

Key Facts about Higher Education in Washington

2009-10

WASHINGTON
**HIGHER
EDUCATION**
COORDINATING BOARD



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2009-10

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Key Facts about Higher Education in Washington

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Introduction

First published in 2002, *Key Facts about Higher Education in Washington* provides valuable information on the ways higher education serves our state and its people. The most current data and information available is presented throughout this report to highlight the *Key Facts* about Washington's postsecondary institutions, including faculty, students, budgets, and financial aid. The final chapter reflects major recommendations from the 2009 System Design Plan, which provides guidance to state lawmakers on policy decisions related to raising the educational attainment levels of Washington's citizens.

Higher Education in Washington

Washington's public and private colleges and universities make invaluable contributions to our state and its people. Our higher education institutions are centers of knowledge and innovation, powerful economic and research engines, creative wellsprings, and a force for positive societal change.

With the founding of the University of Washington in 1861, the state began a long-term commitment to providing higher education for its citizens. In the early 1890s, many of today's comprehensive universities were launched, as well as Washington State University. Throughout the 20th century many other elements of what is now a robust system of two- and four-year colleges and universities came into being.

The state's public higher education system now encompasses two major research institutions, four comprehensive institutions and 34 community and technical colleges. In addition, there are five branch campuses, 10 university centers, and numerous teaching sites. These institutions serve a myriad of state needs in fields as diverse as agriculture, biotechnology, chemistry, engineering, medicine, law, computer science, and architecture.

Washington citizens also benefit from the contributions of long-established independent or private colleges and universities, and religious colleges and universities. The state's independent or private institutions grant about one quarter of the bachelor's degrees and nearly half of the first professional degrees.

Higher education is a primary driver of the Washington economy. The direct and indirect impact of academic research alone accounts for an estimated \$2.1 billion in annual sales in the Washington economy. Higher education institutions throughout the state sustain and stimulate local and regional economies while providing the education and expertise needed to nurture future economic growth.

Despite current economic challenges, colleges in Washington are doing a remarkable job meeting the state's higher education needs. Enrollment was up substantially at public baccalaureate institutions in fall 2009, despite tuition increases of 14 percent. And the state's community colleges are accommodating record numbers of students seeking job training or starting on their way to a college degree.

The Higher Education Coordinating Board

The Washington Higher Education Coordinating Board (HECB) is a state agency governed by a 10-member citizen board to provide vision and leadership for public higher education in Washington.

Created by the Legislature in 1985, the HECB was formally established in January 1986 as the successor to the Council for Postsecondary Education. Board members are appointed to four-year terms by the Governor and confirmed by the Senate. The student member serves a one year term. The Board annually selects from its membership a chair and a vice-chair who each serve a one-year term. The chair and vice-chair may serve more than one term if selected to do so by the membership. The agency's executive director serves at the pleasure of the Board.

The Higher Education Coordinating Board serves as an advocate for students and the overall system of higher education with the Governor, the Legislature, and the public. The Board also collaborates with the public and private two- and four-year institutions, other state governing boards, and the Superintendent of Public Instruction to create a seamless system of public education geared toward student success.

HECB's Key Responsibilities:

- 1) Develops a statewide strategic master plan for higher education.
- 2) Administers state and federal financial aid and other education services programs.
- 3) Reviews, evaluates, prioritizes, and recommends the operating and capital budget requests of the two- and four-year public institutions.
- 4) Establishes an accountability monitoring and reporting system to achieve long-term performance goals in higher education.
- 5) Administers the Guaranteed Education Tuition (GET) college savings program.
- 6) Adopts policies that ensure efficient transfer of credits and courses throughout public higher education.
- 7) Approves all new academic degree programs offered by the public four-year college and universities.
- 8) Establishes minimum admissions standards for the state's public baccalaureate institutions.
- 9) Conducts statewide needs assessment for new degrees and programs, off-campus centers and locations, and consolidation or elimination of programs.
- 10) Provides degree authorization for out-of-state colleges and universities and some in-state private colleges and universities.

Introduction and Quick Facts

Quick Facts about Higher Education in Washington

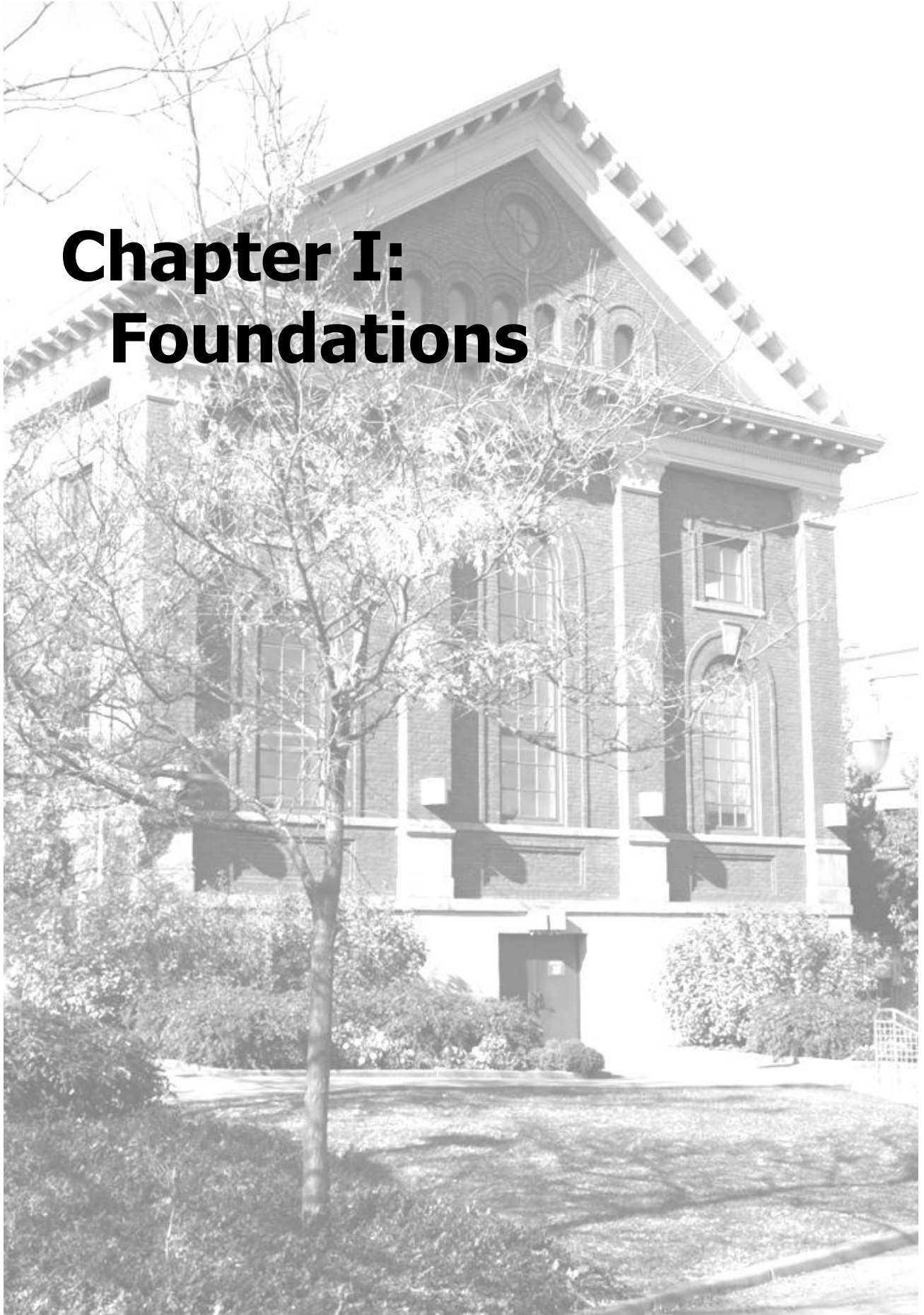
- Higher education operating budget – 2009-11: **\$9.5 billion** (16 percent of state total)
- Near general fund-state contribution for higher education – 2009-11: **\$3.3 billion** (10 percent of state total)
- Tuition and fee cost at flagship university (UW), state ranking – 2008-09: **25th**
- College students receiving state, federal, or institutional need-based aid in 2008-2009 at institutions participating in the State Need Grant program: **144,230**
- Percentage of high school graduates enrolled in college within one year of graduation – 2008: **63 percent**
- Full- and part-time employees, Washington public colleges and universities–fall 2007: **62,000**
- Jobs generated by academic research – 2007: **16,000**
- Economic activity (sales) resulting from academic research – 2007: **\$2.1 billion**
- State/local tax revenues generated by academic research – 2007: **\$200 million**

Fall 2008 Student Headcounts	
Public community and technical colleges	266,703
Public baccalaureate undergraduate	92,379
Public baccalaureate graduate/professional	18,693
Private baccalaureates	48,949

Degrees and certificates conferred in 2007-08	
Public community and technical colleges	24,860
Public baccalaureates, bachelor's	21,641
Public baccalaureates, master's	4,715
Public baccalaureates, doctoral/professional	1,531
Private baccalaureates, bachelor's	7,883
Private baccalaureates, master's	4,105
Private baccalaureates, doctoral/professional	324

Questions or comments about this report may be addressed to Jan Ignash, HECB Deputy Director for Policy, Planning and Research. Phone: 360-704-4168 - Email: JanI@hecb.wa.gov

Chapter I: Foundations



Chapter I: Foundations of Higher Education

A diverse mix of public, private institutions

Washington hosts a wide array of educational institutions beyond the high school level.

Among two- and four-year degree-granting institutions, public colleges and universities account for the majority of enrollments, but private institutions also make a significant contribution to the diversity of Washington's higher education system.¹

Public four-year colleges and universities

Washington provides six public baccalaureate institutions. Each is governed by a board of regents or trustees who are appointed by the Governor and approved by the Senate.

Four-year institutions are divided into two types: research and comprehensive. The research universities offer baccalaureate and graduate programs, including doctoral and professional degrees. Comprehensive institutions offer baccalaureate and master's level programs.

The research universities operate five branch campuses that produce a growing number of baccalaureate degrees. There are also 10 university centers operated jointly by two- and four-year institutions or on a stand-alone basis, numerous teaching sites, and a vigorous online learning environment.

Research Institutions

- **University of Washington** (Seattle)
Branch campuses:
 - University of Washington Bothell
 - University of Washington Tacoma
- **Washington State University** (Pullman)
Branch campuses:
 - Washington State University Tri-Cities
 - Washington State University Vancouver
 - Washington State University Spokane²

Comprehensive Institutions

- **Central Washington University** (Ellensburg)
- **Eastern Washington University** (Cheney)
- **The Evergreen State College** (Olympia)
- **Western Washington University** (Bellingham)

¹ Links to specific institutions are available on the Higher Education Coordinating Board website at www.hecb.wa.gov/links/index.asp.

² In 2004, the Legislature removed the "branch" designation for Washington State University Spokane. Today it is classified as an urban, research campus rather than a branch campus.

Public Four-Year College and University Enrollments

Enrollments include all funding sources	Primary Location	Fall 2008 enrollment (headcounts)		
		Under-graduates	Graduate/ Professional	Total
University of Washington	Seattle	29,397	10,278	39,675
University of Washington Bothell	Bothell	1,948	343	2,291
University of Washington Tacoma	Tacoma	2,449	518	2,967
Washington State University Pullman	Pullman	16,892	2,685	19,577
Washington State University Spokane	Spokane	857	719	1,576
Washington State University Tri-Cities	Tri-Cities	1,105	267	1,372
Washington State University Vancouver	Vancouver	2,295	532	2,827
Central Washington University	Ellensburg	10,181	481	10,662
Eastern Washington University	Cheney	9,485	1,324	10,809
The Evergreen State College	Olympia	4,364	332	4,696
Western Washington University	Bellingham	13,406	1,214	14,620
Total: Public Four-Year		92,379	18,693	111,072

Notes: Enrollments include both state-supported and non-state-supported students. In 2004, the Legislature removed the "branch" designation for Washington State University Spokane.

Source: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2008, for all institutions except WSU Spokane, Tri-Cities, and Vancouver. Data for those institutions are from OFM, Higher Education Enrollment Reports (HEER), fall 2008.

Community and Technical Colleges

Washington has 34 public community and technical colleges that grant certificates and associate degrees. Students enroll in community and technical colleges for various purposes, including academic programs, workforce training, basic skills, and home and family life enrichment.

The two-year schools are governed by boards of trustees appointed by the Governor and approved by the Senate. Associate degrees usually require two years of full-time coursework. In addition, since mid-2006, the HECB has approved eight applied baccalaureate programs at seven community colleges. Applied baccalaureate programs provide pathways for students holding technical associate degrees to earn bachelor's degrees in fields where industry, community, and student demand exists.

Washington also is home to a federally-funded public institution – Northwest Indian College near Bellingham, which offers two- and four-year degrees and certificates.

Chapter I: Foundations of Higher Education

Public Two-Year Community and Technical Colleges

(29 community colleges, 5 technical colleges, 1 vocational institute)

Enrollments include all funding sources:	Primary Location	Fall 2008 enrollment (headcount)
Bates Technical College	Tacoma	6,786
Bellevue College	Bellevue	18,665
Bellingham Technical College	Bellingham	3,622
Big Bend Community College	Moses Lake	2,629
Cascadia Community College	Bothell	3,004
Centralia College	Centralia	4,793
Clark College	Vancouver	13,123
Clover Park Technical College	Tacoma	7,040
Columbia Basin College	Pasco	7,824
Edmonds Community College	Lynnwood	12,112
Everett Community College	Everett	11,339
Grays Harbor College	Aberdeen	3,607
Green River Community College	Auburn	9,867
Highline Community College	Des Moines	10,198
Lake Washington Technical College	Kirkland	5,557
Lower Columbia College	Longview	4,793
Olympic College	Bremerton	8,061
Peninsula College	Port Angeles	5,114
Pierce College Fort Steilacoom	Fort Steilacoom	10,153
Pierce College Puyallup	Puyallup	3,904
Renton Technical College	Renton	7,561
Seattle Central Community College	Seattle	10,292
North Seattle Community College	Seattle	8,641
South Seattle Community College	Seattle	9,367
Seattle Vocational Institute	Seattle	479
Shoreline Community College	Shoreline	7,494
Skagit Valley Community College	Mount Vernon	7,167
South Puget Sound Community College	Olympia	8,354
Spokane Community College	Spokane	8,601
Spokane Falls Community College	Spokane	14,571
Tacoma Community College	Tacoma	7,976
Walla Walla Community College	Walla Walla	6,253
Wenatchee Valley College	Wenatchee	4,687
Whatcom Community College	Bellingham	6,736
Yakima Valley Community College	Yakima	6,333
Total: Community and Technical Colleges		266,703

Notes: Enrollments include both state-supported and non-state-supported students. Spokane Institute of Extended Learning student headcounts are reported in Spokane Falls totals.

Source: State Board of Community and Technical Colleges, *Enrollment and Staffing Report*, fall 2008.

Exempt institutions

Washington law requires the HECB to review and authorize degree-granting institutions operating in the state to protect citizens from fraudulent and deceptive higher education practices. About 110 institutions do not require review and authorization. These are known as ‘exempt’ institutions.

The exempt institutions include:

- **Public institutions.**
- **Long-standing private institutions.** These include the 10 institutions that belong to the Independent Colleges of Washington (ICW).³
- **Schools that exclusively offer religious training.** Institutions are required to submit a report every two years.
- **Conditionally exempt institutions** that offer degree programs or courses exclusively to federal employees at a military base or other federal site. The HECB may review the exemption every two years.
- **Conditional waiver institutions** with very limited educational offerings. They may also be reviewed by the HECB every two years.

Authorized institutions

There are 59 degree-granting institutions authorized by the HECB to operate in Washington:

- **28 not-for-profit**
- **23 for-profit**
- **8 out-of-state**

These institutions offer limited programs and degrees at various locations around the state. Many are chartered in other states and some in other countries. They must renew their authorization every two years.

For a complete list of all authorized and exempt institutions operating in Washington, go to www.hecb.wa.gov/autheval/daa/listofcolleges.asp#4year.

³ Gonzaga University, Heritage University, Pacific Lutheran University, Saint Martin’s University, Seattle Pacific University, Seattle University, University of Puget Sound, Walla Walla University, Whitman College, Whitworth University.

Chapter I: Foundations of Higher Education

Private Four-Year Institutions

Institution	Primary Location	Fall 2008 enrollment (headcount)
Antioch University	Seattle	854
Argosy University	Seattle	448
Art Institute of Seattle	Seattle	2,234
Bastyr University	Kenmore	988
City University of Seattle	Seattle	3,184
Cornish College of the Arts	Seattle	815
DeVry University-Washington	Federal Way	903
DigiPen Institute of Technology	Redmond	915
Faith Evangelical Seminary	Tacoma	192
Gonzaga University	Spokane	7,272
Heritage University	Toppenish	1,087
International Academy of Design and Technology	Seattle	515
ITT Technical Institute-Everett	Everett	427
ITT Technical Institute-Seattle	Seattle	464
ITT Technical Institute-Spokane Valley	Spokane	433
Mars Hill Graduate School	Bothell	276
Northwest Baptist Seminary	Tacoma	78
Northwest College of Art	Poulsbo	78
Northwest University	Kirkland	1,246
Pacific Lutheran University	Tacoma	3,652
Saint Martin's University	Lacey	1,659
Seattle Institute of Oriental Medicine	Seattle	31
Seattle Pacific University	Seattle	3,891
Seattle University	Seattle	7,560
Trinity Lutheran College	Issaquah	90
University of Phoenix-Eastern Washington Campus	Spokane	49
University of Phoenix-Western Washington Campus	Seattle	802
University of Puget Sound	Tacoma	2,844
Walla Walla University	College Place	1,800
Whitman College	Walla Walla	1,458
Whitworth University	Spokane	2,704
Total: Private Four-Year Institutions		48,949

Source: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2008.

Private Career Schools

A number of private career institutions – many focused on workforce development and job training – offer coursework and programs within Washington. Massage and dental assistance are two examples, but there are many others. Private career schools that offer programs at levels below the associate degree level are *licensed* by the Workforce Training and Education Coordinating Board. Data on these independent schools are not included in this report. Information on these institutions can be found at the Workforce Training and Education Coordinating Board website www.wtb.wa.gov.

Chapter I: Foundations of Higher Education

Actual Average Annual FTEs: State-Supported Public Four-Year Institutions and Community and Technical Colleges

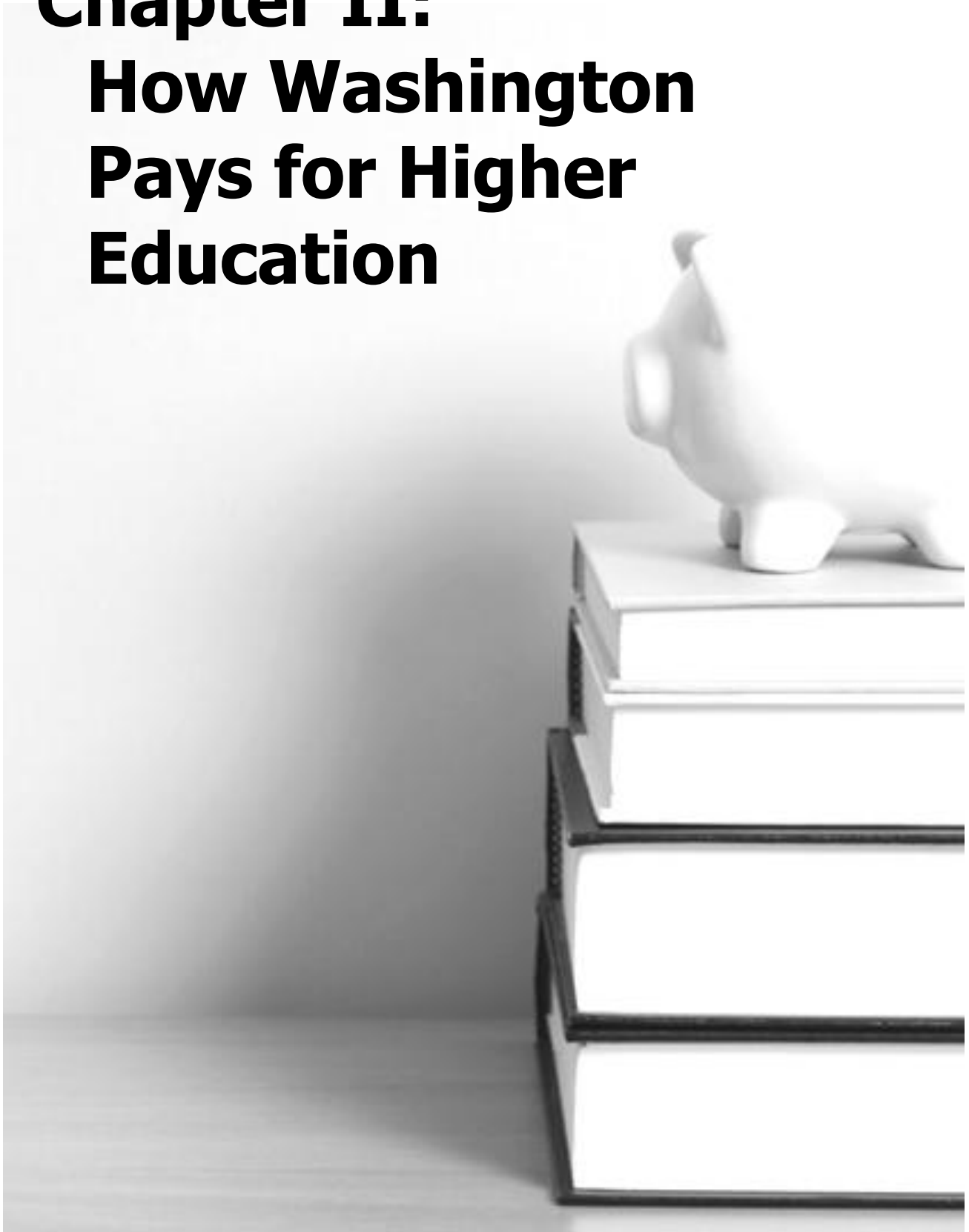
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Research institutions									
UW Main campus	32,661	33,863	34,065	33,487	33,383	33,155	33,497	33,858	35,326
UW Bothell	1,041	1,228	1,236	1,250	1,344	1,200	1,368	1,565	1,922
UW Tacoma	1,264	1,556	1,662	1,579	1,630	1,667	1,782	2,103	2,481
UW total	34,966	36,647	36,963	36,316	36,357	36,022	36,647	37,526	39,729
WSU									
WSU Main campus	17,257	17,607	17,830	17,975	17,954	17,985	17,579	18,246	18,762
WSU Spokane	526	567	628	627	1,192	1,282	1,319	1,340	1,436
WSU Tri-Cities	639	631	627	677	672	691	695	849	957
WSU Vancouver	1,076	1,150	1,226	1,263	1,339	1,367	1,684	1,899	2,161
WSU total	19,498	19,955	20,311	20,542	21,157	21,325	21,277	22,334	23,316
Comprehensive									
CWU	7,287	7,672	8,106	8,657	8,885	9,057	9,204	8,931	9,082
EWU	8,081	8,421	8,700	8,956	9,126	9,281	9,189	9,111	9,287
TESC	3,786	4,009	4,054	4,099	4,120	4,131	4,114	4,269	4,470
WWU	11,214	11,265	11,377	11,505	11,713	11,755	11,784	12,140	12,408
Four-year total	84,832	87,969	89,511	90,075	91,358	91,571	92,215	94,310	98,292
Community and Technical Colleges									
2-year or Less Programs	128,093	133,962	139,753	138,241	131,489	130,933	132,316	136,422	147,560
Baccalaureate Programs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	90	143
CTC total	128,093	133,962	139,753	138,241	131,489	130,933	132,316	136,512	147,703
2- & 4-year Partnerships Contracted Programs	n/a	n/a	n/a	n/a	n/a	n/a	30	211	296
Public total	212,925	221,931	229,264	228,316	222,847	222,504	224,561	231,033	246,291

Notes: Center and off-campus enrollments included with each institution with the exception of two-year and four-year partnership contracted programs beginning in 2006-07.

