

Webinar: Trends in College Spending

**Sponsored by the State Higher Education Executive Officers (SHEEO) with
the Delta Cost Project**

SHEEO

Tuesday September 21, 2010

1:00 – 2:00 EDT

Agenda...

- 1) Introduction and context – Jeff Stanley – 3 minutes
- 2) Presentation of “Trends” – Jane Wellman and Donna Desrochers – 10 minutes
- 3) DISCUSSION: 15 minutes**
 - Increasing usefulness to SHEEO agencies: examples from agencies that have used the data
 - Technical questions about the metrics
- 4) Return to presentation about TCS-online - 10 minutes
- 5) General questions and discussion – 10 minutes
- 6) Conclusion

Presentation of “Trends”

- 1) Why do this?
- 2) Living with imperfect data
- 3) The story-line and what the metrics say
- 4) The metrics themselves, how they're different from others, how they were built and how they can be used
- 5) What's most important for state policy work
- 6) State-level examples of 'fact sheets'

Why do this?

- The “New Normal” – and the mismatch between attainment goals, growing demand and declining resources
- Public and policy skepticism about spending in higher education
- The absence of standard metrics for translating data into information about spending

Living with imperfections

- The time lag in expenditure data
- IPEDS data limitations
- Parent/child, groupings
- The Med School issue
- Capital/operating
- Where IS the data on those climbing walls, anyway?

What the data CAN say!

- Patterns over time allowing comparisons between sectors and institutions
- Shifts among major categories of spending to show instruction/student services and other sources
- Cost/price/subsidy: student share of costs, where public subsidies are used
- Costs and aggregate outcomes: for a given input of resources, degrees/credentials produced

The Story Line

- The cyclical nature of finance – both public and private – and why the wrong focus is whatever you had last year
- Rich man, poor man: the public/private gap
- Spending for E&R versus other functions
- Spending within E&R – instruction & student services vs. administration
- Costs/prices/subsidies – and signs of subsidy shift
- Costs and outcomes: findings, patterns

The data and the trends

- The national data set:
 - Public research universities- 152 institutions
 - Public master's- 231 institutions
 - Public community colleges – 785 institutions
 - Private nonprofit research –100 institutions
 - Private nonprofit master's – 317 institutions
 - Private nonprofit bachelor's –471 institutions

Institutions collectively enroll more than 90 percent of the students in the public and non-profit sectors

6 major categories for 1998 – 2008 trends

1. Where the money comes from: revenues per student by major source
2. Where the money goes
 - E&R, E&G, total operating
 - Within E&R
3. Relation between tuition and spending increases
4. Cost/price/subsidy
5. Cost per degree
6. Costs v. enrollments

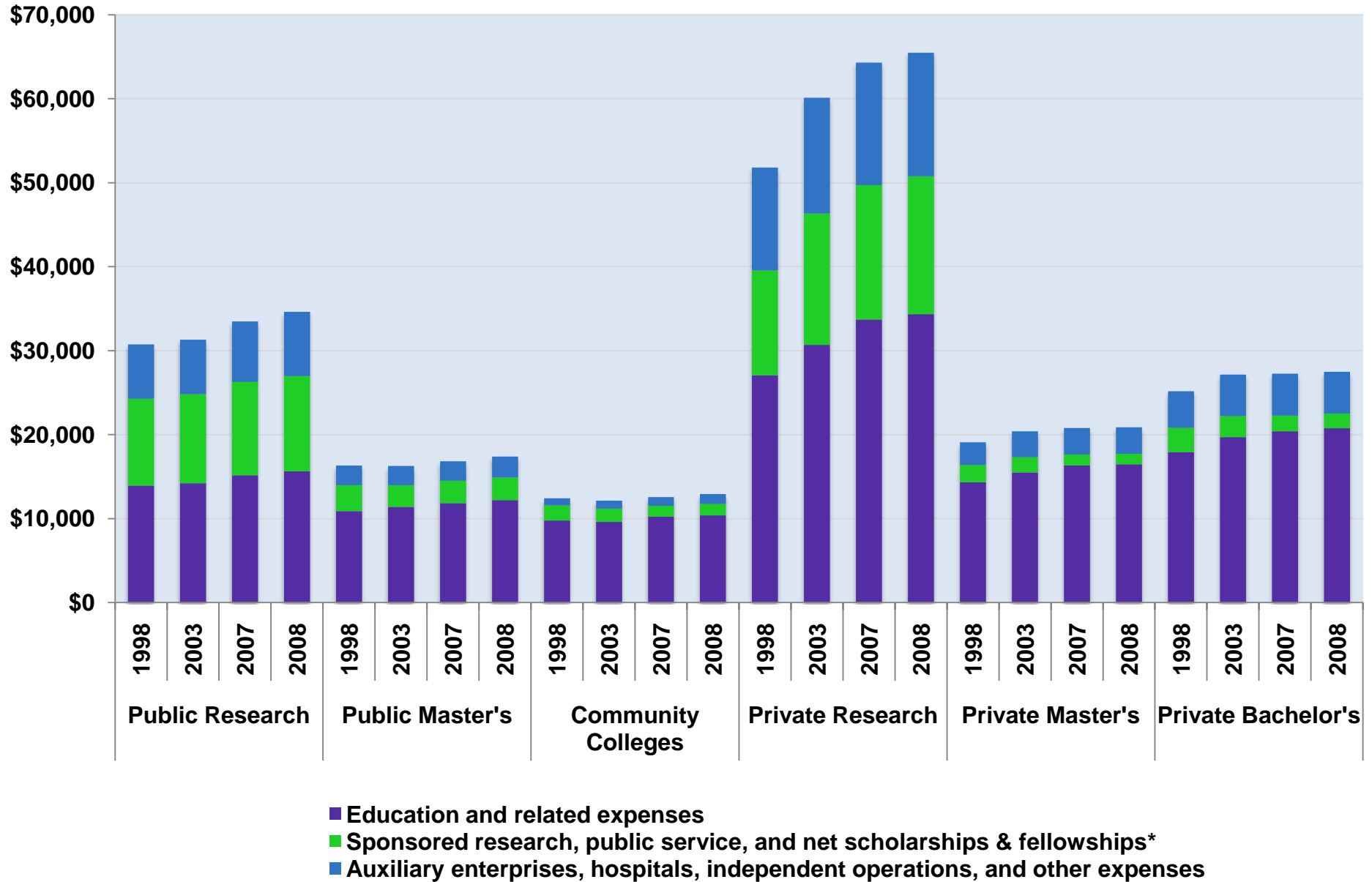
Why these metrics?

- Can be developed with existing data
- Can be aggregated to national, state, or institutional level
- Organized to be relevant to policy-decisions made by legislatures, governing boards
 - Revenues
 - Tuition
 - Subsidy
 - Production
- Not appropriate for program/departmental decision-making

The most important metric: E&R

- E&R spending per student – average education and related spending
 - An average “full-cost” per student figure
 - Includes instruction and student services, and a share of academic/institutional/maintenance
- Changes within E&R over time: is spending on administration going up or down?
- Cost/price/subsidy: the portion of E&R costs paid for by tuitions vs. by the institution, student share of costs
- Cost/tuitions: are tuitions going up because E&R spending is increasing or because of cost-shifting?
- E&R spending and enrollments

