



**Office of Financial Management**

STATE OF WASHINGTON

# **Higher Education Per-Student Funding Comparisons**

**RCW 28B.15.068**

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# Higher Education Per-Student Funding Comparisons

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## Introduction

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In the 2007 Legislative Session, the legislature directed the Office of Financial Management (OFM) to determine per-student funding levels at higher education institutions comparable to institutions in Washington (Second Substitute Senate Bill 5806). RCW 28B.15.068 directs OFM to define the 60<sup>th</sup> percentile of total per-student funding at similar public institutions of higher education in the global challenge states,<sup>1</sup> adjust for regional cost-of-living differences and develop a funding trajectory for each four-year institution of higher education and for the community and technical college system as a whole such that state appropriations plus tuition and fees revenue allow Washington to reach its funding goal of the 60<sup>th</sup> percentile of global challenge states by 2017 (see Appendix A).

This report is submitted to the Governor, the Higher Education Coordinating Board and the education and fiscal committees of the legislature in response to the directive. This report is organized around the requirements of the legislation as follows:

1. Comparable institutions – determination within the eight global challenge states
2. Collection of tuition and appropriations data by institution
3. Calculation of the 60<sup>th</sup> percentile per-student funding level and adjustment for spatial cost-of-living differences
4. Development of funding trajectories
5. Summary

## Identification of Comparable Institutions

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The legislation calls for comparison to “similar public institutions of higher education in the global challenge states,” while adjusting for differences in program offerings and in the relative mix of lower division, upper division and graduate students. To develop this list of similar institutions, the 2005 Carnegie Classification system was used to identify global challenge state institutions where the mix of full- and part-time students, the selectivity and the transfer-in rates were similar to each of the Washington institutions. This process, choosing these characteristics, led to a list of *comparable* institutions specific to this study; they are not necessarily the same as *peer* institutions.

Traditionally, higher education institutions have identified sets of “peer institutions” that are used for comparison of financial items such as tuition and faculty salaries, as well as accountability measures such as retention and graduation rates. Because of the larger number of institutions used in national comparisons, the peer institution analysis can use a more tailored definition of what is a peer institution and still result in a relatively large comparison group in total. When comparing to institutions within a subset of states, precise comparison groups would limit the total number of comparable institutions for the analysis. For example, for Washington State University, established peer institutions are land-grant institutions with a school of veterinary medicine – 21 institutions in all. Connecticut, Maryland, Massachusetts and New Jersey – the majority of the seven comparison

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<sup>1</sup> The global challenge states (GCS) are California, Colorado, Connecticut, Maryland, Massachusetts, New Jersey, Virginia and Washington – the states ranking highest in the New Economy Index of 2002. [[www.neweconomyindex.org/states/2002/](http://www.neweconomyindex.org/states/2002/)]

global challenge states – have no such institutions. The land-grant institutions from those states were included in the per-student funding comparison group.

The regional institutions have 278 peers according to the HECB, a small subset of which are in the comparable institution list for this study. Since the Washington community and technical college system was to be treated “as a whole,” institutions making up each of the other states’ equivalent system were included.

The primary data sources used to identify comparable institutions were the institutional characteristics and enrollment data contained in the Integrated Postsecondary Education Data System (IPEDS).<sup>2</sup> The institutional characteristics contained in IPEDS include a set of descriptive categories defined by the Carnegie Foundation. In the 2005 Carnegie Classification system, the Undergraduate Profile classification describes the undergraduate population with respect to three characteristics: (1) the proportion of part- and full-time students; (2) standardized test scores of first-year students; and (3) the share of entering students who transfer from another institution.

The sets of comparable institutions identified for the 2007-08 study are used in this update. A summary of the criteria used to select comparable institutions follows; full detail is contained in Appendix B:

***University of Washington (all campuses):***

Institutions classified as comparable to the University of Washington were those classified as “Research Universities (very high research activity)” in the Carnegie 2005 Classification system with a medical school. If there was no such institution in a state, data for the research institution was combined with data for the medical school.

***Washington State University (all campuses):***

Land-grant universities classified in the 2005 Carnegie Classification system as “Research Universities (very high research activity)” were selected as the set of comparable institutions for Washington State University. The institution with a veterinary school was selected if more than one institution in a state fell in this category.

***Central Washington University:***

Comparable institutions for Central Washington University were selected based on these criteria: (a) “Master's Colleges & Universities (larger programs)” or “Master's Colleges & Universities (medium programs);” (b) Fall 2005 FTE enrollment between 6,300 and 14,999; and (c) undergraduate profile categorized as “Full-time four-year, more selective, higher transfer in” or “Full-time four-year, selective, higher transfer in” or “Medium full-time four-year, selective, high transfer in.”

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<sup>2</sup> The Integrated Postsecondary Education Data System (IPEDS) is the postsecondary data collection system of the U.S. National Center for Education Statistics. Focus areas for data collection are enrollments, program completions, graduation rates, faculty and staff, finances, institutional prices and student financial aid.

### ***Eastern Washington University:***

Institutions with 2005 Carnegie Classification system Basic of “Master's Colleges and Universities (larger programs)” along with Fall 2005 FTE enrollment of 7,400 to 15,999 were selected as comparable institutions for Eastern Washington University. Because of program similarities, California State University–Bakersfield (FTE enrollment 6,441) was included in the set. The list was reduced based on the Carnegie Classification 2005 Undergraduate Profile characteristics.

### ***Western Washington University:***

Comparable institutions for Western Washington University were selected based on these criteria: (a) “Master's Colleges & Universities (larger programs);” (b) Fall 2005 FTE enrollment of 8,000-17,999; and (c) undergraduate profile categorized as "Fulltime four-year, more selective, higher transfer in" or "Full-time four-year, selective, higher transfer in" or "Fulltime four-year, more selective, lower transfer in" or "Medium full-time four-year, selective, high transfer in."

### ***The Evergreen State College:***

Comparable institutions for the Evergreen State College met the following criteria: (a) 2005 Carnegie Classification system Basic: “Baccalaureate Colleges--Arts & Sciences” or “Master's Colleges & Universities (medium programs)” or “Master's Colleges & Universities (smaller programs);” (b) Fall 2005 FTE enrollment between 3,000 and 7,999; and (c) Highest Level of Offering: Master’s degree or Post-master’s certificate.

### ***Community and Technical Colleges:***

Public two-year institutions that were part of each state’s community and technical college system were selected as the set of institutions comparable to Washington’s community and technical college system. In order to compare Washington’s community and technical college system to those in the other global challenge states, data from these institutions were aggregated to the state level.

## **Tuition, Fees and Appropriations Data**

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Fiscal Year 2007-08 tuition and fees, state appropriations and local appropriations data from IPEDS were used for the comparison of funding levels by institution. Specific definitions of these items are detailed in [Appendix C](#). For baccalaureate institutions, funding consisted of tuition and fees plus state appropriations. For community and technical colleges, funding consisted of tuition and fees plus both state appropriations and local appropriations.<sup>3</sup>

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<sup>3</sup> Colorado institutions proved to be an anomaly beginning with 2005-06 because of conversion to a voucher system. What had been a state appropriation was split into two line items in the IPEDS finance data. One part, the College Opportunity Fund, was paid to undergraduate students and considered as tuition and fees. Another component was considered as a fee for service and reported as “other operating.” For Colorado institutions only, beginning in 2005-06, the revenue amounts reported in “other operating” were used to obtain an equivalent to that reported as state appropriations in prior years. Most likely the result is an overstated total funding amount. It did not change Colorado’s ranking in funding per FTE or affect the calculation of the 60<sup>th</sup> percentile funding levels since Colorado institutions consistently rank at the low end of the continuum.

For some systems, IPEDS finance data were published for system offices in addition to individual institutions. In these cases, for purposes of this report, the system data were distributed proportionally to individual institutions based on fall 2007 FTE enrollment.<sup>4</sup>

## Adjustment for Regional Cost-of-Living Differences

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RCW 28B.15.068 directed OFM to make adjustments for regional cost-of-living differences in the per-student funding study. There is not an accepted, standardized method for making that adjustment, nor is there a stand-alone data source that is well suited for this purpose. In order to account for regional cost-of-living differences, OFM developed a method to account for spatial cost-of-living variation primarily based on two data sources: the ACCRA cost-of-living index (COLI) and U.S. Housing and Urban Development Fair Market Rent (FMR) data. A summary of the methodology follows; a full description is in [Appendix D](#). Cost-of-living information by county is listed in [Appendix E](#).

For global challenge state institutions in a city or county with ACCRA COLI data, the COLI index number was used for this study. COLI data are designed to reflect general living costs and are available for areas smaller than the state level; therefore they were a reasonable option for making cost-of-living adjustments. For areas outside the ACCRA set, a statistical relationship was developed between ACCRA (dependent variable) and two-bedroom FMR (independent variable) to estimate the cost of living for areas without ACCRA data.

Next an adjustment factor was calculated by taking the inverse of the cost-of-living number. Then within each comparison group, the factors were scaled such that the Washington institution's cost-of-living index was the basis; that is, the adjustment factor for the Washington institution equaled one.

Educational institutions face a variety of costs, of which salaries are only a portion. Other costs faced by institutions may or may not be affected by regional cost of living. Therefore, one option was to make a partial adjustment for cost-of-living differences; a fraction of funding was adjusted while the remainder was unadjusted. Salaries could be a component that is likely influenced by local price levels. [Appendix F](#) provides details on how employee compensation as share of total expenses was calculated to allow for a partial adjustment for cost of living.

Thus the funding levels are presented in three ways, as was also done for the 2008 Per-Student Funding study<sup>5</sup>: (1) no cost-of-living adjustment; (2) partial adjustment based on salary and fringe benefits as a proportion of modified total core expenses; and (3) full adjustment (100 percent of expenses are adjusted for cost of living). OFM used the same methodology for 2009 but with data through 2007-08.

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<sup>4</sup> An alternative approach to allocating system office finance amounts for appropriations would be to use the distribution of state appropriations among the institutions to allocate the system office amounts.

<sup>5</sup> See Appendix I of the 2008 Higher Education Per-Student Funding Comparison report (<http://www.ofm.wa.gov/hied/funding/default.asp>) for a critique by Washington State University of the cost-of-living adjustment.

## **Per-Student Funding Levels**

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The following tables show the 2007-08 per-student funding levels for the Washington institutions and community and technical college system, and the comparable institutions from other global challenge states. The tables include funding levels that were adjusted for regional cost-of-living differences as well as unadjusted levels.

## University of Washington

### 2007-08 Per-Student Funding Levels

Institution	\$ per FTE		
	Unadjusted	Partial COLA	Full COLA
University of California-Davis	\$25,835	\$26,505	\$26,726
University of California-Irvine	\$19,258	\$16,711	\$15,645
University of California-Los Angeles	\$28,566	\$25,304	\$23,789
University of California-San Diego	\$21,628	\$20,168	\$19,503
University of Colorado –all campuses	\$16,195	\$16,168	\$16,155
University of Connecticut + medical	\$28,565	\$28,547	\$28,542
University of Massachusetts - Amherst+medical	\$23,891	\$25,636	\$26,715
University of Maryland - College Park+Baltimore	\$25,864	\$24,438	\$23,848
Rutgers Total + medical	\$30,066	\$29,512	\$29,304
University of Virginia - Main Campus	\$21,661	\$23,798	\$24,579
<b>University of Washington - all campuses</b>	<b>\$20,382</b>	<b>\$20,382</b>	<b>\$20,382</b>

	\$ per FTE		
	Unadjusted	Partial COLA	Full COLA
<b>University of Washington</b>	<b>\$20,382</b>	<b>\$20,382</b>	<b>\$20,382</b>
60 <sup>th</sup> Percentile	\$25,847	\$25,437	\$25,433
Difference	(\$5,465)	(\$5,055)	(\$5,051)
Percent Change to Achieve 60 <sup>th</sup> Percentile	+ 27%	+ 25%	+ 25%

## Washington State University

### 2007-08 Per-Student Funding Levels

Institution	\$ per FTE		
	Unadjusted	Partial COLA	Full COLA
University of California-Davis	\$25,835	\$22,124	\$20,903
Colorado State University	\$10,166	\$10,233	\$10,262
University of Connecticut without medical	\$21,077	\$17,185	\$16,471
University of Massachusetts-Amherst	\$22,448	\$20,402	\$19,632
University of Maryland-College Park	\$22,477	\$17,898	\$16,209
Rutgers	\$21,746	\$17,976	\$16,577
Virginia Polytechnic Institute & State University	\$18,336	\$17,467	\$17,142
<b>Washington State University</b>	<b>\$18,387</b>	<b>\$18,387</b>	<b>\$18,387</b>

	\$ per FTE		
	Unadjusted	Partial COLA	Full COLA
<b>Washington State University</b>	<b>\$18,387</b>	<b>\$18,387</b>	<b>\$18,387</b>
60 <sup>th</sup> Percentile	\$22,167	\$17,945	\$16,916
Difference	(\$3,780)	\$442	\$1,471
Percent Change to Achieve 60 <sup>th</sup> Percentile	+21%	-2%	-8%

**Central Washington University**  
2007-08 Per-Student Funding Levels

<b>Institution</b>	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
California State University-Chico	\$11,353	\$10,864	\$10,703
Humboldt State University	\$14,942	\$14,034	\$13,714
Sonoma State University	\$13,122	\$11,022	\$10,287
Central Connecticut State University	\$14,169	\$12,483	\$11,568
Southern Connecticut State University	\$14,515	\$12,662	\$11,928
Bridgewater State College	\$12,477	\$10,204	\$9,386
University of Massachusetts-Dartmouth	\$16,182	\$14,128	\$13,331
Salisbury University	\$11,136	\$10,692	\$10,618
Rowan University	\$15,521	\$13,083	\$12,360
Montclair State University	\$13,863	\$11,492	\$10,783
William Paterson University of New Jersey	\$16,527	\$13,229	\$12,517
Radford University	\$11,023	\$10,823	\$10,766
<b>Central Washington University</b>	<b>\$11,064</b>	<b>\$11,064</b>	<b>\$11,064</b>

	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
<b>Central Washington University</b>	<b>\$11,064</b>	<b>\$11,064</b>	<b>\$11,064</b>
60 <sup>th</sup> Percentile	\$14,377	\$12,590	\$11,784
Difference	(\$3,313)	(\$1,526)	(\$720)
Percent Change to Achieve 60 <sup>th</sup> Percentile	+ 30%	+ 14%	+ 7%

**Eastern Washington University**  
2007-08 Per-Student Funding Levels

<b>Institution</b>	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
California State University-Bakersfield	\$12,931	\$11,873	\$11,436
California State University-San Bernardino	\$11,828	\$9,977	\$9,166
California State University-Chico	\$11,353	\$10,232	\$9,862
Central Connecticut State University	\$14,169	\$11,893	\$10,659
Southern Connecticut State University	\$14,515	\$11,990	\$10,990
Bridgewater State College	\$12,477	\$9,661	\$8,648
University of Massachusetts-Dartmouth	\$16,182	\$13,373	\$12,283
Towson University	\$11,414	\$9,349	\$8,671
Rowan University	\$15,521	\$12,334	\$11,388
Montclair State University	\$13,863	\$10,839	\$9,936
William Paterson University of New Jersey	\$16,527	\$12,420	\$11,533
Radford University	\$11,023	\$10,167	\$9,919
<b>Eastern Washington University</b>	<b>\$11,542</b>	<b>\$11,542</b>	<b>\$11,542</b>

	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
<b>Eastern Washington University</b>	<b>\$11,542</b>	<b>\$11,542</b>	<b>\$11,542</b>
60 <sup>th</sup> Percentile	\$14,047	\$11,885	\$10,858
Difference	(\$2,504)	(\$343)	\$685
Percent Change to Achieve 60 <sup>th</sup> Percentile	+ 22%	+ 3%	- 6%

**The Evergreen State College**  
2007-08 Per-Student Funding Levels

<b>Institution</b>	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
California State University-Stanislaus	\$12,037	\$11,525	\$11,344
Humboldt State University	\$14,942	\$14,468	\$14,301
California State University-San Marcos	\$13,226	\$11,037	\$10,162
California State University-Monterey Bay	\$17,418	\$15,180	\$14,419
Eastern Connecticut State University	\$13,969	\$13,608	\$13,492
Westfield State College	\$12,041	\$11,666	\$11,471
Worcester State College	\$12,919	\$12,680	\$12,607
Coppin State University	\$11,546	\$10,602	\$9,926
Ramapo College of New Jersey	\$14,541	\$12,179	\$11,484
Christopher Newport University	\$11,331	\$11,044	\$10,945
Longwood University	\$11,810	\$12,525	\$12,839
University of Mary Washington	\$12,560	\$10,260	\$9,580
<b>The Evergreen State College</b>	<b>\$14,348</b>	<b>\$14,348</b>	<b>\$14,348</b>

	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
<b>The Evergreen State College</b>	<b>\$14,348</b>	<b>\$14,348</b>	<b>\$14,348</b>
60 <sup>th</sup> Percentile	\$13,103	\$12,387	\$12,158
Difference	\$1,244	\$1,961	\$2,190
Percent Change to Achieve 60 <sup>th</sup> Percentile	- 9%	- 14%	- 15%