Numbers may not always sum to totals due to rounding.

Sources: Office of Financial Management, Higher Education Enrollment Statistics, and budget driver reports (as of August 28, 2009).

Chapter II: How Washington Pays for Higher Education

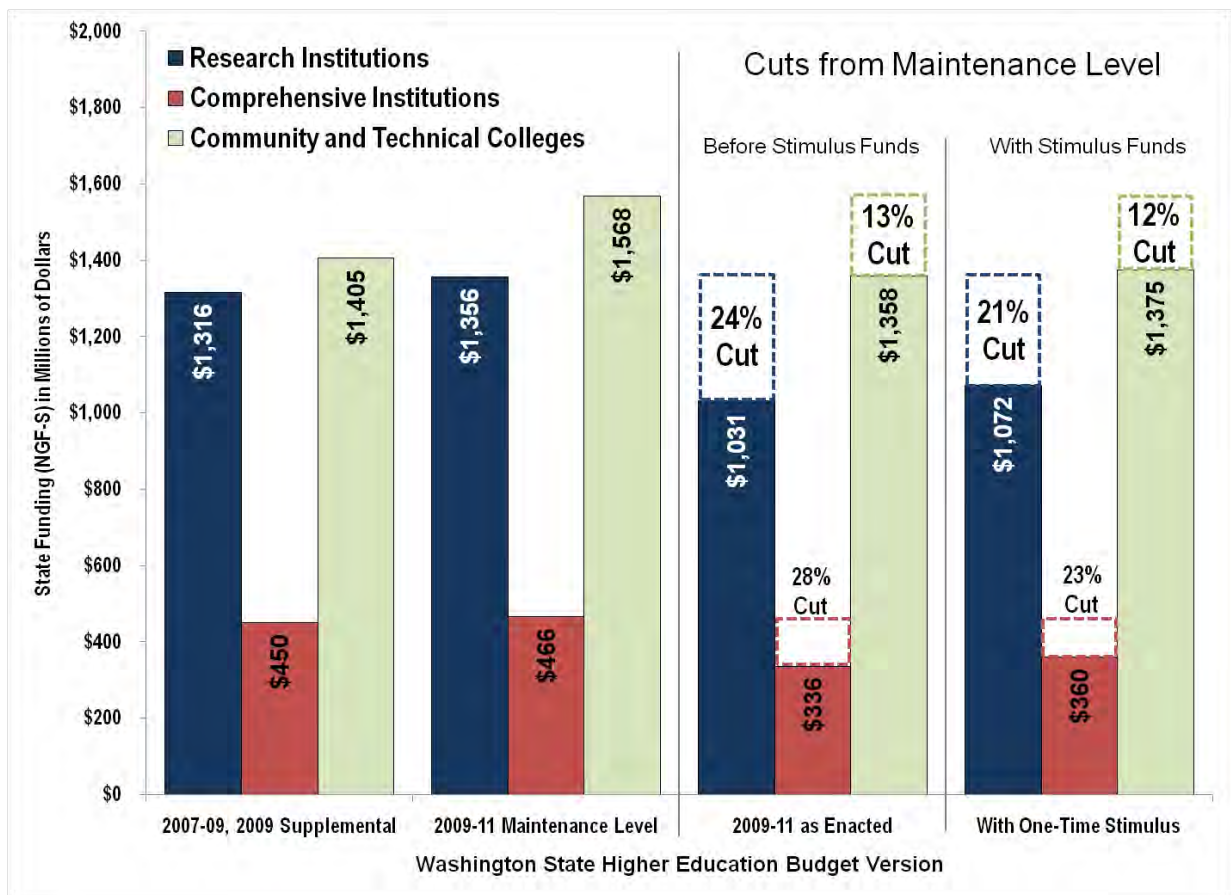


Washington’s higher education system experiences the effects of a national recession

The national recession dealt Washington’s public higher education institutions a serious blow in 2009. Sharply declining state revenue forced lawmakers to reduce the system’s 2009-11 operating budget to a level significantly below that needed to maintain existing programs. The budget crisis came at a time when the state’s *Strategic Master Plan for Higher Education*, adopted in 2008, called for increasing degree and certificate production by more than 40 percent annually within a decade to meet projected demand for college graduates.

The budget shortfall was partially offset by authorized tuition increases of up to 14 percent per year for resident undergraduates at public baccalaureate institutions, and 7 percent per year at the community and technical colleges. Taking into account added tuition revenue and one-time federal stimulus money, the state’s two research universities (UW and WSU) will have about 7 percent less revenue in 2009-11 than in fiscal year 2009; the other four-year public universities will have 6.5 percent less; the community and technical colleges will operate their core programs with 6 percent less revenue.

2009-11 State Funding Reductions for Public Higher Education Institutions from Maintenance Level by Sector
Near General Fund-State, Dollars in Millions



Source: HECB analysis of data from OFM Budget Allocation and Support System (accessed 9/24/09).

Chapter II: How Washington Pays for Higher Education

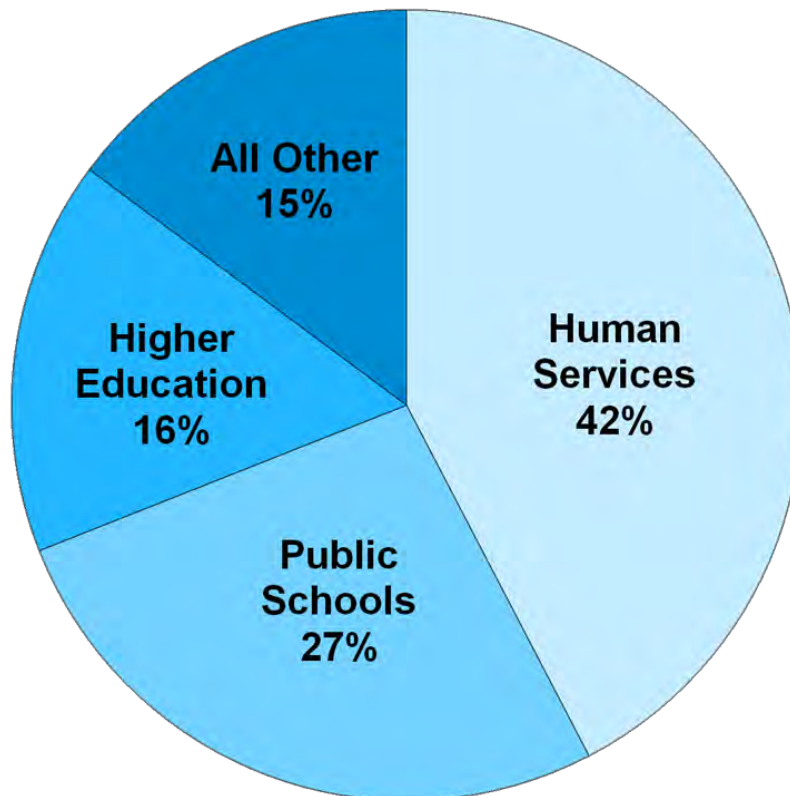
Current operating budget is below level needed to maintain services in last biennium

Money from the State General Fund and student tuition provide the bulk of the money in the state operating budget for public higher education. The General Fund includes revenues from the state sales tax, business and occupation tax, property tax, and other excise taxes. Other revenue sources for higher education include grants and contracts, dedicated local revenues, and the University of Washington hospital.

The state's total operating budget of \$58.7 billion for the 2009-11 biennium includes \$9.5 billion for public colleges and universities, or about 16 percent of the total budget. An \$81.5 million infusion of federal stimulus money still left the public higher education institutions about \$556 million below the "maintenance level." Maintenance level is the amount of funding needed by public institutions to deliver the same level of services they did in the previous biennium. A maintenance-level budget includes cost increases over which the institutions have no control, such as negotiated wage and benefit agreements, inflation in the cost of goods and services, and increased energy costs.

Washington State 2009-11 Operating Budget, All Fund Sources

Total: \$58.7 billion, including \$2.5 billion of one-time federal stimulus funding



Note: Spokane Intercollegiate Research and Technical Institute is included in "All Other," and not "Higher Education."

Source: HECB fiscal.wa.gov (accessed 10/07/09).

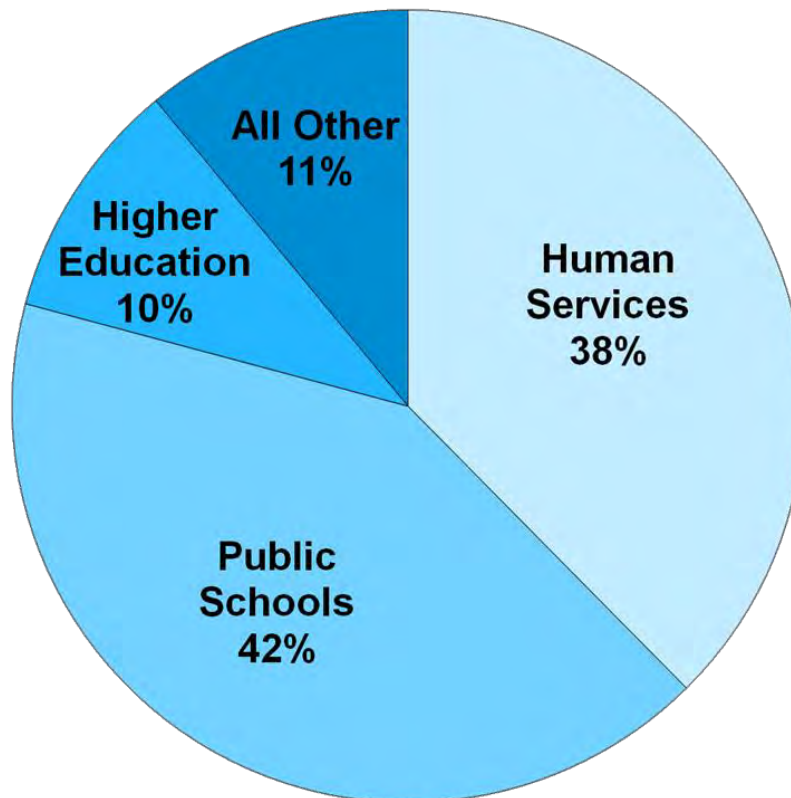
The state's contribution: A look at the near general fund

Higher education budget discussions often refer to the Near General Fund, which includes money from the Education Legacy Trust Account (cigarette and estate taxes earmarked for education) and other sources, in addition to the General Fund. In the current biennium, it also includes \$2.5 billion in federal stimulus money.

The \$33.9 billion Near General Fund provides nearly \$3.3 billion for higher education in the 2009-11 biennium. This constitutes about 10 percent of Near General Fund revenues. The K-12 public school system accounts for the largest percentage of Near General Fund spending.

Washington State 2009-11 Near General Fund-State

Total: \$33.9 billion, including \$2.5 billion of one-time federal stimulus funding



Note: Spokane Intercollegiate Research and Technical Institute is included in "All Other," and not "Higher Education."

Source: fiscal.wa.gov (accessed 10/07/09).

Chapter II: How Washington Pays for Higher Education

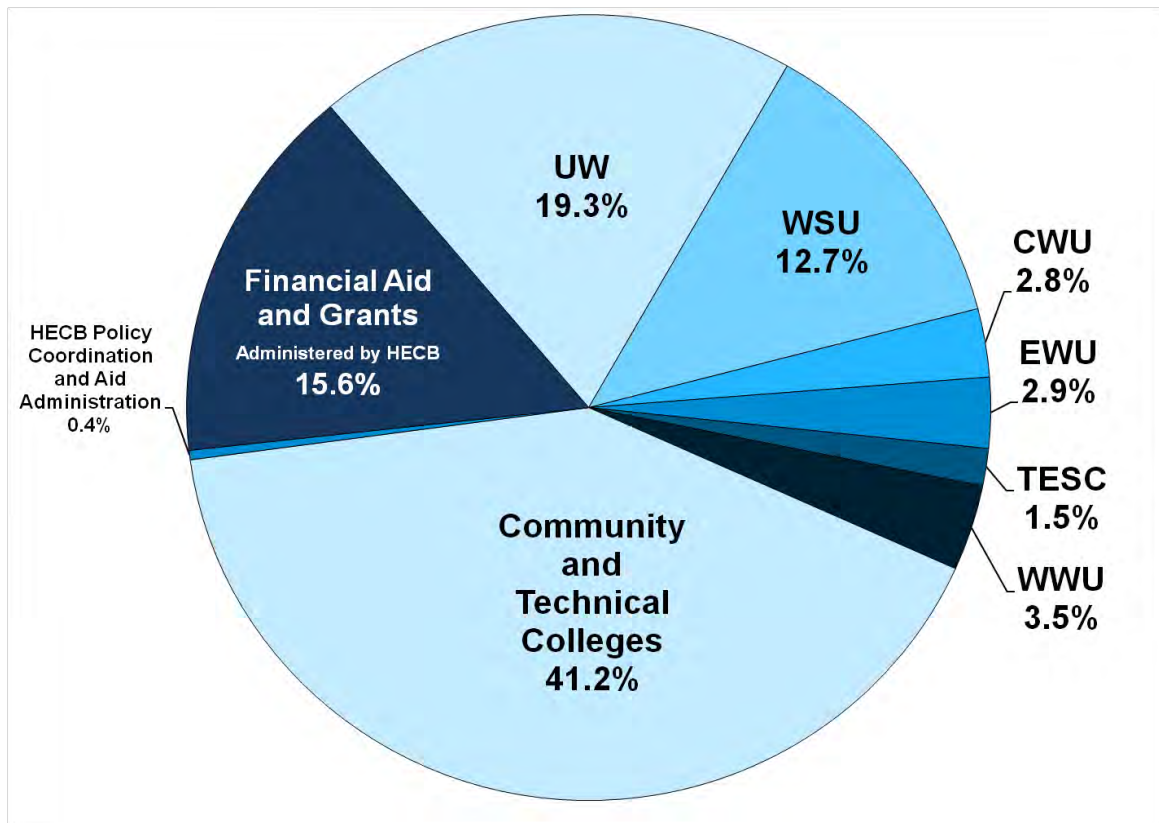
How near general fund money for higher education is distributed

The \$3.3 billion in Near General Fund revenues for higher education in the 2009-11 biennium were distributed as follows:

- \$ 1.4 billion for Community and Technical Colleges
- \$ 646 million for the University of Washington
- \$ 522 million for student financial aid
- \$ 425 million for Washington State University
- \$ 118 million for Western Washington University
- \$ 97 million for Eastern Washington University
- \$ 94 million for Central Washington University
- \$ 51 million for The Evergreen State College
- \$ 12.8 million for the Higher Education Coordinating Board

Washington State 2009-11 Higher Education Operating Budget Near General Fund-State

Total: \$3.3 billion, including \$81 million of one-time federal stimulus funding



Note: Spokane Intercollegiate Research and Technical Institute is included in "All Other," and not "Higher Education."

Source: fiscal.wa.gov (accessed 10/07/09).

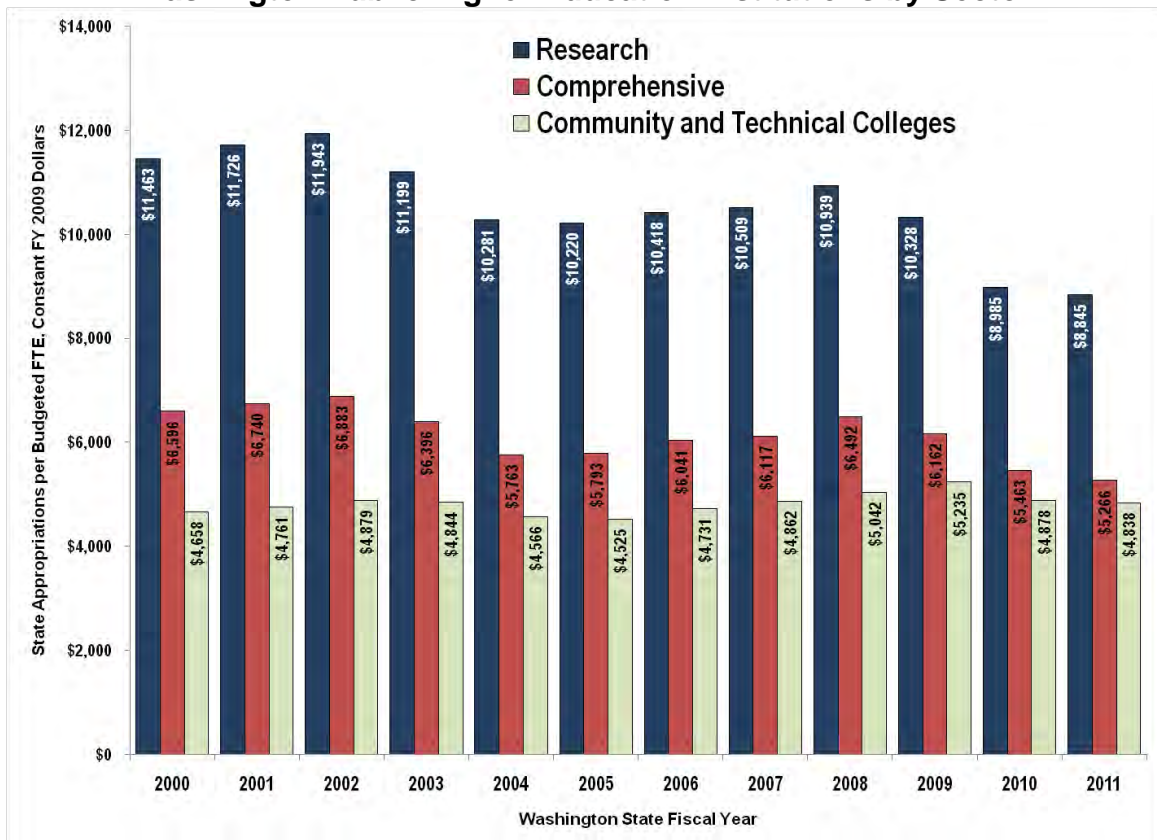
The state's contribution: A look at general fund spending per student FTE

One measure of the level of support provided by the state to public higher education institutions is how much is spent for each budgeted student FTE.

- Between 2000 and 2011, average appropriations for the community and technical colleges remained relatively constant, rising slightly from \$4,658 to \$4,838 (+4 percent).
- Average appropriations for the comprehensive institutions (CWU, EWU, TESC, and WWU) declined from \$6,596 to \$5,266, a reduction of more than 20 percent.
- Average state per-FTE appropriations for the research institutions (UW and WSU) fell even more markedly, from \$11,463 to \$8,845, a reduction of about 23 percent.