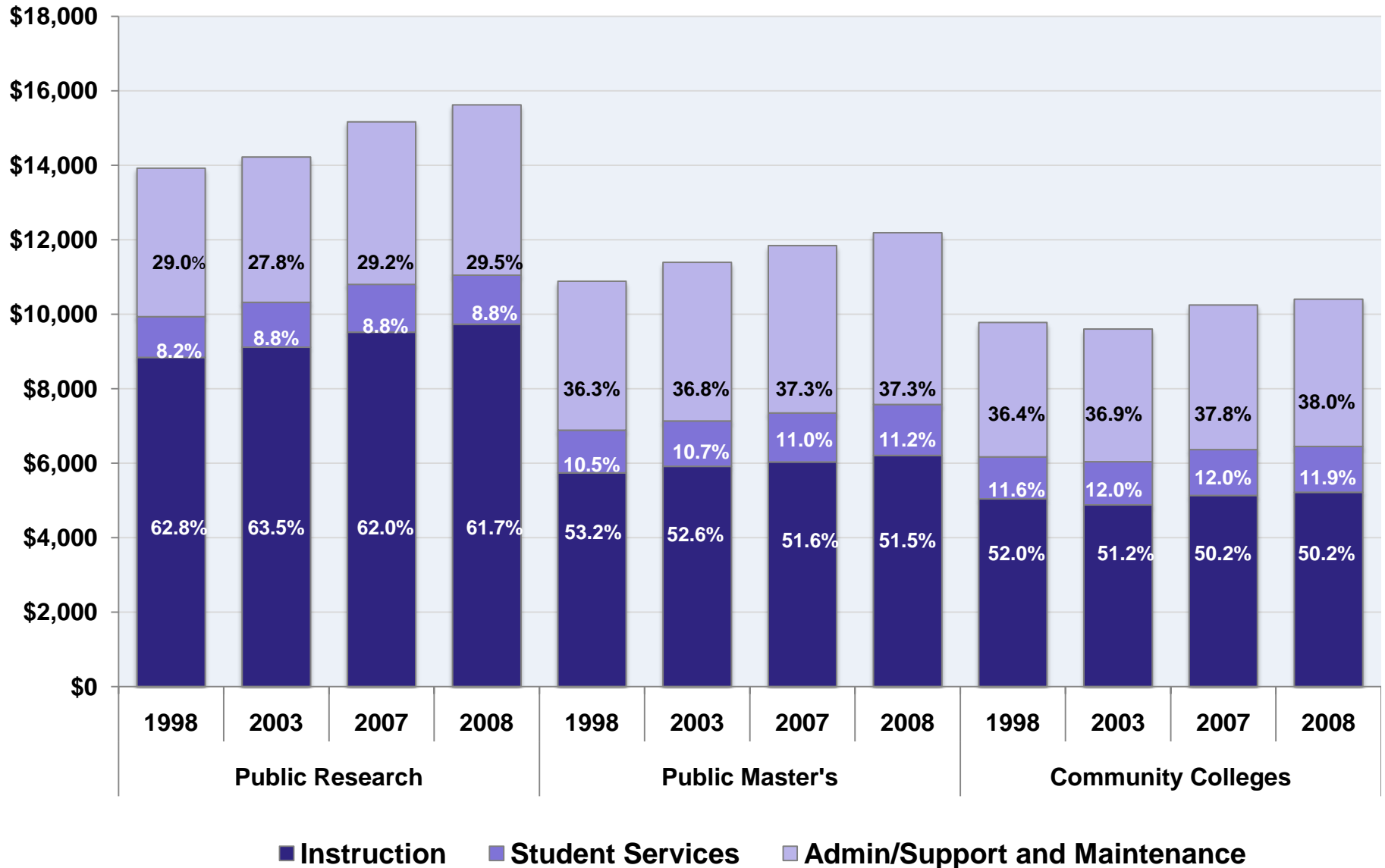
E&R spending as a proportion of total operating spending



*Note: In 1998, public institutions reported gross scholarships and fellowships.

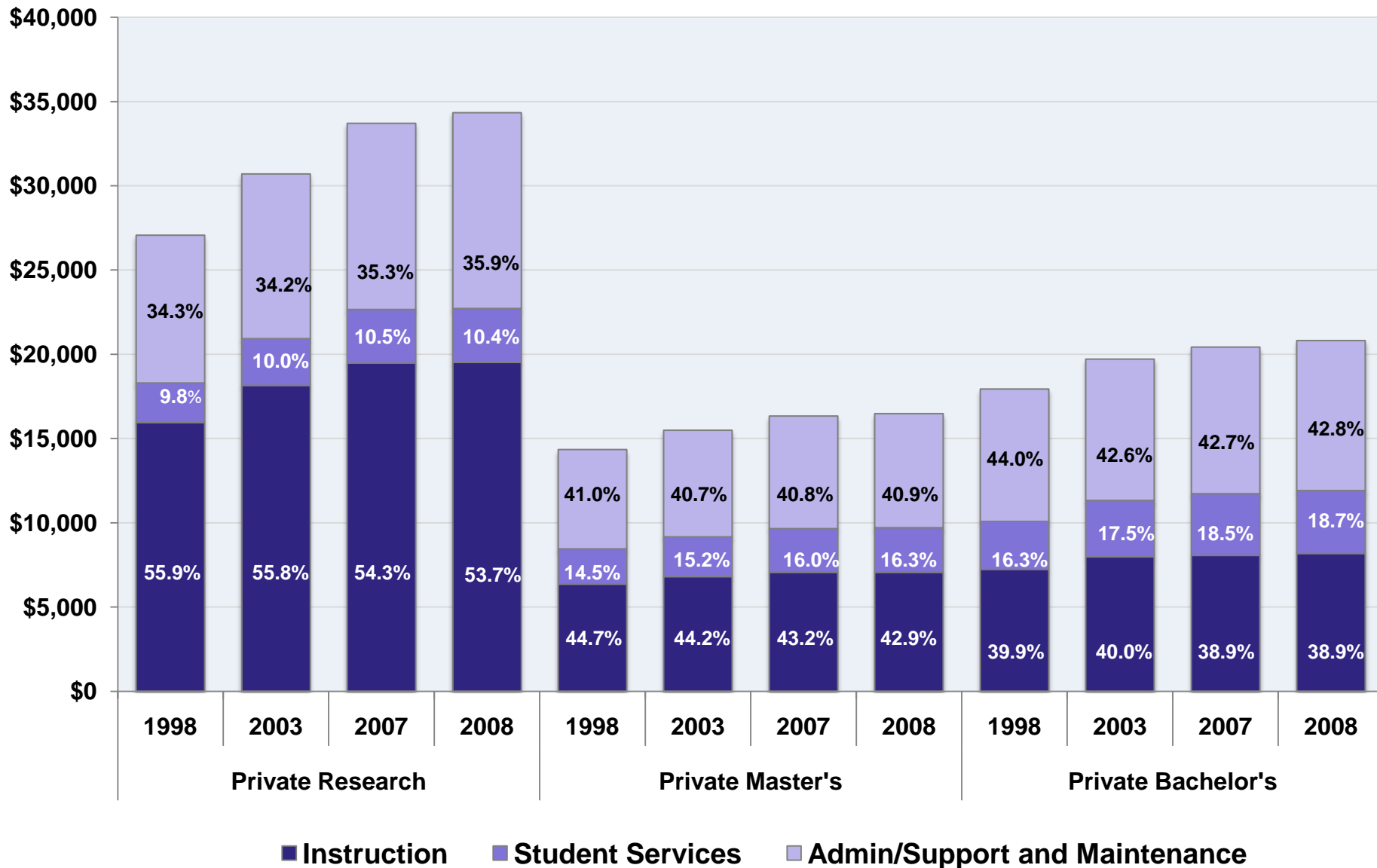
Source: Delta Cost Project IPEDS Database, 1987-2008, 11-year matched set.

Average **education and related (E&R)** spending per FTE student, by component, at public institutions, 1998-2008 (in 2008 \$).



Source: Delta Cost Project IPEDS database, 1987-2008, 11-year matched set.

Average **education and related (E&R)** spending per FTE student, by component, at private nonprofit institutions, 1998-2008 (in 2008 \$).



