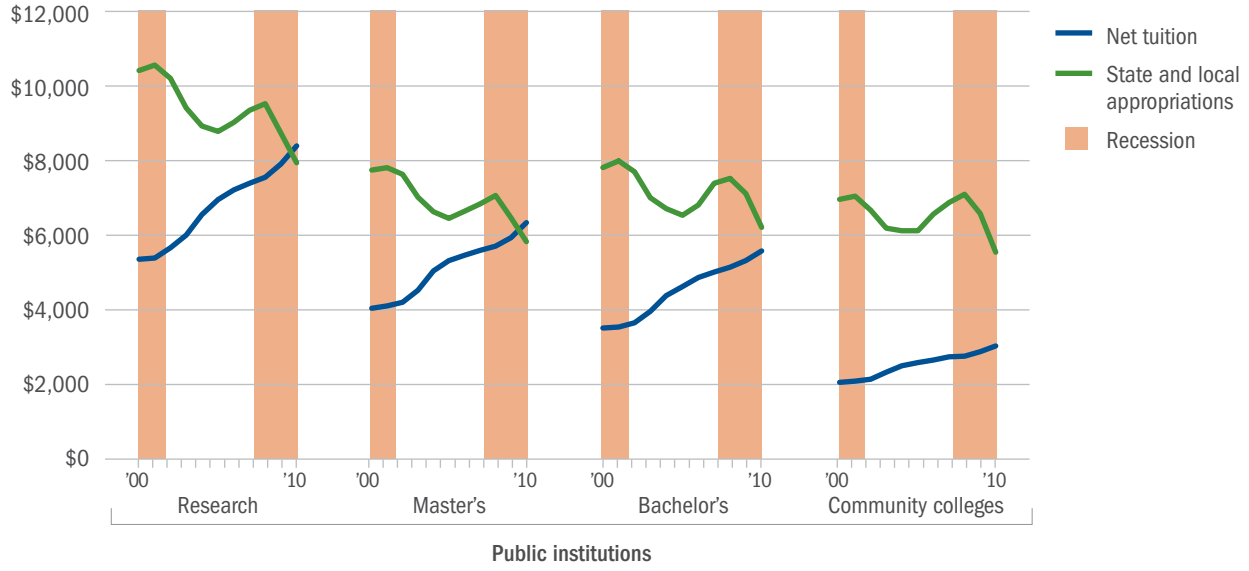
Figure 2 shows changes in the amount of revenue derived from tuition and state appropriations.

- **Tuition revenues exceeded state and local appropriations in public research and master's institutions and were nearly equal in public bachelor's institutions.** Across the public sector, average state and local appropriations per FTE student reached 10-year lows, and tuition revenues were higher than state and local appropriations among public 4-year institutions.
- Declines in state and local appropriations per student from 2009 to 2010 ranged from 9 percent in public research institutions to 15 percent in community colleges, bringing them below the previous lows of 2005. Net tuition revenues increased, on average, by 4 to 7 percent in public institutions.

Figure 2

Tuition revenues surpassed state and local appropriations in public research and master's institutions.

Net tuition revenues and state and local appropriations revenues per FTE student, AY 2000–2010 (in 2010 dollars)



Source. IPEDS Analytics: Delta Cost Project Database 1987–2010, 11-year matched set.

Figure 3 compares changes in sticker price, gross tuition revenues, and net tuition revenues, which provides a way of examining pricing and discounting policies within institutions. *Sticker prices* are based on average full-time undergraduate tuition and fees for in-state students in public institutions and average full-time undergraduate tuition and fees for private institutions. *Gross tuition revenues* include all revenues from tuition and fees before discounts. *Net tuition revenues* include all revenues from tuition and fees after tuition discounts. The *tuition discount rate* is the extent to which institutions use tuition paid by some students to discount the tuition paid by others. Discounts are estimated by evaluating the difference between gross and net tuition revenues and by examining how these, in turn, compare to sticker prices.