The chart below, calculated in 2009 dollars, shows support per state-funded student FTE in each sector over the past decade. Institutions frequently enroll more students than budgeted. Appropriations reflect the final supplemental biennial budget, with the exception of FY 2010 and FY 2011 which reflect the 2009-11 Operating Budget as Enacted. Running Start enrollments are not reflected in community and technical college budgeted FTE enrollments.

Near General Fund-State Operating Appropriations per Budgeted Student FTE for Washington Public Higher Education Institutions by Sector



Sources: Office of Financial Management Budget Allocation and Support System for appropriation data. Legislative Evaluation and Accountability Program Committee Legislative Budget Notes for budgeted student FTE data. Legislative Evaluation and Accountability Program forecast data for IPD adjustment.

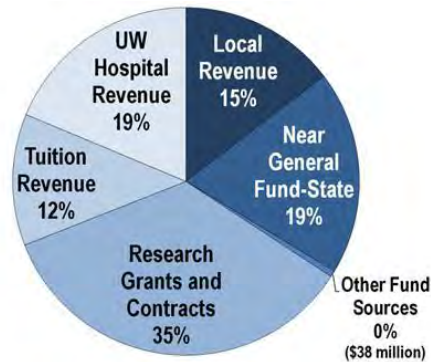
Chapter II: How Washington Pays for Higher Education

Differing institutional roles influence amount of revenue received from other sources

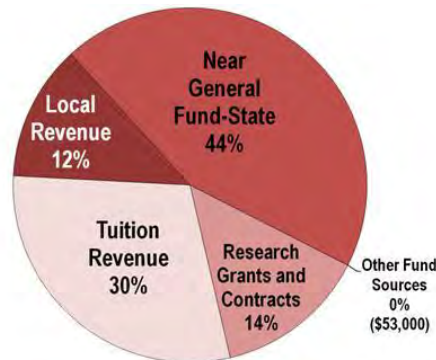
Washington's institutions of higher education have differing missions that are reflected in the revenue they receive from funding sources other than tuition and state appropriations. For example, faculty at the University of Washington and Washington State University are more heavily engaged in research than the state's other public baccalaureate institutions or its community and technical colleges. The latter are primarily engaged in teaching. As a result, the two research institutions receive more money from research grants and contracts than the other institutions. In addition, the UW has the unique mission in this state of operating a university hospital, which generated \$1.2 billion in the 2007-09 biennium.

Public Higher Education Institution Operating Funding Sources by Sector 2007-09 Actual Expenditures through June, Dollars in Millions

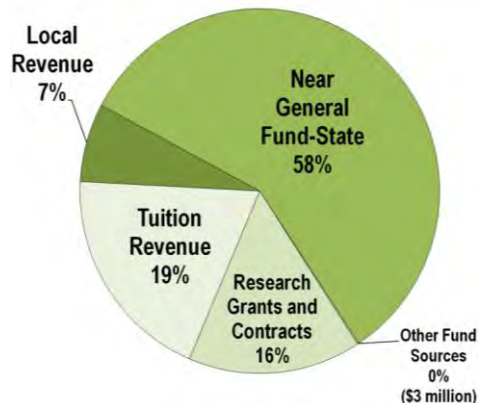
Research Institutions Total: \$6.7 billion



Comprehensive Institutions Total: \$1 billion



Community & Technical Colleges Total: \$2.4 billion



Source: Higher Education Coordinating Board analysis of data from fiscal.wa.gov (accessed 10/07/09).

Chapter II: How Washington Pays for Higher Education

The state's contribution: Providing educational system infrastructure

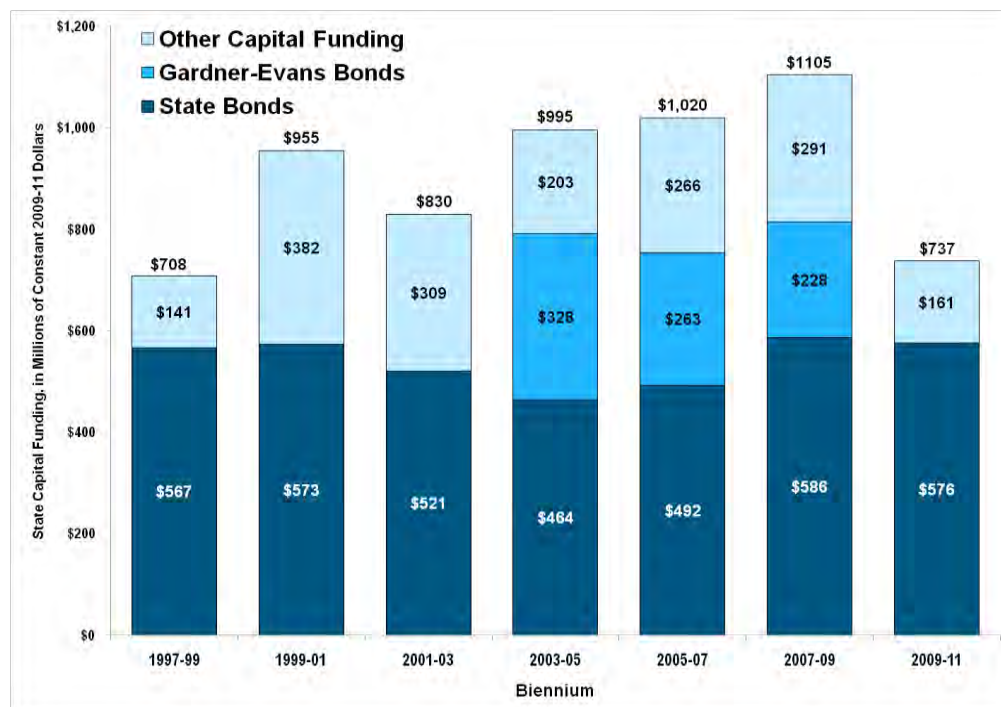
Over the decades, Washington has invested heavily in the classrooms, research facilities, administrative offices, and support structures that constitute the brick and mortar of its public colleges and universities. Today, these structures account for more than half of the state's total physical plant.

The state provides three kinds of facility support: (1) building maintenance; (2) repair and renovation; and (3) expanded capacity to meet increased levels of enrollment. The state earmarks operating budget funds for repair and renovation, and uses capital funds to support new construction.

Since 1997, about 70 percent of all higher education capital appropriations have come from borrowing through the sale of general obligation bonds. The remaining 30 percent of all capital appropriations are from local, dedicated sources.

Because state law limits the total amount of debt that can be incurred through general obligation bonds, institutional requests for new capital construction must be prioritized on a biennial basis. In general, capital spending, on the rise since 1997, fell sharply this biennium due to the recession and the absence of Gardner-Evans Bonds, which the Legislature had authorized to help finance branch campus construction. The authority to issue Gardner-Evans Bonds ended in 2009.

Higher Education Capital Appropriations by Source IPD Adjusted Constant 2009-2011 Dollars in Millions



Note: Data reflects new appropriations only; does not include alternative finance projects.

Sources: Higher Education Coordinating Board analysis of data from fiscal.wa.gov (accessed 10/08/09) for capital appropriations data. Legislative Evaluation and Accountability Program Committee, Economic Forecast Data for biennial IPD (Implicit Price Deflator) adjustments.

The state's contribution: Bonds provide funds for capital projects

In 1989, the Legislature approved a proposal to establish branch campuses of the University of Washington and Washington State University. In 2003, to fund needed growth at these campuses, the Legislature voted to raise the state's debt limit so that additional capital funds could be provided for higher education facilities.

Known as Gardner-Evans Bonds, these instruments helped the system rapidly ramp up facilities development between 2003 and 2009. These funds, totaling \$750 million, were earmarked for projects to modernize and restore existing facilities, as well as provide additional capacity for future enrollment demand. The authority to issue Gardner-Evans Bonds ended in 2009 when the Legislature chose not to renew it.

Washington's public colleges and universities are operating at near capacity on their home campuses. Growth in the system is occurring most rapidly at the five branch campuses and 10 university centers located throughout the state.

Prioritization of capital projects: Engrossed Substitute House Bill 3329, as passed into law on April 1, 2008, requires institutions to submit capital budget proposals to the Office of Financial Management, which creates a prioritized list that is then sent to the Higher Education Coordinating Board. The board then makes funding recommendations based on the prioritized list and sends those recommendations to OFM and the Legislature.

What students pay: It's more than just tuition

Statutory tuition consists of two components:

- **Operating fees:** Primarily used to fund the instructional activities of an institution.
- **Building fees:** Cover debt service on the institution's buildings.

Tuition and the following additional fees are commonly referred to as the "sticker price" to attend a higher education institution:

- **Services and activities fees:** Support student activities.
- **Technology fees:** Charged at some institutions to support technology enhancements.

However, tuition and fees are not the only cost of a college education. Other expenses, including room, board, books, transportation, and incidentals must be factored in to determine a total cost.

Both sticker price and total costs vary among the state's public institutions. Tuition rates for resident, undergraduate students are determined by institutions within limits set by the Legislature. Institutions are allowed to set their own graduate tuition rates, as well as those for nonresidents.

Responding to budget cuts forced by the current recession, the Legislature permitted the state's four-year institutions to increase tuition up to 14 percent during each year of the 2009-11 biennium. For community and technical colleges, tuition increases of up to 7 percent were authorized in each year of the biennium. The "net price" – the amount a student actually pays to attend a college or university – can vary. Federal and state financial aid, institutional aid, scholarships, and work study jobs can help reduce what students actually pay.

Chapter II: How Washington Pays for Higher Education

2009-10 Selected Tuition and Fee Rates at Washington Public Higher Education Institutions

Includes tuition, service and activities, and technology fees. Other fees may apply.

	Washington Resident		Nonresident	
	Undergraduate	Graduate	Undergraduate	Graduate
University of Washington				
UW- Seattle	\$7,587	\$10,622 ¹	\$24,262	\$23,962 ¹
UW- Bothell	\$7,575	\$10,160 ¹	\$24,250	\$23,950 ¹
UW- Tacoma	\$7,653	\$10,688 ¹	\$24,328	\$24,028 ¹
Washington State University	\$7,600	\$8,456	\$18,676	\$20,644
Central Washington University	\$5,589	\$7,426	\$15,851	\$16,454
Eastern Washington University	\$5,445	\$7,581	\$14,163	\$18,135
The Evergreen State College	\$5,413	\$6,886	\$16,429	\$20,020
Western Washington University	\$5,472	\$6,642	\$16,503	\$16,317
	Washington Resident		Nonresident	
	Undergraduate	Upper-Division in Applied Baccalaureate Programs	Undergraduate	Upper-Division in Applied Baccalaureate Programs
Community & Technical Colleges²	\$2,925	\$5,295	\$8,145	\$15,255

¹ The University of Washington uses a tiered graduate tuition system. These tuition rates assume Tier I tuition levels.

² Full-time (15 credits per quarter) tuition rates for the community colleges. Tuition rates may vary at the technical colleges.

Source: 2009-10 tuition and fee rates were provided to the Higher Education Coordinating Board by the public four-year institutions and the State Board for Community and Technical Colleges.

NOTE: See full tuition and fee schedule at: <http://www.hecb.wa.gov/research/issues/tuition.asp>

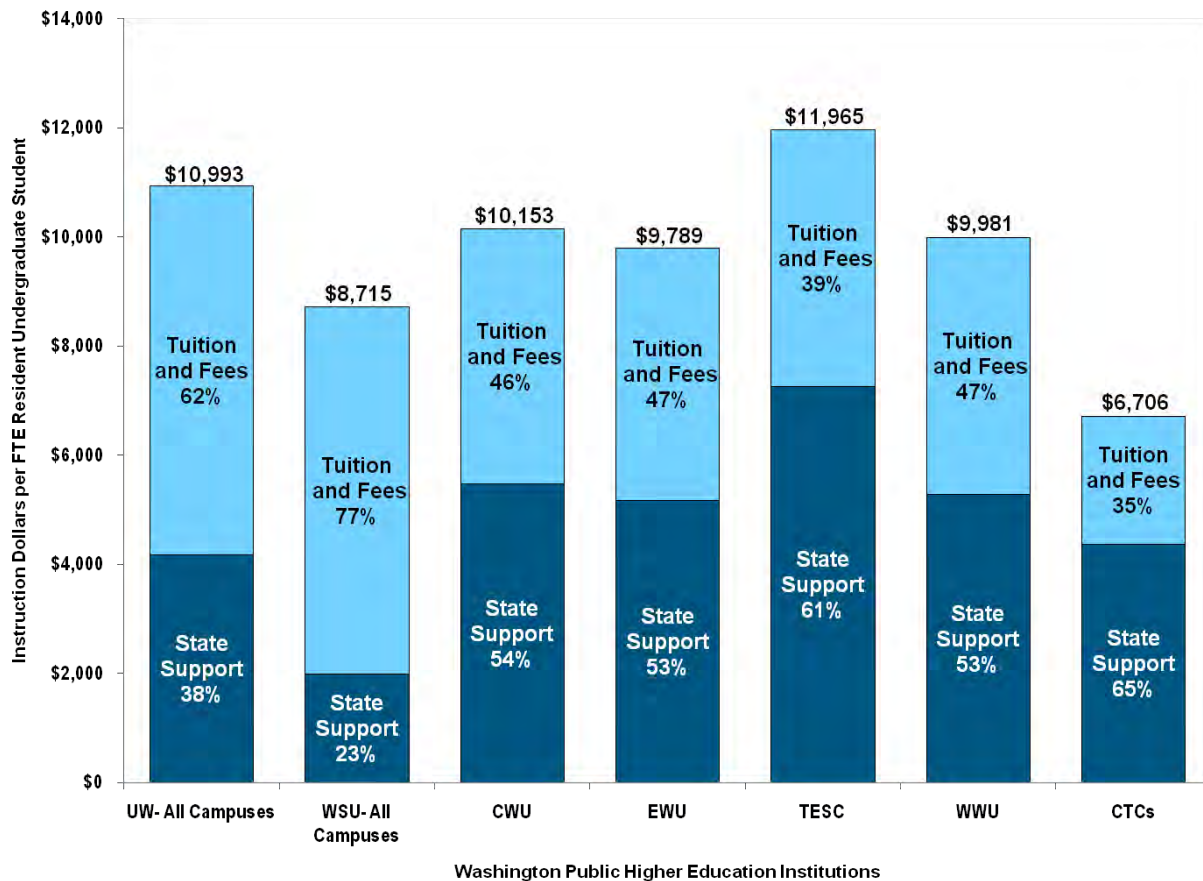
Cost of educating students varies at institutions

Instructional costs differ at public institutions. Factors include the impact of program start-up costs at particular institutions, the distribution of programs between main and branch campuses, the nature of the faculty, teaching loads, and the mix of courses. For example, the average cost of instruction per student at community and technical colleges is lower than at baccalaureate institutions.

Students pay their share of the cost of instruction through tuition and fees. But because all state residents benefit directly or indirectly from the existence of a public higher education system, state support also is provided through legislative appropriations.

The table below shows the percent of the average cost of undergraduate instruction at various institutions paid by tuition and fees and the percent paid by state appropriations.

**Money Spent on Instruction for Resident Undergraduate Students at Washington Public Higher Education Institutions, by Source
2009-10 Academic Year**



Source: Higher Education Coordinating Board, 2009-10 Disclosure Report.

Chapter II: How Washington Pays for Higher Education

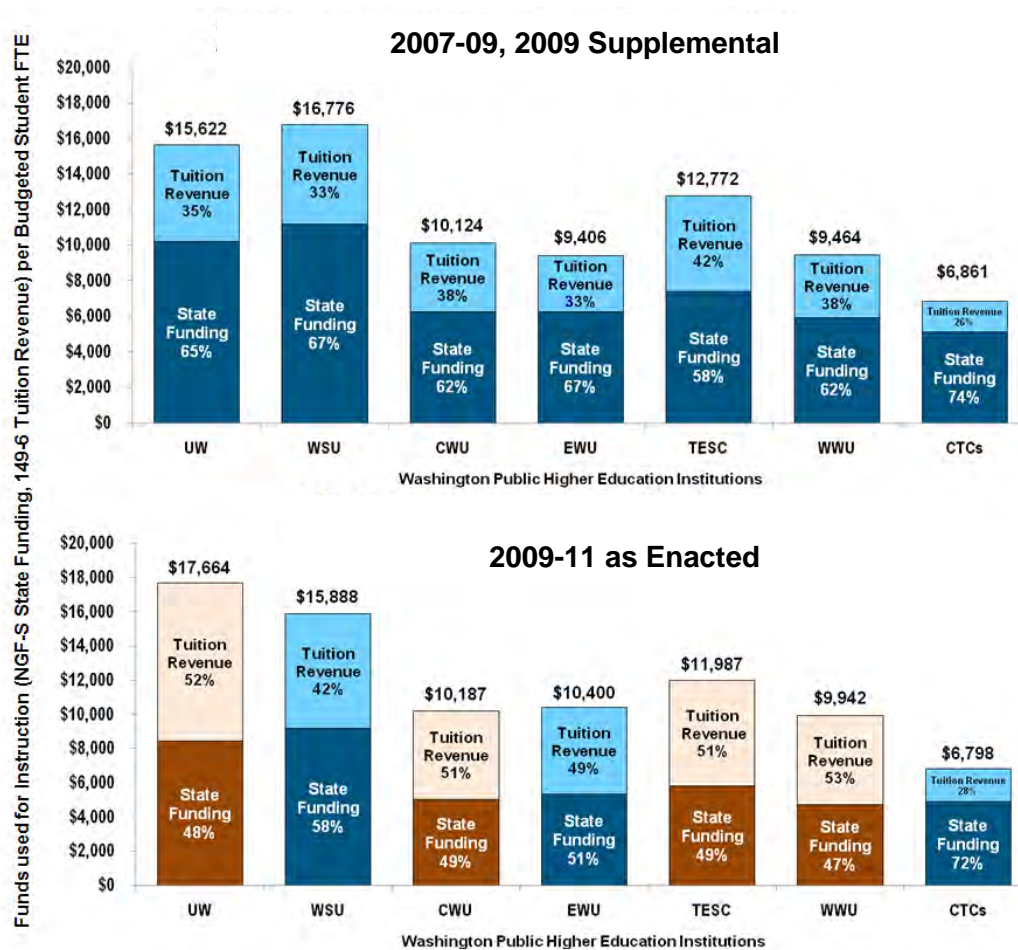
Tuition covers a growing share of higher education costs

Although taxpayers and students share the cost of public higher education, the portion students pay through tuition and fees has been growing, at least at the state’s four-year colleges and universities. During the current biennium, tuition revenue will, for the first time, constitute a majority of the operating budget at four of the state’s six public baccalaureate institutions, as shown in the graphic.

Over the past decade, the amount of per student FTE instruction cost covered by state revenue and the amount provided by tuition have been steadily narrowing at the public baccalaureate institutions. However, at the community and technical colleges, per student instruction costs covered by the state have remained consistently higher relative to tuition.

Maintaining a proper balance between the two revenue sources is consistent with the principle that higher education benefits both individuals who attend colleges and universities, and the general public.

**State Funding and Tuition Revenue per Budgeted Student FTE
by Institution, 2007-09 compared to 2009-11***



*Does not include \$81 million of one-time federal stimulus funding.

Note: State funding as represented by Near General Fund-State appropriations, tuition revenue as represented by tuition revenue for state supported enrollments (Fund 149-6), average biennial budgeted FTE.

Source: HECB analysis of data from fiscal.wa.gov for state funding and tuition (accessed 12/7/09). Legislative Evaluation and Accountability Program Committee Legislative Budget Notes for budgeted student FTE.

Student financial aid helps bridge the gap between college costs and family income

State and federal financial aid programs are a critical component of Washington's higher education funding system. Without financial aid, the goal of a college degree or certificate would be beyond the reach of many Washington families.

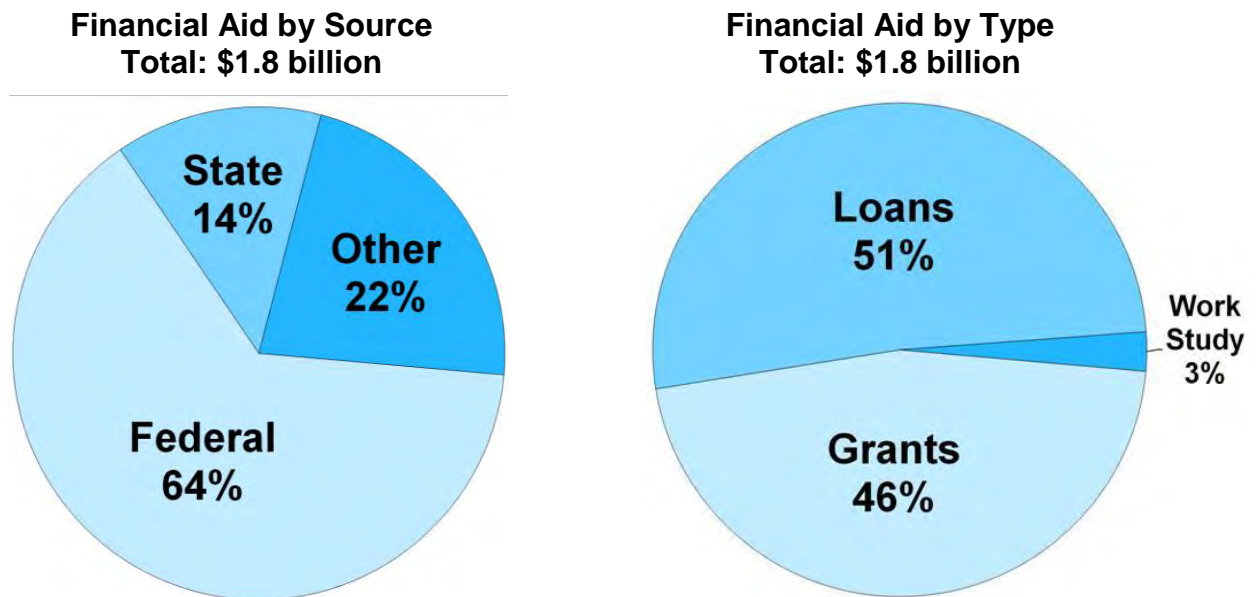
How much students are expected to pay toward the price of attendance is based on variables such as family income and assets, family size, and age of parents. The Free Application for Federal Student Aid (FAFSA) is used to establish the amount students will be expected to pay and their eligibility for state and federal financial aid programs.