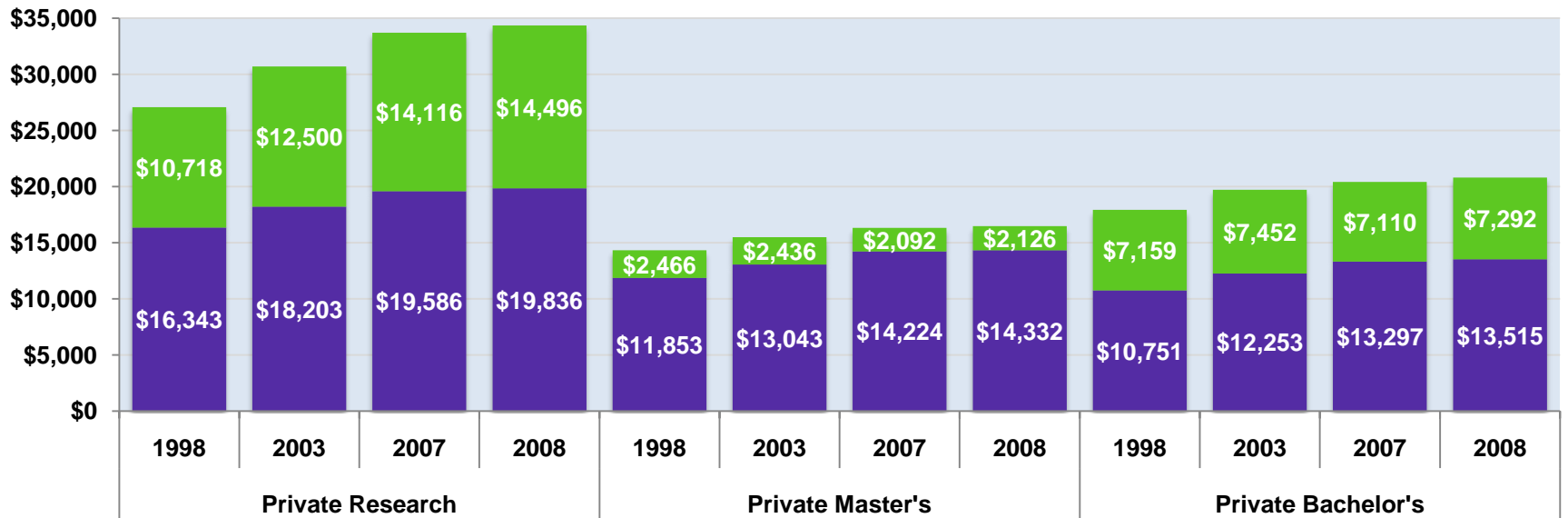
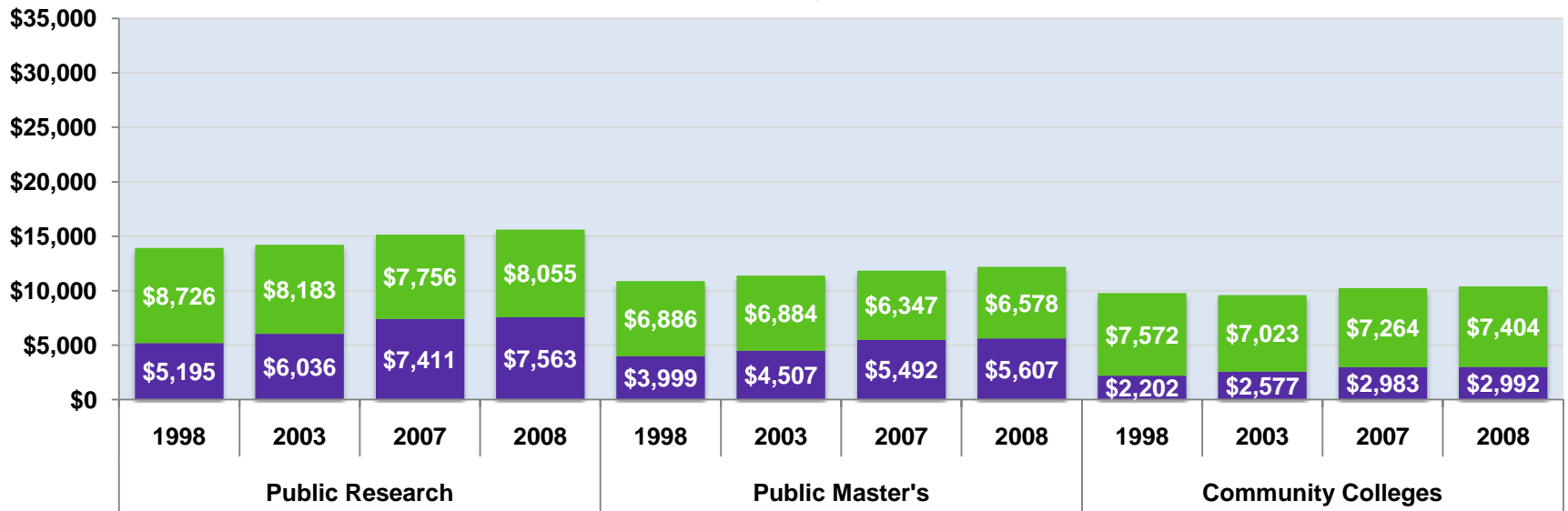
Source: Delta Cost Project IPEDS database, 1987-2008, 11-year matched set.

Cost/Price/Subsidy

*What proportion of **E&R costs** are paid by students, and what by the institution/state?*

- **Cost: Average E&R spending** per student
- **Price: Proportion of cost paid from net tuition revenues**
- **Subsidy: Proportion of cost paid from institutional revenues (Cost less price)**

Average **education and related** spending per FTE student, by net tuition and subsidy, AY1998-2008