- **In contrast to previous years, published sticker prices among most four-year public institutions increased faster than gross tuition revenue.** This suggests that the practice of using other tuition revenue—in particular from out-of-state students—to mitigate tuition price increases for in-state students was no longer tenable in 2010.
- Among private colleges and universities, increases in net tuition revenue between 2009 and 2010 were less than 2 percent in all types of institutions and less than the increases in either sticker price or gross tuition revenue. This implies that more institutional aid was provided to students to counter sticker price increases.
- Sticker prices in public colleges and universities increased between 5 and 6 percent between 2009 and 2010, whereas private institutions increased sticker prices by roughly 3 to 4 percent. In actual dollars, however, the increases in public institutions were considerably less than those in private institutions. The 6 percent increase in tuition at public research universities, for example, represented a $408 increase, whereas the 3 percent increase in private research universities equaled $930.
- Tuition discounting, while a common practice in both public and private institutions, was particularly prominent in the private sector, with discount rates ranging between 27 and 36 percent in 2010. Among public institutions, the discount rate ranged from 10 percent in community colleges to 18 percent in research universities. These rates remained relatively unchanged from 2009.

Figure 3

Tuition discount rates in 2010 were comparable to those in 2009.

Pricing versus revenues, AY 2000–2010 (in 2010 dollars)

Public research	2000	2005	2009	2010	2009–2010 change $	2009–2010 change %
Sticker price	$4,526	$6,194	$6,993	$7,400	$408	5.8%
Gross tuition revenue	$6,513	$8,642	$9,974	$10,536	$562	5.6%
Net tuition revenue	$5,469	$7,116	$8,106	$8,611	$505	6.2%
Tuition discount rate	16%	17%	18%	18%	0%	

Public master's	2000	2005	2009	2010	2009–2010 change $	2009–2010 change %
Sticker price	$3,796	$5,014	$5,713	$6,079	$366	6.4%
Gross tuition revenue	$4,616	$5,999	$6,805	$7,226	$420	6.2%
Net tuition revenue	$4,114	$5,365	$5,961	$6,360	$399	6.7%
Tuition discount rate	11%	11%	12%	12%	0%	

Public bachelor's	2000	2005	2009	2010	2009–2010 change $	2009–2010 change %
Sticker price	$3,859	$4,875	$5,474	$5,752	$278	5.1%
Gross tuition revenue	$4,149	$5,525	$6,445	$6,722	$276	4.3%
Net tuition revenue	$3,611	$4,759	$5,471	$5,746	$275	5.0%
Tuition discount rate	13%	14%	15%	15%	0%	

Public community colleges	2000	2005	2009	2010	2009–2010 change $	2009–2010 change %
Sticker price	$1,830	$2,266	$2,421	$2,546	$125	5.2%
Gross tuition revenue	$2,506	$3,051	$3,403	$3,537	$134	3.9%
Net tuition revenue	$2,324	$2,831	$3,130	$3,269	$139	4.4%
Tuition discount rate	9%	9%	11%	10%	-1%	

Private research	2000	2005	2009	2010	2009–2010 change $	2009–2010 change %
Sticker price	$23,427	$26,960	$30,384	$31,314	$930	3.1%
Gross tuition revenue	$23,182	$26,399	$29,287	$30,057	$769	2.6%
Net tuition revenue	$17,509	$19,277	$20,560	$20,718	$157	0.8%
Tuition discount rate	24%	26%	29%	30%	1%	

Private master's	2000	2005	2009	2010	2009–2010 change $	2009–2010 change %
Sticker price	$16,823	$19,739	$22,378	$23,144	$766	3.4%
Gross tuition revenue	$15,934	$18,393	$20,416	$21,095	$679	3.3%
Net tuition revenue	$12,312	$13,843	$14,940	$15,192	$253	1.7%
Tuition discount rate	23%	24%	26%	27%	1%	

Private bachelor's	2000	2005	2009	2010	2009–2010 change $	2009–2010 change %
Sticker price	$17,522	$20,259	$22,646	$23,480	$834	3.7%
Gross tuition revenue	$16,960	$19,561	$22,036	$22,708	$672	3.1%
Net tuition revenue	$11,502	$12,916	$14,086	$14,257	$171	1.2%
Tuition discount rate	32%	33%	35%	36%	1%	

Source. IPEDS Analytics: Delta Cost Project Database 1987-2010, 11-year matched set.