**Western Washington University**  
2007-08 Per-Student Funding Levels

<b>Institution</b>	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
California Polytechnic State University-San Luis Obispo	\$12,839	\$11,923	\$11,630
California State Polytechnic University-Pomona	\$11,655	\$9,627	\$8,885
California State University-Chico	\$11,353	\$11,833	\$11,992
Central Connecticut State University	\$14,169	\$13,386	\$12,961
Southern Connecticut State University	\$14,515	\$13,690	\$13,364
Towson University	\$11,414	\$10,759	\$10,544
Rowan University	\$15,521	\$14,231	\$13,848
Montclair State University	\$13,863	\$12,491	\$12,081
William Paterson University of New Jersey	\$16,527	\$14,468	\$14,024
James Madison University	\$11,685	\$12,455	\$12,762
Radford University	\$11,023	\$11,829	\$12,062
<b>Western Washington University</b>	<b>\$10,869</b>	<b>\$10,869</b>	<b>\$10,869</b>

	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
<b>Western Washington University</b>	<b>\$10,869</b>	<b>\$10,869</b>	<b>\$10,869</b>
60 <sup>th</sup> Percentile	\$13,863	\$12,491	\$12,762
Difference	(\$2,993)	(\$1,622)	(\$1,892)
Percent Change to Achieve 60 <sup>th</sup> Percentile	+28%	+15%	+17%

**State Community & Technical College Systems**  
2007-08 Per-Student Funding Levels

<b>Institution</b>	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
California	\$8,361	\$7,124	\$6,677
Colorado	\$5,654	\$6,020	\$6,238
Connecticut	\$10,774	\$9,675	\$9,365
Maryland	\$11,565	\$10,684	\$10,356
Massachusetts	\$9,228	\$8,492	\$8,172
New Jersey	\$6,850	\$6,259	\$5,894
Virginia	\$6,777	\$6,784	\$6,786
<b>Washington</b>	<b>\$7,916</b>	<b>\$7,916</b>	<b>\$7,916</b>

	<b>\$ per FTE</b>		
	<b>Unadjusted</b>	<b>Partial COLA</b>	<b>Full COLA</b>
<b>Washington Community &amp; Technical Colleges</b>	<b>\$7,916</b>	<b>\$7,916</b>	<b>\$7,916</b>
60 <sup>th</sup> Percentile	\$8,881	\$7,945	\$7,618
Difference	(\$964)	(\$28)	\$299
Percent Change to Achieve 60 <sup>th</sup> Percentile	+ 12%	+ 0%	- 4%

## Development of Funding Trajectories

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The preceding tables show the calculated 60<sup>th</sup> percentile per-student funding levels for each of the baccalaureate institutions and the community and technical college system. Individual trajectories were developed based on the assumption that the funding at each Washington institution would attain the 60<sup>th</sup> percentile of per-student funding in 2017. The per-student funding levels at the comparable institutions were assumed to continue to grow at the same overall rate as they have in recent years. To calculate this rate of change, historical funding levels were determined from IPEDS data for 2002-03 through 2007-08. This led to a calculated annual average growth rate for each set of comparable institutions. It should be noted that the growth in funding here includes both inflation (price level changes) and general spending changes; there is no distinction made between the two.

Therefore a 60<sup>th</sup> percentile 2017 target was determined for each Washington institution and the community college system. The global challenge state 60<sup>th</sup> percentile starting point (2007-08) rises each year by the assumed annual growth rate until 2017. Then the trajectory was determined using the Washington institution's starting point (2007-08 per-student funding level) and the target 2017 level. Those two points dictated the annual rate of change needed for the Washington institution to reach the 60<sup>th</sup> percentile in per-student funding in 2017.

The following charts and tables each show six trajectories: the comparable institutions' 60<sup>th</sup> percentile growth through 2017 and the Washington trajectory through 2017, each with full cost-of-living adjustment, partial adjustment and no adjustment.

The charts displayed here do not assume enrollment growth as funding new enrollments is a budget/legislative decision and because per-student funding levels are independent of the number of students on a particular campus. However, adding new enrollments impacts the total funding necessary to reach the target per-student funding level.

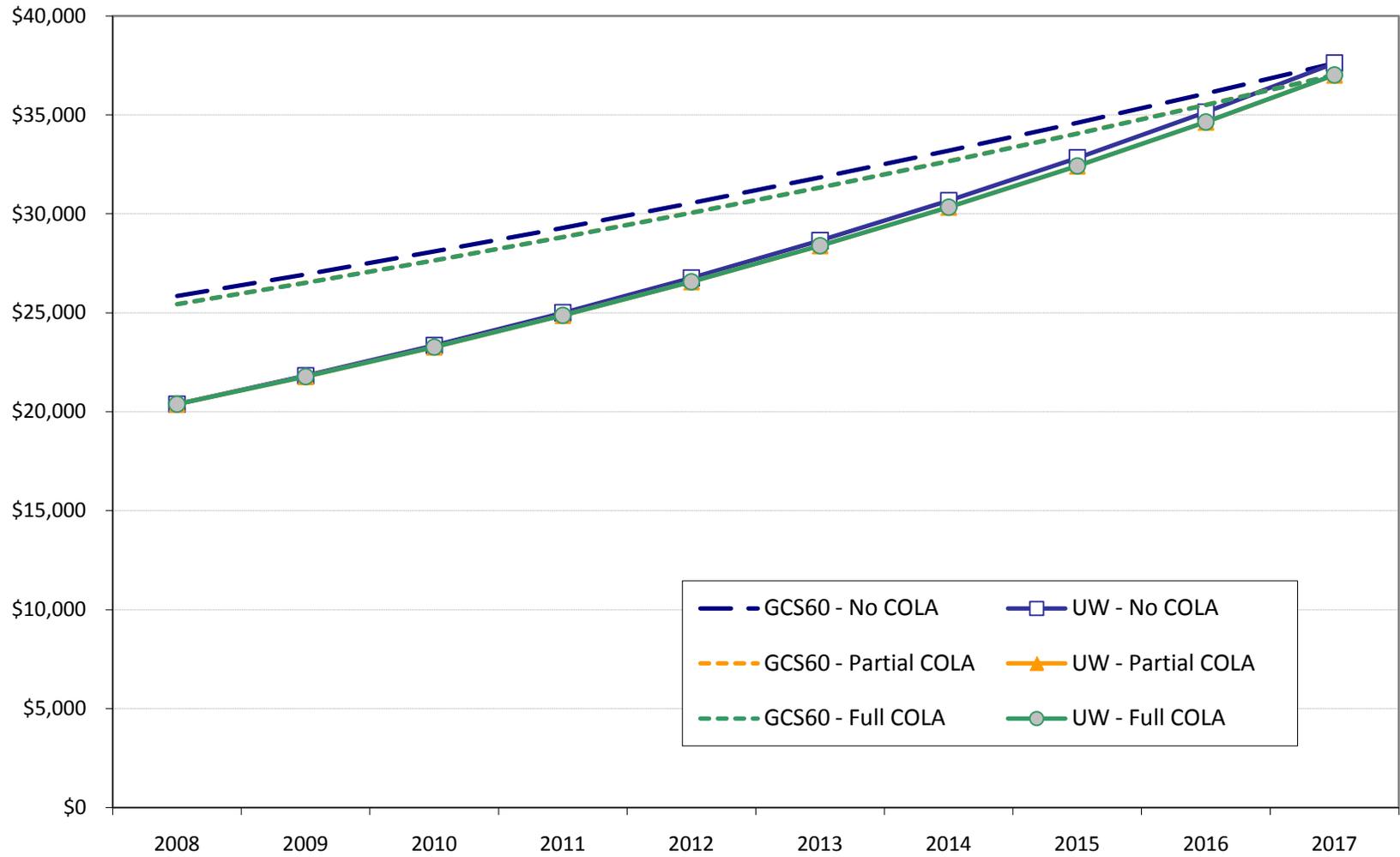
# University of Washington

**GCS 60<sup>th</sup> Percentile  
Trajectory Growth 4.26%**

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Annual Growth Rate
<b>No Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$25,847	\$26,947	\$28,094	\$29,290	\$30,537	\$31,836	\$33,192	\$34,604	\$36,077	\$37,613	4.26%
<b>UW</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$20,382	\$21,818	\$23,355	\$25,000	\$26,762	\$28,647	\$30,665	\$32,825	\$35,138	\$37,613	7.04%
<b>Partial Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$25,437	\$26,520	\$27,649	\$28,826	\$30,053	\$31,332	\$32,665	\$34,056	\$35,506	\$37,017	4.26%
<b>UW</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$20,382	\$21,779	\$23,272	\$24,868	\$26,572	\$28,394	\$30,340	\$32,420	\$34,642	\$37,017	6.85%
<b>Full Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$25,433	\$26,516	\$27,644	\$28,821	\$30,048	\$31,327	\$32,660	\$34,051	\$35,500	\$37,011	4.26%
<b>UW</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$20,382	\$21,779	\$23,272	\$24,866	\$26,570	\$28,391	\$30,337	\$32,416	\$34,637	\$37,011	6.85%
	FTE	39,651	39,651	39,651	39,651	39,651	39,651	39,651	39,651	39,651	39,651	
No COLA	Total Funding	808.2	865.1	926.1	991.3	1,061.1	1,135.9	1,215.9	1,301.6	1,393.2	1,491.4	\$ in millions
	Change from previous year		56.9	60.9	65.2	69.8	74.8	80.0	85.7	91.7	98.1	
Partial COLA	Total Funding	808.2	863.6	922.8	986.0	1,053.6	1,125.8	1,203.0	1,285.5	1,373.6	1,467.8	
	Change from previous year		55.4	59.2	63.3	67.6	72.2	77.2	82.5	88.1	94.2	
Full COLA	Total Funding	808.2	863.6	922.7	986.0	1,053.5	1,125.7	1,202.9	1,285.3	1,373.4	1,467.5	
	Change from previous year		55.4	59.2	63.2	67.6	72.2	77.1	82.4	88.1	94.1	

"Trajectory growth" is assumed annual change in per-student funding for the GCS 60<sup>th</sup> percentile. It includes inflation (price level changes) and general spending changes.

# University of Washington



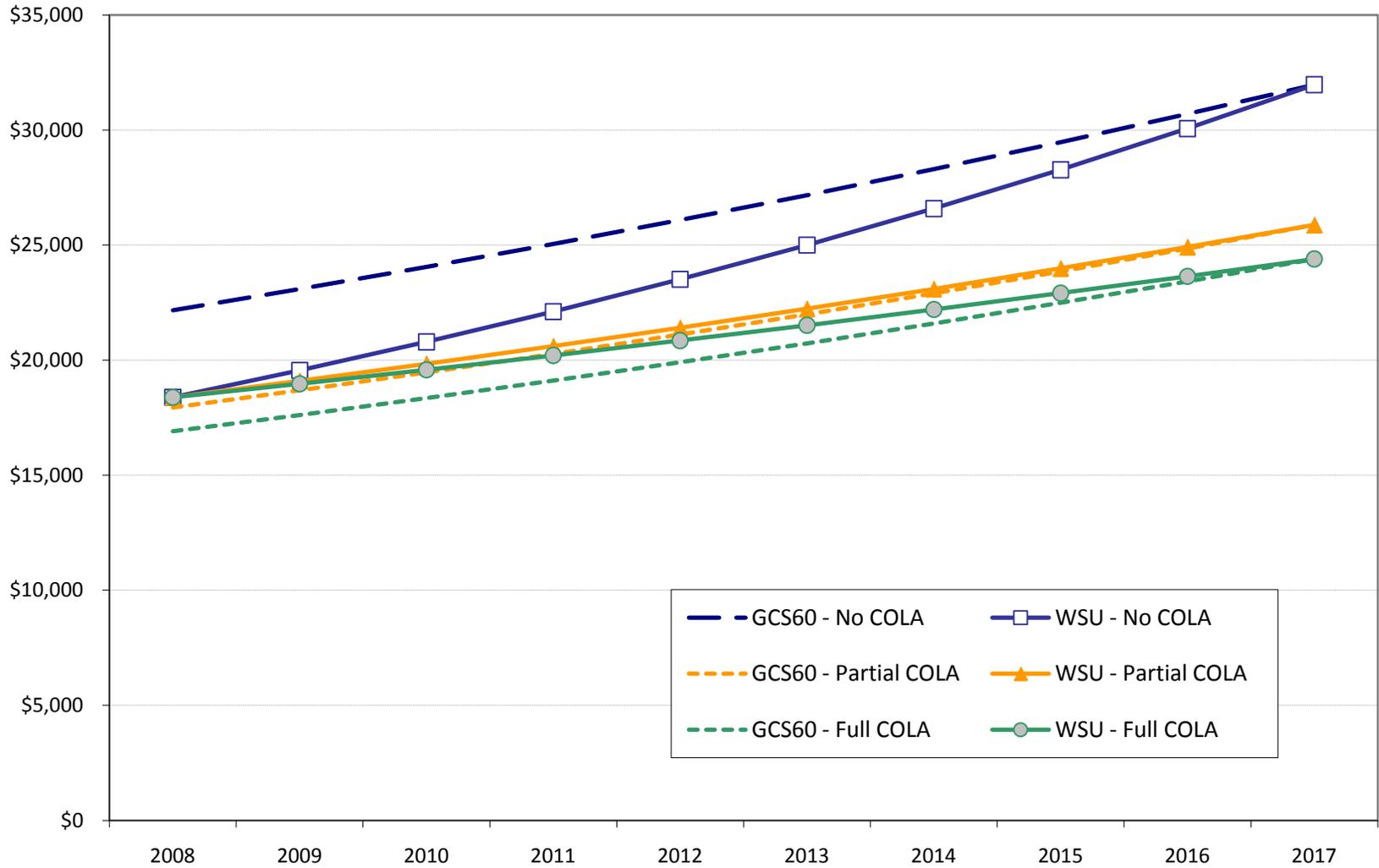
# Washington State University

**GCS 60<sup>th</sup> Percentile Trajectory Growth** 4.15%

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Annual Growth Rate
<b>No Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$22,167	\$23,088	\$24,046	\$25,045	\$26,084	\$27,167	\$28,295	\$29,470	\$30,694	\$31,968	4.15%
<b>WSU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$18,387	\$19,553	\$20,792	\$22,110	\$23,511	\$25,001	\$26,586	\$28,271	\$30,063	\$31,968	6.34%
<b>Partial Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$17,945	\$18,690	\$19,466	\$20,274	\$21,116	\$21,993	\$22,906	\$23,857	\$24,848	\$25,879	4.15%
<b>WSU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$18,387	\$19,099	\$19,838	\$20,606	\$21,404	\$22,232	\$23,093	\$23,987	\$24,915	\$25,879	3.87%
<b>Full Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$16,916	\$17,618	\$18,350	\$19,112	\$19,905	\$20,732	\$21,593	\$22,489	\$23,423	\$24,395	4.15%
<b>WSU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$18,387	\$18,974	\$19,580	\$20,205	\$20,849	\$21,515	\$22,201	\$22,910	\$23,641	\$24,395	3.19%
	FTE	21,822	21,822	21,822	21,822	21,822	21,822	21,822	21,822	21,822	21,822	
No COLA	Total Funding	401.2	426.7	453.7	482.5	513.1	545.6	580.2	616.9	656.0	697.6	\$ in millions
	Change from previous year		25.4	27.0	28.8	30.6	32.5	34.6	36.8	39.1	41.6	
Partial COLA	Total Funding	401.2	416.8	432.9	449.7	467.1	485.2	503.9	523.4	543.7	564.7	
	Change from previous year		15.5	16.1	16.8	17.4	18.1	18.8	19.5	20.3	21.0	
Full COLA	Total Funding	401.2	414.1	427.3	440.9	455.0	469.5	484.5	499.9	515.9	532.4	
	Change from previous year		12.8	13.2	13.6	14.1	14.5	15.0	15.5	16.0	16.5	

"Trajectory growth" is assumed annual change in per-student funding for the GCS 60<sup>th</sup> percentile. It includes inflation (price level changes) and general spending changes.