In 2008-09, a total of \$1.8 billion was provided to about 144,000 needy Washington students from state, federal, and other sources. This represents an increase of \$170 million and 9,000 students compared to 2007-08.

This aid took the form of grants, work study awards, and loans. **Grants** are gifts with an obligation to make academic progress, but they do not need to be repaid. **Work Study** is a part-time employment opportunity. **Loans** are given with the requirement that they be repaid with interest in the future, usually after graduation.

As in previous years, the federal government provided the majority of financial aid received by Washington students. About 75 percent of the federal aid was in the form of loans.

Financial Aid Received by Washington Need-Based Aid Recipients 2008-09 Academic Year



Source: Higher Education Coordinating Board 2008-2009 Unit Record Report.

Chapter II: How Washington Pays for Higher Education

Washington offers several types of financial aid programs

In 2008-09, about \$252 million in state aid was disbursed through programs administered by the Higher Education Coordinating Board (HECB) and the State Board for Community and Technical Colleges (SBCTC). More than 85,000 students received some form of state assistance. In 2009-10, nearly \$270 million is available for state aid programs administered by the HECB and the SBCTC.

About 90 percent of state aid is in the form of grants and scholarships. The remaining 10 percent is in the form of work study and a small percent represents forgivable loan programs and scholarships.

The State Need Grant program is the largest financial aid program offered by the state of Washington. It accounts for 80 percent of state financial aid. An annual report providing additional information about Washington financial aid programs is available on the HECB website at www.hecb.wa.gov/leg/2009FinancialAidNews-Updates.asp.

Need Based Financial Aid and Grant Programs: State General Fund Appropriations for Fiscal Year 2009

State Funding for Financial Aid Programs Dollars Available to Students, 2009-10	
State Need Grant	\$213 million
State Work Study	\$22 million
SBCTC Worker Retraining	\$10.7 million
SBCTC Opportunity Grant	\$9.5 million
Alternative Routes to Teaching	\$3.5 million
Educational Opportunity Grant	\$2.9 million
Washington Scholars	\$2.8 million
GEAR UP Scholarships	\$1.3 million
Washington Award for Vocational Excellence	\$1.3 million
Future Teachers Conditional Scholarship	\$1 million
Passport to College Promise Program	\$945,819
Health Professional Scholarship	\$562,500
WICHE Professional Student Exchange	\$200,000
American Indian Endowed Scholarship	\$12,000
Total State Funding	\$269.7 million

Source: Higher Education Coordinating Board. Includes State General Fund, education legacy trust, and small amounts of federal LEAP and SLEAP funds.

Institutions provide significant additional financial assistance to students

In addition to student financial assistance provided by federal and state governments, institutions provide significant aid to students. Washington law requires public two- and four-year institutions to set aside at least 3.5 percent of revenue collected from tuition and services and activities fees to be used for needy students. Funds are usually awarded as grants, but may also be used to fund work study or loans.

Current institutional plans envision tuition revenue collections to reach \$957 million¹ annually by 2011. Three-and-one-half percent of this total equals about \$33.5 million.

The current state budget requires baccalaureate institutions to set aside additional tuition revenue for financial assistance to resident undergraduate students during the 2009-11 biennium. The additional amount is one-seventh of the tuition revenue collected beyond what would have been generated if the 7 percent cap on resident undergraduate tuition increases had remained in effect. (Institutions were authorized to raise tuition by up to 14 percent in each of the two academic years covered by the current state budget.)

Additional student aid comes in the form of partial and full tuition waivers. Institutions are required to waive tuition for the children, spouse, or domestic partner of a military veteran who was killed or became totally disabled as a result of military service. On a voluntary basis, institutions are authorized to grant waivers to additional categories of students, including veterans and National Guard members. At the discretion of institutions, teachers and state employees may also receive tuition waivers for a particular course when space is available. For the entire student population, institutional authority to grant tuition waivers is limited by the state to a percentage of tuition revenue collected – a cap which varies among institutions.

Institutions that have resources from endowments, gifts, and other sources may choose to bolster student aid.

¹ Legislative Evaluation and Accountability Program, based on allotments for fiscal year 2011 submitted by institutions. Reported revenue total includes community and technical colleges.

Grant aid minimizes borrowing for Washington residents

The availability of federal and state student financial aid, such as Pell Grants and Washington State Need Grants, help make college affordable for more students and reduces the need to assume debt in order to pay for college. On average, State Need Grant recipients borrowed \$1,700 less than needy resident undergraduates who did not receive State Need Grants during the 2008-2009 academic year. In fact, only half of the State Need Grant recipients borrowed at all and the proportion of State Need Grant recipients who borrow has remained the same over the past five years. However, some students still take on larger amounts of debt. More than 8,400 students borrowed \$10,000 or more in 2008-2009, including 6,000 State Need Grant recipients.

However, this only reflects past student behavior. Dramatic changes in tuition and state financial aid policies implemented now will have a direct impact on the behavior of students in the future. As tuition and other costs increase, students' financial need increases. If grant aid is not sufficient to cover the rising cost of attendance and the increasing numbers of financially needy students, students will need to borrow more, work more, drop out, or defer enrollment.

Annual Average Debt State Need Grant Recipients					Annual Average Debt Non-state Need Grant Recipients Needy Resident Undergraduates				
Academic Year	Number of Borrowers	Average Annual Debt*	% of All SNG Recipients	Number of SNG Recipients	Academic Year	Number of Borrowers	Average Annual Debt*	% of All Non-SNG Recipients	Number of Non-SNG Recipients
2004-05	27,079	\$5,698	49%	55,301	2004-05	37,496	\$7,234	73%	51,705
2005-06	33,654	\$5,803	52%	65,288	2005-06	29,726	\$7,725	75%	39,392
2006-07	33,851	\$5,941	51%	66,323	2006-07	27,393	\$7,955	73%	37,521
2007-08	35,253	\$6,122	50%	70,021	2007-08	25,945	\$8,236	72%	35,770
2008-09	35,734	\$6,562	49%	72,423	2008-09	29,581	\$8,293	70%	42,224

*Part of the increase in average annual debt may be due in part to the increase in the federal loan limits for the 2007-08 academic year.

Source: Higher Education Coordinating Board Unit Record, as submitted by institutions.

GET program helps families save for future college expenses

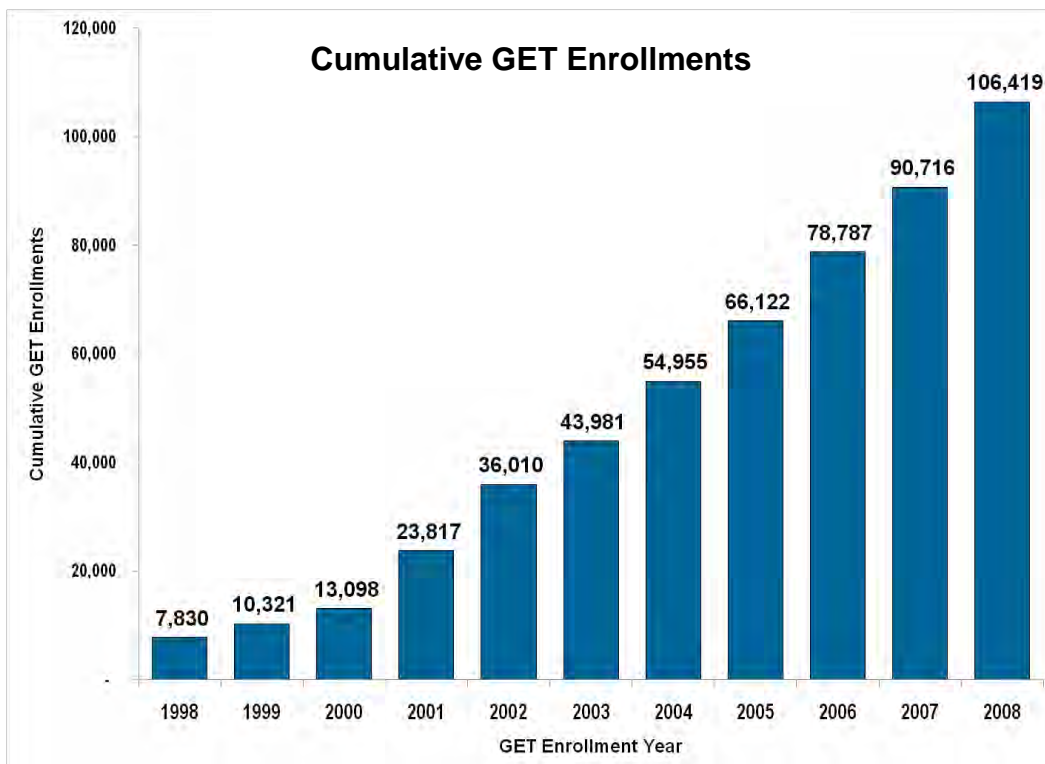
To encourage Washington families to save for college, the state Legislature, in 1997, authorized an IRS Section 529 prepaid college tuition plan called the Guaranteed Education Tuition (GET) program. GET, which began operation in August 1998, allows families to purchase tuition units now for use at a later date. The funds are invested and the purchaser is guaranteed a return to help cover future tuition.

Families can purchase between one and 500 units. The state guarantees that 100 units will cover one year of resident undergraduate tuition and state-mandated fees at the highest-priced public college or university in Washington. Students may use their GET units at any eligible in-state or out-of-state public or private accredited educational institution.

The Committee on Advanced Tuition Payment, commonly referred to as the GET Committee, governs the program. The committee is comprised of the executive director of the Higher Education Coordinating Board, the State Treasurer, the director of the Office of Financial Management, and two citizen members. The HECB administers the GET program, while the State Investment Board oversees its investments.

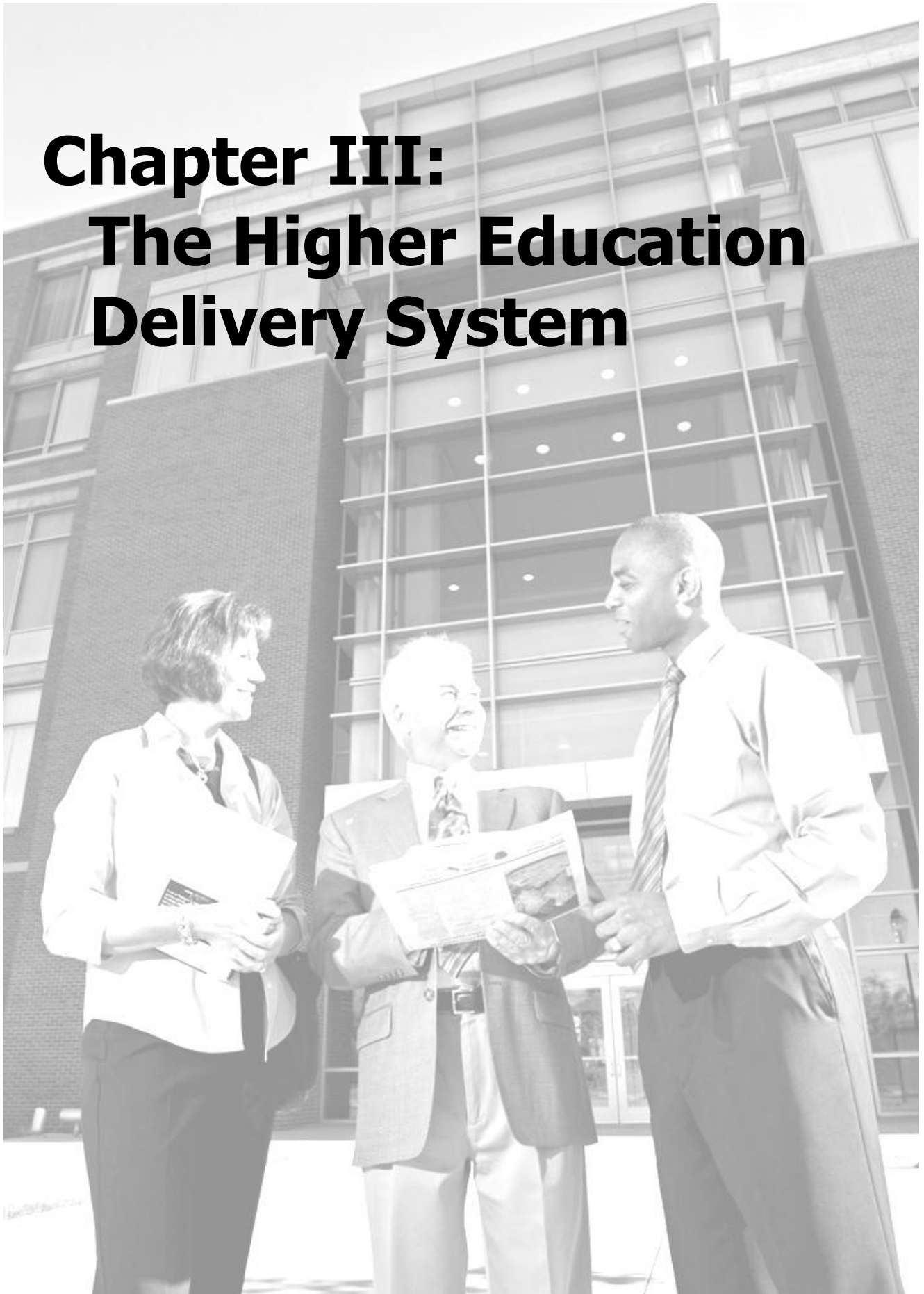
As of June 2009, Washington families had opened more than 106,000 accounts, valued at more than \$1.4 billion. To date, more than 13,456 students have used their GET accounts to attend colleges and universities in all 50 states and in five foreign countries. GET is one of the nation's fastest-growing prepaid tuition plans in both assets and number of accounts.

The GET Committee annually sets the price of a GET unit, currently \$101. Families can buy units by setting up a customized monthly payment plan or by making lump sum purchases. The annual enrollment period runs September 15 through March 31. For more information, visit www.get.wa.gov or call 1-800-955-2318.



Source: Higher Education Coordinating Board, GET program.

Chapter III: The Higher Education Delivery System



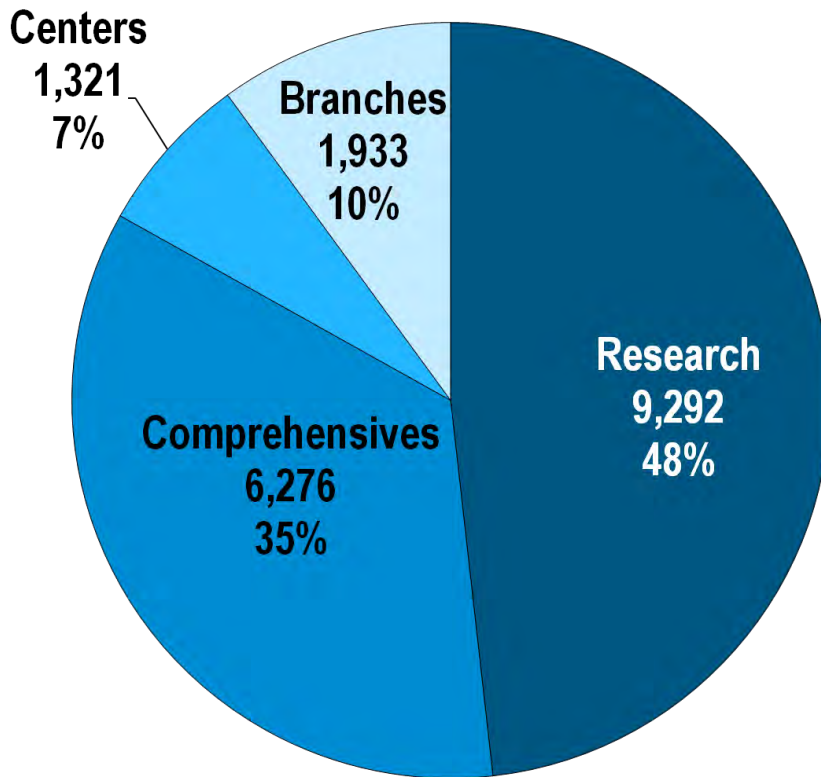
Research universities produce about half of public baccalaureate degrees

Bachelor’s degree programs are widely available in Washington State through public and private institutions. The public institutions include two research universities (UW and WSU), and four comprehensive institutions (EWU, CWU, TESC, and WWU). The research universities also operate five branch campuses. In addition, the state operates 10 higher education centers, which often are located on community college campuses. Centers house educational programs offered by one or more baccalaureate institutions whose main campuses are elsewhere in Washington or in another state. Another category of baccalaureate institutions are teaching sites, which may be temporary and generally enroll fewer than 150 students in no more than three degree programs.

Washington’s public institutions produce about 75 percent of the state’s bachelor’s degrees, about 54 percent of its master’s and first professional degrees (mainly law and medicine), and 90 percent of its doctoral degrees.

Research universities account for about half the baccalaureate degrees produced by public institutions.

Public Baccalaureate Degrees Awarded by Location Type, 2005-06
Degrees Awarded: 19,272



Source: Office of Financial Management, PCHEES Outcome Data.

CTC s prepare students for careers and college transfer

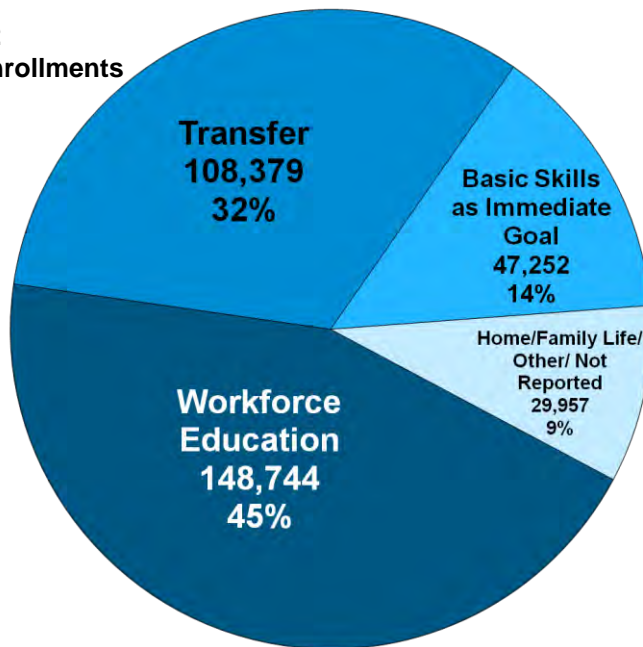
Washington maintains a system of 34 public community and technical colleges (CTCs) located in many parts of the state. These institutions offer a variety of two-year degrees and certificates.

Seven CTCs have been authorized to award eight applied baccalaureate degrees designed to provide advanced training in fields in which technical associate degrees exist and there is industry, community, and student demand for bachelor’s degrees.

Community colleges award associate of arts degrees that prepare students for transfer to a baccalaureate institution or recognize two years of general education. Community and technical colleges also award associate degrees in applied technologies in several hundred programs that provide workforce education for technical and paraprofessional positions. In addition, they award certificates in various specific job-related programs. These programs can take from several weeks to more than two years to complete. Thousands of adults complete high school or earn their General Education Development (GED) certificates at community and technical colleges.

Community and Technical Colleges State Supported Students by Purpose for Attending, 2008-09

Total: 334,332
Headcount Enrollments



Source: State Board for Community and Technical Colleges, 2008-09 Academic Year Report.

CTC Student Goals

Academic transfer:

Earning credits that can be applied to a bachelor’s degree program when students transfer to four-year institutions.

Workforce education:

Preparing for jobs or upgrading job skills.

Basic skills as immediate goal:

Taking courses that focus on English as a second language, adult basic education, and courses leading to a high school diploma or General Education Development (GED) certificate.

Note: Some portion of students classified as “transfer” and “workforce” also enroll in one or more basic skills courses.

Home and family life, other, and not reported:

These students enroll for parent education, retirement planning, or other purposes. This category also includes students who did not specify a goal when they enrolled.