Where the Money Comes From: Revenue Sources

- **Net tuition revenue.** Total revenue from tuition and fees (including grant and loan aid used by students to pay tuition); institutional student aid that is applied to tuition and fees is excluded.
- **State and local appropriations.** Revenues received through state or local legislative organizations (except grants, contracts, and capital appropriations).
- **Private and affiliated gifts, investment returns, and endowment income (PIE).** Private and affiliated gifts include revenues received from private donors or private contracts for specific goods or services provided by the institution that are directly related to instruction, research, public service, or other institutional purposes. Investment revenues are from interest income, dividend income, rental income, or royalty income. Endowment income is generally income from trusts held by others and income from endowments and similar funds.
- **State and local grants and contracts.** Revenues from state or local government agencies for training programs or similar activities that are either received or are reimbursable under a contract or grant.
- **Federal appropriations, grants, and contracts.** The total amount of revenue coming from federal appropriations, grants, and contracts (excluding Pell grants).
- **Auxiliary enterprises.** Revenues generated by or collected from auxiliary enterprise operations of the institution that furnish a service to students, faculty, or staff and that charge a fee related to the cost of service. These are generally self-supporting activities, such as residence halls, food services, student health services, and intercollegiate athletics.
- **Hospitals, independent operations, and other sources.** Revenue generated by hospitals operated by the postsecondary institution. Revenues associated with the medical school are not included. Independent operations are revenues associated with operations independent or unrelated to instruction, research, or public services and generally include only revenues from major, federally funded research and development centers. Other sources include educational sales and services and miscellaneous revenues not covered elsewhere.

Supplemental Tables

Figure S1

FTE enrollment, AY 2000-2010

	2000	2005	2009	2010	10-year change	1-year change
Public research	2,996,782	3,346,624	3,561,280	3,669,834	22.5%	3.0%
Public master's	1,722,723	1,950,242	2,092,926	2,163,384	25.6%	3.4%
Public bachelor's	237,245	274,466	290,398	307,902	29.8%	6.0%
Public community colleges	2,843,154	3,496,802	3,801,306	4,251,990	49.6%	11.9%
Private research	837,277	924,412	977,558	1,003,533	19.9%	2.7%
Private master's	790,952	942,520	1,027,568	1,056,664	33.6%	2.8%
Private bachelor's	595,317	664,245	695,177	716,384	20.3%	3.1%

Source. IPEDS Analytics: Delta Cost Project Database 1987–2010, 11-year matched set.

Figure S2

Average revenues per FTE student, AY 2000–2010 (in 2010 dollars)

Public research institutions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net tuition	$5,469	$5,511	$5,791	$6,138	$6,706	$7,116	$7,387	$7,574	$7,737	$8,106	$8,611
State and local appropriations	$10,682	$10,837	$10,473	$9,653	$9,146	$9,001	$9,260	$9,588	$9,762	$8,950	$8,132
Federal appropriations and federal, state, and local grants and contracts	$5,248	$5,580	$7,096	$7,482	$7,719	$8,071	$8,042	$8,009	$7,938	$8,175	$8,389
Auxiliary enterprises, hospitals, independent operations, and other sources	$9,193	$9,345	$9,166	$8,927	$9,507	$9,802	$10,035	$10,354	$10,714	$11,145	$11,445
Operating revenues (excluding PIE)	$30,593	$31,272	$32,527	$32,201	$33,078	$33,991	$34,480	$35,273	$35,957	$36,200	$36,417
Private and affiliated gifts, grants, contracts, investment returns, and endowment income (PIE)	$2,369	$2,553	$1,338	$2,011	$2,130	$2,234	$2,415	$3,386	$1,599	-$381	$2,338
Total operating revenue	$32,962	$33,825	$33,864	$34,212	$35,208	$36,225	$36,894	$38,658	$37,557	$35,819	$38,755