# Washington State University



# Central Washington University

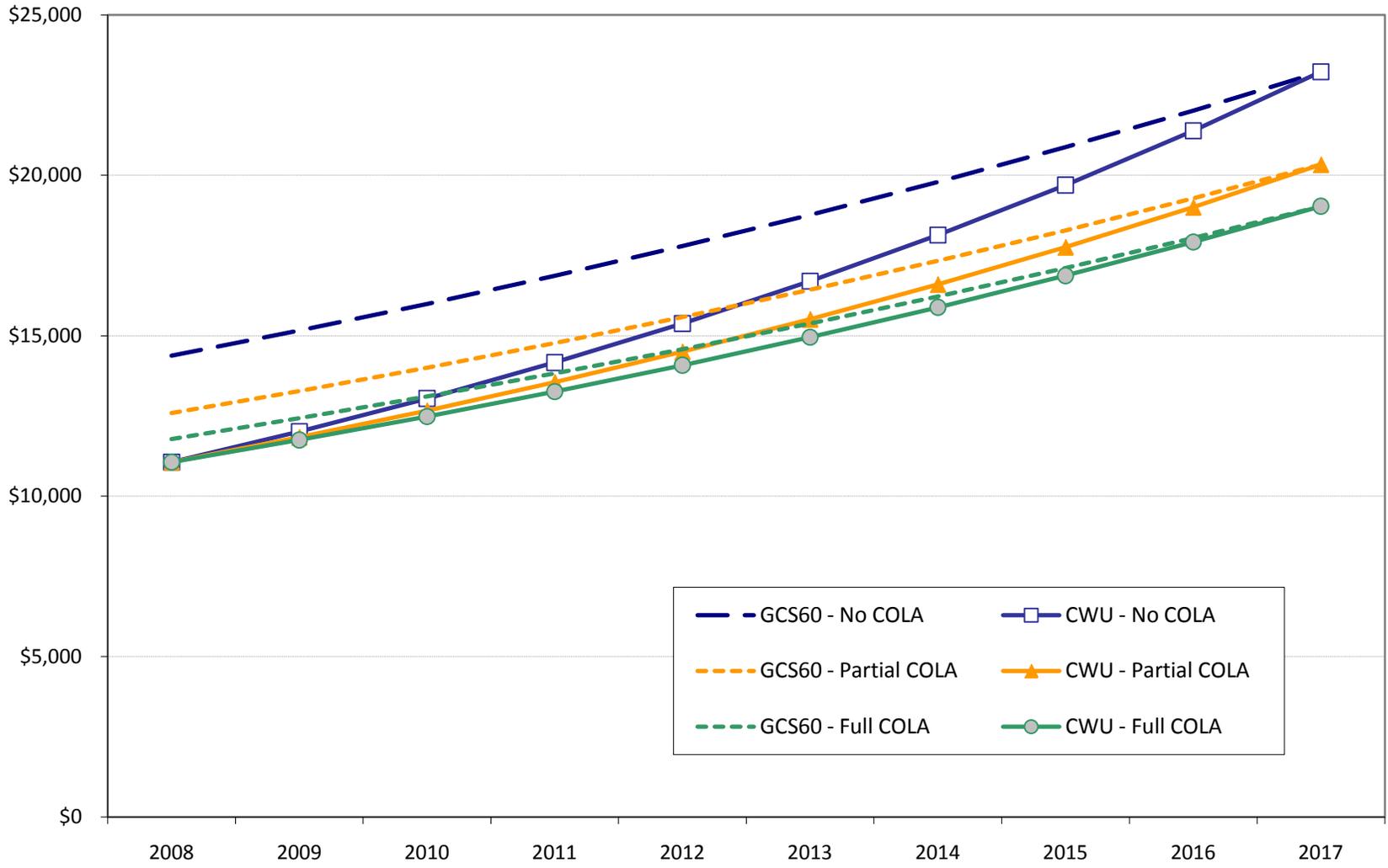
GCS 60<sup>th</sup> Percentile  
Trajectory Growth

5.47%

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Annual Growth Rate
<b>No Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$14,377	\$15,164	\$15,994	\$16,869	\$17,793	\$18,767	\$19,794	\$20,877	\$22,020	\$23,225	5.47%
<b>CWU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$11,064	\$12,014	\$13,046	\$14,167	\$15,383	\$16,704	\$18,139	\$19,697	\$21,388	\$23,225	8.59%
<b>Partial Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$12,590	\$13,279	\$14,006	\$14,773	\$15,581	\$16,434	\$17,334	\$18,283	\$19,283	\$20,339	5.47%
<b>CWU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$11,064	\$11,838	\$12,667	\$13,553	\$14,502	\$15,517	\$16,603	\$17,765	\$19,008	\$20,339	7.00%
<b>Full Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$11,784	\$12,429	\$13,109	\$13,827	\$14,584	\$15,382	\$16,224	\$17,112	\$18,048	\$19,036	5.47%
<b>CWU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$11,064	\$11,752	\$12,482	\$13,258	\$14,082	\$14,957	\$15,886	\$16,874	\$17,922	\$19,036	6.21%
	FTE	9,563	9,563	9,563	9,563	9,563	9,563	9,563	9,563	9,563	9,563	
No COLA	Total Funding	105.8	114.9	124.8	135.5	147.1	159.7	173.5	188.4	204.5	222.1	\$ in millions
	Change from previous year		9.1	9.9	10.7	11.6	12.6	13.7	14.9	16.2	17.6	
Partial COLA	Total Funding	105.8	113.2	121.1	129.6	138.7	148.4	158.8	169.9	181.8	194.5	
	Change from previous year		7.4	7.9	8.5	9.1	9.7	10.4	11.1	11.9	12.7	
Full COLA	Total Funding	105.8	112.4	119.4	126.8	134.7	143.0	151.9	161.4	171.4	182.0	
	Change from previous year		6.6	7.0	7.4	7.9	8.4	8.9	9.4	10.0	10.7	

"Trajectory growth" is assumed annual change in per-student funding for the GCS 60<sup>th</sup> percentile. It includes inflation (price level changes) and general spending changes.

# Central Washington University



# Eastern Washington University

GCS 60<sup>th</sup> Percentile  
Trajectory Growth

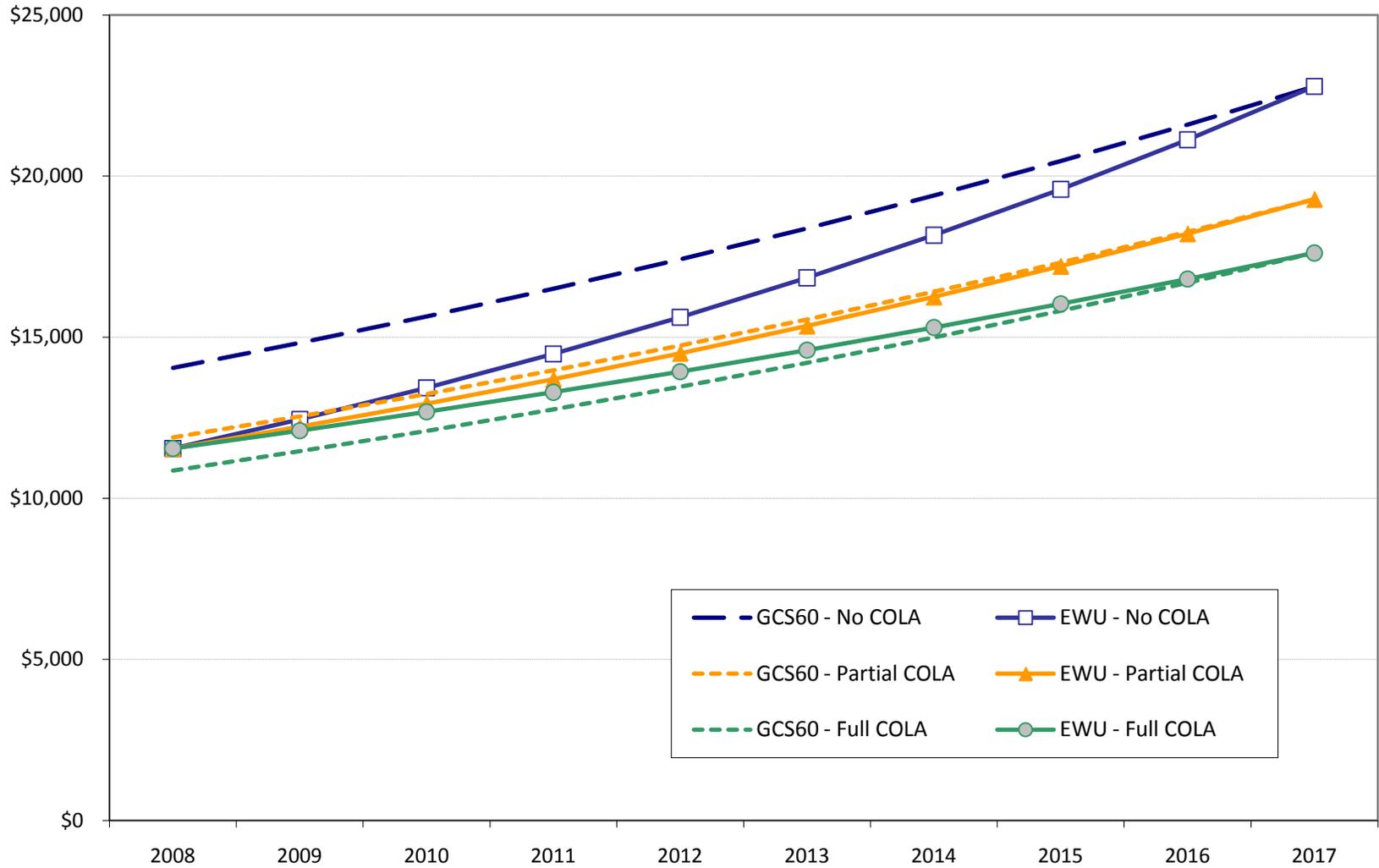
5.52%

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Annual Growth Rate
<b>No Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$14,047	\$14,822	\$15,640	\$16,504	\$17,415	\$18,377	\$19,391	\$20,462	\$21,591	\$22,784	5.52%
<b>EWU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$11,542	\$12,448	\$13,425	\$14,479	\$15,615	\$16,841	\$18,163	\$19,588	\$21,125	\$22,784	7.85%
<b>Partial Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$11,885	\$12,541	\$13,234	\$13,964	\$14,735	\$15,549	\$16,407	\$17,313	\$18,269	\$19,278	5.52%
<b>EWU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$11,542	\$12,219	\$12,936	\$13,694	\$14,498	\$15,348	\$16,248	\$17,201	\$18,210	\$19,278	5.86%
<b>Full Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$10,858	\$11,457	\$12,090	\$12,757	\$13,461	\$14,205	\$14,989	\$15,816	\$16,690	\$17,611	5.52%
<b>EWU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$11,542	\$12,097	\$12,678	\$13,288	\$13,927	\$14,596	\$15,297	\$16,033	\$16,803	\$17,611	4.81%
	FTE	9,592	9,592	9,592	9,592	9,592	9,592	9,592	9,592	9,592	9,592	
No COLA	Total Funding	110.7	119.4	128.8	138.9	149.8	161.5	174.2	187.9	202.6	218.5	
	Change from previous year		8.7	9.4	10.1	10.9	11.8	12.7	13.7	14.7	15.9	
Partial COLA	Total Funding	110.7	117.2	124.1	131.4	139.1	147.2	155.9	165.0	174.7	184.9	
	Change from previous year		6.5	6.9	7.3	7.7	8.2	8.6	9.1	9.7	10.2	
Full COLA	Total Funding	110.7	116.0	121.6	127.5	133.6	140.0	146.7	153.8	161.2	168.9	
	Change from previous year		5.3	5.6	5.8	6.1	6.4	6.7	7.1	7.4	7.7	

\$ in millions

"Trajectory growth" is assumed annual change in per-student funding for the GCS 60<sup>th</sup> percentile. It includes inflation (price level changes) and general spending changes.

# Eastern Washington University



# The Evergreen State College

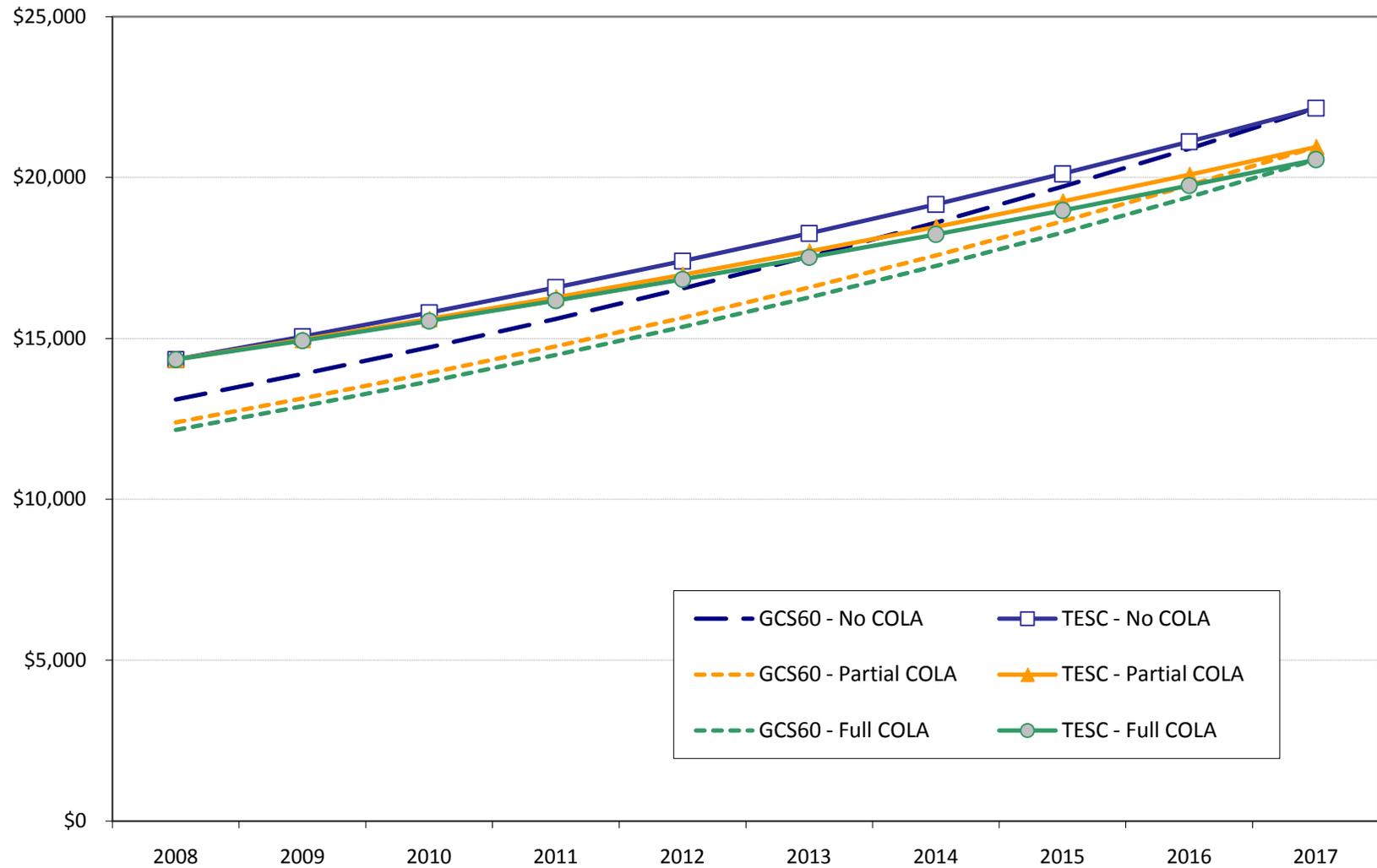
**GCS 60<sup>th</sup> Percentile  
Trajectory Growth**

**6.01%**

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Annual Growth Rate
<b>No Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$13,103	\$13,891	\$14,726	\$15,611	\$16,549	\$17,543	\$18,598	\$19,715	\$20,900	\$22,156	6.01%
<b>TESC</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$14,348	\$15,057	\$15,802	\$16,584	\$17,404	\$18,265	\$19,168	\$20,117	\$21,112	\$22,156	4.95%
<b>Partial Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$12,387	\$13,131	\$13,920	\$14,757	\$15,644	\$16,584	\$17,580	\$18,637	\$19,757	\$20,944	6.01%
<b>TESC</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$14,348	\$14,963	\$15,606	\$16,276	\$16,974	\$17,703	\$18,463	\$19,256	\$20,082	\$20,944	4.29%
<b>Full Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$12,158	\$12,888	\$13,663	\$14,484	\$15,354	\$16,277	\$17,255	\$18,292	\$19,391	\$20,557	6.01%
<b>TESC</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$14,348	\$14,932	\$15,541	\$16,175	\$16,834	\$17,520	\$18,235	\$18,978	\$19,752	\$20,557	4.08%
	FTE	4,192	4,192	4,192	4,192	4,192	4,192	4,192	4,192	4,192	4,192	
No COLA	Total Funding	60.1	63.1	66.2	69.5	73.0	76.6	80.4	84.3	88.5	92.9	\$ in millions
	Change from previous year		3.0	3.1	3.3	3.4	3.6	3.8	4.0	4.2	4.4	
Partial COLA	Total Funding	60.1	62.7	65.4	68.2	71.2	74.2	77.4	80.7	84.2	87.8	
	Change from previous year		2.6	2.7	2.8	2.9	3.1	3.2	3.3	3.5	3.6	
Full COLA	Total Funding	60.1	62.6	65.1	67.8	70.6	73.4	76.4	79.6	82.8	86.2	
	Change from previous year		2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	

"Trajectory growth" is assumed annual change in per-student funding for the GCS 60<sup>th</sup> percentile. It includes inflation (price level changes) and general spending changes.