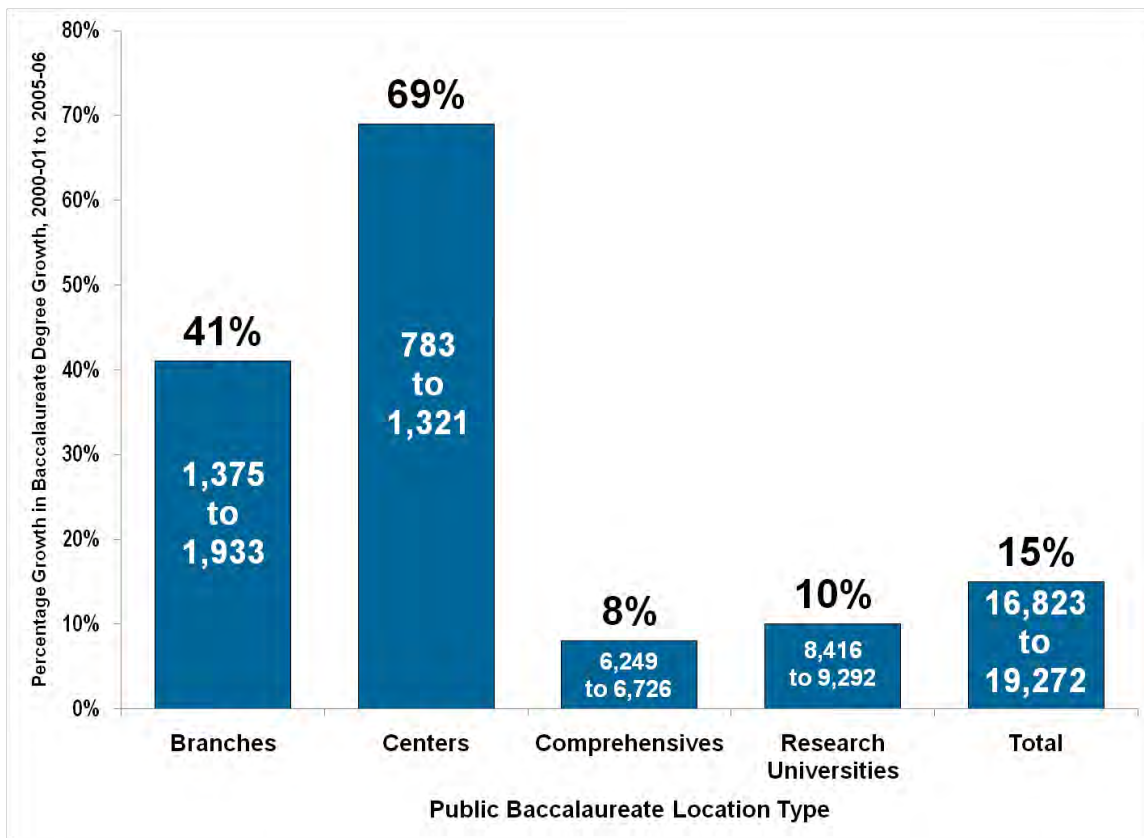
Bachelor’s degree production is growing fastest at branch campuses and centers

Over the past two decades, Washington’s public baccalaureate institutions have evolved from a handful of central campuses to a diverse mix of institutional types located in more communities across the state. This has allowed the state to respond to growth demands and has opened new opportunities for students who find it less convenient to pursue baccalaureate degrees on central campuses.

Five branch campuses of Washington’s two research universities—the University of Washington and Washington State University—were launched beginning in the early 1990s. Branch campuses provide access to higher education in urban growth areas where there is no four-year institution. Another type of institution, the university center, houses baccalaureate programs offered by one or more baccalaureate institutions at a single location. University centers are located in Everett, Des Moines, Yakima, and other communities.

Although the research and comprehensive institutions still account for most of the baccalaureate degrees awarded in the state, branch campuses and centers have seen the most rapid growth in degree production. Among other benefits, they help facilitate the student needs of working adults who wish to complete baccalaureate degree work.

**Public Baccalaureate Degree Award Growth by Location Type
2000-01 to 2005-06**



Sources: 2000-01 - SBCTC Role of Transfer in the Bachelor's Degree (http://www.sbctc.edu/college/d_transfer.aspx); 2005-06 - PCHEES 2005-06 Outcome Data.

Distance learning offers alternatives to campus-based teaching

Taking courses in traditional classrooms remains the predominant way students choose to go to college today. However, technology has provided new opportunities for instruction beyond the typical classroom environment. In the future, these technologies may help serve more students whose jobs or other circumstances make it inconvenient or impossible to attend college in the traditional way.

Distance learning is the general term used to describe educational activities that occur when teachers and students are physically separated for at least part of the instructional time. Distance learning includes use of the Internet, satellite transmissions, cable networks, and other technologies.

In Washington state, the state-funded portion of total instruction that can be characterized as distance learning has averaged about 2 percent in the public four-year institutions and 5 percent in the public two-year system since 2000.¹

eLearning is a more specific term applied to the use of digital and online technologies to provide educational opportunities any place, any time. In academic year 2008-2009, eLearning enrollments accounted for approximately 29,000 FTEs across the public four-year and public two-year sectors. Those include both state-funded FTEs, and FTEs in programs for which state funding is not provided.

Nationally, the number of students taking at least one online course has grown at a compound annual rate of 19.7 percent between fall 2002 and fall 2007, with online enrollments representing 9.6 percent of total enrollments in fall of 2002 and 21 percent of total enrollments in fall 2007.²

¹ *Washington State Higher Education Trends and Highlights*, State of Washington, Office of Financial Management, February 2009.

² *Staying the Course; Online Education in the United States, 2008*, Babson Survey Research Group & The Sloan Consortium, November 2008.

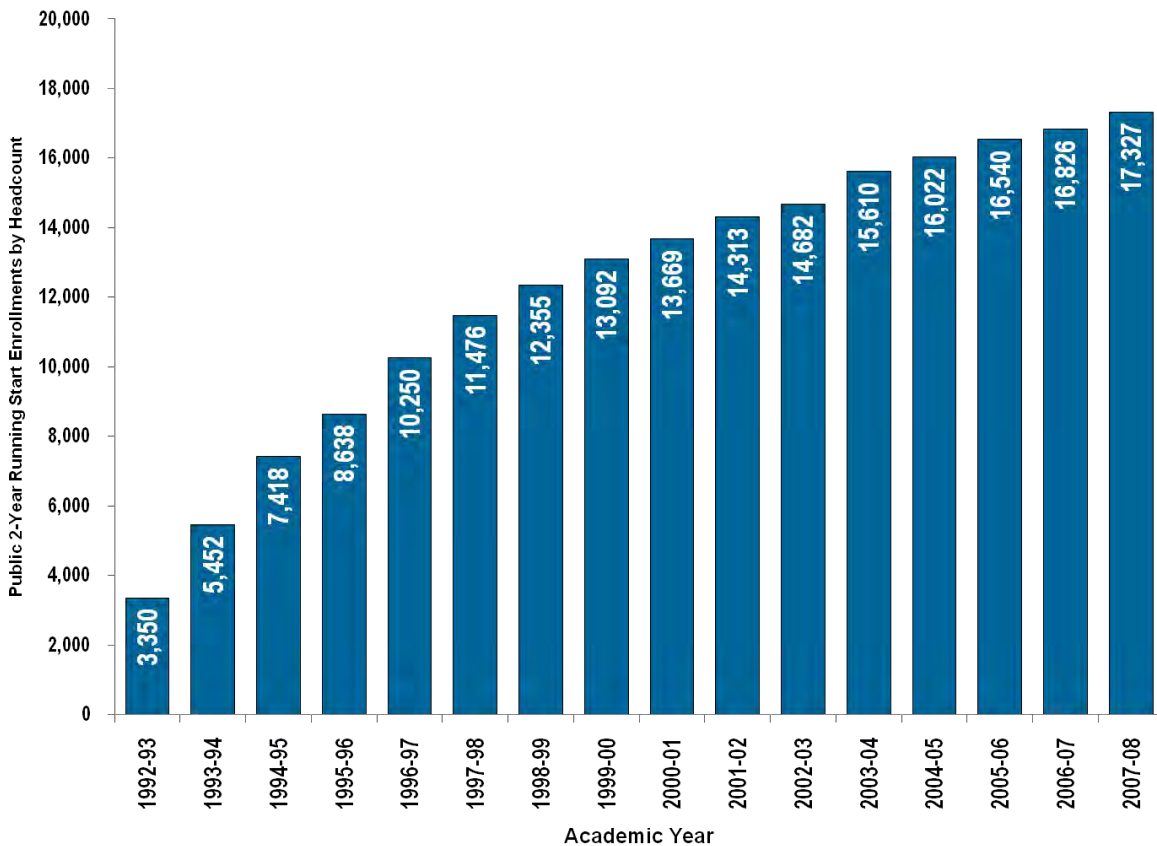
Through Running Start, many students earn college credit while still in high school

The Running Start program enables qualified high school juniors and seniors to earn college credit by taking courses free of charge at community and technical colleges, most baccalaureate institutions, and Northwest Indian College. About 11 percent of all high school juniors and seniors in public schools take at least one college course through Running Start. High school students are tested before being admitted to the two-year colleges to determine whether they are capable of doing college-level work.

The number of Running Start students has grown steadily. In 2007-08, 17,327 students participated (equivalent to 11,185 FTE enrollments). During the same year, 1,180 Running Start students were issued 1,224 community and technical college degrees or certificates (3.6 percent of all awards).

As Running Start enrollments continue to grow, funding becomes an even greater challenge for the colleges that provide instruction. Today the reimbursement rate to colleges is 60 percent of the cost of educating students, compared to 80 percent when the program began.

Headcount Enrollment in Running Start Programs at Public Two-Year Institutions 1992-2008



Note: Does not include Running Start students at public four-year education institutions. These enrollments have historically been small as compared to enrollments at community and technical colleges.

Source: State Board for Community and Technical Colleges, Running Start: 2007-08 Annual Progress Report.

Other college-prep programs offered to high school students

Advanced Placement

The Advanced Placement Program® of the College Board is a cooperative endeavor between secondary schools and institutions of higher education. The program offers high school students college-level courses taught by specially trained teachers. The students are then given examinations to determine their level of mastery of the material on a 1-5 scale. The American Council on Education recommends that colleges and universities grant credit and/or placement into higher-level courses to entrants with AP Exam grades of 3, 4, and 5, with each college determining course applicability. 30,228 Washington students took Advanced Placement Exams in 2008-09, and 18,355 received a grade of 3 or higher.

More information: www.collegeboard.com/student/testing/ap/about.html

International Baccalaureate

The International Baccalaureate (IB) program is a college prep course of study leading to examinations in core fields. Colleges and universities may award credit for International Baccalaureate work, depending on IB examination scores. The program began as a way to establish a common curriculum and university entry credential for students moving from one country to another.

More information: International Baccalaureate Organization: www.ibo.org

College in the High School

College in the High School programs provide college-level courses to 11th and 12th grade students. These courses are offered at the high schools and may be taught by high school faculty who are also adjunct faculty at a college. The courses use the same curriculum, assessments, and textbooks as identical courses offered on campus would use. The courses must be college-level, included in the college's catalog or an appropriate supplement, and taught as part of the college curriculum. 2,876 students participated in this program in 2008-09.

More information: State Board for Community and Technical Colleges: www.sbctc.ctc.edu/college/_e-wkforcecollegeinhighschool.aspx

Tech Prep

Tech Prep offers students an opportunity to earn community college credit while still in high school by enrolling in a "tech prep" course. These courses are aimed at preparing students for technical and professional careers by requiring that they earn a B grade; students pay up to \$25 to apply to the college awarding the credit. Tech Prep credit is awarded for many types of courses, ranging from accounting to auto body repair to drafting and Web site design. 32,331 students were enrolled statewide in the program in 2008-09.

More information: State Board for Community and Technical colleges: www.sbctc.ctc.edu/College/_e-wkforcetechprep.aspx

Majority of public college employees are engaged in teaching, research, public service

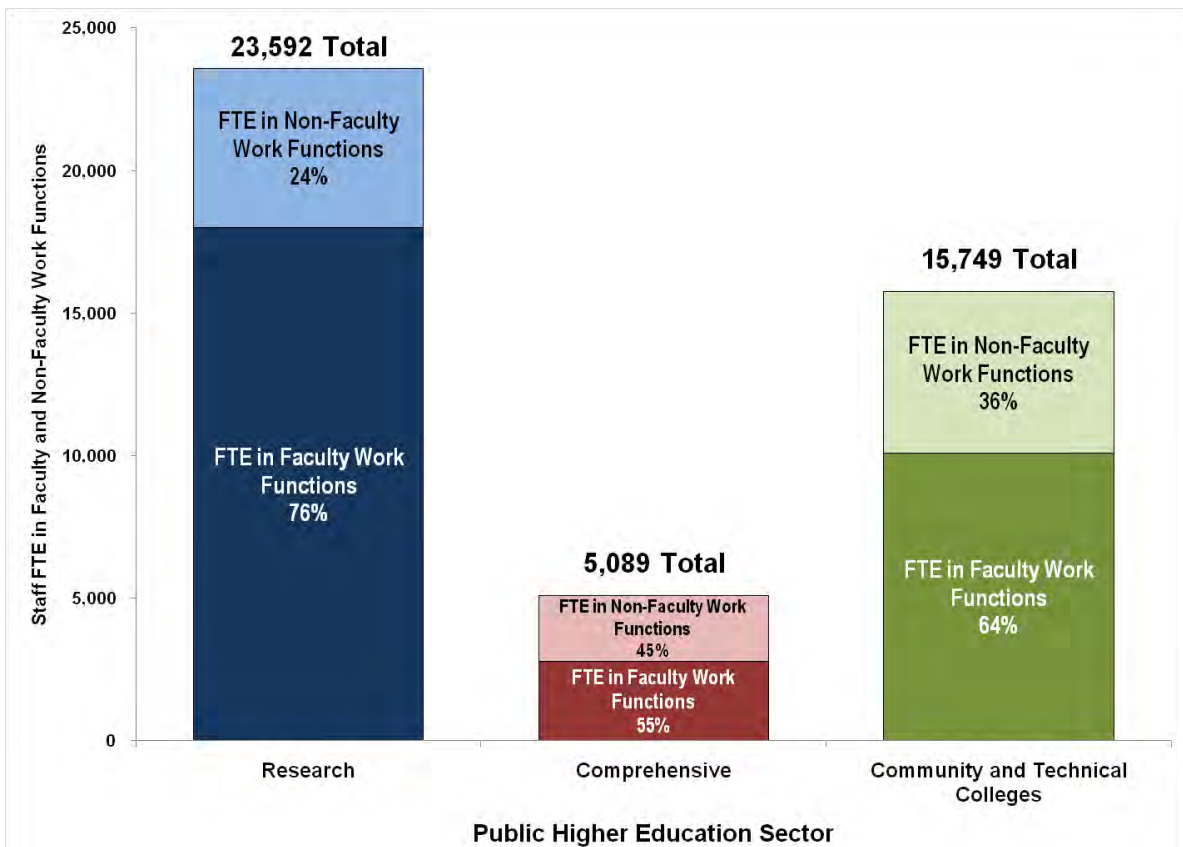
Operating a world class educational system requires thousands of faculty and staff to educate students, conduct research, carry out essential business functions, provide student services, and preserve the state investment in higher education infrastructure. In fall 2007, approximately 62,000 people were employed (either full-time or part-time) in Washington’s public colleges and universities.

Faculty constitutes those whose main assignments are instruction, research, or public service. Faculty may hold various academic rank titles. Staff includes executive, administrative, managerial, technical, clerical, secretarial, skilled crafts, and service and maintenance personnel.

The majority of employees at the state’s public institutions are directly engaged in instruction, research, or public service. At the research universities, more than three-fourths of the faculty and staff are engaged in these functions, and less than a quarter hold non-faculty-support positions.

Average Annual FTE in Faculty and Non-Faculty Program Areas In Washington Public Institutions of Higher Education, by Sector

Operating FTE Staff, All Fund Sources, 2007-09 Biennium Actual Data



Note: **Faculty Work Functions** are defined as including programs 010-Instruction, 020-Research, 030-Public Service, and 100-Sponsored Research and Programs. **Non-Faculty Work Functions** are defined as including programs 040-Primary Support, 050-Library, 060-Student Services, 080-Institutional Support, 090-Plant Operations and Maintenance, 110-State Board Support (for CTC's), 120-Special Projects (for CTC's), and 500-WSU Service Center.

Source: Higher Education Coordinating Board analysis of LEAP data from fiscal.wa.gov, downloaded 11-24-09.

Average faculty salaries at most public four-year institutions lag behind peers

In 2008-09, average faculty salaries at all Washington's public four-year institutions, except for the University of Washington and Western Washington University, were below the average salaries of their established peer groups and all were below the 75th percentile of their peer groups. These averages reflect full-time faculty (for three academic ranks – full professor, associate professor, and assistant professor) whose major assignment is instruction or instruction combined with research and/or public service.

Washington Public Higher Education Average Faculty Salary for All Tenure-Track Faculty among Peers

	<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>
University of Washington								
<i>Average salary</i>	\$76,777	\$77,613	\$79,894	\$83,530	\$86,800	\$92,502	\$97,893	\$103,022
<i>Peer group percentile rank</i>	50 th	38 th	38 th	54 th	54 th	58 th	62 nd	67 th
Washington State University								
<i>Average salary</i>	\$64,707	\$64,901	\$65,974	\$68,365	\$72,702	\$75,491	\$78,566	\$82,966
<i>Peer group percentile rank</i>	18 th	14 th	14 th	14 th	18 th	18 th	18 th	18 th
Central Washington University								
<i>Average salary</i>	\$52,828	\$52,832	\$54,607	\$56,583	\$58,435	\$62,933	\$63,287	\$65,698
<i>Peer group percentile rank</i>	28 th	23 rd	29 th	31 st	35 th	43 rd	34 th	36 th
Eastern Washington University								
<i>Average salary</i>	\$55,340	\$55,333	\$54,745	\$56,029	\$57,550	\$61,050	\$61,194	\$65,780
<i>Peer group percentile rank</i>	46 th	35 th	31 st	29 th	29 th	35 th	27 th	37 th
The Evergreen State College								
<i>Average salary</i>	\$53,548	\$54,014	\$54,995	\$54,879	\$56,805	\$58,073	\$58,144	\$62,299
<i>Peer group percentile rank</i>	32 nd	29 th	32 nd	23 rd	24 th	22 nd	11 th	23 rd
Western Washington University								
<i>Average salary</i>	\$57,017	\$57,448	\$57,224	\$58,433	\$60,673	\$63,354	\$63,305	\$69,036
<i>Peer group percentile rank</i>	54 th	50 th	42 nd	42 nd	45 th	46 th	35 th	51 st
Community / Technical Colleges								
<i>Average salary</i>	\$46,247	\$47,916	\$48,303	\$48,240	\$49,518	\$50,766	\$52,520	\$55,320
<i>Peer group percentile rank</i>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Notes: Average salary refers to the arithmetic mean of faculty salaries. A percentile rank represents the salary at which that percentage of institutions' salaries falls at or below. For example, in the table above, in 2008-09, the UW's average faculty salary of \$103,022 was at the 67th percentile. This means that in 2008-09, 67 percent of the UW's peer institutions' salaries fell at or below \$103,022, and 33 percent were above that amount. Peer group comparisons for community and technical colleges were discontinued in 1997-98.

Sources: Integrated Postsecondary Education Data System (U.S. Department of Education); Higher Education Coordinating Board, Faculty Salary Survey; American Association of University Professors, Report on the Economic Status of the Profession; State Board for Community and Technical Colleges, Academic Year Reports.

Part-time faculty play important role at public two-year and private institutions

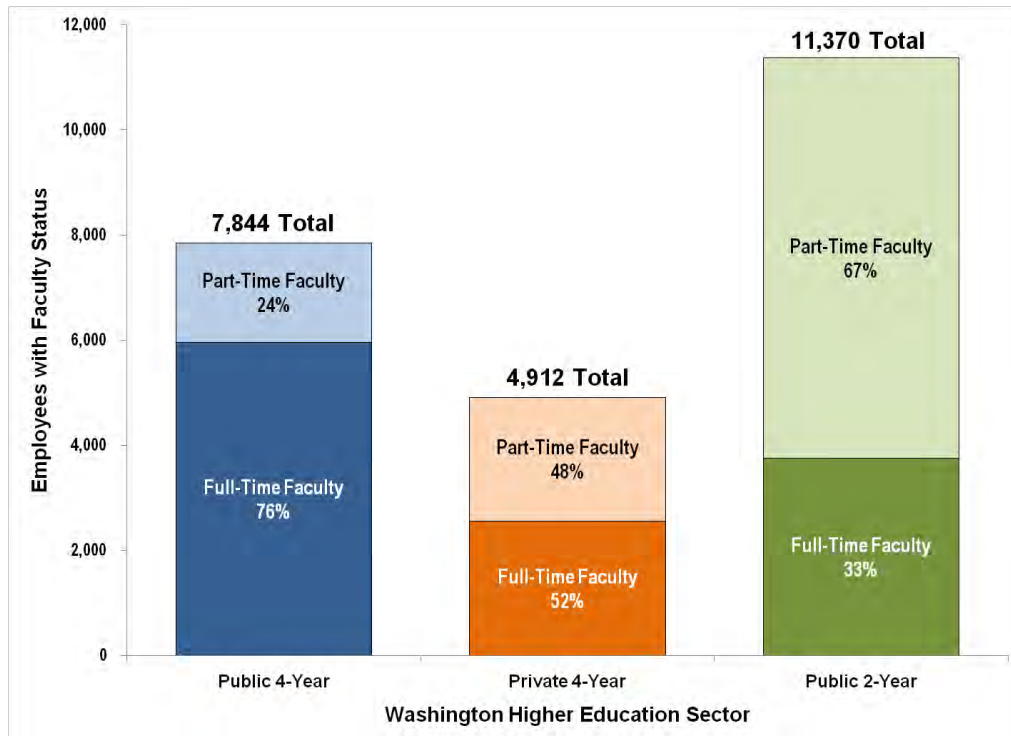
Part-time (or adjunct) faculty members are a significant component of the instructional workforce at the two- and four-year colleges and universities.