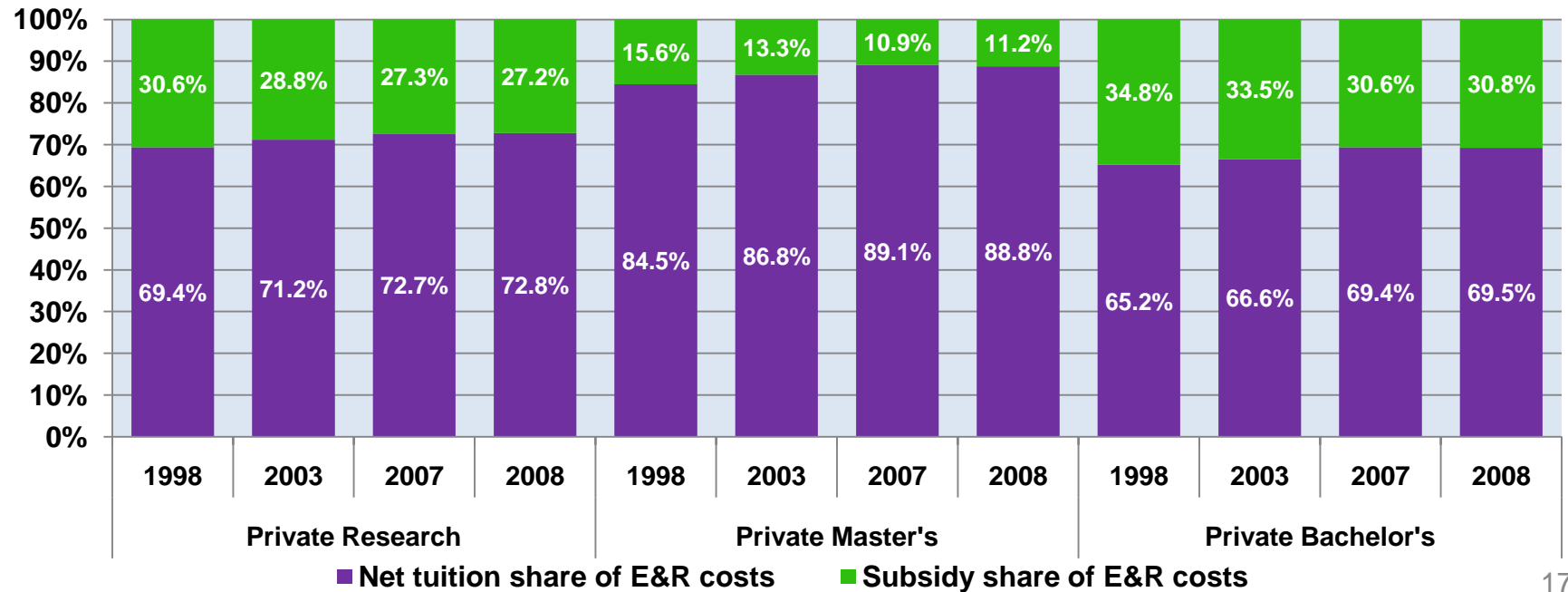
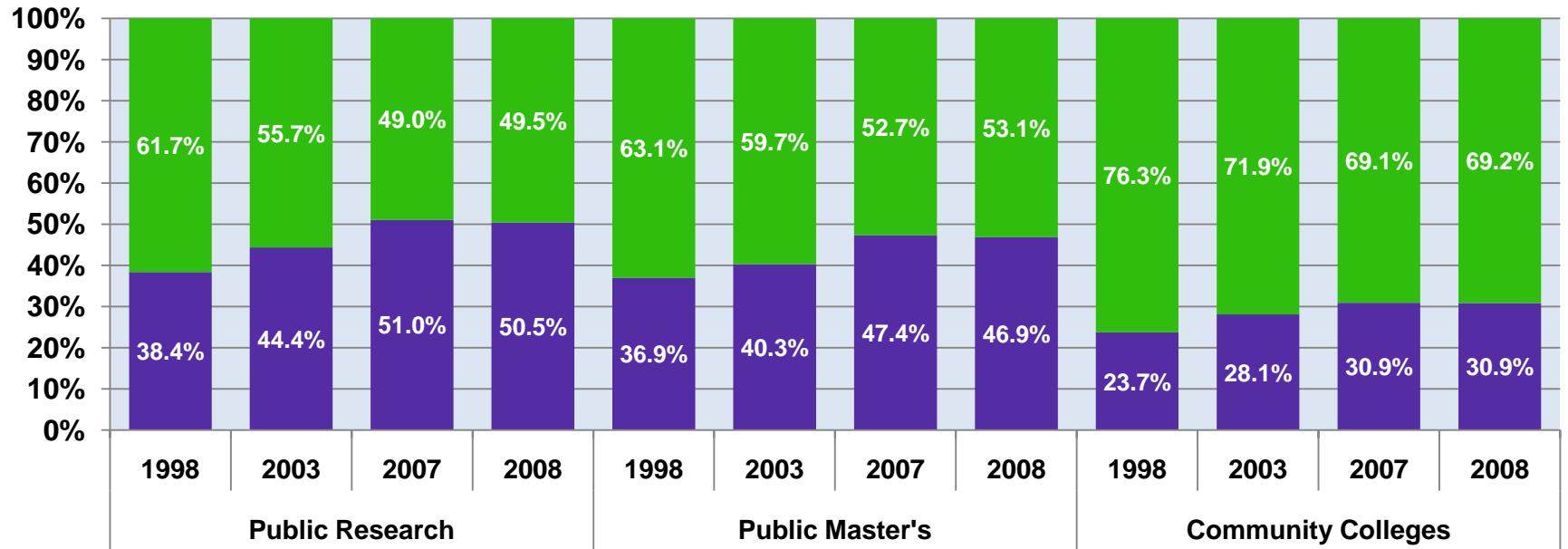


■ Net tuition

■ Average subsidy

Source: Delta Cost Project IPEDS database, 1987-2008, 11-year matched set.

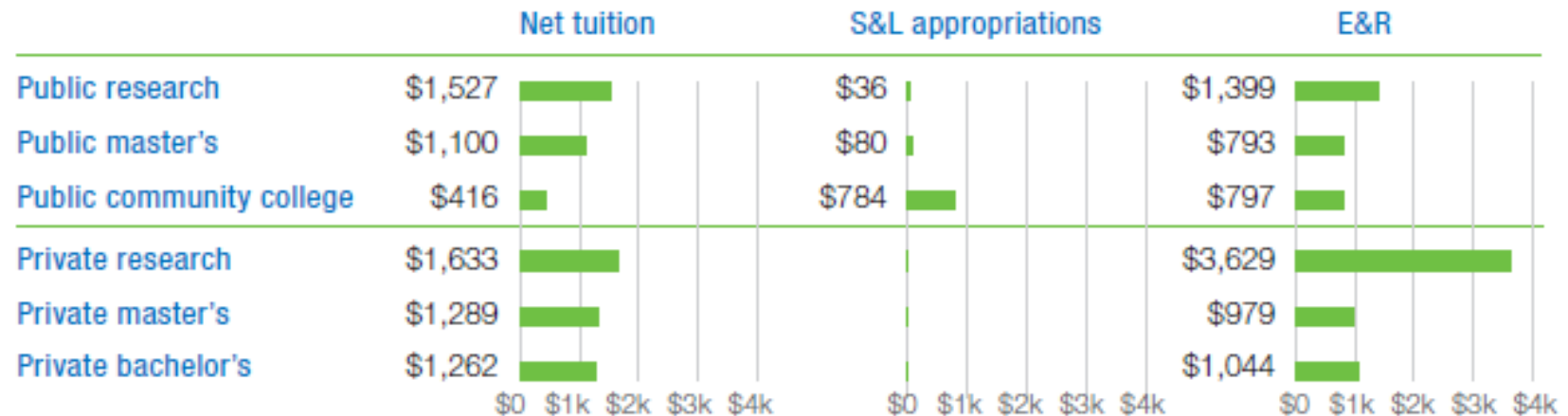
Net tuition and subsidy shares of E&R costs, AY1998-2008



Relation between tuition and E&R spending increases

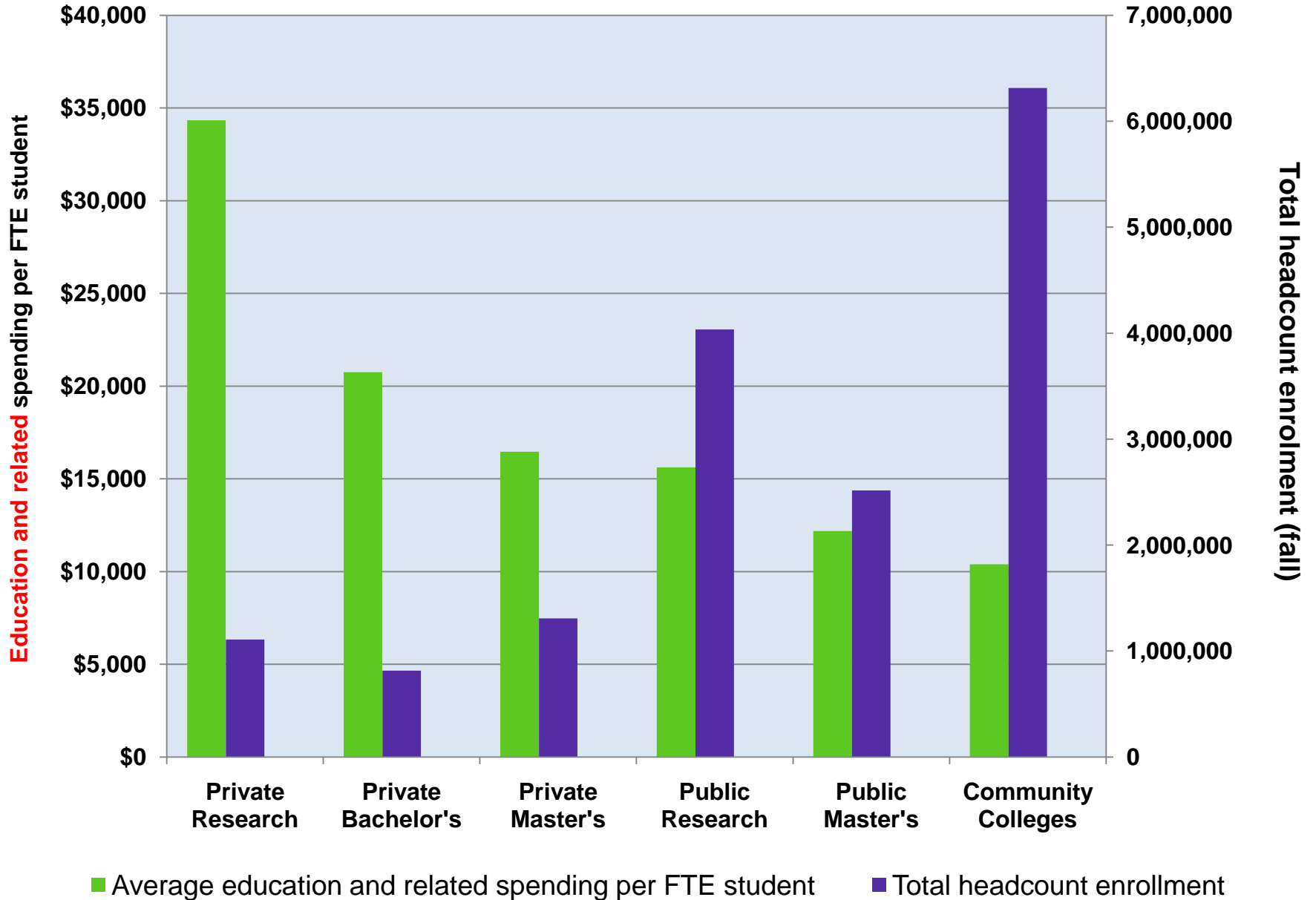
Outside the private research sector, the student share of costs is rising primarily to replace Institutional subsidies—and not to enable greater spending