# The Evergreen State College



# Western Washington University

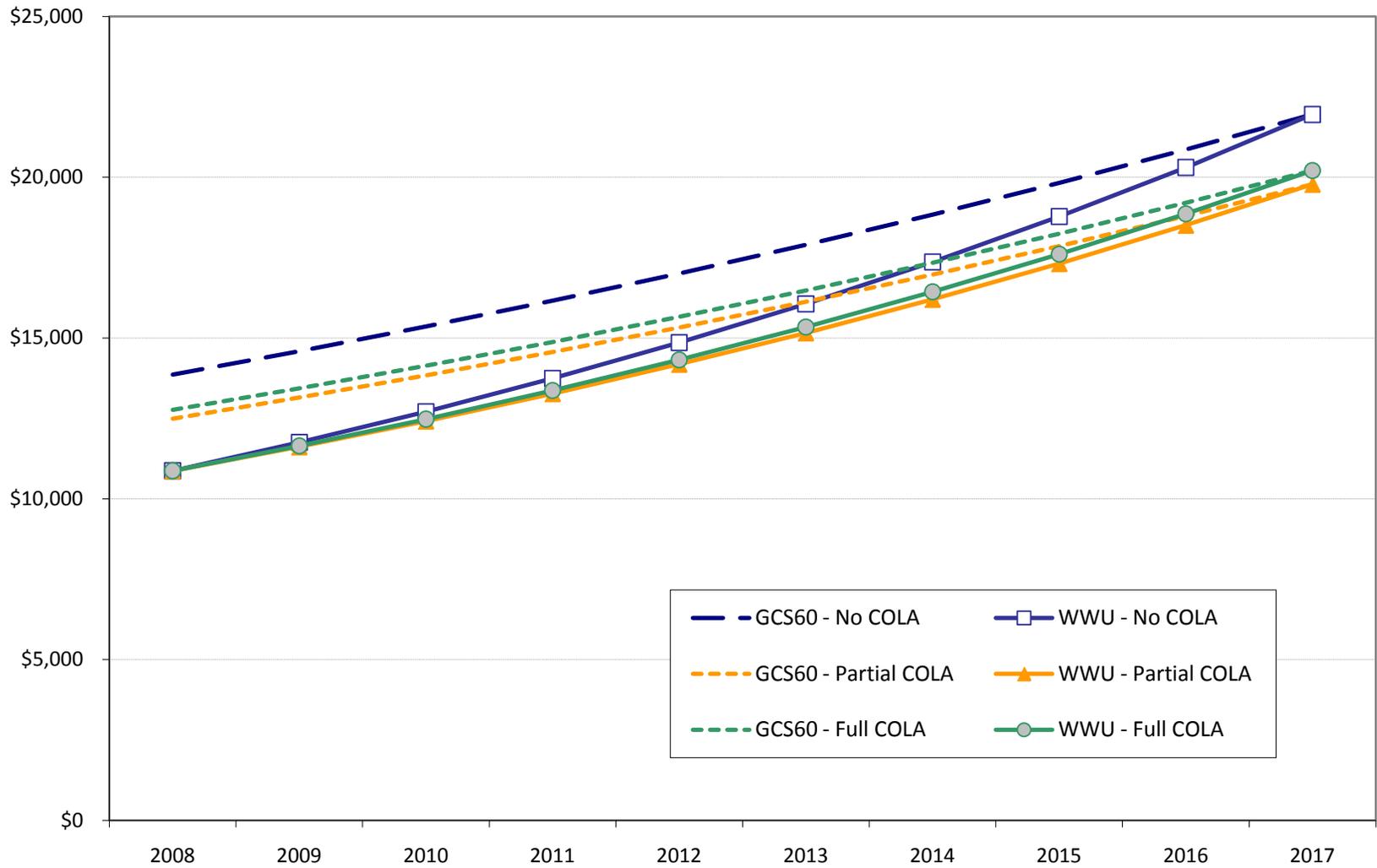
GCS 60<sup>th</sup> Percentile  
Trajectory Growth

5.24%

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Annual Growth Rate
<b>No Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$13,863	\$14,589	\$15,353	\$16,157	\$17,004	\$17,895	\$18,832	\$19,819	\$20,857	\$21,950	5.24%
<b>WWU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$10,869	\$11,752	\$12,707	\$13,739	\$14,855	\$16,061	\$17,365	\$18,776	\$20,301	\$21,950	8.12%
<b>Partial Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$12,491	\$13,146	\$13,834	\$14,559	\$15,322	\$16,125	\$16,969	\$17,858	\$18,794	\$19,779	5.24%
<b>WWU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$10,869	\$11,617	\$12,416	\$13,270	\$14,183	\$15,158	\$16,201	\$17,315	\$18,506	\$19,779	6.88%
<b>Full Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$12,762	\$13,430	\$14,134	\$14,874	\$15,654	\$16,474	\$17,337	\$18,245	\$19,201	\$20,207	5.24%
<b>WWU</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$10,869	\$11,645	\$12,475	\$13,365	\$14,318	\$15,339	\$16,433	\$17,606	\$18,861	\$20,207	7.13%
	FTE	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	
No COLA	Total Funding	144.4	156.1	168.8	182.5	197.4	213.4	230.7	249.5	269.7	291.6	\$ in millions
	Change from previous year		11.7	12.7	13.7	14.8	16.0	17.3	18.7	20.3	21.9	
Partial COLA	Total Funding	144.4	154.4	165.0	176.3	188.4	201.4	215.3	230.1	245.9	262.8	
	Change from previous year		9.9	10.6	11.3	12.1	13.0	13.9	14.8	15.8	16.9	
Full COLA	Total Funding	144.4	154.7	165.8	177.6	190.2	203.8	218.4	233.9	250.6	268.5	
	Change from previous year		10.3	11.0	11.8	12.7	13.6	14.5	15.6	16.7	17.9	

"Trajectory growth" is assumed annual change in per-student funding for the GCS 60<sup>th</sup> percentile. It includes inflation (price level changes) and general spending changes.

# Western Washington University



## Community & Technical Colleges

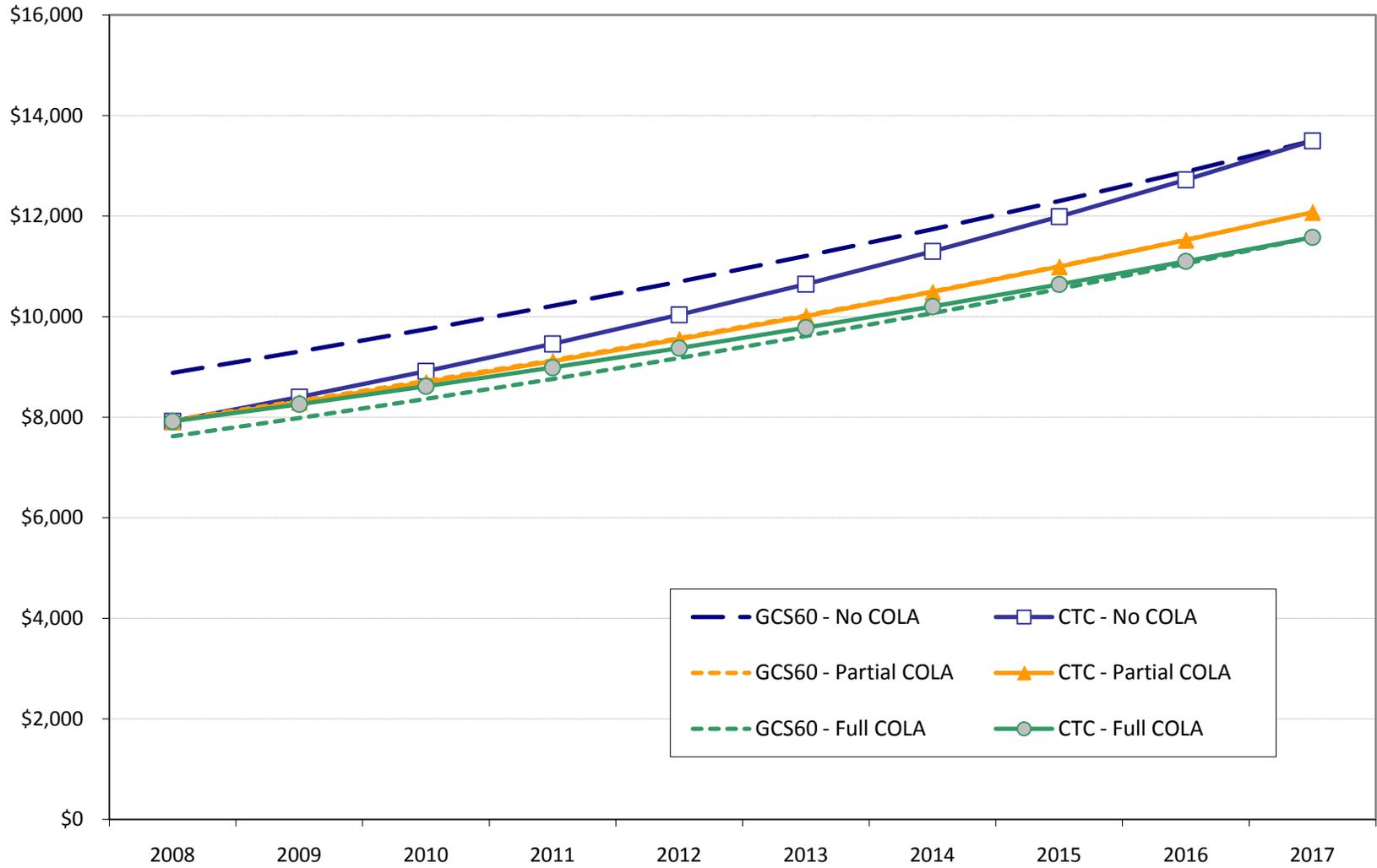
GCS 60<sup>th</sup> Percentile  
Trajectory Growth

4.76%

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Annual Growth Rate
<b>No Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$8,881	\$9,304	\$9,747	\$10,211	\$10,697	\$11,206	\$11,740	\$12,299	\$12,884	\$13,498	4.76%
<b>CTC</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$7,916	\$8,400	\$8,913	\$9,457	\$10,035	\$10,648	\$11,298	\$11,988	\$12,721	\$13,498	6.11%
<b>Partial Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$7,945	\$8,323	\$8,720	\$9,135	\$9,570	\$10,025	\$10,503	\$11,003	\$11,527	\$12,075	4.76%
<b>CTC</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$7,916	\$8,297	\$8,695	\$9,113	\$9,551	\$10,009	\$10,490	\$10,994	\$11,522	\$12,075	4.80%
<b>Full Cost-of-Living Adjustment</b>												
<b>GCS 60</b>	With trajectory growth	\$7,618	\$7,981	\$8,361	\$8,759	\$9,176	\$9,613	\$10,070	\$10,550	\$11,052	\$11,578	4.76%
<b>CTC</b>	Trajectory growth & to 60 <sup>th</sup> percentile	\$7,916	\$8,258	\$8,614	\$8,986	\$9,374	\$9,778	\$10,200	\$10,640	\$11,099	\$11,578	4.31%
	FTE	122,761	122,761	122,761	122,761	122,761	122,761	122,761	122,761	122,761	122,761	
No COLA	Total Funding	971.8	1,031.2	1,094.2	1,161.0	1,231.9	1,307.2	1,387.0	1,471.7	1,561.6	1,657.0	\$ in millions
	Change from previous year		59.4	63.0	66.8	70.9	75.2	79.8	84.7	89.9	95.4	
Partial COLA	Total Funding	971.8	1,018.5	1,067.4	1,118.7	1,172.4	1,228.7	1,287.8	1,349.6	1,414.4	1,482.4	
	Change from previous year		46.7	48.9	51.3	53.7	56.3	59.0	61.9	64.8	67.9	
Full COLA	Total Funding	971.8	1,013.8	1,057.5	1,103.1	1,150.7	1,200.4	1,252.2	1,306.2	1,362.6	1,421.4	
	Change from previous year		41.9	43.7	45.6	47.6	49.7	51.8	54.0	56.4	58.8	

"Trajectory growth" is assumed annual change in per-student funding for the GCS 60<sup>th</sup> percentile. It includes inflation (price level changes) and general spending changes.

## Community & Technical Colleges



## Summary

The following table summarizes each Washington institution’s per-student funding trajectory growth rates needed to achieve the 60<sup>th</sup> percentile among comparable global challenge state institutions.

	Assumed Annual Growth Rate of GCS 60 <sup>th</sup> Percentile	Growth Rate Needed to Achieve 60 <sup>th</sup> Percentile in 2017 For Cost-of-Living Adjustment (COLA) Scenarios		
		No COLA	Partial COLA	Full COLA
University of Washington	4.26%	7.04%	6.85%	6.85%
Washington State University	4.15%	6.34%	3.87%	3.19%
Central Washington University	5.47%	8.59%	7.00%	6.21%
Eastern Washington University	5.52%	7.85%	5.86%	4.81%
Western Washington University	5.24%	8.12%	6.88%	7.13%
The Evergreen State College	6.01%	4.95%	4.29%	4.08%
Community & Technical Colleges	4.76%	6.11%	4.80%	4.31%

These numbers summarize the results of a detailed process to establish lists of comparable institutions, adjust for program and enrollment differences, account for reporting irregularities and adjust for spatial cost-of-living variations. While this report reflects a concerted effort to address data issues and use reasonable methodologies, there were numerous challenges.

## Selecting Similar Institutions of Higher Education

Using the global challenge states as a comparison group is a departure from the usual process of identifying peer or comparable institutions based solely on institutional characteristics. While the global challenge states might be similar to Washington with respect to the new economy index, it does not necessarily follow that the higher education institutions in those states are the most suitable for comparing per-student funding.

## Cost-of-Living Adjustment

The adjustment for regional differences in cost of living posed the greatest challenge of all requirements. First, there is not a standard, accepted method for controlling for spatial cost-of-living differences. The index produced by ACCRA was a step in the right direction, as it is intended to capture regional variation in the costs facing households. However, the ACCRA data does not cover all areas in which there is a comparable institution. Second, while Fair Market Rent has a strong correlation with the cost-of-living index and the estimate is reasonable for many regions, there are areas such as Whitman County where the estimated index is likely to be inaccurate. One potential resolution to the problem of using FMR to estimate a cost-of-living index would be to purchase cost-of-living data from a private firm for all areas represented by comparison institutions, but the cost of doing so may be prohibitive. Third, the concept of ‘per-student funding’ does not fit

perfectly with the notion of cost of living. This was addressed by including a partial cost-of-living adjustment, but that is only an estimate of the cost variation that institutions face.

## **Construction of Trajectories**

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The cost-of-living adjustment, as applied to the starting point (2007-08), was intended to put the comparable institutions and Washington institutions on equal footing for comparisons of current per-student funding. The trajectories were built on the assumption that average recent growth rates will continue. Each Washington institution's per-student funding was assumed to grow at that average rate plus make up the difference to reach the 60<sup>th</sup> percentile level.

These assumed growth rates do not distinguish between funding changes that are attributed to inflation (overall price level changes) and real funding changes. That is not of consequence due to the assumptions inherent in the methodology. For the adjusted or partially adjusted scenarios, the study methodology implicitly assumed that the growth to 2017 will be equal to the average rate within a given set of comparables and the real versus inflation components of that growth are also the same for each. This ensures that each Washington institution's per-student funding corresponds to the 60<sup>th</sup> percentile level in 2017. The historical proportion of inflation versus real change in the growth rate is immaterial unless growth in that time frame was atypical. Assumptions inherent in the unadjusted scenario are less restrictive: The proportion of funding growth that is inflation versus real is not relevant since an adjustment for price level is not assumed for the starting point or in 2017.

**28B.15.068**

**Tuition fees increase limitations — State funding goals — Reports — "Global challenge states."**

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(1) Beginning with the 2007-08 academic year and ending with the 2016-17 academic year, tuition fees charged to full-time resident undergraduate students may increase no greater than seven percent over the previous academic year in any institution of higher education. Annual reductions or increases in full-time tuition fees for resident undergraduate students shall be as provided in the omnibus appropriations act, within the seven percent increase limit established in this section. To the extent that state appropriations combined with tuition and fee revenues are insufficient to achieve the total per-student funding goals established in subsection (2) of this section, the legislature may revisit state appropriations, authorized enrollment levels, and changes in tuition fees for any given fiscal year.

(2) The state shall adopt as its goal total per-student funding levels, from state appropriations plus tuition and fees, of at least the sixtieth percentile of total per-student funding at similar public institutions of higher education in the global challenge states. In defining comparable per-student funding levels, the office of financial management shall adjust for regional cost-of-living differences; for differences in program offerings and in the relative mix of lower division, upper division, and graduate students; and for accounting and reporting differences among the comparison institutions. The office of financial management shall develop a funding trajectory for each four-year institution of higher education and for the community and technical college system as a whole that when combined with tuition and fees revenue allows the state to achieve its funding goal for each four-year institution and the community and technical college system as a whole no later than fiscal year 2017. The state shall not reduce enrollment levels below fiscal year 2007 budgeted levels in order to improve or alter the per-student funding amount at any four-year institution of higher education or the community and technical college system as a whole. The state recognizes that each four-year institution of higher education and the community and technical college system as a whole have different funding requirements to achieve desired performance levels, and that increases to the total per-student funding amount may need to exceed the minimum funding goal.

(3) By September 1st of each year beginning [in] 2008, the office of financial management shall report to the governor, the higher education coordinating board, and appropriate committees of the legislature with updated estimates of the total per-student funding level that represents the sixtieth percentile of funding for comparable institutions of higher education in the global challenge states, and the progress toward that goal that was made for each of the public institutions of higher education.