While part-time faculty members outnumber full-time faculty at two-year institutions, full-time faculty spend more hours in the classroom. Each part-time faculty member teaches about five credits, while full-time faculty members teach about 15 credits. About 55 percent of state-supported credit hours at two-year institutions are taught by full-time faculty.

While nearly half the faculty members at private four-year institutions are part-time, less than a third of those at the Independent Colleges of Washington (ICW)³ are part-time. ICW institutions more closely resemble public baccalaureates than do the remaining private institutions, many of which are extensions of out-of-state universities.

Part-time faculty members give colleges the flexibility to offer courses outside the expertise of full-time faculty, to offer more evening and off-campus courses, and to quickly adjust course offerings in response to changes in student demand or funding.⁴

Faculty Full- and Part-Time Status, by Sector
Excludes Medical School Employees



Source: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2008.

³ Gonzaga University, Heritage University, Pacific Lutheran University, Saint Martin's University, Seattle Pacific University, Seattle University, University of Puget Sound, Walla Walla University, Whitman College, Whitworth University.

⁴ 2008-09 Academic Year Report, State Board for Community and Technical Colleges.

A black and white photograph of a person from the waist down, wearing a vertically striped shirt and dark pants. They are carrying a stack of several books under their left arm. The background is plain white.

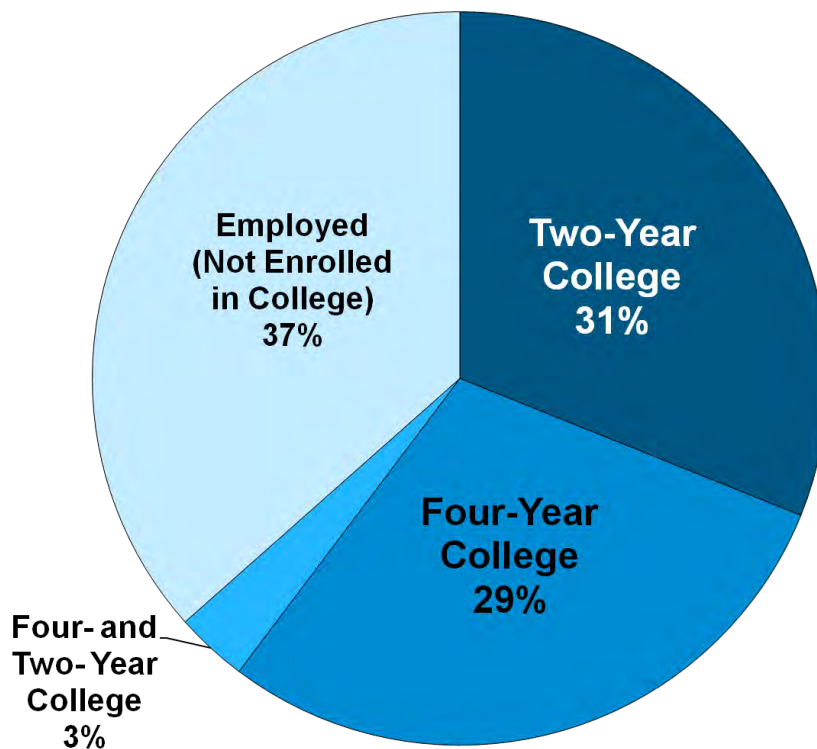
Chapter IV: Who Goes to College in Washington

College-going behavior after high school

The traditional path to a postsecondary education – high school immediately followed by two to four years at a college or trade school – is not the typical journey for many college students today. Increasingly, college experiences occur throughout one’s adult life. By choice or necessity, some go to work full-time immediately after high school and defer college. Others work and attend college part-time. Many return to college later in life for career retraining or to update job skills.

The *Washington State Graduate Follow-Up Study* for 2007 looked at the employment and education-related activities of Washington’s high school graduates in their first year after graduation. Of these, 63 percent attended a two- or four-year institution – or both – for at least part of the year. According to the study, women were more likely to combine work and school, while men were more likely to work full-time and not enroll in college.

**Student Activity One Year After High School Graduation
from Washington Public High Schools, Class of 2007**



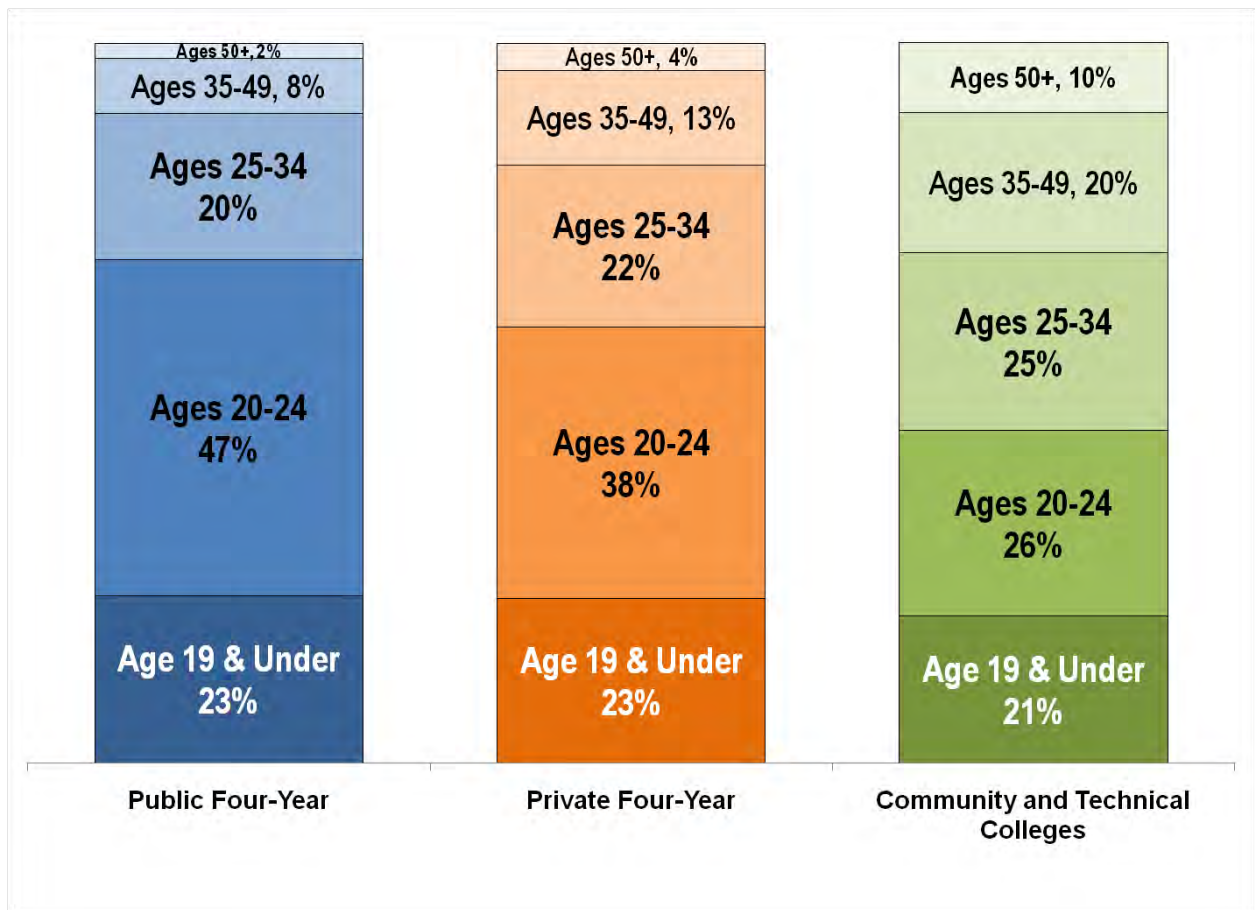
Note: Students for whom no enrollment or employment data exists are not included.

Source: WSU Social and Economic Services Research Center for the Office of the Superintendent of Public Instruction, *Washington State Graduate Follow-Up Study*, High School Class of 2007.

Students at baccalaureate institutions more likely to be in their early 20s

Students attending four-year public and private institutions tend to be in the age categories most commonly associated with college students (ages 18-24). The community and technical colleges, on the other hand, serve a greater percentage of older students.

Student Age Distribution as a Percentage of Total Headcount Enrollment by Sector, Fall 2007



Note: Students for whom no age data exists are not included.

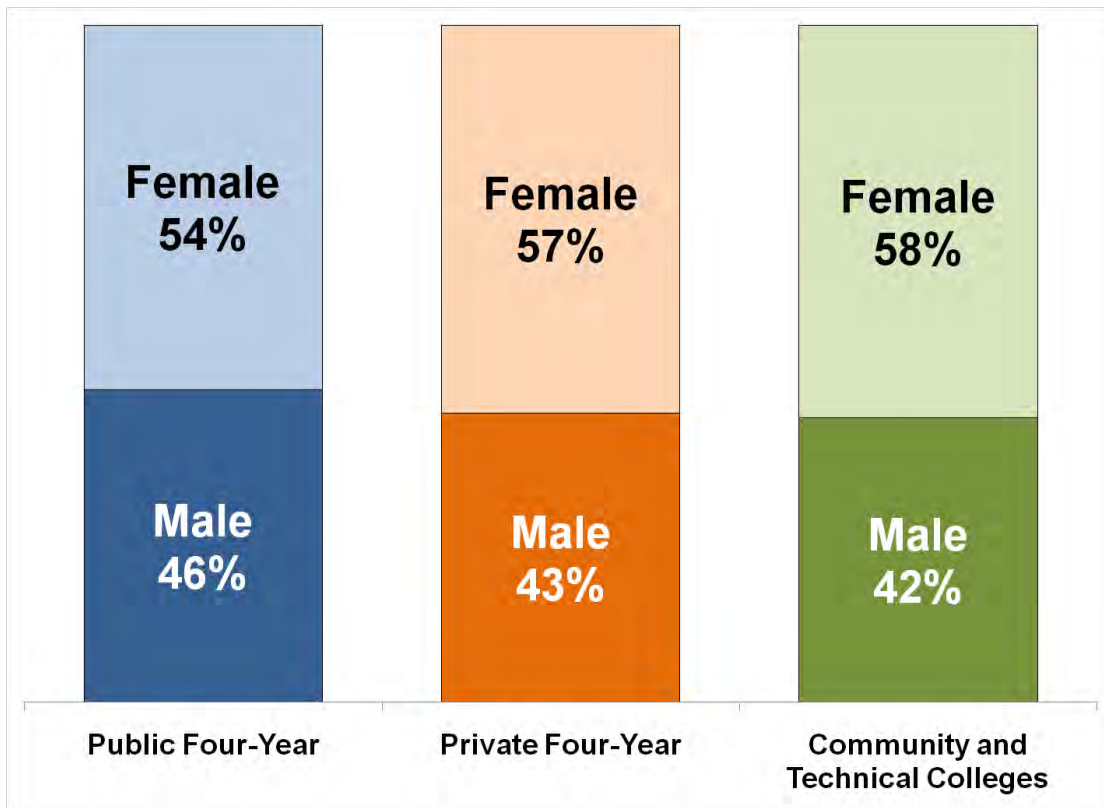
Source: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2007.

More than half of college students at two- and four-year institutions are female

In 2008, females again outnumbered males on Washington college campuses. Female enrollments at most institutions have consistently outpaced male enrollments at most Washington institutions since at least 1996.

While females outnumber males in overall numbers on college campuses, they trail males in pursuit of degrees in the science, technology, engineering, and mathematics (STEM) fields. In 2007-08, just 34 percent of all STEM postsecondary degree awards in Washington's public and private institutions went to female students.¹

Student Gender Distribution as a Percentage of Total Headcount Enrollment by Sector, Fall 2008



Sources: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2008; State Board for Community and Technical Colleges, fall 2008 report.

¹ HECB analysis of data from Integrated Postsecondary Education Data System (U.S. Department of Education).

Chapter IV: Who Goes to College in Washington?

As state's diversity increases, faces change on Washington campuses

Washington is growing more diverse. The share of the state population that includes people of color and Hispanics grew from 20.6 percent of the state population in 2000, to 23.8 percent in 2008.²

As Washington's overall population changes, the mix of students on college campuses also is undergoing a transformation. In 1998, whites accounted for more than 75 percent of students attending the state's public four-year institutions; it had declined to below 71 percent a decade later. At the state's independent four-year institutions, nearly 75 percent of students were white in 2008, which was a drop from 78 percent in 1998. At the state's community and technical colleges, more than 79 percent were white in 1998, compared to nearly 71 percent in 2008.

Hispanics, Washington's fastest-growing minority group, accounted for 6 percent of students at public four-year institutions in 2008, compared to fewer than 4 percent in 1998. The next fastest-growing group, Asians and Pacific Islanders, accounted for a little more than 13 percent of the student population in 2008; it was less than 12 percent in 1998.

Student Race/Ethnicity Distribution as a Percentage of Total Headcount Enrollment by Sector, Fall 2008

Race/Ethnicity	Headcount Enrollment			Percentage Within Sector		
	Public Four-Year	Private Four-Year	Community and Technical Colleges	Public Four-Year	Private Four-Year	Community and Technical Colleges
Fall 1998						
Black	2,220	1,321	7,191	2.7%	3.7%	4.6%
Native American	1,677	588	3,651	2.0%	1.6%	2.3%
Asian/Pacific Islander	9,561	2,839	10,998	11.5%	7.9%	7.0%
Hispanic	3,265	1,333	6,917	3.9%	3.7%	4.4%
White	62,449	28,236	124,382	75.2%	78.3%	79.3%
Nonresident Alien	3,848	1,765	3,728	4.6%	4.9%	2.4%
TOTAL	83,020	36,082	156,867	99.9%	100.1%	100.0%
Fall 2008						
Black	3,273	1,918	9,000	3.2%	4.5%	5.1%
Native American	1,632	704	3,016	1.6%	1.6%	1.7%
Asian/Pacific Islander	13,404	3,879	13,077	13.3%	9.0%	7.4%
Hispanic	6,010	2,601	14,444	6.0%	6.0%	8.2%
White	71,265	32,207	124,381	70.6%	74.6%	70.6%
2 or More (See Note)	574	41	6,455	0.6%	0.1%	3.7%
Nonresident Alien	4,826	1,797	5,873	4.8%	4.2%	3.3%
TOTAL	100,984	43,147	176,246	100.1%	100.0%	100.0%

Note: Northwest Indian College enrollments are included in the community and technical colleges sector. Students from "unknown" racial/ethnic backgrounds are excluded from the analysis. For fall 2008, institutions were given the option of using the "multi-racial" category; not all schools did.

Source: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2008.

² Population by Race and Hispanic Origin: 2000 and 2008. Office of Financial Management, <http://www.ofm.wa.gov/pop/race/08estimates/executivesummary08.pdf>.

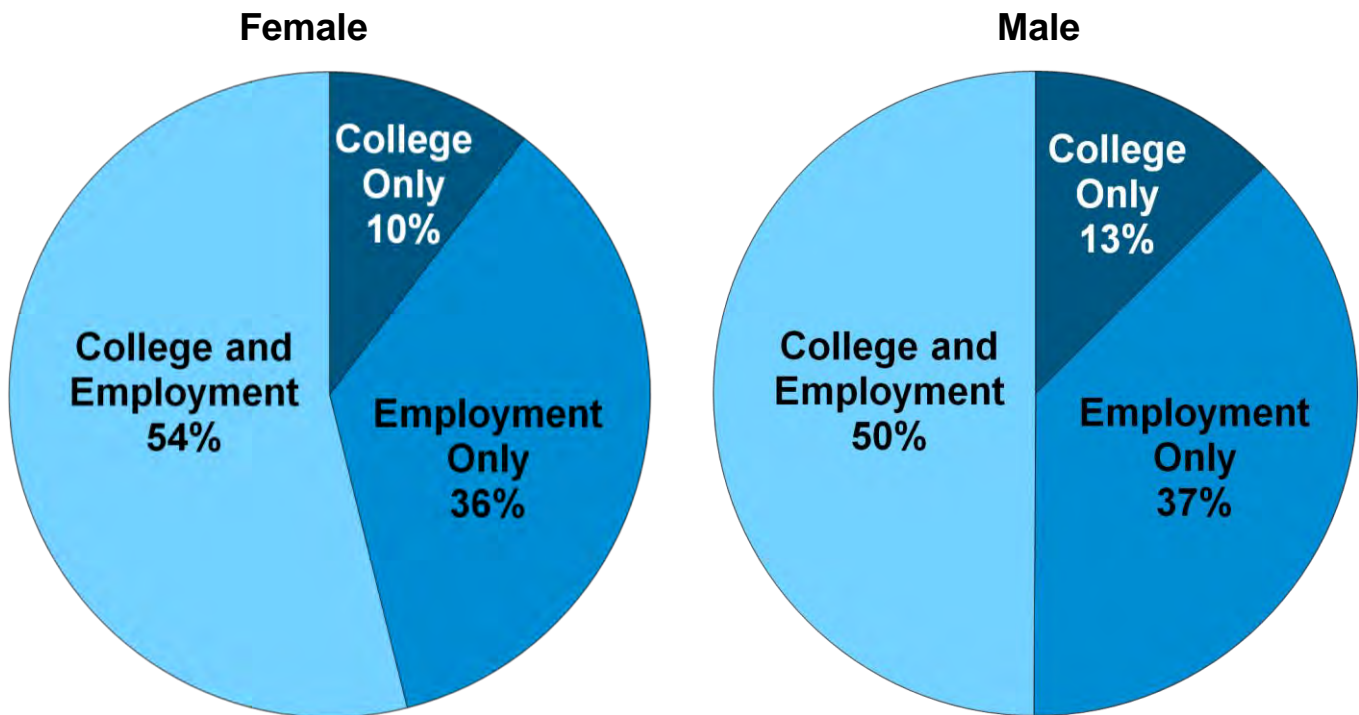
Juggling study and work is a reality for many Washington students

Many students face the challenge of balancing college work with the demands of a job or family. Some work intermittently or full-time to earn money to help pay tuition and cover living expenses or to gain valuable work experience in a chosen field. Others work at career jobs full-time while taking college classes to update job skills in specific areas.

The *Washington State Graduate Follow-up Study* for 2007 found that more than 24 percent of high school graduates who attended two-year institutions during their first year after graduation were employed at some time during the year. More than 20 percent of those attending baccalaureate institutions worked.

The report also found that female students were more likely to have jobs during the year, while men were more likely to work without attending college. Roughly the same proportion of men and women (10 percent) attended college without working.

**Post-High School Efforts in Year After Graduating by Gender
Class of 2007**



Note: Students for which no data exists are not included.

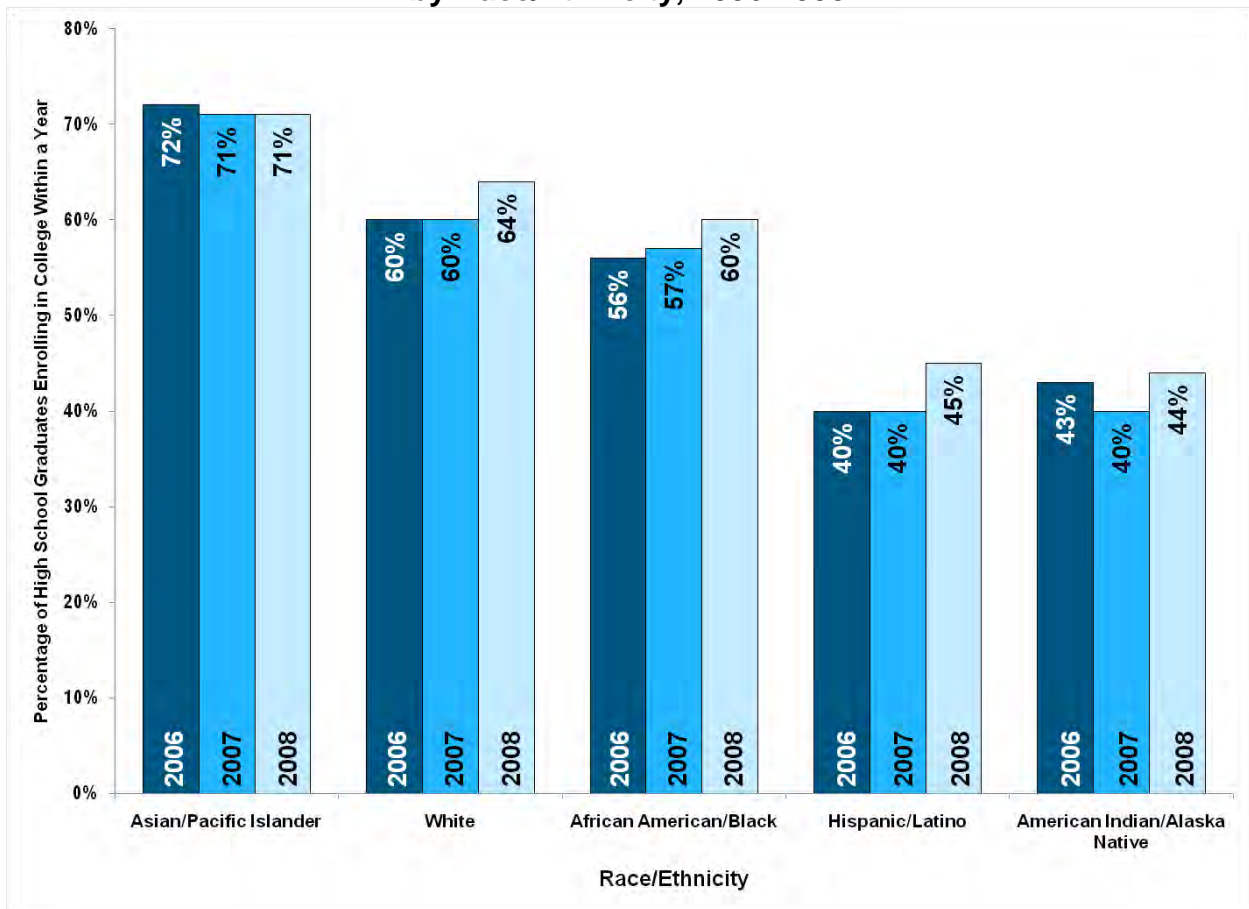
Source: WSU Social and Economic Services Research Center for the Office of the Superintendent of Public Instruction, *Washington State Graduate Follow-up Study*, Class of 2007.