Changes in net tuition, state and local appropriations, and education and related spending per FTE student, 2003–2008 (in 2008 dollars)



Source: Delta Cost Project IPEDS database, 20-year matched set.

Enrollment vs. E&R Spending, AY2008



Source: Delta Cost Project IPEDS database, 1987-2008, 11-year matched set (E&R) and unmatched set (enrollment).

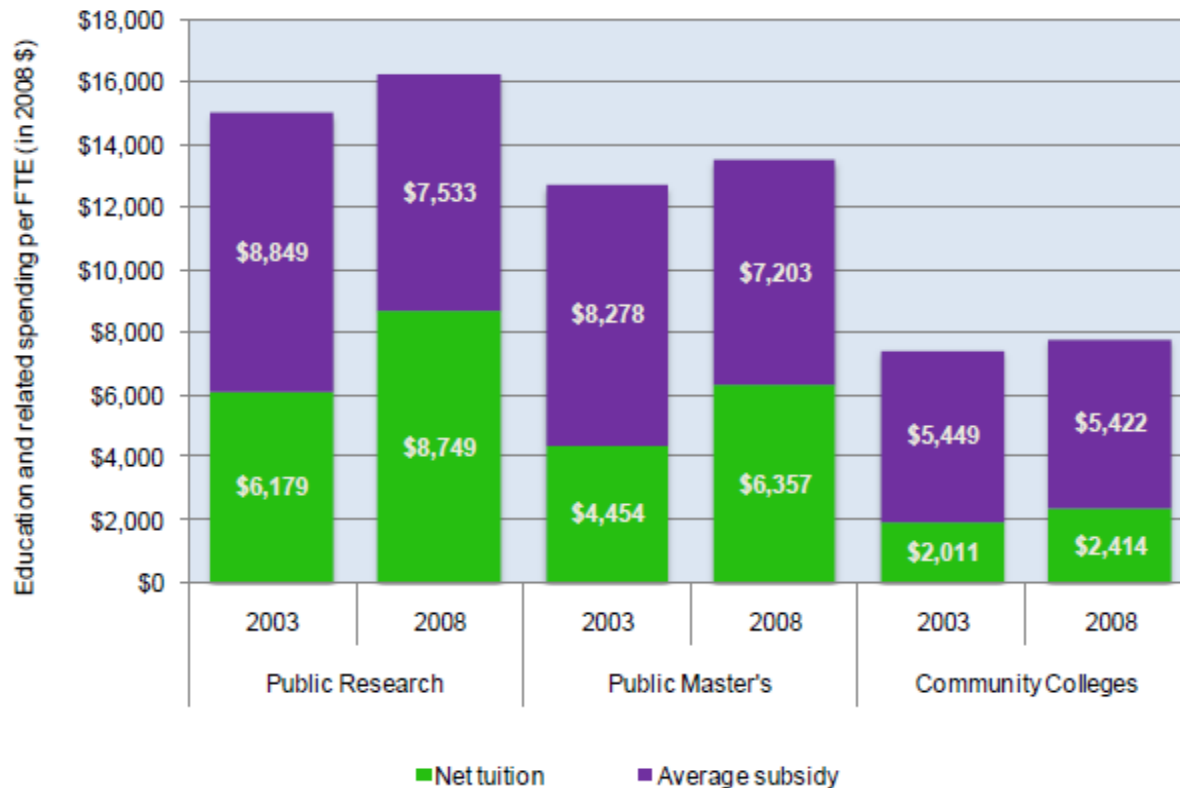
State Fact Sheets

For public institutions only, state level data showing key DCP metrics from 2003-2008:

- *where the students are*
- *cost/price/subsidy*
- *student share of costs*
- *instruction share of costs*
- *completions per 100 FTE students*
- *spending per completion*
- *comparisons to national averages*
- **Created to provide precise data at the institution and Carnegie classification level by untangling “parent-child” reported data, which is only possible in more recent years.**
- **<http://www.deltacostproject.org/data/state/>**

Illinois

Average education and related spending per FTE student in Illinois, 2003 and 2008



Total number of students enrolled at public and private postsecondary institutions:

Illinois: 851,240
United States: 18,584,201

Percentage of students enrolled in public institutions:

Illinois: 65%
United States: 72%

Distribution of enrollments at public institutions:

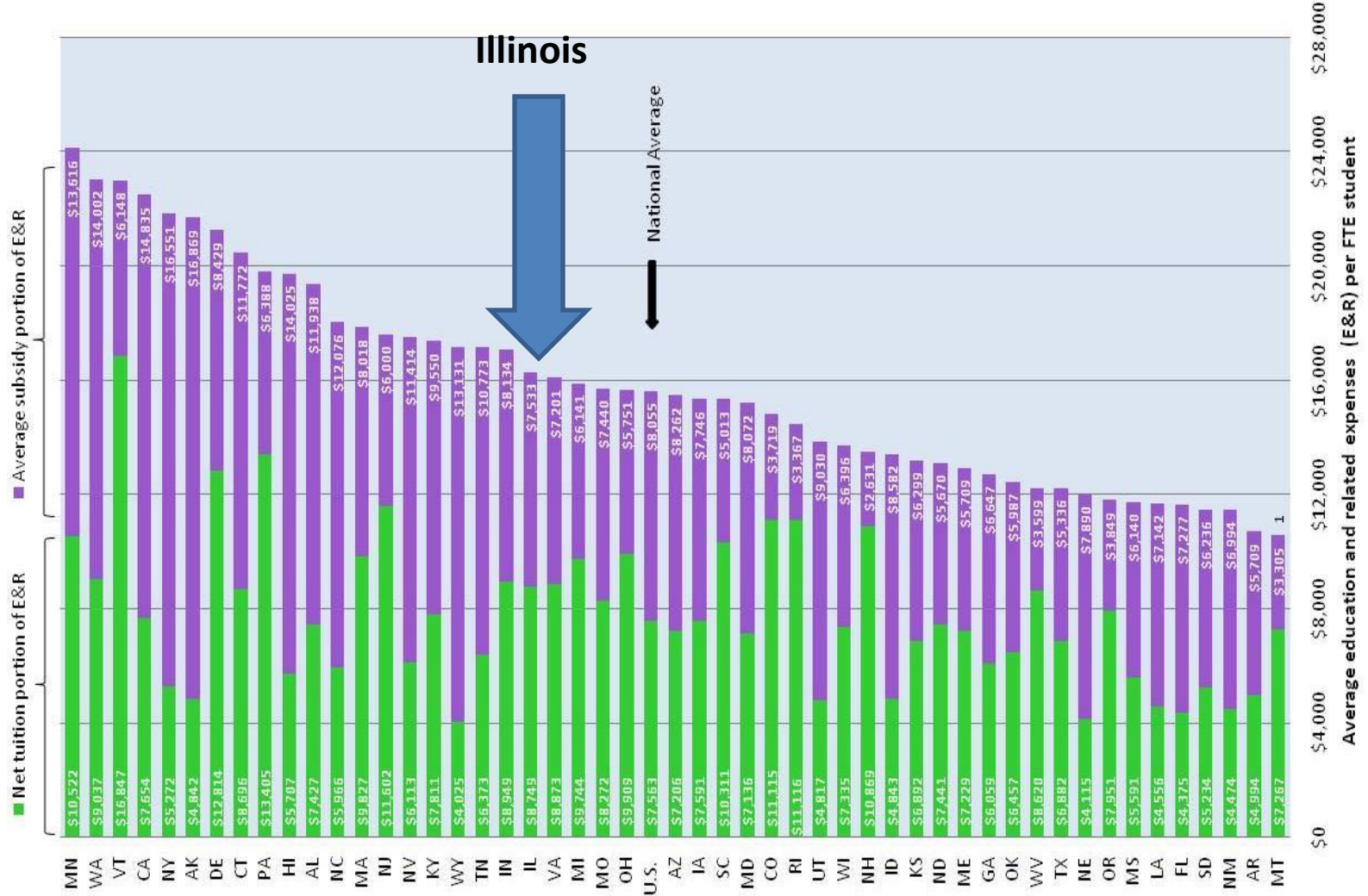
	<u>IL</u>	<u>U.S.</u>
Research:	24%	28%
Master's:	13%	19%
Bachelor's:	n/a	3%
Community Colleges:	63%	49%

Average education and related costs per FTE student, student share, instruction share, and performance

	Illinois				United States			
	Public Research	Public Master's	Public Bachelor's	Community Colleges	Public Research	Public Master's	Public Bachelor's	Community Colleges
Education and related costs per FTE student								
2008	\$16,282	\$13,560	n/a	\$7,836	\$15,619	\$12,185	\$17,075	\$10,396
<i>Change from 2003-2008</i>	8%	6%	n/a	5%	10%	7%	4%	8%
Net tuition share of education and related costs								
2008	55%	48%	n/a	31%	50%	47%	44%	31%
<i>Percentage-point change from 2003-2008</i>	12	13	n/a	4	6	7	7	3
Instruction share of education and related costs								
2008	61%	54%	n/a	47%	62%	52%	47%	50%
<i>Percentage-point change from 2003-2008</i>	1	-2	n/a	-3	-1	-1	-1	-1
Completions per 100 FTE students								
2008	27	33	n/a	28	25	24	20	26
<i>Change from 2003-2008</i>	0	3	n/a	2	1	1	1	3
Education and related spending per completion								
2008	\$59,453	\$46,343	n/a	\$34,182	\$62,654	\$54,252	\$84,561	\$45,949
<i>Change from 2003-2008</i>	7%	3%	n/a	-3%	3%	3%	0%	-4%

Delta Cost Project IPEDS State Database, 2003-2008.

Public Research Institutions: Average Subsidy/Student share of E&R Spending per student by State, 2008

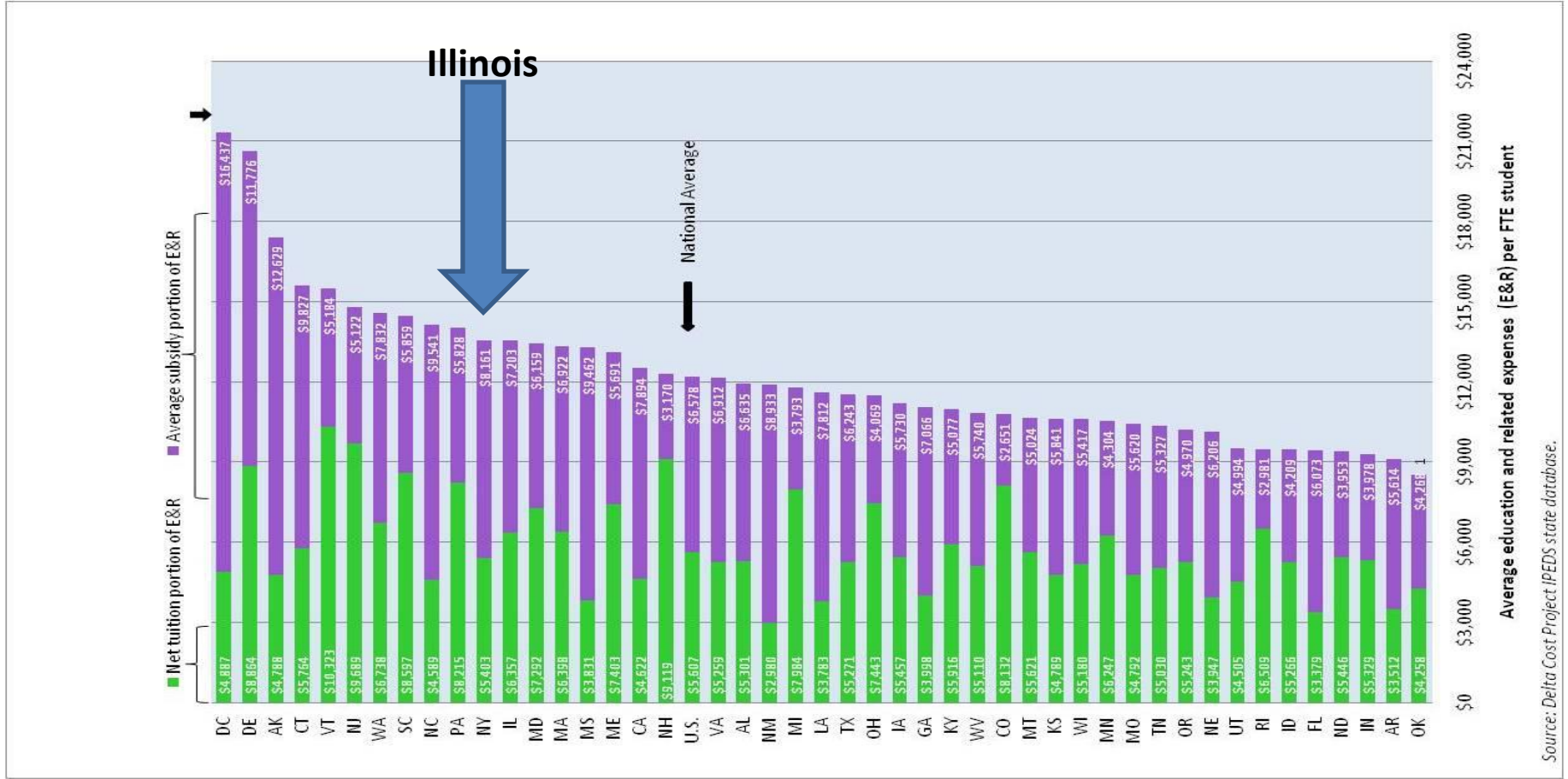


Source: Delta Cost Project IPEDS state database.