(4) As used in this section, "global challenge states" are the top performing states on the new economy index published by the progressive policy institute as of July 22, 2007. The new economy index ranks states on indicators of their potential to compete in the new economy. At least once every five years, the office of financial management shall determine if changes to the list of global

## **Appendix A: Text of RCW 28B.15.068**

challenge states are appropriate. The office of financial management shall report its findings to the governor and the legislature.

[2007 c 151 § 1.]

### **Notes:**

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**Captions not law -- 2007 c 151:** "Captions used in this act are not any part of the law." [2007 c 151 § 3.]

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

Comparable institutions for 2007-08 per-student funding comparisons are those identified for the initial study conducted in 2008.

For each Washington public baccalaureate institution and for the community and technical college system, a set of comparable institutions were identified based on the 2005 Carnegie Classification system, on fall FTE enrollment<sup>6</sup> and on programmatic offerings.

The primary data source used to identify comparable institutions was the Integrated Postsecondary Education Data System (IPEDS), specifically: (1) institutional characteristics files (HD2005 and HD2006); (2) enrollment files (EF2005A and EF2006A); and (3) finance (F0607\_F1A) downloaded in July 2008. Institutions with veterinary schools were identified using information provided on the Association of American Veterinary Medical Colleges website.<sup>7</sup> Identification of public two-year institutions that are part of state community and technical college systems was based on information obtained from the higher education websites for each state.<sup>8</sup>

The **Carnegie Classification 2005: Basic** categorization was the beginning point for the identification of a set of comparable institutions for the baccalaureate institutions. The following categories were used:

**Doctorate-granting Universities.** Includes institutions that award at least 20 doctoral degrees per year (excluding doctoral-level degrees that qualify recipients for entry into professional practice such as the J.D., M.D., Pharm.D., D.P.T., etc.). Doctoral institutions were classified by the level of research activity as determined by the Carnegie Foundation using a variety of sources.<sup>9</sup>

- Research Universities (very high research activity)
- Research Universities (high research activity)
- Doctoral/Research Universities

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<sup>6</sup> Fall FTE enrollment is used in this report due to data availability from IPEDS. However, Washington policy-makers have traditionally used average annual FTEs when discussing this issue. Fall FTE enrollment levels are likely to be higher than average annual FTEs.

<sup>7</sup> Association of American Veterinary Medical Colleges website: [[www.aavmc.org/](http://www.aavmc.org/)]

<sup>8</sup> California Postsecondary Education Commission [[www.cpec.ca.gov/](http://www.cpec.ca.gov/)]; California Community Colleges System Office (CCCCO) [[www.cccco.edu/](http://www.cccco.edu/)]; Colorado Department of Higher Education [[highered.colorado.gov/](http://highered.colorado.gov/)]; Connecticut Department of Higher Education [[www.ctdhe.org/](http://www.ctdhe.org/)]; Maryland Higher Education Commission [[www.mhec.state.md.us/](http://www.mhec.state.md.us/)]; Massachusetts Department of Higher Education [[www.mass.edu/](http://www.mass.edu/)]; New Jersey Commission on Higher Education [[www.state.nj.us/highereducation/](http://www.state.nj.us/highereducation/)]; and State Council of Higher Education for Virginia [[www.schev.edu/](http://www.schev.edu/)].

<sup>9</sup> The Carnegie Foundation used the following items to create two indices of research activity: research & development (R&D) expenditures in science and engineering (S&E; "science and engineering" is defined by National Science Foundation (NSF) to include the social sciences); R&D expenditures in non-S&E fields; S&E research staff (postdoctoral appointees and other non-faculty research staff with doctorates); doctoral conferrals in humanities fields, in social science fields, in STEM (science, technology, engineering and mathematics) fields, and in other fields (e.g., business, education, public policy and social work). One index represented the overall level of research activity and the other represented per-capita research activity. Institutions that were very high on *either* index were assigned to the "very high" group, while institutions that were high on at least one (but very high on neither) were assigned to the "high" group. Remaining institutions and those not represented in the NSF data collections were assigned to the "Doctoral/Research Universities" category. [[www.carnegiefoundation.org/classifications/](http://www.carnegiefoundation.org/classifications/)]

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

**Master's Colleges and Universities.** Includes institutions that award at least 50 master's degrees per year.

- Master's Colleges and Universities (larger programs) – those awarding at least 200 master's degrees in 2003-04
- Master's Colleges and Universities (medium programs) – those awarding 100 to 199 master's degrees in 2003-04
- Master's Colleges and Universities (smaller programs) – those awarding 50 to 99 master's degrees in 2003-04

**Baccalaureate Colleges.** Includes institutions where baccalaureate degrees represent at least 10 percent of all undergraduate degrees and that award fewer than 50 master's degrees or fewer than 20 doctoral degrees per year.

- Baccalaureate Colleges—Arts & Sciences (those with at least half of bachelor's degree majors in arts and sciences)
- Baccalaureate Colleges—Diverse Fields (those with less than half of bachelor's degree majors in arts and sciences)
- Baccalaureate/Associate's Colleges (those where bachelor's degrees represent at least 10 percent but less than half of undergraduate degrees)

For some baccalaureate institutions, the **Carnegie Classification 2005: Undergraduate Profile** categorization was used in identifying comparable institutions. This classification describes the undergraduate population with respect to three characteristics: the proportion of part- and full-time students; standardized test scores of first-year students; and the share of entering students who transfer from another institution.

There are three components to this category:

### **Part-time/Full-time:**

**Higher part-time.** At least 40 percent of undergraduates enrolled part-time.

**Medium full-time.** 60 to 79 percent of undergraduates enrolled full-time.

**Full-time.** At least 80 percent of undergraduates enrolled full-time

**Selectivity:** based on Carnegie Foundation analysis of 25<sup>th</sup> percentile standardized test scores for entering freshmen:

**Inclusive.** These institutions either did not report test score data or the scores indicate that they extend educational opportunity to a wide range of students with respect to academic preparation and achievement.

**Selective.** Roughly the middle two-fifths of baccalaureate institutions.

**More selective.** Roughly the top fifth of baccalaureate institutions.

### **Transfer rate:**

**Lower transfer-in.** Fewer than 20 percent of entering undergraduates are transfer students.

**Higher transfer-in.** 20 percent or more of entering undergraduates are transfer students.

The tables on the following pages show the detail for the set of comparable institutions used in this study for each Washington institution or system. For some systems, IPEDS finance data are

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

published for system offices in addition to individual institutions. In these cases, the system data is allocated to individual institutions based on fall 2007 FTE enrollment. The institutions for which system finance data is allocated are indicated by an asterisk (\*) by the institution name. The system offices with associated finance data are:

<b>IPEDS Unit ID</b>	<b>Institution Name</b>	<b>State</b>
110501	California State University-Chancellors Office	California
124557	University of California System Administration Central Office	California
164146	University System of Maryland	Maryland
166665	University of Massachusetts-Central Office	Massachusetts

In some instances, enrollment is reported by campus within a system, but finance data for all campuses is reported with a single institution, usually the main campus. The University of Connecticut and Rutgers University follow this pattern, so enrollment for all campuses is associated with finance data reported for the main campus.

In the tables that follow, the county or equivalent geographic entity used in cost-of-living adjustments is shown with each institution. Occasionally, more than one geographic location is associated with an institution. In these situations, the county or equivalent in which the greatest number of FTE enrollment is located is used for the cost-of-living adjustment for the institution.

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

### University of Washington

**IPEDS Unit IDs:**

236948 - Seattle Campus; 377555 - Bothell Campus; 377564 - Tacoma Campus

**Fall 2005 FTE Enrollment (IPEDS):** 38,220

**Carnegie 2005 Basic:** Research Universities (very high research activity)

**Carnegie Classification 2005 Undergraduate Profile:** Full-time four-year, more selective, higher transfer-in

**Criteria for comparable institutions:**

- Institutions classified as “Research Universities (very high research activity)” with medical school.
- Data for the research institution is combined with data for the medical school if the medical school is not included as part of institution record.

Enrollment and/or finance data for a single institution may be the sum of those items for multiple campuses, which are indicated in the table below. In some instances, noted by asterisk (\*), system finance data has been allocated over the member institutions based on FTE enrollment.

	IPEDS Unit ID	Institution Name	Associated County or Equivalent	State
1	110662	University of California-Los Angeles*	Los Angeles	California
2	110680	University of California-San Diego*	San Diego	California
3	110644	University of California-Davis*	Yolo	California
4	110653	University of California-Irvine*	Orange	California
5	126614	University of Colorado at Boulder	Boulder	Colorado
	126562	University of Colorado-Denver & Health Sciences		
	126580	University of Colorado at Colorado Springs		
	128300	University of Colorado System Office		
6	129020	University of Connecticut	Tolland, Mansfield town	Connecticut
	436818	University of Connecticut-Tri-Campus		
	436827	University of Connecticut-Avery Point		
	436836	University of Connecticut-Stamford		
7	243762	University of Connecticut-Medicine & Dentistry	Prince George’s	Maryland
	163286	University of Maryland-College Park*		
8	163259	University of Maryland-Baltimore*	Hampshire, Amherst town	Massachusetts
	166629	University of Massachusetts-Amherst*		
9	166708	University of Massachusetts Medical School*	Middlesex	New Jersey
	186371	Rutgers University-Camden		
	186380	Rutgers University-New Brunswick		
	186399	Rutgers University-Newark		
10	187222	University of Medicine & Dentistry of New Jersey	Charlottesville city	Virginia
	234076	University of Virginia-Main Campus		
		University of Washington	King	Washington

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

### Washington State University

**IPEDS Unit ID:** 236939

**Fall 2005 FTE Enrollment (IPEDS):** 21,061

**Carnegie 2005 Basic:** Research Universities (very high research activity)

**Carnegie Classification 2005 Undergraduate Profile:** Full-time four-year, selective, higher transfer-in

**Criteria for comparable institutions:**

One land grant institution classified as “Research Universities (very high research activity)” per state. Institution with veterinary school selected if more than one institution falls in this Carnegie 2005: Basic category.

Enrollment and/or finance data for a single institution may be the sum of those items for multiple campuses, which are indicated in the table below. In some instances, noted by asterisk (\*), system finance data has been allocated over the member institutions based on FTE enrollment.

	IPEDS Unit ID	Institution Name	Associated County or Equivalent	State
1	110644	University of California-Davis*	Yolo	California
2	126818	Colorado State University (main campus)*	Larimer	Colorado
3	129020	University of Connecticut	Tolland-Mansfield town	Connecticut
	436818	University of Connecticut-Tri-Campus		
	436827	University of Connecticut-Avery Point		
	436836	University of Connecticut-Stamford		
4	163286	University of Maryland-College Park*	Prince George’s	Maryland
5	166629	University of Massachusetts-Amherst*	Hampshire-Amherst	Massachusetts
6	186371	Rutgers University-Camden (enrollment only)	Middlesex	New Jersey
	186380	Rutgers University-New Brunswick/Piscataway		
	186399	Rutgers University-Newark (enrollment only)		
7	233921	Virginia Polytechnic Institute and State University	Montgomery	Virginia
		Washington State University	Whitman	Washington

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

### Central Washington University

**IPEDS Unit ID:** 234827

**Fall 2005 FTE Enrollment (IPEDS):** 9,373

**Carnegie 2005 Basic:** Master's Colleges & Universities (larger programs)

**Carnegie Classification 2005 Undergraduate Profile:** Full-time four-year, selective, higher transfer-in

**Criteria for comparable institutions:**

- Carnegie Classification 2005 Basic: “Master's Colleges & Universities (larger programs)” or “Master's Colleges & Universities (medium programs).”
- Fall 2005 FTE enrollment: 6,300-14,999.
- Carnegie Classification 2005 Undergraduate Profile: "Fulltime four-year, more selective, higher transfer in" or "Full-time four-year, selective, higher transfer in" or "Medium full-time four-year, selective, high transfer in."

In some instances, noted by asterisk (\*), system finance data has been allocated over the member institutions based on FTE enrollment.

	<b>IPEDS Unit ID</b>	<b>Institution Name</b>	<b>Associated County or Equivalent</b>	<b>State</b>
1	110538	California State University-Chico*	Butte	California
2	115755	Humboldt State University*	Humboldt	California
3	123572	Sonoma State University*	Sonoma	California
4	128771	Central Connecticut State University	Hartford-New Britain city	Connecticut
5	130493	Southern Connecticut State University	New Haven-New Haven city	Connecticut
6	163851	Salisbury University*	Wicomico	Maryland
7	165024	Bridgewater State College	Plymouth-Bridgewater	Massachusetts
8	167987	University of Massachusetts-Dartmouth*	Bristol-Dartmouth	Massachusetts
9	185590	Montclair State University	Essex	New Jersey
10	184782	Rowan University	Gloucester	New Jersey
11	187444	William Paterson University of New Jersey	Passaic	New Jersey
12	233277	Radford University	Radford city	Virginia
		Central Washington University	Kittitas	Washington

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

### Eastern Washington University

**IPEDS Unit ID:** 235097

**Fall 2005 FTE Enrollment (IPEDS):** 9,690

**Carnegie 2005 Basic:** Master's Colleges & Universities (larger programs)

**Carnegie Classification 2005 Undergraduate Profile:** Full-time four-year, selective, higher transfer-in

**Criteria for comparable institutions:**

- Institutions with Carnegie Classification 2005 of “Master's Colleges and Universities (larger programs).”
- Fall 2005 FTE enrollment of 7,400 to 15,999 with the addition of California State University-Bakersfield (FTE enrollment 6,441) because of program similarities.
- Carnegie Classification 2005 Undergraduate Profile: Institutions classified as “Medium full-time four-year, selective, higher transfer-in,” “Full-time four-year, inclusive” where student achievement levels are available from sources other than IPEDS, and “Full-time four-year, selective, higher transfer-in.”

Enrollment and/or finance data for a single institution may be the sum of those items for multiple campuses, which are indicated in the table below. In some instances, noted by asterisk (\*), system finance data has been allocated over the member institutions based on FTE enrollment.

	IPEDS Unit ID	Institution Name	Associated County or Equivalent	State
1	110486	California State University-Bakersfield*	Kern	California
2	110538	California State University-Chico*	Butte	California
3	110510	California State University-San Bernardino*	San Bernardino	California
4	128771	Central Connecticut State University	Hartford-New Britain city	Connecticut
5	130493	Southern Connecticut State University	New Haven-New Haven city	Connecticut
6	164076	Towson University*	Baltimore	Maryland
7	165024	Bridgewater State College	Plymouth-Bridgewater	Massachusetts
8	167987	University of Massachusetts-Dartmouth*	Bristol-Dartmouth	Massachusetts
9	185590	Montclair State University	Essex	New Jersey
10	184782	Rowan University	Gloucester	New Jersey
11	187444	William Paterson University of New Jersey	Passaic	New Jersey
12	233277	Radford University	Radford city	Virginia
		Eastern Washington University	Spokane	Washington

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

### The Evergreen State College

**IPEDS Unit ID:** 235167

**Fall 2005 FTE Enrollment (IPEDS):** 4,063

**Carnegie 2005 Basic:** Master's Colleges & Universities (smaller programs)

**Carnegie Classification 2005 Undergraduate Profile:** Full-time four-year, selective, higher transfer-in

**Criteria for comparable institutions:**

- Carnegie Classification 2005 Basic: “Baccalaureate Colleges--Arts & Sciences” or “Master's Colleges & Universities (medium programs)” or “Master's Colleges & Universities (smaller programs).”
- Fall 2005 FTE enrollment: 3,000-7,999.
- Highest Level of Offering: Master’s degree or Post-master’s certificate.
- Exclude Thomas Edison State College (NJ), which has large distance learning component, and Mesa State College (CO) because of issues with finance data. Both have very low state appropriations as share of core revenues.

**Note:** An analysis of “Research expenses as a percent of total core expenses” revealed little variance among the remaining peers and Evergreen. (0-1 percent of core expenses are in research for all institutions).

In some instances, noted by asterisk (\*), system finance data has been allocated over the member institutions based on FTE enrollment.

	IPEDS Unit ID	Institution Name	Associated County or Equivalent	State
1	409698	California State University-Monterey Bay*	Monterey	California
2	366711	California State University-San Marcos*	San Diego	California
3	110495	California State University-Stanislaus*	Stanislaus	California
4	115755	Humboldt State University*	Humboldt	California
5	129215	Eastern Connecticut State University	Windham-Windham town	Connecticut
6	162283	Coppin State University*	Baltimore city	Maryland
7	168263	Westfield State College	Hampden-Westfield	Massachusetts
8	168430	Worcester State College	Worcester	Massachusetts
9	186201	Ramapo College of New Jersey	Mercer	New Jersey
10	231712	Christopher Newport University	Newport News city	Virginia
11	232566	Longwood University	Prince Edward	Virginia
12	232681	University of Mary Washington	Fredericksburg city	Virginia
		The Evergreen State College	Thurston	Washington

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

### Western Washington University

**IPEDS Unit ID:** 237011

**Fall 2005 FTE Enrollment (IPEDS):** 13,270

**Carnegie 2005 Basic:** Master's Colleges & Universities (larger programs)

**Carnegie Classification 2005 Undergraduate Profile:** Full-time four-year, selective, higher transfer-in

**Criteria for comparable institutions:**

- Carnegie Classification 2005 Basic: "Master's Colleges & Universities (larger programs)."
- Fall 2005 FTE enrollment: 8,000-17,999.
- Carnegie Classification 2005 Undergraduate Profile: "Fulltime four-year, more selective, higher transfer in" or "Full-time four-year, selective, higher transfer in" or "Fulltime four-year, more selective, lower transfer in" or "Medium full-time four-year, selective, high transfer in."