Figure S2

Average revenues per FTE student, AY 2000–2010 (in 2010 dollars)

Public master's institutions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net tuition	$4,114	$4,170	$4,268	$4,595	$5,096	$5,365	$5,497	$5,625	$5,744	$5,961	$6,360
State and local appropriations	$7,725	$7,796	$7,626	$7,025	$6,641	$6,468	$6,657	$6,841	$7,076	$6,477	$5,859
Federal appropriations and federal, state, and local grants and contracts	$1,586	$1,757	$1,923	$1,944	$1,956	$1,925	$1,986	$2,017	$2,061	$1,987	$2,158
Auxiliary enterprises, hospitals, independent operations, and other sources	$3,276	$3,154	$3,201	$3,140	$3,177	$3,356	$3,222	$3,337	$3,321	$3,564	$3,725
Operating revenues (excluding PIE)	$16,701	$16,878	$17,018	$16,703	$16,870	$17,114	$17,305	$17,761	$18,141	$17,932	$18,051
Private and affiliated gifts, grants, contracts, investment returns, and endowment income (PIE)	$464	$508	$367	$337	$325	$362	$459	$619	$446	$275	$362
Total operating revenue	$17,155	$17,374	$17,384	$17,039	$17,194	$17,477	$17,763	$18,380	$18,586	$18,206	$18,413

Public bachelor's institutions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net tuition	$3,611	$3,647	$3,761	$4,077	$4,503	$4,759	$5,006	$5,155	$5,290	$5,471	$5,746
State and local appropriations	$8,029	$8,228	$7,915	$7,207	$6,911	$6,717	$7,008	$7,596	$7,735	$7,315	$6,388
Federal appropriations and federal, state, and local grants and contracts	$1,695	$1,960	$2,053	$2,201	$2,170	$2,201	$2,301	$2,265	$2,350	$2,309	$2,537
Auxiliary enterprises, hospitals, independent operations, and other sources	$3,370	$3,544	$3,429	$3,435	$3,328	$3,348	$3,415	$3,619	$3,666	$3,741	$3,875
Operating revenues (excluding PIE)	$16,704	$17,379	$17,158	$16,920	$16,912	$17,024	$17,404	$18,194	$18,591	$18,411	$18,175
Private and affiliated gifts, grants, contracts, investment returns, and endowment income (PIE)	$577	$701	$491	$521	$556	$572	$620	$789	$630	$376	$628
Total operating revenue	$17,268	$18,056	$17,638	$17,441	$17,468	$17,596	$18,025	$18,983	$19,221	$18,787	$18,796

Figure S2

Average revenues per FTE student, AY 2000–2010 (in 2010 dollars)

Public community colleges	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net tuition	$2,324	$2,361	$2,412	$2,581	$2,758	$2,831	$2,909	$2,994	$3,010	$3,130	$3,269
State and local appropriations	$7,095	$7,164	$6,803	$6,333	$6,275	$6,275	$6,704	$7,012	$7,225	$6,726	$5,712
Federal appropriations and federal, state, and local grants and contracts	$1,646	$1,803	$1,727	$1,809	$1,839	$1,732	$1,773	$1,836	$1,876	$1,949	$1,821
Auxiliary enterprises, hospitals, independent operations, and other sources	$1,252	$1,307	$1,399	$1,303	$1,345	$1,253	$1,238	$1,258	$1,316	$1,263	$1,310
Operating revenues (excluding PIE)	$12,265	$12,591	$12,284	$11,972	$12,173	$12,057	$12,484	$12,966	$13,303	$12,952	$12,005
Private and affiliated gifts, grants, contracts, investment returns, and endowment income (PIE)	$222	$212	$211	$198	$172	$228	$296	$377	$299	$179	$158
Total operating revenue	$12,440	$12,757	$12,469	$12,161	$12,342	$12,281	$12,776	$13,338	$13,598	$13,128	$12,160