Illinois/National Comparisons - Public research sector - AY 2008

	National average	Illinois	Illinois Rank
E&R spending per student	\$15,619	\$16,282	20
State and local subsidy per student	\$8,055	\$7,533	28

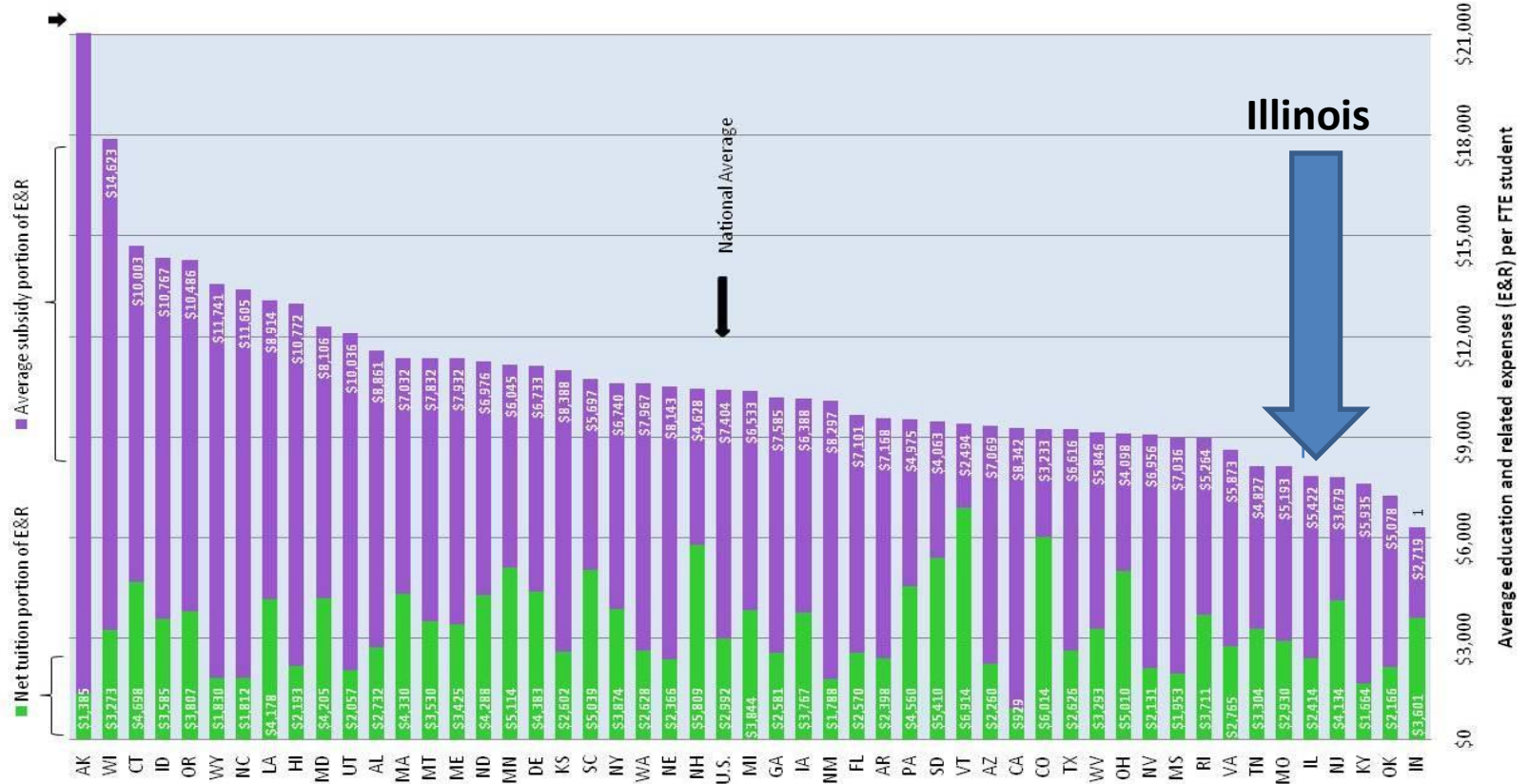
Public Masters' Institutions: Average Subsidy/Student share of E&R Spending per student by State, 2008



Illinois/National Comparisons - Public masters' AY 2008

	National average	Illinois	Illinois Rank
E&R spending per student	\$12,185	\$13,560	13
State and local subsidy per student	\$6,578	\$7,203	17

Public Community Colleges: Average Subsidy/Student share of E&R Spending per student by State, 2008



Source: Delta Cost Project IPEDS state database.

Illinois/National Comparisons – Public Community Colleges AY 2008

	National average	Illinois	Illinois Rank
E&R spending per student	\$10,396	\$7,836	46
State and local subsidy per student	\$7,404	\$5,422	31

Stop for discussion and questions

- How to improve utility of data for state/SHEEO use: examples from audience
 - West Virginia – Kevin Walthers
 - SHEEO ‘Completions’ study – variations using Delta data – Jeff Stanley
 - Others?
- Questions about data/metrics

Delta Cost Project TCS Online

Trends in College Spending (TCS) Online is a free, user-friendly, online data system www.tcs-online.org

TCS Online provides standardized reports for:

- Focus and comparison institutions
- Individual institution snapshots
- U.S. Carnegie Group averages

Using DCP finance and performance metrics:

- User-defined year selections and inflation adjustors
- Dollar amounts per FTE student
- Group means/medians
- Percent change
- Also includes enrollment data (by status, level, and race/ethnicity)

Various output options:

- Single or multi-year
- Tables and graphs (single year only)
- Html, excel, and pdf

- **BASIC GUIDE TO USING TCS ONLINE**
- <http://www.tcs-online.org>
- **(webinar participants will shift to ‘live’ screen)**
- **Step 1: Choosing Type of Report Using the Selection Menu**
 - **single institution**
 - **Compare institutions**
 - **US by Carnegie Group**

- **Step 2: Choosing Areas of Analysis**
- **Revenues**
- **Expenditures**
 - **By Grouped Categories**
 - **Within E&G by standard categories**
 - **Spending within E&R by share**
- **Cost/price/subsidy**
- **Spending and outcomes**
 - **Degrees/completions per 100 students enrolled**
 - **E&R spending per degree/completion**
- **Spending v. prices**
- **Enrollments and spending**

- **Step 3: Select additional filters**
- **Year**
 - Single year
 - Changes over multiple years (2002 - 2008)
- **Inflation adjustment**
 - None (current dollars)
 - CPI-U
 - HEPI
 - HECA
 - Default is CPI-U constant dollars

- **Step 4: Select additional filters**
 - **Year (single or over time)**
 - **Inflation adjustment**
 - **None (current dollars), CPI-U, HEPI, or HECA**
 - **Default is CPI-U**
 - **Select institution**
 - **Enter name of the institution**
 - **Search by state**
 - **Search by sector**
- Click on selected institutions, and >>> to select or <<< to deselect**

- **Step 5: Generate report**
 - **Save to excel or to PDF using “save” at top left**

Some examples

- One-year comparison of spending within E&R for 6 national research universities
- Changes in cost/price/subsidy over time for a single institution
- Comparisons of cost/price/subsidy for three public institutions in one state

Spending within Education and Related (E&R) by Component and Share (One Year)

Year: 2008 All dollars are reported per FTE Student, in 2008 dollars (CPI adjusted).

Institution	Carnegie	Instruction (a)	Student Services (b)	Admin/Support and Maintenance (c)	Total Education and Related (E&R) (d)=(a+b+c)	Instruction Share of E&R (e)=(a/d)	Student Services Share of E&R (f)=(b/d)	Admin Support Share of E&R (g)=(c/d)
Duke University	Private Research	\$46,520	\$2,791	\$23,491	\$72,802	63.9 %	3.8 %	32.3 %
Harvard University*	Private Research	\$38,770	\$5,577	\$41,891	\$86,239	45.0 %	6.5 %	48.6 %
Stanford University	Private Research	\$58,058	\$6,439	\$20,618	\$85,115	68.2 %	7.6 %	24.2 %
The University of Texas*	Public Research	\$14,664	\$1,138	\$5,034	\$20,837	70.4 %	5.5 %	24.2 %
University of California-Berkeley	Public Research	\$16,098	\$3,467	\$5,500	\$25,065	64.2 %	13.8 %	21.9 %
University of Michigan-Ann Arbor	Public Research	\$19,261	\$1,854	\$8,156	\$29,271	65.8 %	6.3 %	27.9 %
Selected Comparison Group	Median	\$29,016	\$3,129	\$14,387	\$51,037	65.0 %	6.4 %	26.0 %
Selected Comparison Group	Mean	\$32,229	\$3,544	\$17,448	\$53,222	62.9 %	7.2 %	29.8 %

Note: Data presented may differ from that reported by institutions; some data were adjusted to account for changes in financial reporting standards or data collection surveys over time. Data in italics were imputed.