In some instances, noted by asterisk (\*), system finance data has been allocated over the member institutions based on FTE enrollment.

	IPEDS Unit ID	Institution Name	Associated County or Equivalent	State
1	110422	California Polytechnic State University-San Luis Obispo*	San Luis Obispo	California
2	110529	California State Polytechnic University-Pomona*	Los Angeles	California
3	110538	California State University-Chico*	Butte	California
4	128771	Central Connecticut State University	Hartford-New Britain city	Connecticut
5	130493	Southern Connecticut State University	New Haven-New Haven city	Connecticut
6	164076	Towson University*	Baltimore	Maryland
7	185590	Montclair State University	Essex	New Jersey
8	184782	Rowan University	Gloucester	New Jersey
9	187444	William Paterson University of New Jersey	Passaic	New Jersey
10	232423	James Madison University	Harrisonburg city	Virginia
12	233277	Radford University	Radford city	Virginia
		Western Washington University	Whatcom	Washington

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

### Washington Community & Technical College System Comparable Institutions

**Criteria:** Public community and technical colleges (districts), state supported. Institutions supported by city or county governments, or by local school districts are excluded from this list.

These institutions will be analyzed at the state level.

	IPEDS Unit ID	Institution Name	Associated County or Equivalent	State
1	108807	Alan Hancock Joint Community College District Allan Hancock College	Santa Barbara	California
2	109350	Antelope Valley Community College District Antelope Valley College	Los Angeles	California
3	109907	Barstow Community College District Barstow Community College	San Bernardino	California
4	110246	Butte-Glenn Community College District Butte College	Butte	California
5	110334	Cabrillo Community College District Cabrillo College	Santa Cruz	California
6	111887	Cerritos Community College District Cerritos College	Los Angeles	California
7	111920 366401	Chabot-Las Positas Community College District Chabot College Las Positas College	Alameda	California
8	111939	Chaffey Community College District Chaffey College	San Bernardino	California
9	112172	Citrus Community College District Citrus College	Los Angeles	California
10	112376 112385 115126 120342	Coast Community College District Office Coastline Community College Golden West College Orange Coast College	Orange	California
11	112817 112826 113634 117894	Contra Costa Community College District Office Contra Costa College Diablo Valley College Los Medanos College	Contra Costa	California
12	395362	Copper Mountain Community College District Copper Mountain College	San Bernardino	California
13	113573	Desert Community College District College of the Desert	Riverside	California
14	112686 113980	El Camino Community College District El Camino College-Compton Center El Camino College	Los Angeles	California

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

	<b>IPEDS Unit ID</b>	<b>Institution Name</b>	<b>Associated County or Equivalent</b>	<b>State</b>
15	114433	Feather River Community College District Feather River College	Plumas	California
16	114831 113333 114716	Foothill-De Anza Community College District De Anza College Foothill College	Santa Clara	California
17	114938	Gavilan Community College District Gavilan College	Santa Clara	California
18	115001	Glendale Community College District Glendale Community College	Los Angeles	California
19	115287 113218 115296	Grossmont-Cuyamaca Community College District Cuyamaca College Grossmont College	San Diego	California
20	115393	Hartnell Community College District Hartnell College	Monterey	California
21	115861	Imperial Community College District Imperial Valley College	Imperial	California
22	109819 111896 121363	Kern Community College District Bakersfield College Cerro Coso Community College Porterville College	Kern	California
23	117195	Lake Tahoe Community College District Lake Tahoe Community College	El Dorado	California
24	117274	Lassen Community College District Lassen Community College	Lassen	California
25	117645	Long Beach Community College District Long Beach City College	Los Angeles	California
26	117681 113856 117788 11769 117867 117706 117715 117724 117733 125471	Los Angeles Community College District Office East Los Angeles College Los Angeles City College Los Angeles Harbor College Los Angeles Mission College Los Angeles Pierce College Los Angeles Southwest College Los Angeles Trade Technical College Los Angeles Valley College West Los Angeles College	Los Angeles	California
27	117900 109208 113096 444219 122180	Los Rios Community College District Office American River College Cosumnes River College Folsom Lake College Sacramento City College	Sacramento	California
28	118347	Marin Community College District College of Marin	Marin	California
29	118684	Mendocino-Lake Community College District Mendocino College	Mendocino	California

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

	<b>IPEDS Unit ID</b>	<b>Institution Name</b>	<b>Associated County or Equivalent</b>	<b>State</b>
30	118718	Merced Community College District Merced College	Merced	California
31	118912	MiraCosta Community College District MiraCosta College	San Diego	California
32	119067	Monterey Peninsula Community College District Monterey Peninsula College	Monterey	California
33	11916	Mt. San Antonio Community College District Mt. San Antonio College	Los Angeles	California
34	119216	Mt. San Jacinto Community College District Mt. San Jacinto Community College	Riverside	California
35	119331	Napa Valley Community College District Napa Valley College	Napa	California
36	120023 113236 114859	North Orange County Community College District Cypress College Fullerton College	Orange	California
37	120290	Ohlone Community College District Ohlone College	Alameda	California
38	120953	Palo Verde Community College District Palo Verde College	Riverside	California
39	120971	Palomar Community College District Palomar College	San Diego	California
40	121044	Pasadena Area Community College District Pasadena City College	Los Angeles	California
41	121178 125170 108667 117247 118772	Peralta Community College System Office Berkeley City College College of Alameda Laney College Merritt College	Alameda	California
42	438665 121619 399212	Rancho Santiago Community College District Office Santa Ana College Santiago Canyon College	Orange	California
43	121707	Redwoods Community College District College of the Redwoods	Humboldt	California
44	121886	Rio Hondo Community College District Rio Hondo College	Los Angeles	California
45	121901	Riverside Community College District Riverside Community College	Riverside	California
46	428426 113111 123527	San Bernardino Community College District Crafton Hills College San Bernardino Valley College	San Bernardino	California
47	122320 122339 122375 122384	San Diego Community College District-District San Diego City College San Diego Mesa College San Diego Miramar College	San Diego	California

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

	IPEDS Unit ID	Institution Name	Associated County or Equivalent	State
48	112190	San Francisco Community College District City College of San Francisco	San Francisco	California
49	122658	San Joaquin Delta Community College District San Joaquin Delta College	San Joaquin	California
50	122737 114266 122746	San Jose-Evergreen Community College District Evergreen Valley College San Jose City College	Santa Clara	California
51	113193	San Luis Obispo Community College District Cuesta College	San Luis Obispo	California
52	122782 111434 122791 123509	San Mateo County Community College District Canada College College of San Mateo Skyline College	San Mateo	California
53	122889	Santa Barbara Community College District Santa Barbara City College	Santa Barbara	California
54	111461	Santa Clarita Community College District College of the Canyons	Los Angeles	California
55	122977	Santa Monica Community College District Santa Monica College	Los Angeles	California
56	123217	Sequoias Community College District College of the Sequoias	Tulare	California
57	123299	Shasta-Tehama-Trinity Joint Community College Shasta College	Shasta	California
58	123341	Sierra Joint Community College District Sierra College	Placer	California
59	123484	Siskiyou Joint Community College District College of the Siskiyous	Siskiyou	California
60	123563	Solano Community College District Solano Community College	Solano	California
61	123013	Sonoma County Community College District Santa Rosa Junior College	Sonoma	California
62	432144 116439 122205	South Orange County Community College District Irvine Valley College Saddleback College	Orange	California
63	123800	Southwestern Community College District Southwestern College	San Diego	California
64	123925 114789 117052	State Center Community College District Fresno City College Reedley College	Fresno	California
65	125019 119137 120421 125028	Ventura County Community College System Office Moorpark College Oxnard College Ventura College	Ventura	California
66	125091	Victor Valley Community College District Victor Valley College	San Bernardino	California

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

	IPEDS Unit ID	Institution Name	Associated County or Equivalent	State
67	448637 125462 448594	West Hills Community College District West Hills College-Coalinga West Hills College-Lemoore	Fresno	California
68	124113	West Kern Community College District Taft College	Kern	California
69	125222 118930 125499	West Valley Mission Community College District Mission College West Valley College	Santa Clara	California
70	126100 112561 118976	Yosemite Community College District Office Columbia College (Tuolumne County) Modesto Junior College	Stanislaus	California
71	126119	Yuba Community College District Yuba College	Yuba	California
72	126289	Arapahoe Community College	Arapahoe	Colorado
73	126748	Colorado Northwestern Community College	Rio Blanco	Colorado
74	126863	Community College of Aurora	Arapahoe	Colorado
75	126942	Community College of Denver	Denver	Colorado
76	127200	Front Range Community College	Adams	Colorado
77	127389	Lamar Community College	Prowers	Colorado
78	127617	Morgan Community College	Morgan	Colorado
79	127732	Northeastern Junior College	Logan	Colorado
80	127778	Otero Junior College	Otero	Colorado
81	127820	Pikes Peak Community College	El Paso	Colorado
82	127884	Pueblo Community College	Pueblo	Colorado
83	127909	Red Rocks Community College	Jefferson	Colorado
84	128258	Trinidad State Junior College	Las Animas	Colorado
85	126915	Delta Montrose Technical College	Delta	Colorado
86	127158	Emily Griffith Opportunity School	Denver	Colorado
87	128036	San Juan Basin Technical College	Montezuma	Colorado
88	128151	T H Pickens Technical Center	Arapahoe	Colorado
89	128577	Asnuntuck Community College	Hartford-Enfield town	Connecticut
90	129367	Capital Community College	Hartford-Hartford city	Connecticut
91	130396	Gateway Community College	New Haven-New Haven city and North Haven town	Connecticut
92	129543	Housatonic Community College	Fairfield-Bridgeport town	Connecticut
93	129695	Manchester Community College	Hartford-Manchester	Connecticut
94	129756	Middlesex Community College	Middlesex-Middletown	Connecticut
95	129729	Naugatuck Valley Community College	New Haven-Waterbury	Connecticut
96	130040	Northwestern Connecticut Community College	Litchfield	Connecticut
97	130004	Norwalk Community College	Fairfield-Norwalk town	Connecticut
98	130217	Quinebaug Valley Community College	Windham-Killingly town-Danielson borough	Connecticut

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

	<b>IPEDS Unit ID</b>	<b>Institution Name</b>	<b>Associated County or Equivalent</b>	<b>State</b>
99	129808	Three Rivers Community College	New London-Norwich	Connecticut
100	130606	Tunxis Community College	Hartford-Farmington city	Connecticut
101	161688	Allegany College of Maryland	Allegany	Maryland
102	161767	Anne Arundel Community College	Anne Arundel	Maryland
103	161864	Baltimore City Community College	Baltimore city	Maryland
104	405872	Carroll Community College	Carroll	Maryland
105	162104	Cecil Community College	Cecil	Maryland
106	162168	Chesapeake College	Somerset	Maryland
107	162122	College of Southern Maryland	Charles	Maryland
108	162557	Frederick Community College	Frederick	Maryland
109	162609	Garrett College	Garrett	Maryland
110	162690	Hagerstown Community College	Washington	Maryland
111	162706	Harford Community College	Harford	Maryland
112	162779	Howard Community College	Howard	Maryland
113	163426	Montgomery College	Montgomery	Maryland
114	163657	Prince George's Community College	Prince George's	Maryland
115	434672	The Community College of Baltimore County	Baltimore	Maryland
116	164313	Wor-Wic Community College	Wicomico	Maryland
117	164775	Berkshire Community College	Berkshire-Pittsfield	Massachusetts
118	165033	Bristol Community College	Bristol-Fall River	Massachusetts
119	165112	Bunker Hill Community College	Suffolk-Boston	Massachusetts
120	165194	Cape Cod Community College	Barnstable-West Barnstable	Massachusetts
121	165981	Greenfield Community College	Franklin-Greenfield	Massachusetts
122	166133	Holyoke Community College	Hampden-Holyoke	Massachusetts
123	166647	Massachusetts Bay Community College	Norfolk-Wellesley Hills	Massachusetts
124	166823	Massasoit Community College	Plymouth-Brockton	Massachusetts
125	166887	Middlesex Community College	Middlesex-Bedford	Massachusetts
126	166957	Mount Wachusett Community College	Worcester-Gardner	Massachusetts
127	167312	North Shore Community College	Essex-Danvers	Massachusetts
128	167376	Northern Essex Community College	Essex-Haverhill	Massachusetts
129	167534	Quinsigamond Community College	Worcester-Worcester	Massachusetts
130	167631	Roxbury Community College	Suffolk-Boston	Massachusetts
131	167905	Springfield Technical Community College	Hampden-Springfield	Massachusetts
132	183655	Atlantic Cape Community College	Atlantic	New Jersey
133	183743	Bergen Community College	Bergen	New Jersey
134	183859	Brookdale Community College	Monmouth	New Jersey
135	183877	Burlington County College	Burlington	New Jersey
136	183938	Camden County College	Camden	New Jersey
137	184180	County College of Morris	Morris	New Jersey
138	184205	Cumberland County College	Cumberland	New Jersey
139	184481	Essex County College	Essex	New Jersey
140	184791	Gloucester County College	Gloucester	New Jersey
141	184995	Hudson County Community College	Hudson	New Jersey

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

	<b>IPEDS Unit ID</b>	<b>Institution Name</b>	<b>Associated County or Equivalent</b>	<b>State</b>
142	185509	Mercer County Community College	Mercer	New Jersey
143	185536	Middlesex County College	Middlesex	New Jersey
144	185873	Ocean County College	Ocean	New Jersey
145	186034	Passaic County Community College	Passaic	New Jersey
146	186645	Raritan Valley Community College	Somerset	New Jersey
147	186469	Salem Community College	Salem	New Jersey
148	247603	Sussex County Community College	Sussex	New Jersey
149	187198	Union County College	Union	New Jersey
150	245625	Warren County Community College	Warren	New Jersey
151	231536	Blue Ridge Community College	Augusta	Virginia
152	231697	Central Virginia Community College	Lynchburg city	Virginia
153	231873	Dabney S Lancaster Community College	Alleghany	Virginia
154	231882	Danville Community College	Danville	Virginia
155	232052	Eastern Shore Community College	Accomack	Virginia
156	232195	Germanna Community College	Orange	Virginia
157	232414	J Sargeant Reynolds Community College	Henrico	Virginia
158	232450	John Tyler Community College	Chesterfield	Virginia
159	232575	Lord Fairfax Community College	Frederick	Virginia
160	232788	Mountain Empire Community College	Wise	Virginia
161	232867	New River Community College	Pulaski	Virginia
162	232946	Northern Virginia Community College	Fairfax city	Virginia
163	233019	Patrick Henry Community College	Henry	Virginia
164	233037	Paul D Camp Community College	Franklin	Virginia
165	233116	Piedmont Virginia Community College	Charlottesville city	Virginia
166	233310	Rappahannock Community College	Middlesex	Virginia
167	233639	Southside Virginia Community College	Brunswick	Virginia
168	233648	Southwest Virginia Community College	Tazewell	Virginia
169	233754	Thomas Nelson Community College	Hampton city	Virginia
170	233772	Tidewater Community College	Norfolk city	Virginia
171	233903	Virginia Highlands Community College	Washington	Virginia
172	233949	Virginia Western Community College	Roanoke	Virginia
173	234377	Wytheville Community College	Wythe	Virginia

## Appendix B: Comparable Institutions Used for Per-Student Funding Study

### Washington Community and Technical College System Institutions

<b>IPEDS Unit ID</b>	<b>Institution Name</b>	<b>Associated County or Equivalent</b>	<b>State</b>
235671	Bates Technical College	Pierce	Washington
234669	Bellevue Community College	King	
234696	Bellingham Technical College	Whatcom	
234711	Big Bend Community College	Grant	
439190	Cascadia Community College	King	
234845	Centralia College	Lewis	
234933	Clark College	Clark	
234951	Clover Park Technical College	Pierce	
234979	Columbia Basin College	Franklin	
235103	Edmonds Community College	Snohomish	
235149	Everett Community College	Snohomish	
235334	Grays Harbor College	Grays Harbor	
235343	Green River Community College	King	
235431	Highline Community College	King	
235699	Lake Washington Technical College	King	
235750	Lower Columbia College	Cowlitz	
236188	Olympic College	Kitsap	
236258	Peninsula College	Clallam	
235237	Pierce College at Fort Steilacoom	Pierce	
439145	Pierce College at Puyallup	Pierce	
236382	Renton Technical College	King	
236513	Seattle Community College-Central Campus	King	
236072	Seattle Community College-North Campus	King	
236504	Seattle Community College-South Campus	King	
381529	Seattle Vocational Institute	King	
236610	Shoreline Community College	King	
236638	Skagit Valley College	Skagit	
236656	South Puget Sound Community College	Thurston	
236692	Spokane Community College	Spokane	
236708	Spokane Falls Community College	Spokane	
236753	Tacoma Community College	Pierce	
236887	Walla Walla Community College	Walla Walla	
236975	Wenatchee Valley College	Chelan	
237039	Whatcom Community College	Whatcom	
237109	Yakima Valley Community College	Yakima	

## Appendix C: Integrated Postsecondary Education Data System (IPEDS) – Selected Data Definitions

The **Integrated Postsecondary Education Data System (IPEDS)** collection, conducted by the National Center for Education Statistics, began in 1986 and involves annual institution-level data collections. All postsecondary institutions that have a Program Participation Agreement with the Office of Postsecondary Education (OPE), U.S. Department of Education (throughout IPEDS referred to as “Title IV”) are required to report data using a web-based data collection system. IPEDS currently consists of the following components: Institutional Characteristics (IC); 12-month Enrollment (E12); Completions (C); Human Resources (HR) composed of Employees by Assigned Position (EAP), Fall Staff (S), and Salaries (SA); Fall Enrollment (EF); Graduation Rates (GRS); Finance (F); and Student Financial Aid (SFA).