College participation rates vary among racial and ethnic groups

While more minority students are enrolling at Washington colleges and universities, the level of participation by different ethnic groups varies and does not always correspond to their overall growth rate in the state population. Asians and Pacific Islanders are the state's second fastest-growing minority group, but they lead all racial and ethnic categories in rates of college participation. Hispanics, the fastest-growing racial and ethnic category, trail Asian and Pacific Islanders, whites, and African Americans in college participation.

To meet the state's long term goals for increased production of college degrees, more members of minority groups will need to be encouraged to pursue college degrees and certificates.

Percentage of High School Graduates Enrolling in College within a Year by Race/Ethnicity, 2006-2008



Source: WSU Social and Economic Services Research Center for the Office of the Superintendent of Public Instruction, Washington State College Enrollment Study (various years).

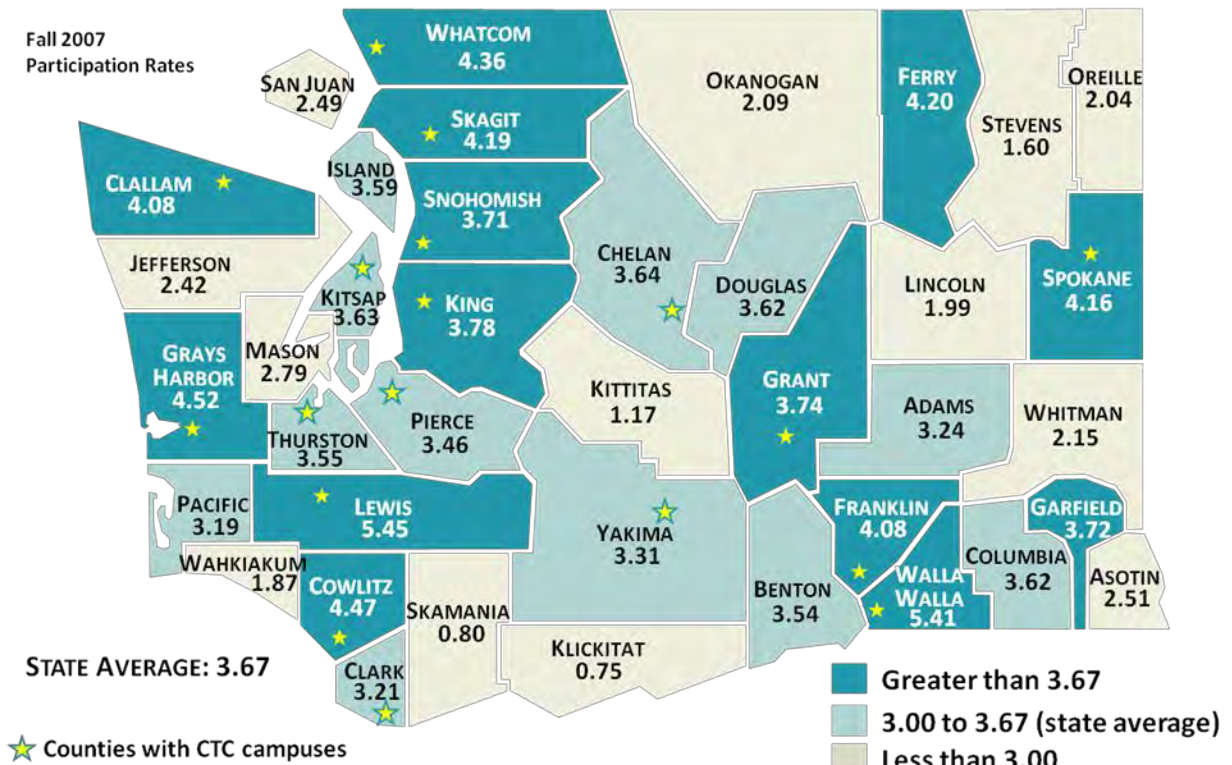
Chapter IV: Who Goes to College in Washington?

Proximity to college services increases odds of enrollment

The existence of a college in one's hometown or a nearby community makes college attendance easier. Data confirms that Washington residents who live in counties where community or technical colleges are located attend CTCs in greater numbers than people who live in counties that do not host CTCs. The accompanying map shows CTC participation rates as a percentage of the county resident population aged 17-64.

The impact that proximity and ease-of-access have on college participation rates highlights the importance of improving college access, especially for people whose incomes or other circumstances make it difficult to travel long distances to attend college.

**Community College Participation Rates by County
Percent of Population Aged 17-64, Fall 2007**



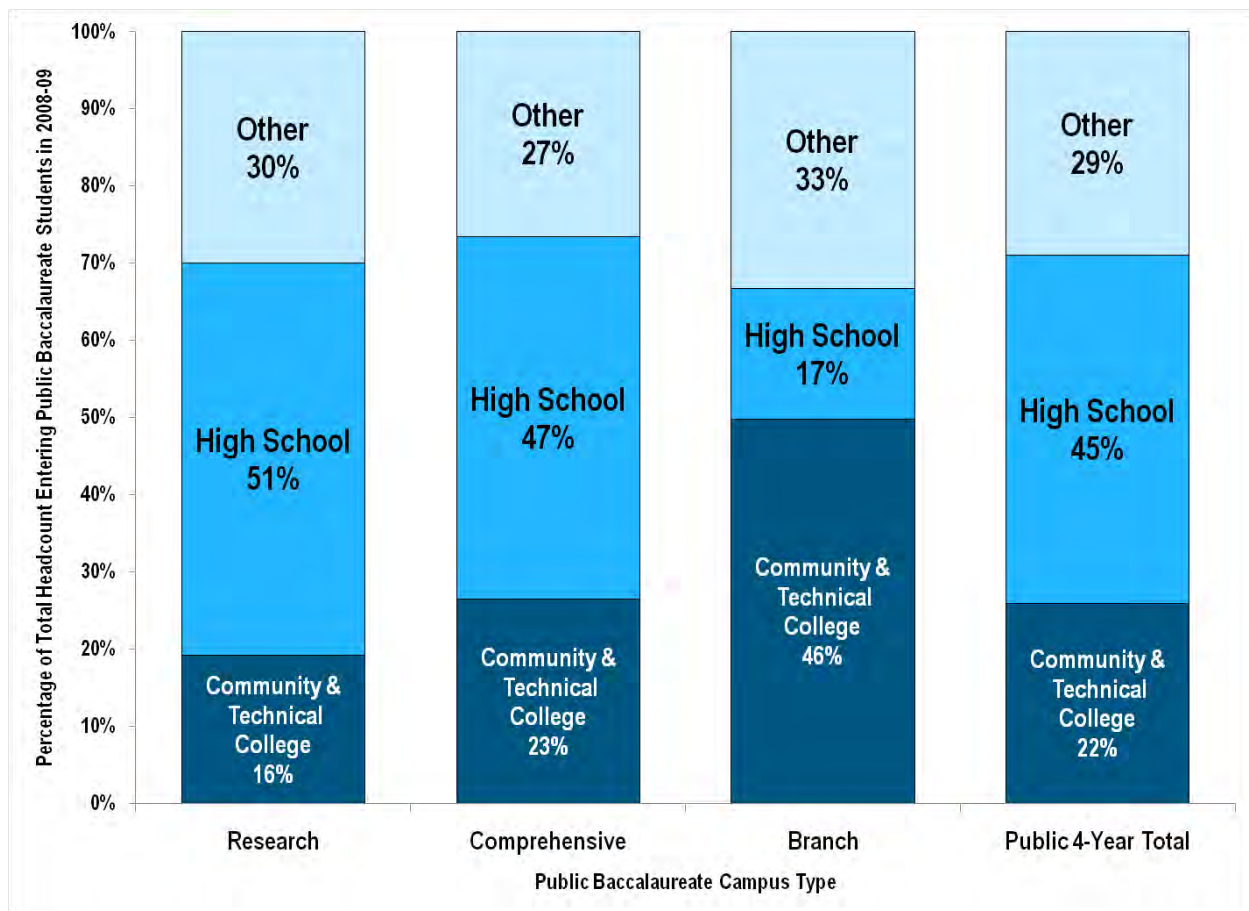
Sources: State Board for Community and Technical College's Management Information System Reports; Office of Financial Management's county population estimates.

Students travel a variety of pathways to reach baccalaureate institutions

Students arrive at the state’s public baccalaureate institutions with a variety of educational backgrounds. Some come straight from high school, while others transfer from community and technical colleges or from other baccalaureate institutions.

The chart below shows that the educational backgrounds of the student populations within each institutional type vary considerably. Over half the entering students at the research and comprehensive institutions had their last educational experience in high school, while less than a quarter of those enrolling at branch campuses came from high school. Branch campuses, which began admitting freshmen in 2006, have a higher percentage of students with other educational backgrounds, including transfers from other four-year institutions in Washington or out-of-state.

**Students Entering Public Baccalaureate Institutions
as a Percentage of Headcount Total by Source and Campus Type
2008-09 Academic Year**



Notes: Students with Running Start Credits are included in "High School." "Other" includes transfers from Washington four-year institutions, transfers from out-of-state, and unknown.

Source: Office of Financial Management, *Higher Education Enrollment Report*, Table 7, 2008-09.

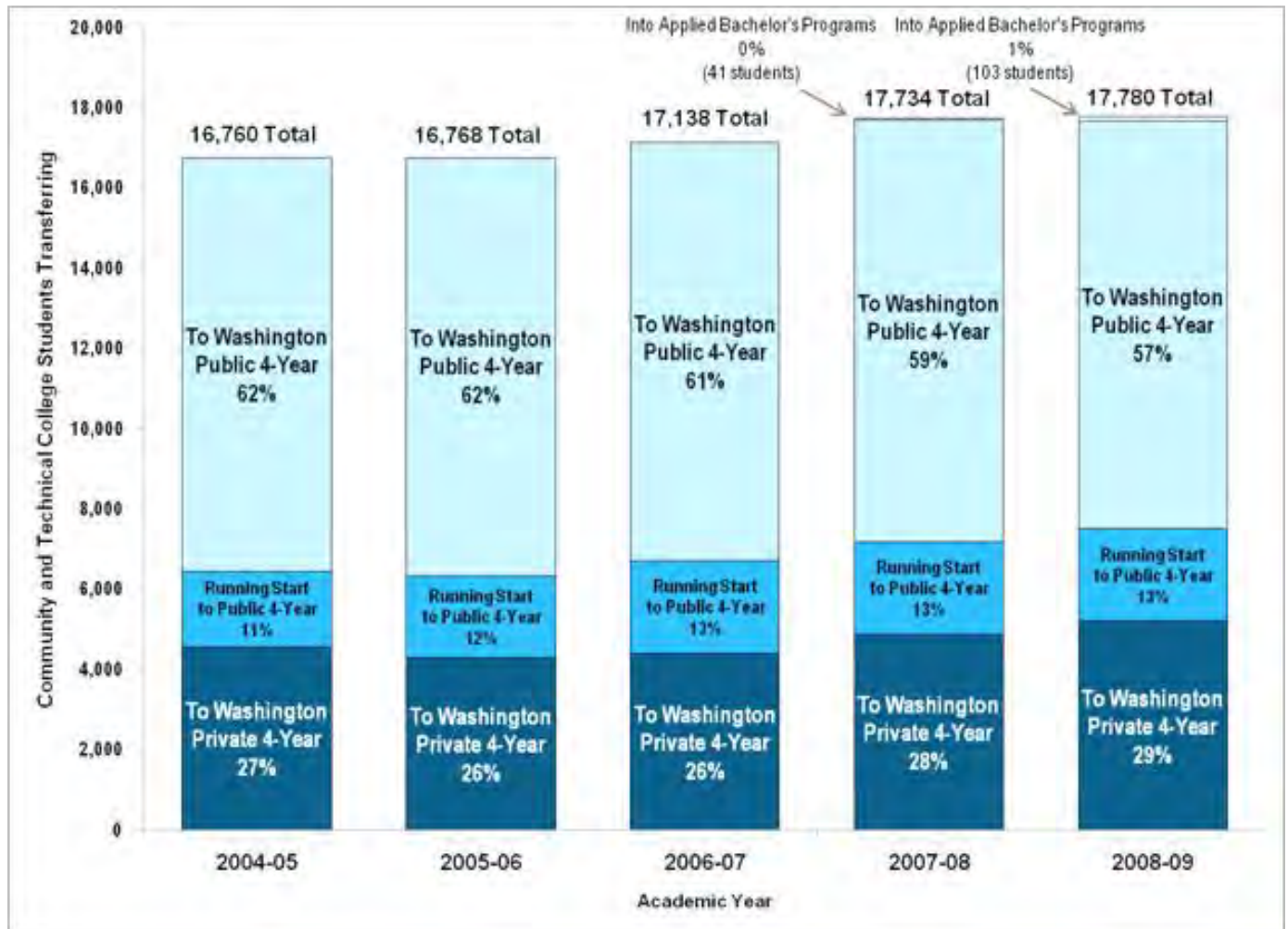
Chapter IV: Who Goes to College in Washington?

Many baccalaureate students begin college at two-year institutions

The number of community and technical college students who transfer to public or private baccalaureate institutions has grown at a modest pace in recent years. In 2007-08, approximately 17,800 Washington community and technical college students transferred to four-year institutions. Another 3,000 students transferred to out-of-state institutions.

Not all transfer students have degrees and not all students with two-year degrees transfer. Of those who transferred to a Washington college or university, about four-fifths enrolled at public four-year institutions; this includes more than 2,300 Running Start students. In addition, about 5,200 students transferred to independent four-year institutions in Washington or to Portland State University.

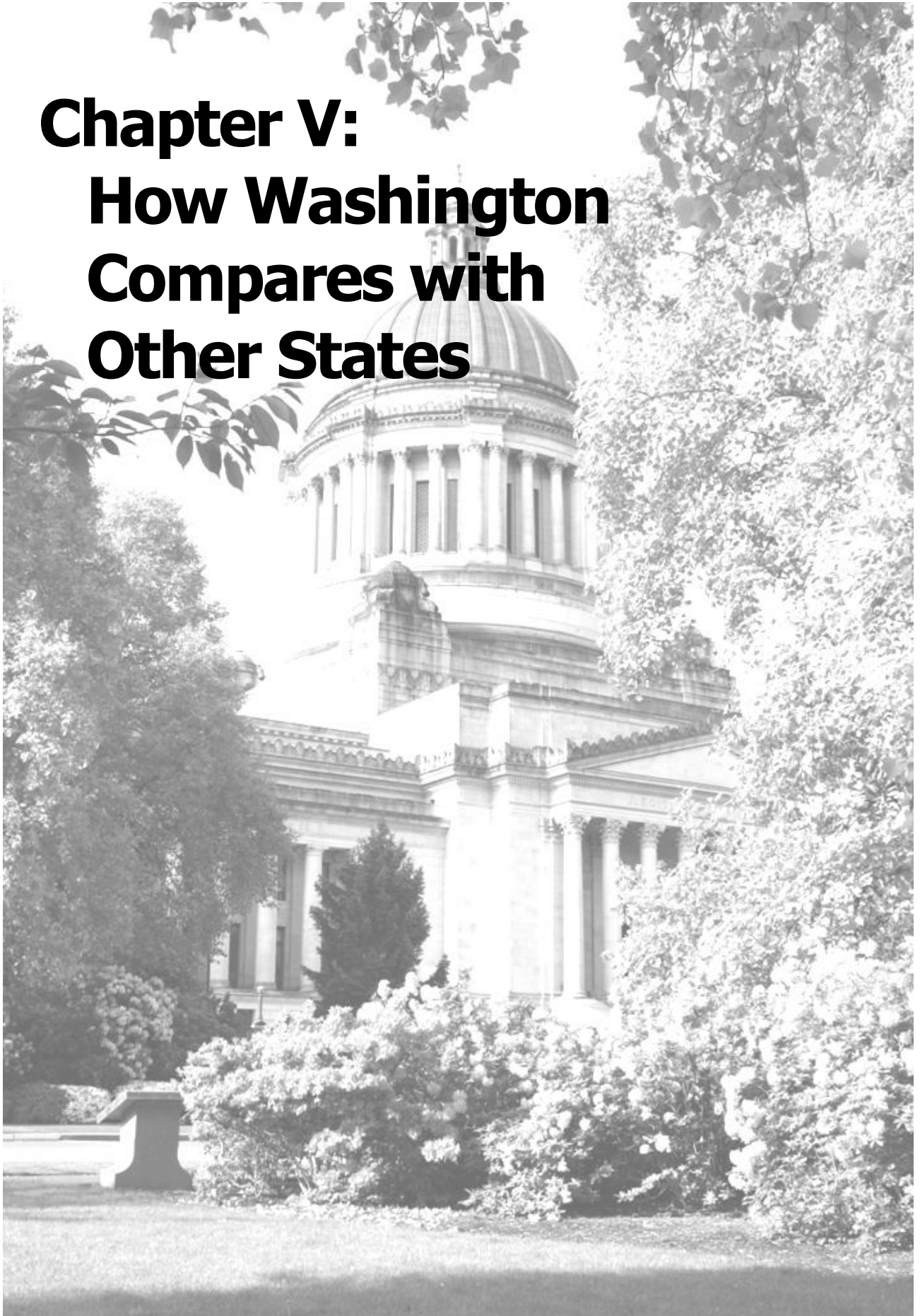
**Transfers Students from Community and Technical Colleges by Destination
2004-05 to 2008-09**



Notes: Washington independent schools includes Portland State University. Totals may not add due to rounding.

Source: State Board for Community and Technical Colleges, *Academic Year Report*, 2007-08.

Chapter V: How Washington Compares with Other States

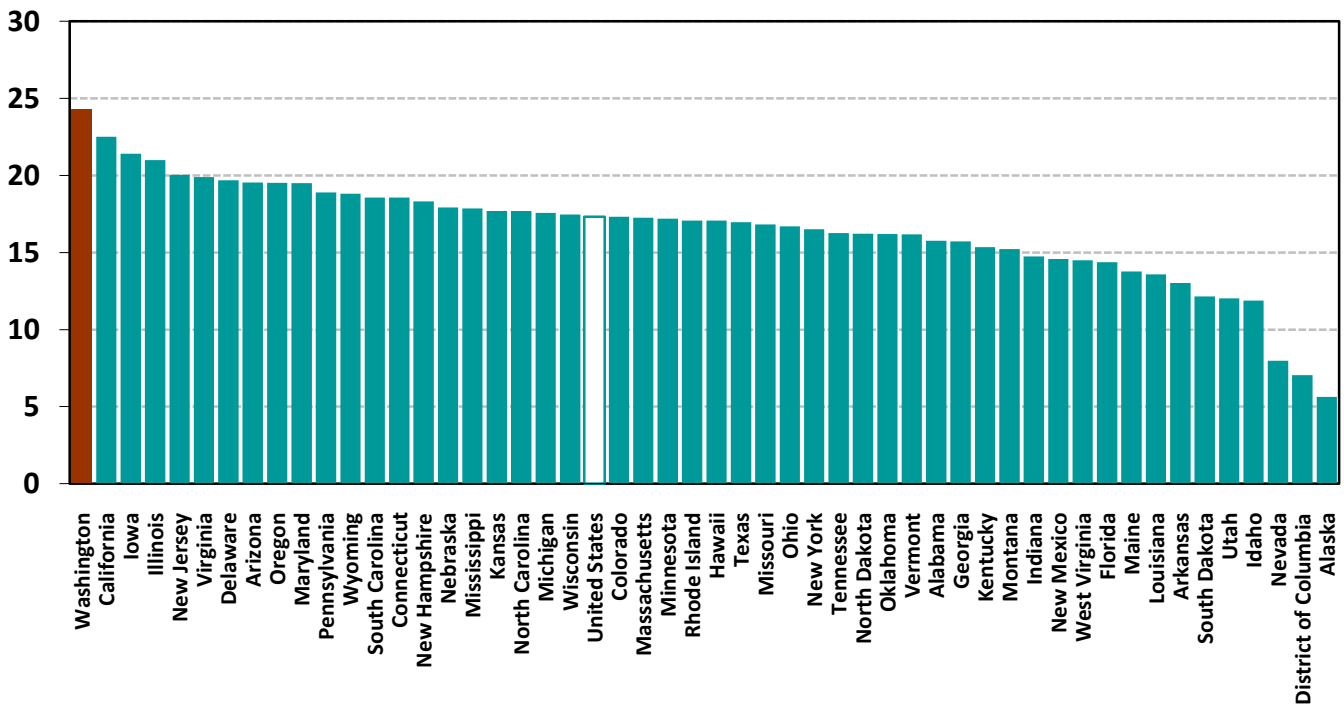


Washington’s public four-year colleges are highly productive in degree completion...