N/A - Not Applicable

Source: Delta Cost Project IPEDS Database, 1987-2008 generated by TCS Online.

* Institution is part of a "grouped institution." The data presented also includes data for other schools or campuses (usually in the same system) which reported some or all data together.

[The Grouped Institution List \(under the "Help" tab\) shows which institutions were grouped.](#)

All dollar amounts are reported in 2008 dollars (CPI adjusted).

Cost/Price/Subsidy Institution Snapshot

Institution: University of Maryland-College Park

Carnegie Sector: Public Research

All dollars are reported per FTE Student, in 2008 dollars (CPI adjusted).

	2002	2003	2004	2005	2006	2007	2008	Average Annual Percent Change (2002 - 2007)	Percent Change (2007 - 2008)
Education and Related	\$18,200	\$16,707	\$16,209	\$16,529	\$17,052	\$17,128	\$16,802	-1.2 %	-1.9 %
Net Tuition Revenue	\$6,573	\$6,919	\$7,928	\$8,313	\$8,467	\$8,548	\$9,410	5.4 %	10.1 %
Average Subsidy	\$11,628	\$9,789	\$8,281	\$8,215	\$8,585	\$8,580	\$7,392	-5.9 %	-13.8 %
Student Share of Costs	36.1 %	41.4 %	48.9 %	50.3 %	49.7 %	49.9 %	56.0 %	2.8 %	6.1 %
Subsidy Share of Costs	63.9 %	58.6 %	51.1 %	49.7 %	50.3 %	50.1 %	44.0 %	-2.8 %	-6.1 %

Note: Data presented may differ from that reported by institutions; some data were adjusted to account for changes in financial reporting standards or data collection surveys over time. Data in italics were imputed.

N/A - Not Applicable

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All dollar amounts are reported in 2008 dollars (CPI adjusted).

Cost/Price/Subsidy (One Year)

Year: 2008

All dollars are reported per FTE Student, in 2008 dollars (CPI adjusted).

Institution	Carnegie	Education and Related (a)	Net Tuition Revenue (b)	Average Subsidy (c)=(a-b)	Student Share of Costs (d)=(b/a)
City College of San Francisco*	Public Associate's	\$10,236	\$1,968	\$8,268	19.2 %
San Francisco State University	Public Master's	\$11,786	\$5,187	\$6,598	44.0 %
University of California-Berkeley	Public Research	\$25,065	\$8,900	\$16,165	35.5 %
Selected Comparison Group	Median	\$11,786	\$5,187	\$8,268	35.5 %
Selected Comparison Group	Mean	\$15,696	\$5,352	\$10,344	32.9 %

Note: Data presented may differ from that reported by institutions; some data were adjusted to account for changes in financial reporting standards or data collection surveys over time. Data in italics were imputed.

N/A - Not Applicable

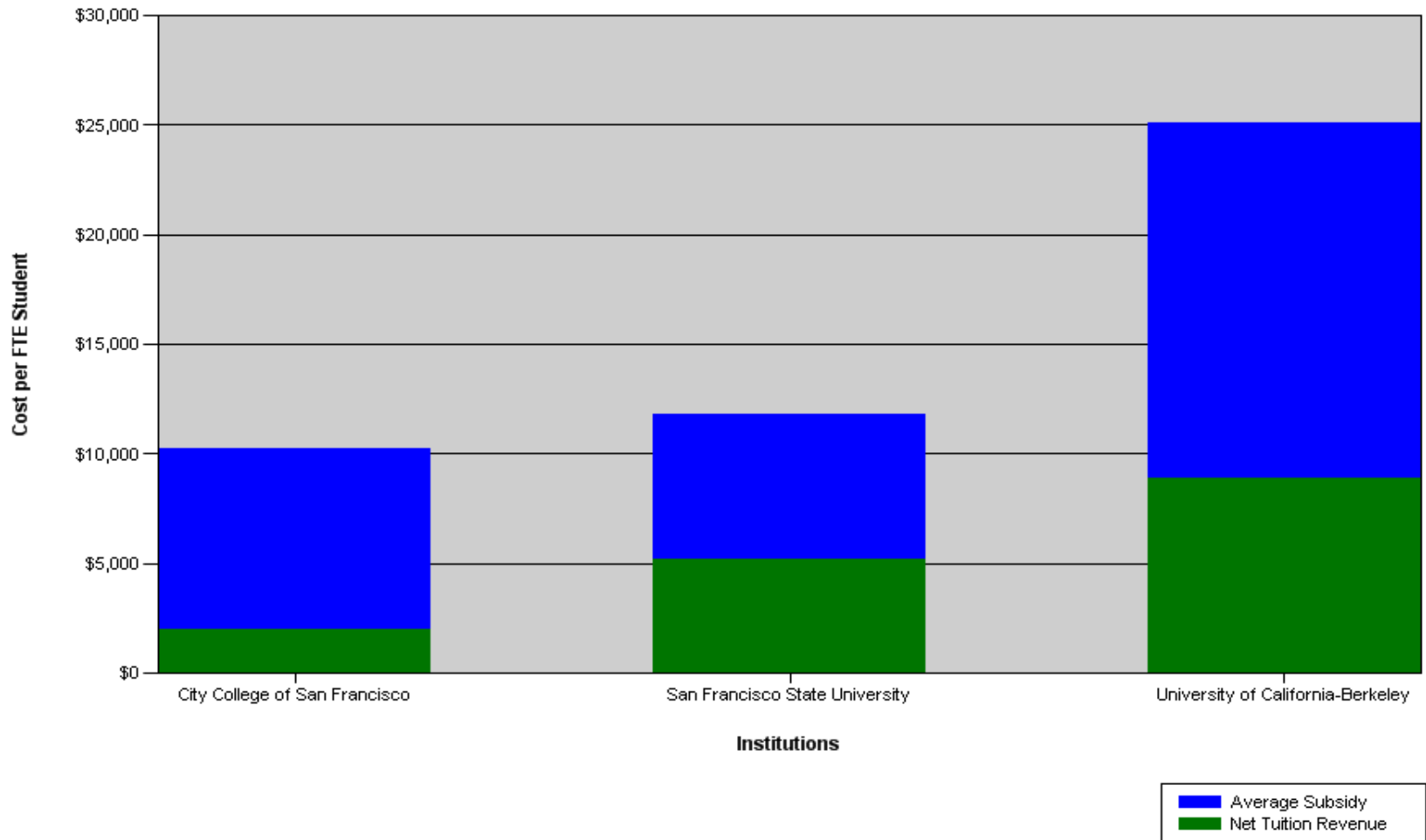
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[The Grouped Institution List](#) (under the "Help" tab) shows which institutions were grouped.

All dollar amounts are reported in 2008 dollars (CPI adjusted).

Cost/Price/Subsidy (One Year)



Source: Delta Cost Project IPEDS Database, 1987-2008 generated by TCS Online.

Discussion and questions

- Please type in questions into the (what do we call this area?)
- For one-on-one Q&A, or to arrange for a private tutorial, send questions to:
colleen@deltacostproject.org
- Let us know how we may help!

For more information, visit the Delta Project website, at:

<http://www.deltacostproject.org>

<http://www.tcs-online.org>