### Enrollment

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#### Full-time student:

**Undergraduate** — a student enrolled for 12 or more semester credits, 12 or more quarter credits or 24 or more contact hours a week each term.

**Graduate** — a student enrolled for 9 or more semester credits, 9 or more quarter credits or a student involved in thesis or dissertation preparation that is considered full time by the institution.

**First-professional** — as defined by the institution.

#### Part-time student:

**Undergraduate** — a student enrolled for either 11 semester credits or less, 11 quarter credits or less, or less than 24 contact hours a week each term.

**Graduate** — a student enrolled for either 8 semester credits or less, or 8 quarter credits or less.

**First-professional** — as defined by the institution.

**First-professional student:** A student enrolled in any of the following degree programs:

- Chiropractic (D.C. or D.C.M.)
- Dentistry (D.D.S. or D.M.D.)
- Law (L.L.B., J.D.)
- Medicine (M.D.)
- Optometry (O.D.)
- Osteopathic Medicine (D.O.)
- Pharmacy (Pharm.D.)
- Podiatry (D.P.M., D.P., or Pod.D.)
- Theology (M.Div., M.H.L., B.D., or Ordination)
- Veterinary Medicine (D.V.M.)

**Calculation of FTE students (using fall student headcounts):** The number of FTE students is calculated based on fall student headcounts as reported by the institution on the IPEDS Enrollment (EF) component (Part A). The full-time equivalent (headcount) of the institution's part-time enrollment is estimated by multiplying the factors noted below times the part-time headcount. These are then added to the full-time enrollment headcounts to obtain an FTE for all students enrolled in the fall.

## Appendix C: Integrated Postsecondary Education Data System (IPEDS) – Selected Data Definitions

Part-time undergraduate enrollment
Public 4-year (.403543)
Public 2-year and <2-year (.335737)
Part-time first-professional enrollment
Public 4-year (.600000)
Part-time graduate enrollment
Public 4-year (.361702)

### Expenses

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**Core expenses:** Total expenses for the essential education activities of the institution. Core expenses for public institutions reporting under GASB standards include expenses for instruction, research, public service, academic support, student services, institutional support, operation and maintenance of plant, depreciation, scholarships and fellowships, interest and other operating and non-operating expenses. Core expenses exclude expenses for auxiliary enterprises (e.g., bookstores, dormitories), hospitals and independent operations.

Core expenses derived for public institutions using the new GASB 34/35 standard are calculated as the sum of:

- Instruction (F1C011)
- Research (F1C021)
- Public service (F1C031)
- Academic support (F1C051)
- Student services (F1C061)
- Institutional support (F1C071)
- Operation maintenance of plant (F1C081)
- Depreciation (F1C091)
- Scholarships and fellowships expenses (F1C101)
- Other expenses and deductions (F1C141)
- Interest (F1C161)
- Total non-operating expenses and deductions (F1C181)

**Instruction:** A functional expense category that includes expenses of the colleges, schools, departments and other instructional divisions of the institution, and expenses for departmental research and public service that are not separately budgeted. Includes general academic instruction, occupational and vocational instruction, community education, preparatory and adult basic education, and regular, special and extension sessions. Also includes expenses for both credit and non-credit activities. Excludes expenses for academic administration where the primary function is administration (e.g., academic deans). Information technology expenses related to instructional activities if the institution separately budgets and expenses information technology resources are included (otherwise these expenses are included in academic support). GASB institutions include actual or allocated operation and maintenance of plant or interest and depreciation.

**Research (expense):** A functional expense category that includes expenses for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution. The category

## Appendix C: Integrated Postsecondary Education Data System (IPEDS) – Selected Data Definitions

includes institutes and research centers, and individual and project research. This function does not include non-research sponsored programs (e.g., training programs). Also included are information technology expenses related to research activities if the institution separately budgets and expenses information technology resources (otherwise these expenses are included in academic support.) GASB institutions include actual or allocated operation and maintenance of plant or interest and depreciation.

**Public service (expense):** A functional expense category that includes expenses for activities established primarily to provide non-instructional services beneficial to individuals and groups external to the institution. Examples are conferences, institutes, general advisory service, reference bureaus and similar services provided to the community. This function includes expenses for community services, cooperative extension services and public broadcasting services. Also includes information technology expenses related to the public service activities if the institution separately budgets and expenses information technology resources, otherwise these expenses are included in academic support. GASB institutions include actual or allocated operation and maintenance of plant or interest and depreciation.

**Academic support:** A functional expense category that includes expenses of activities and services that support the institution's primary missions of instruction, research and public service. It includes the retention, preservation and display of educational materials (for example, libraries, museums and galleries); organized activities that provide support services to the academic functions of the institution (such as a demonstration school associated with a college of education or veterinary and dental clinics if their primary purpose is to support the instructional program); media such as audiovisual services; academic administration (including academic deans but not department chairpersons); and formally organized and separately budgeted academic personnel development and course and curriculum development expenses. Also included are information technology expenses related to academic support activities. If an institution does not separately budget and expense information technology resources, the costs associated with the three primary programs will be applied to this function and the remainder to institutional support. GASB institutions include actual or allocated operation and maintenance of plant or interest and depreciation.

**Student services (expenses):** A functional expense category that includes expenses for admissions, registrar activities and activities whose primary purpose is to contribute to students' emotional and physical well-being and to their intellectual, cultural and social development outside the context of the formal instructional program. Examples include student activities, cultural events, student newspapers, intramural athletics, student organizations, supplemental instruction outside the normal administration and student records. Intercollegiate athletics and student health services may also be included except when operated as self-supporting auxiliary enterprises. Also may include information technology expenses related to student service activities if the institution separately budgets and expenses information technology resources (otherwise these expenses are included in institutional support.) GASB institutions include actual or allocated operation and maintenance of plant or interest and depreciation.

**Institutional support:** A functional expense category that includes expenses for the day-to-day operational support of the institution. Includes expenses for general administrative services, central executive-level activities concerned with management and long range planning, legal and fiscal operations, space management, employee personnel and records, logistical services such as purchasing and printing, and public relations and development. Also includes information technology expenses related to institutional support activities. If an institution does not separately budget and expense

## Appendix C: Integrated Postsecondary Education Data System (IPEDS) – Selected Data Definitions

information technology resources, the costs associated with student services and operation and maintenance of plant will also be applied to this function. GASB institutions include actual or allocated operation and maintenance of plant or interest and depreciation.

**Operation and maintenance of plant (expenses):** A functional expense category that includes expenses for operations established to provide service and maintenance related to campus grounds and facilities used for educational and general purposes. Specific expenses include utilities, fire protection, property insurance and similar items. This function does not include amounts charged to auxiliary enterprises, hospitals and independent operations. Also includes information technology expenses related to operation and maintenance of plant activities if the institution separately budgets and expenses information technology resources (otherwise these expenses are included in institutional support). Institutions may, as an option, distribute operation and maintenance of plant expense to this function.

**Depreciation:** The allocation or distribution of the cost of capital assets, less any salvage value, to expenses over the estimated useful life of the asset in a systematic and rational manner. Depreciation for the year is the amount of the allocation or distribution for the year involved.

**Scholarships and fellowships (expenses):** That portion of scholarships and fellowships granted that exceeds the amount applied to institutional charges such as tuition and fees or room and board. The amount reported as expense excludes allowances and discounts.

**Interest:** The price paid or received for the use of money over a period of time. Interest income is one component of investment income. Interest paid by the institution is interest expense.

**Other operating:** GASB requires that revenues and expenses be separated between operating and non-operating. Operating revenues and expenses result from providing goods and services. Operating transactions are incurred in the course of the operating activities of the institution.

**Other non-operating:** GASB requires that revenues and expenses be separated between operating and non-operating. Operating revenues and expenses result from providing goods and services. Non-operating activities are those outside the activities that are part of the operating activities of the institution. Most government appropriations are non-operating because they are not generated by the operations of the institution. Investment income is non-operating in most instances because institutions are not engaged in investing as an operating activity. Gifts are defined as non-operating. Non-exchange transactions generate non-operating revenues.

### Revenues

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**Tuition and fees after deducting discounts and allowances:**<sup>10</sup> Tuition and fees are revenues from all tuition and fees assessed against students (net of refunds and discounts, and allowances) for educational purposes. If tuition or fees are remitted to the state as an offset to the state appropriation, the total of such tuition or fees should be deducted from the total state appropriation and added to the total for tuition and fees. If an all-inclusive charge is made for tuition, board, room and other services,

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<sup>10</sup> IPEDS "tuition and fees" includes a variety of accounts, some dedicated to specific purposes and not available to support general operations. Examples include student activities fees, recreation center fees, building fees and transit fees.

## **Appendix C: Integrated Postsecondary Education Data System (IPEDS) – Selected Data Definitions**

a reasonable distribution is made between revenues for tuition and fees and revenues for auxiliary enterprises. Tuition and fees excludes charges for room, board and other services rendered by auxiliary enterprises.

**State appropriations:** State appropriations are amounts received by the institution through acts of a state legislative body, except grants and contracts and capital appropriations. Funds reported in this category are for meeting current operating expenses, not for specific projects or programs.

**Local appropriations, education district taxes, and similar support:** Local appropriations, education district taxes and similar support are amounts received from property or other taxes assessed directly by or for an institution below the state level. It includes any other similar general support provided to the institution from governments below the state level, including local government appropriations.

**Other operating:** GASB requires that revenues and expenses be separated between operating and non-operating. Operating revenues and expenses result from providing goods and services. Operating transactions are incurred in the course of the operating activities of the institution. “Other” operating revenues are revenues that do not fall into the categories of tuition and fees, operating grants and contracts, sales and services of auxiliary operations or hospitals and independent operations.

## Appendix D: Adjusting for Regional Cost-of-Living Differences

This appendix describes OFM's methods for incorporating cost-of-living adjustments to per-student funding levels in public higher education.

### Cost-of-living index versus price index

It is important to make the conceptual distinction between a price index and a cost-of-living index. A price index measures how prices change *over time*. A cost-of-living index compares price levels across different geographic areas. For the per-student funding study, RCW 28B.15.068 states that OFM shall adjust for regional cost-of-living differences.

### Data options

There is not an accepted, standard method for adjusting for regional price variation. Challenges include developing a common market basket of goods, accounting for area characteristics, and defining an appropriate geographic area. There are several potential sources of data, but none is well-suited by itself for this purpose:

- The Consumer Price Index (CPI) ([www.bls.gov/cpi](http://www.bls.gov/cpi)), produced by the Bureau of Labor Statistics, is the most commonly cited price index. It is a measure of average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. The percent change in the CPI from year to year is a measure of inflation. The CPI is produced at a national level and also for a few metropolitan areas. However, because it does not show variation for all local areas and it is designed for estimating price levels over time, it is not suitable for the per-student funding study.
- ACCRA Cost-of-Living Index (COLI) ([www.coli.org](http://www.coli.org)), produced by the Council for Community and Economic Research, is a source of city-to-city comparisons of consumer costs. The ACCRA COLI is designed for comparing households in the highest income quintile and is based on a market basket of goods which has six weighted expenditure categories. Data are collected for around 300 metropolitan areas across the nation.<sup>11</sup>
- Fair Market Rents (FMR), established annually by the U.S. Department of Housing and Urban Development, are gross rent estimates for the 40<sup>th</sup> percentile of rental units.<sup>12</sup> HUD estimates FMRs for 530 metropolitan areas and 2,045 nonmetropolitan county areas.<sup>13</sup>
- Basic Allowance for Housing (BAH)<sup>14</sup> provides uniformed members of the military with compensation for housing costs. It is based on geographic duty location, pay grade and dependency status, and is intended to provide equitable housing compensation based on housing costs in local civilian housing markets.

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<sup>11</sup> For a description of the COLI methodology, see [www.coli.org/method.asp](http://www.coli.org/method.asp).

<sup>12</sup> [www.huduser.org/datasets/fmr.html](http://www.huduser.org/datasets/fmr.html). The current definition of FMR is the 40<sup>th</sup> percentile rent, the dollar amount below which 40 percent of the standard-standard quality rental housing units are rented.

<sup>13</sup> For a complete overview of Fair Market Rents, see [www.huduser.org/datasets/fmr/fmrover\\_071707R2.doc](http://www.huduser.org/datasets/fmr/fmrover_071707R2.doc).

<sup>14</sup> [perdiem.hqda.pentagon.mil/perdiem/BAH-Primer.pdf](http://perdiem.hqda.pentagon.mil/perdiem/BAH-Primer.pdf)

## Appendix D: Adjusting for Regional Cost-of-Living Differences

- Higher Education Price Index (HEPI) is an “inflation index designed specifically for use by institutions of higher education”<sup>15</sup> and is designed to measure changes over time. Although the 2009 update does include regional data, each region category encompasses multiple states and is not sufficiently localized for distinguishing cost variation at the institution level.

The U.S. Government Accountability Office (GAO) released a study in August 2009 (GAO-09-825, “Federal Student Aid Formula”)<sup>16</sup> reaching similar conclusions about the availability of data sources for making regional cost-of-living adjustments. The GAO study sought to address “what options exist for modifying (the financial aid formula) to reflect geographic cost-of-living differences” and noted, “There are no official federal measures of overall geographic cost-of-living differences. Existing measures track changes in prices over time rather than differences in prices across the country.” (Page 24). GAO identified three potential cost-of-living adjustment options, one of which was housing rental costs from HUD (Fair Market Rent), which is the data used in this study to supplement the ACCRA index. Strengths are that it is available for every county in the United States and is a widely used measure of housing expenses. GAO notes that drawbacks to using FMR data are it only captures recent movers rather than the entire housing market and only measures rental housing costs.

### Methodology

- For global challenge state institutions in a city or county with ACCRA COLI data, the COLI index number was used. ACCRA is a nationwide data set covering most metropolitan areas. Data collectors are given detailed specifications regarding the goods to be priced and timing of data collection. COLI data are designed to reflect general living costs and are available for areas smaller than the state level; therefore they were a good option for making cost-of-living adjustments. Among the Washington baccalaureate institutions and their associated comparables used in this study, approximately 75 percent were in a county with ACCRA COLI data.
- For areas outside the ACCRA set but within the global challenge states and with a public baccalaureate or community college, a regression relationship was developed between ACCRA (dependent variable) and two-bedroom FMR (independent variable). This method indicated that nearly 80 percent of the variance in cost of living (COLI) was explained by variability in housing costs.<sup>17</sup> The resulting relationship was used to estimate cost of living for areas without ACCRA data. Therefore, each institution (or set of institutions, as is the case with community colleges) has an index number reflecting the cost of living.
- An adjustment factor was calculated by taking the inverse of the cost-of-living number. Then within each comparison group, the factors were scaled such that the Washington institution’s adjustment factor equals 1. For example, suppose Institution A has a COLI of 105 and Washington Institution B has a COLI of 101. A’s cost of living is 4 percent higher than B’s and the adjustment factor is  $101/105 = 96.2$  percent. B’s adjustment factor is  $101/101 = 1$ .

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<sup>15</sup> College and University Higher Education Price Index, 2009 Update (page 1) [[www.commonfund.org/Commonfund/CF+Institute/CI\\_About\\_HEPI.htm](http://www.commonfund.org/Commonfund/CF+Institute/CI_About_HEPI.htm)]

<sup>16</sup> [gaonet.gov/products/GAO-09-825](http://gaonet.gov/products/GAO-09-825)

<sup>17</sup> The relationship between ACCRA COLI and Base Allowance for Housing (BAH) was also tested. The FMR data had a higher correlation with ACCRA, and thus was chosen for predicting ACCRA cost of living.

## Appendix D: Adjusting for Regional Cost-of-Living Differences

- (d) Educational institutions face a variety of costs, of which salaries are only a portion. Other costs faced by institutions may or may not be affected by regional cost of living. Therefore, one option would be to make a *partial* adjustment for cost of living; a fraction of funding could be adjusted while the remainder is unadjusted. The results are presented in three ways: (1) full adjustment of funding; (2) partial adjustment; and (3) no adjustment.