Private research institutions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net tuition	$17,509	$17,522	$18,168	$18,453	$18,757	$19,277	$19,306	$19,972	$20,265	$20,560	$20,718
State and local appropriations	$513	$508	$517	$1,027	$774	$689	$754	$790	$833	$707	$623
Federal appropriations and federal, state, and local grants and contracts	$9,363	$9,633	$10,499	$11,053	$11,881	$12,243	$11,831	$11,542	$11,351	$11,382	$11,691
Auxiliary enterprises, hospitals, independent operations, and other sources	$18,493	$18,439	$18,830	$19,216	$20,067	$21,016	$21,460	$22,692	$23,316	$22,358	$23,068
Operating revenues (excluding PIE)	$45,125	$45,349	$47,214	$48,667	$50,549	$52,477	$52,556	$54,180	$54,807	$54,141	$55,398
Private and affiliated gifts, grants, contracts, investment returns, and endowment income (PIE)	$46,394	$7,640	$4,759	$15,615	$31,063	$31,348	$34,255	$46,791	$15,852	-$30,548	$24,202
Total operating revenue	$91,519	$52,989	$51,974	$64,282	$81,611	$83,824	$86,811	$100,971	$70,659	$23,593	$79,600

Figure S2

Average revenues per FTE student, AY 2000–2010 (in 2010 dollars)

Private master's institutions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net tuition	$12,312	$12,466	$12,843	$13,082	$13,536	$13,843	$13,939	$14,335	$14,423	$14,940	$15,192
State and local appropriations	$537	$545	$458	$429	$426	$413	$378	$348	$366	$361	$288
Federal appropriations and federal, state, and local grants and contracts	$982	$1,070	$1,176	$1,087	$1,068	$979	$949	$888	$841	$885	$898
Auxiliary enterprises, hospitals, independent operations, and other sources	$3,882	$3,782	$3,921	$3,839	$3,910	$3,904	$4,122	$4,144	$3,981	$4,035	$3,988
Operating revenues (excluding PIE)	$17,128	$17,272	$17,872	$17,991	$18,489	$18,707	$18,985	$19,348	$19,241	$19,852	$20,066
Private and affiliated gifts, grants, contracts, investment returns, and endowment income (PIE)	$5,514	$3,098	$2,136	$2,925	$4,666	$4,178	$4,522	$5,788	$2,557	-$1,301	$3,500
Total operating revenue	$22,625	$20,360	$20,000	$20,916	$23,155	$22,885	$23,507	$25,136	$21,798	$18,552	$23,555

Private bachelor's institutions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net tuition	$11,502	$11,728	$12,045	$12,266	$12,665	$12,916	$13,079	$13,480	$13,707	$14,086	$14,257
State and local appropriations	$426	$488	$542	$440	$389	$362	$482	$515	$614	$583	$464
Federal appropriations and federal, state, and local grants and contracts	$1,576	$1,731	$1,638	$1,653	$1,530	$1,502	$1,451	$1,403	$1,311	$1,369	$1,356
Auxiliary enterprises, hospitals, independent operations, and other sources	$6,148	$6,066	$6,059	$6,137	$7,366	$6,500	$6,651	$6,322	$6,243	$6,211	$6,373
Operating revenues (excluding PIE)	$19,114	$19,432	$19,653	$19,967	$21,456	$20,812	$21,113	$21,149	$21,217	$21,624	$21,937
Private and affiliated gifts, grants, contracts, investment returns, and endowment income (PIE)	$17,144	$6,212	$3,954	$7,516	$14,945	$12,347	$14,149	$20,357	$5,665	-$8,360	$11,966
Total operating revenue	$36,258	$25,643	$23,650	$27,467	$36,369	$33,132	$35,231	$41,507	$26,882	$13,264	$33,877

Source. IPEDS Analytics: Delta Cost Project Database 1987–2010, 11-year matched set.

About the Delta Cost Project

The Delta Cost Project at American Institutes for Research provides data and tools to help higher education administrators and policymakers improve college affordability by controlling institutional costs and increasing productivity. The work is animated by the belief that college costs can be contained without sacrificing access or educational quality through better use of data to inform strategic decision making. For more information about the Delta Cost Project, visit **www.deltacostproject.org.**

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