### Comments and concerns about the methodology

- *“Conceptually, ‘per-student funding’ does not fit perfectly with the notion of cost of living.”*

Perhaps the costs that institutions face are not captured in consumer-type data such as ACCRA and rental/housing prices. OFM attempted to address this concern by developing a scenario where the per-student funding level was partially adjusted for cost of living: consumer-type data and regional costs of living would be reflected in salaries, so only the salary portion of funding was adjusted. (This is mentioned in Methodology (d) above.)

- *“The cost- of- living adjustments may not be very stable over time since the ACCRA cost-of-living index is not designed for measuring inflation.”*

ACCRA is designed for regional or city-to-city comparisons within any given year, which is what OFM did with the per-student funding cost-of-living adjustment. A look at the data shows that the data did not bounce around unexpectedly: the median change of the cost-of-living index between 2007 and 2008 for areas in which there was a comparable institution was 1.5 percent. The COLI for the study fluctuated slightly less, with a median variation of 1.2 percent.

- *“The proxy housing costs, as reported by Fair Market Rent, are unrepresentative within certain areas.”*

To assess the reliability of using Fair Market Rent as a proxy for overall housing costs, OFM compared local area rental costs with owner-occupied housing costs using data from the American Community Survey and with the index used in this study. Among locations with four-year institutions included in this study, there was a 0.87 correlation between owner-occupied housing costs and renter-occupied housing costs (ACS data). FMR and ACS housing costs have a correlation of 0.85.

- *Other research.*

The Bureau of Economic Analysis is conducting research on regional price parities<sup>18</sup> though the methodology is still experimental and has not been fully vetted. One significant limitation in the context of this study would be that it provides the same value for all non-metro areas within a state.

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<sup>18</sup> Aten, Bettina and D’Souza, Roger J. “Regional Price Parities: Comparing Price Level Differences Across Geographic Areas,” *Survey of Current Business* (Washington, D.C.: U.S. Bureau of Economic Analysis, November 2008).

## Appendix E: Cost-of-Living Data by County or Equivalent

State	County or Equivalent	Cost-of-Living Index Used in 2007-08 Study	Fair Market Rent 2008	ACCRA 2008
California	Alameda	147.9	\$1,239	147.9
California	Butte	106.6	\$790	
California	Contra Costa	147.9	\$1,239	147.9
California	El Dorado	118.9	\$982	118.9
California	Fresno	120.6	\$805	120.6
California	Humboldt	109.5	\$837	
California	Imperial	106.2	\$784	
California	Kern	104.7	\$679	104.7
California	Lassen	107.5	\$804	
California	Los Angeles	147.7	\$1,300	147.7
California	Marin	172.1	\$1,592	172.1
California	Mendocino	113.4	\$899	
California	Merced	103.5	\$740	
California	Monterey	126.6	\$1,111	
California	Napa	132.9	\$1,214	
California	Orange	151.4	\$1,595	151.4
California	Placer	118.9	\$982	118.9
California	Plumas	108.6	\$822	
California	Riverside	119.5	\$1,142	119.5
California	Sacramento	118.9	\$982	118.9
California	San Bernardino	119.5	\$1,142	119.5
California	San Diego	136.4	\$1,355	136.4
California	San Francisco	172.1	\$1,592	172.1
California	San Joaquin	114.3	\$914	
California	San Luis Obispo	124.3	\$1,075	
California	San Mateo	172.1	\$1,592	172.1
California	Santa Barbara	140.4	\$1,334	
California	Santa Clara	156.0	\$1,293	156.0
California	Santa Cruz	150.3	\$1,493	
California	Shasta	105.1	\$766	
California	Siskiyou	101.8	\$713	

## Appendix E: Cost-of-Living Data by County or Equivalent

State	County or Equivalent	Cost-of-Living Index Used in 2007-08 Study	Fair Market Rent 2008	ACCRA 2008
California	Solano	125.2	\$1,090	
California	Sonoma	128.2	\$1,137	
California	Stanislaus	111.2	\$864	
California	Tulare	95.6	\$612	
California	Tuolumne	112.8	\$889	
California	Ventura	147.7	\$1,422	147.7
California	Yolo	118.9	\$1,013	118.9
California	Yuba	101.5	\$707	
Colorado	Adams	105.0	\$876	105.0
Colorado	Alamosa	92.0	\$555	
Colorado	Arapahoe	105.0	\$876	105.0
Colorado	Boulder	123.3	\$1,000	123.3
Colorado	Delta	94.7	\$598	
Colorado	Denver	105.0	\$876	105.0
Colorado	El Paso	92.8	\$797	92.8
Colorado	Gunnison	117.7	\$745	117.7
Colorado	Jefferson	105.0	\$876	105.0
Colorado	LaPlata	105.8	\$777	
Colorado	Larimer	95.3	\$807	95.3
Colorado	Las Animas	92.5	\$562	
Colorado	Logan	92.2	\$557	
Colorado	Mesa	101.0	\$655	101.0
Colorado	Montezuma	94.9	\$601	
Colorado	Morgan	93.7	\$582	
Colorado	Otero	92.0	\$555	
Colorado	Prowers	92.0	\$555	
Colorado	Pueblo	87.1	\$657	87.1
Colorado	Rio Blanco	102.6	\$726	
Colorado	Weld	97.6	\$652	97.6
Connecticut	Fairfield-Bridgeport town	149.0	\$1,171	149.0
Connecticut	Fairfield-Danbury city	149.0	\$1,451	149.0
Connecticut	Fairfield-Norwalk town	149.0	\$1,642	149.0

## Appendix E: Cost-of-Living Data by County or Equivalent

State	County or Equivalent	Cost-of-Living Index Used in 2007-08 Study	Fair Market Rent 2008	ACCRA 2008
Connecticut	Hartford-Enfield town	123.1	\$985	123.1
Connecticut	Hartford-Farmington city	123.1	\$985	123.1
Connecticut	Hartford-Hartford city	123.1	\$985	123.1
Connecticut	Hartford-Manchester town	123.1	\$985	123.1
Connecticut	Hartford-New Britain city	123.1	\$985	123.1
Connecticut	Litchfield	115.7	\$937	
Connecticut	Middlesex-Middletown city	116.8	\$985	116.8
Connecticut	New Haven-New Haven city	122.3	\$1,142	122.3
Connecticut	New Haven-New Haven city and North Haven town	122.3	\$1,142	122.3
Connecticut	New Haven-Waterbury city	122.3	\$863	122.3
Connecticut	New London-Norwich city	116.8	\$926	116.8
Connecticut	Tolland-Mansfield town	123.1	\$985	123.1
Connecticut	Windham-Killingly town-Danielson borough	108.5	\$820	
Connecticut	Windham-Windham town	108.5	\$820	
Maryland	Allegany	92.0	\$555	
Maryland	Anne Arundel	121.9	\$1,013	121.9
Maryland	Baltimore City	121.9	\$1,013	121.9
Maryland	Baltimore County	121.9	\$1,013	121.9
Maryland	Carroll	121.9	\$1,013	121.9
Maryland	Cecil	121.9	\$932	121.9
Maryland	Charles	133.4	\$1,324	133.4
Maryland	Frederick	133.4	\$1,324	133.4
Maryland	Garrett	93.0	\$571	
Maryland	Harford	121.9	\$1,013	121.9
Maryland	Howard	121.9	\$1,013	121.9
Maryland	Montgomery	133.4	\$1,324	133.4
Maryland	Prince George's	133.4	\$1,324	133.4
Maryland	Somerset	98.1	\$652	
Maryland	St. Mary's	120.2	\$1,009	
Maryland	Washington	88.8	\$713	88.8
Maryland	Wicomico	105.4	\$770	
Massachusetts	Barnstable-Bourne	128.7	\$1,145	

## Appendix E: Cost-of-Living Data by County or Equivalent

State	County or Equivalent	Cost-of-Living Index Used in 2007-08 Study	Fair Market Rent 2008	ACCRA 2008
Massachusetts	Berkshire-North Adams	107.4	\$764	107.4
Massachusetts	Barnstable-West Barnstable	128.7	\$1,145	
Massachusetts	Berkshire-Pittsfield	107.4	\$806	107.4
Massachusetts	Bristol-Dartmouth	122.0	\$819	122.0
Massachusetts	Bristol-Fall River	122.0	\$1,020	122.0
Massachusetts	Essex-Danvers	133.6	\$1,353	133.6
Massachusetts	Essex-Haverhill	133.6	\$1,127	133.6
Massachusetts	Essex-Salem	133.6	\$1,353	133.6
Massachusetts	Franklin-Greenfield	108.5	\$820	
Massachusetts	Hampden-Holyoke	110.0	\$844	
Massachusetts	Hampden-Springfield	110.0	\$844	
Massachusetts	Hampden-Westfield	110.0	\$844	
Massachusetts	Hampshire-Amherst	110.0	\$844	
Massachusetts	Middlesex-Bedford	141.6	\$1,353	
Massachusetts	Middlesex-Framingham	141.6	\$1,353	
Massachusetts	Middlesex-Lowell	134.1	\$1,232	
Massachusetts	Norfolk-Wellesley Hills	133.6	\$1,353	133.6
Massachusetts	Plymouth-Bridgewater	133.6	\$1,213	133.6
Massachusetts	Plymouth-Brockton	133.6	\$1,213	133.6
Massachusetts	Suffolk-Boston	133.6	\$1,353	133.6
Massachusetts	Worcester	107.4	\$965	107.4
Massachusetts	Worcester-Gardner	107.4	\$913	107.4
Massachusetts	Worcester-Worcester	107.4	\$965	107.4
New Jersey	Atlantic	121.7	\$1,033	
New Jersey	Bergen	132.7	\$1,256	132.7
New Jersey	Burlington	126.2	\$932	126.2
New Jersey	Camden	126.2	\$932	126.2
New Jersey	Cumberland	116.9	\$956	
New Jersey	Essex	129.2	\$1,103	129.2
New Jersey	Gloucester	126.2	\$932	126.2
New Jersey	Hudson	132.7	\$1,192	132.7
New Jersey	Mercer	132.7	\$1,120	132.7

## Appendix E: Cost-of-Living Data by County or Equivalent

State	County or Equivalent	Cost-of-Living Index Used in 2007-08 Study	Fair Market Rent 2008	ACCRA 2008
New Jersey	Middlesex	126.2	\$1,340	126.2
New Jersey	Monmouth	126.2	\$1,251	126.2
New Jersey	Morris	132.7	\$1,103	132.7
New Jersey	Ocean	126.2	\$1,251	126.2
New Jersey	Passaic	132.7	\$1,256	132.7
New Jersey	Salem	104.0	\$932	104.0
New Jersey	Somerset	132.7	\$1,340	132.7
New Jersey	Sussex	129.2	\$1,103	129.2
New Jersey	Union	129.2	\$1,103	129.2
New Jersey	Warren	120.1	\$1,007	
Virginia	Accomack	92.5	\$563	
Virginia	Alleghany	90.8	\$535	
Virginia	Augusta	97.9	\$627	97.9
Virginia	Brunswick	92.0	\$555	
Virginia	Charlottesville city	108.4	\$847	108.4
Virginia	Chesterfield	104.2	\$870	104.2
Virginia	Danville city	92.4	\$561	
Virginia	Fairfax city	137.4	\$1,324	137.4
Virginia	Franklin	90.8	\$535	
Virginia	Frederick	101.5	\$718	101.5
Virginia	Fredericksburg city	137.4	\$1,324	137.4
Virginia	Hampton city	108.5	\$904	108.5
Virginia	Harrisonburg city	103.1	\$649	103.1
Virginia	Henrico	104.2	\$870	104.2
Virginia	Henry	86.9	\$535	86.9
Virginia	Lexington city	98.1	\$535	98.1
Virginia	Lynchburg city	102.8	\$595	102.8
Virginia	Middlesex	97.6	\$645	
Virginia	Montgomery	102.9	\$639	102.9
Virginia	Newport News city	108.5	\$904	108.5
Virginia	Norfolk city	108.5	\$904	108.5
Virginia	Orange	98.4	\$657	

## Appendix E: Cost-of-Living Data by County or Equivalent

State	County or Equivalent	Cost-of-Living Index Used in 2007-08 Study	Fair Market Rent 2008	ACCRA 2008
Virginia	Prince Edward	96.4	\$626	
Virginia	Pulaski	90.8	\$535	
Virginia	Radford city	102.9	\$639	102.9
Virginia	Richmond city	104.2	\$870	104.2
Virginia	Roanoke	92.6	\$656	92.6
Virginia	Tazewell	90.8	\$535	
Virginia	Washington	98.1	\$535	98.1
Virginia	Williamsburg city	108.4	\$904	108.4
Virginia	Wise	90.8	\$535	
Virginia	Wythe	90.8	\$535	
Washington	Chelan	99.1	\$669	
Washington	Clallam	101.5	\$707	
Washington	Clark	95.5	\$757	95.5
Washington	Cowlitz	96.6	\$628	
Washington	Franklin	90.2	\$662	90.2
Washington	Grant	95.5	\$611	
Washington	Grays Harbor	96.2	\$622	
Washington	King	123.0	\$942	123.0
Washington	Kitsap	107.1	\$797	
Washington	Kittitas	100.5	\$691	
Washington	Lewis	99.0	\$668	
Washington	Pierce	109.9	\$845	109.9
Washington	Skagit	110.1	\$846	
Washington	Snohomish	123.0	\$942	123.0
Washington	Spokane	92.6	\$674	92.6
Washington	Thurston	104.8	\$778	104.8
Washington	Walla Walla	96.0	\$619	
Washington	Whatcom	112.6	\$760	112.6
Washington	Whitman	96.2	\$622	
Washington	Yakima	98.6	\$700	98.6

## Appendix F: Calculation of Employee Compensation as Share of Total Expenses

The IPEDS definition of **core expenses** is the sum of all expenses in the following categories:

- Instruction (01)
- Research (02)
- Public service (03)
- Academic support (05)
- Student services (06)
- Institutional support (07)
- Operation maintenance of plant (08)
- Depreciation (09)
- Scholarships and fellowships expenses (10)
- Other expenses and deductions (14)
- Interest (16)
- Total non-operating expenses and deductions (18)

Each of these categories is broken down into components. ‘xx’ corresponds to the functional categories listed above.

- Current year total (F1Cxx1)
- Salaries and wages (F1Cxx2)
- Employee fringe benefits (F1Cxx3)
- All other (F1Cxx5)
- Operation and maintenance of plant (F1Cxx6)

Operation and maintenance of plant is reported either as a total amount (F1C081) and (F1C084) or by functional area (F1Cxx6).

“**Modified core expenses**” as used in this study exclude all expenditures associated with depreciation and with non-operating expenses and deductions. The total modified core expenses are calculated as the sum of the following IPEDS finance items:

- F1C012 – Instruction: Salaries and wages
- F1C013 – Instruction: Employee fringe benefits
- F1C015 – Instruction: All other
- F1C016 – Instruction: Operation and maintenance of plant
- F1C022 – Research: Salaries and wages
- F1C023 – Research: Employee fringe benefits
- F1C025 – Research: All other
- F1C026 – Research: Operation and maintenance of plant
- F1C032 – Public Service: Salaries and wages
- F1C033 – Public Service: Employee fringe benefits
- F1C035 – Public Service: All other
- F1C036 – Public Service: Operation and maintenance of plant
- F1C052 – Academic Support: Salaries and wages
- F1C053 – Academic Support: Employee fringe benefits
- F1C055 – Academic Support: All other
- F1C046 – Academic Support: Operation and maintenance of plant
- F1C062 – Student Services: Salaries and wages
- F1C063 – Student Services: Employee fringe benefits
- F1C065 – Student Services: All other

## Appendix F: Calculation of Employee Compensation as Share of Total Expenses

- F1C066 – Student Services: Operation and maintenance of plant
- F1C072 – Institutional Support: Salaries and wages
- F1C073 – Institutional Support: Employee fringe benefits
- F1C075 – Institutional Support: All other
- F1C076 – Institutional Support: Operation and maintenance of plant
- F1C082 – Operation maintenance of plant: Salaries and wages
- F1C083 – Operation maintenance of plant: Employee fringe benefits
- F1C085 – Operation maintenance of plant: All other
- F1C086 – Operation maintenance of plant: Operation and maintenance of plant
- F1C102 – Scholarships and fellowships expenses: Salaries and wages
- F1C103 – Scholarships and fellowships expenses: Employee fringe benefits
- F1C105 – Scholarships and fellowships expenses
- F1C106 – Scholarships and fellowships expenses: Operation and maintenance of plant
- F1C142 – Other expenses and deductions: Salaries and wages
- F1C143 – Other expenses and deductions: Employee fringe benefits
- F1C145 – Other expenses and deductions: All other
- F1C146 – Other expenses and deductions: Operation and maintenance of plant

The ratio of salaries, wages and employee fringe benefits to modified core expenses is calculated by using the Salaries and wages components (F1Cxx2) plus the Employee fringe benefits components (F1Cxx3) of the modified core expenses as the numerator and the sum of all modified core expenses as the denominator.



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