An undergraduate who attends one of Washington’s four-year public colleges and universities has an excellent chance of successfully completing his or her studies and receiving a baccalaureate degree. Washington leads the nation in the efficient production of baccalaureate degrees among students already enrolled in college.

Factors that help account for Washington’s high ranking include the high number of freshmen and transfer students who successfully graduate from the state’s baccalaureate institutions.

How states compare in completion of bachelor’s degrees, 2005-06¹



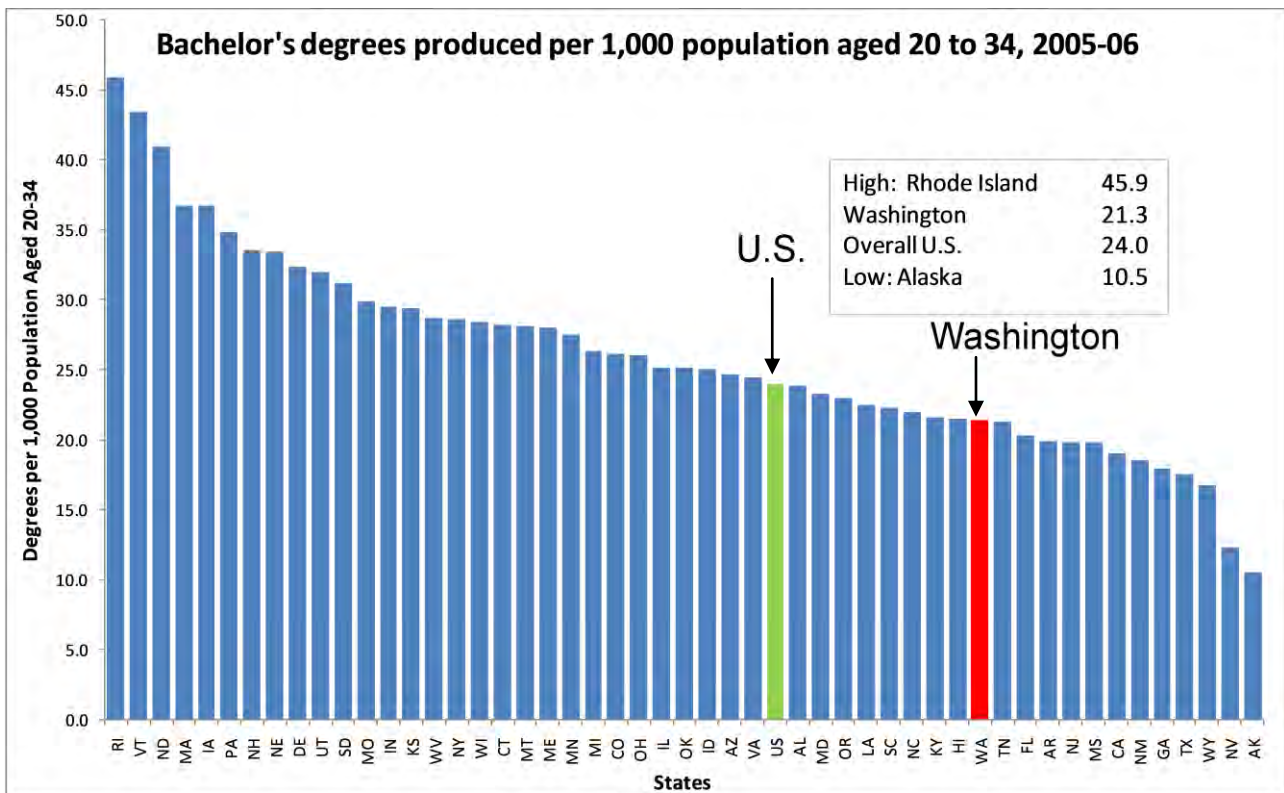
Source: U.S. National Center for Education Statistics, Integrated Postsecondary Education Data System, preliminary data downloaded January 9, 2009.

¹ Degree completion is per 100 students enrolled in public baccalaureate institutions, fall 2005.

Chapter V: How We Compare with Other States

...but based on population, Washington degree production ranks in bottom third of states

In relation to its overall population, Washington residents do not attain bachelor's degrees in high numbers compared to residents in other states. A major factor contributing to Washington's ranking is inadequate institutional capacity, which limits access to baccalaureate degree programs.

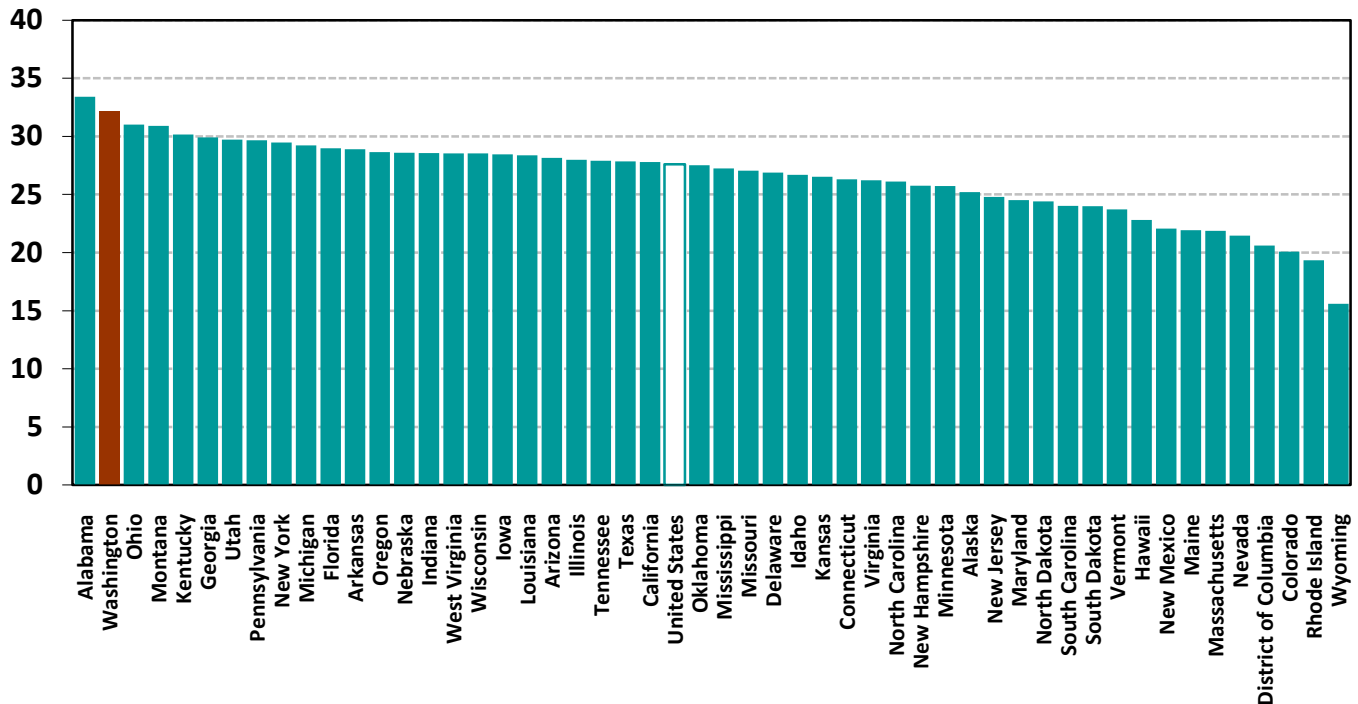


Source: Center for Education Statistics, Digest of Education Statistics 2007; U.S. Census Bureau.

Institutions are highly efficient in the production of graduate degrees...

Washington produces more graduate degrees relative to the number of graduate students enrolled than do most other states. One factor that may help explain why state colleges and universities are highly efficient in the production of graduate degrees is the highly selective nature of many graduate programs, which means only the very best students are accepted into those programs.

How states compare in graduate-degree completion, 2005-06²



Source: U.S. National Center for Education Statistics, Integrated Postsecondary Education Data System, preliminary data downloaded January 9, 2009.

² Degree completion is per 100 graduate students enrolled in public baccalaureate institutions, fall 2005.

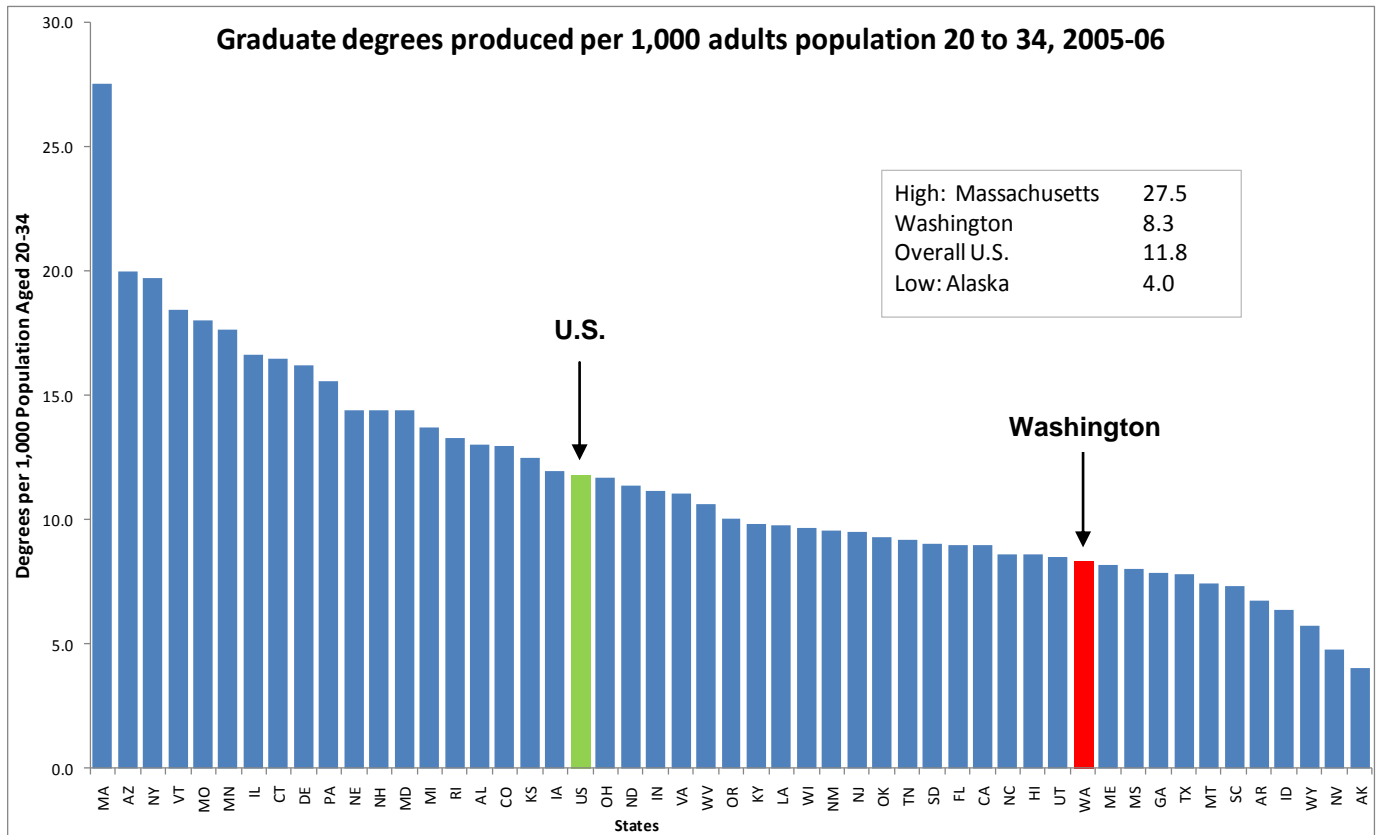
Chapter V: How We Compare with Other States

...but Washington needs to boost advanced degree production to keep pace with other states

Overall, Washington trails many other states in the production of graduate degrees within the population age category most likely to produce master's and doctor's degrees. Washington's relatively low production of bachelor's degrees may be a factor that impacts demand for advanced-degree programs.

Washington is home to two public research universities that together produce more than 90 percent of the doctoral degrees and half the professional degrees awarded in the state.

Washington is 39th among all U.S. states in advanced degrees produced per 1,000 population 20-34



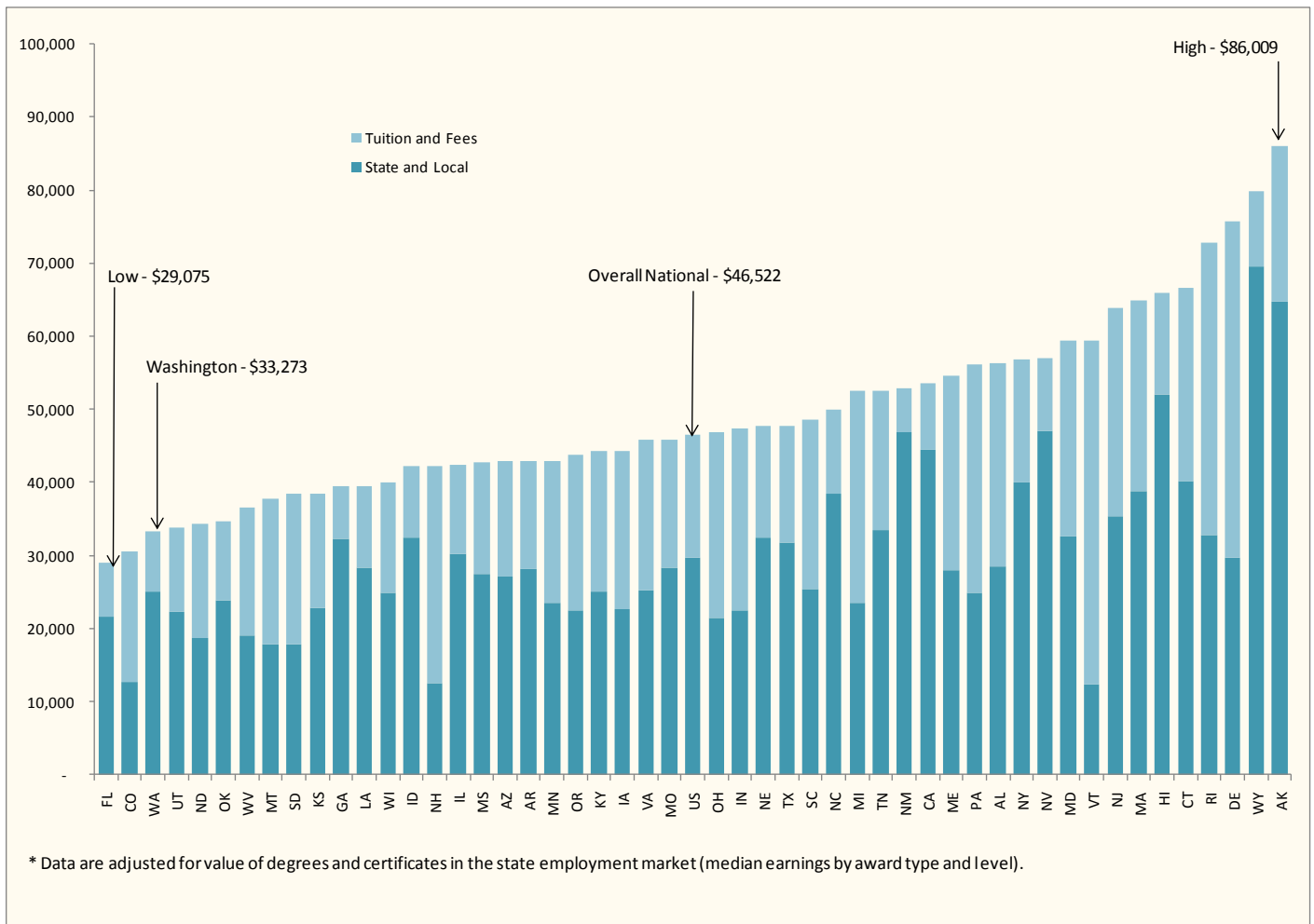
Source: "Opportunities for Change" presentation to HECB on June 30, 2009, at UW Tacoma.

Washington produces higher-value degrees for each dollar spent

Just as Washington graduates a greater percentage of its baccalaureate and graduate students than most other states, it also produces more degrees and certificates for each dollar spent by taxpayers and students, according to one national study.

To arrive at its findings, the study weighted degrees and certificates produced in each state by the median earnings of those who held those specific degrees and certificates in the state's employment market. By weighting the value of each state's degree production, the researchers could determine each state's degree "productivity" based on the amount of state and local appropriations and tuition and fee revenues spent to produce each degree.

Productivity: Total funding per degree/certificate*



Source: Kelly, Patrick J. 2009. The Dreaded "P" Word: An Examination of Productivity in Public Postsecondary Education. Washington, DC: Delta Cost Project. Available at www.deltacostproject.org/resources/pdf/Kelly07-09_WP.pdf.

Data source: SHEEO State Higher Education Finance Survey 2008; NCES IPEDS Completions Survey, 2006-2007; U.S. Census Bureau American Community Survey (PUMS), 2007.

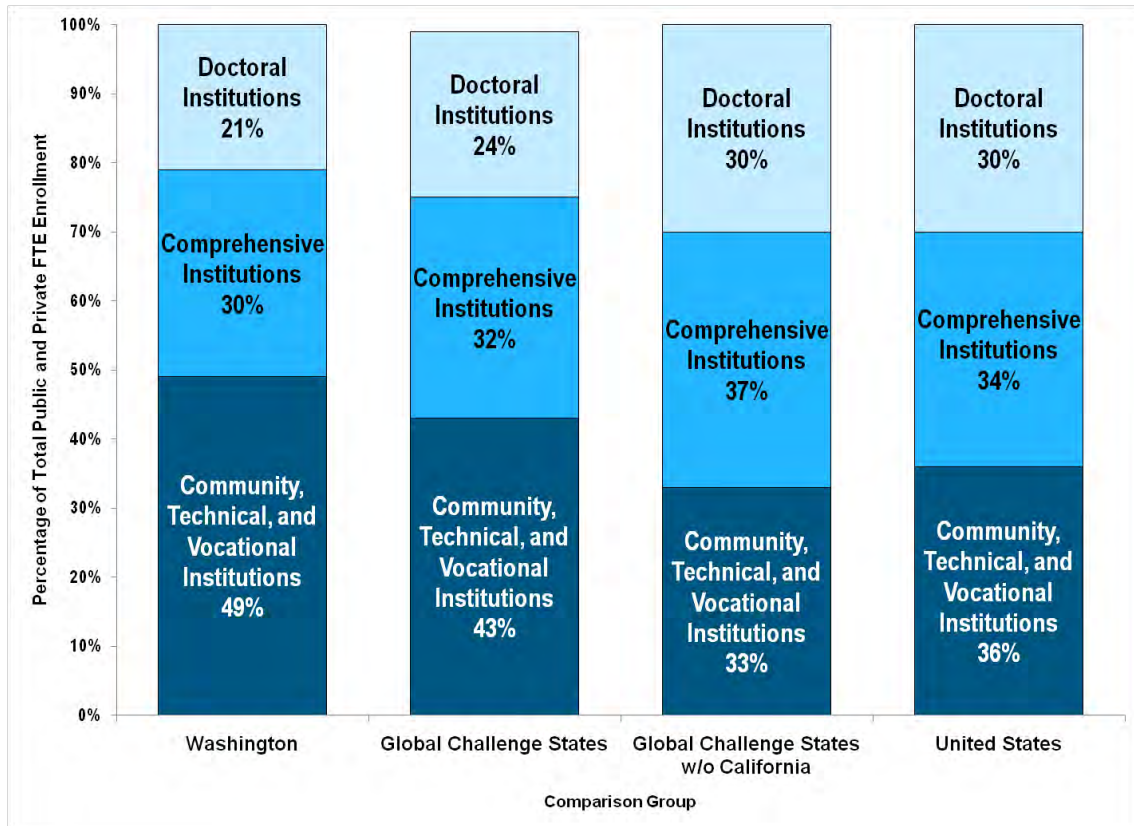
Share of students attending four-year institutions higher in Washington’s peer states

A higher proportion of public and private college students in Washington attend two-year institutions than do so in the United States generally, including in the states most compared with Washington. These include the 15 Western states that comprise the Western Interstate Commission for Higher Education (WICHE), and the Global Challenge States (GCS) of Washington, Massachusetts, California, New Jersey, Connecticut, Colorado, Virginia, and Maryland. The GCS are states that have been identified as having a high potential to succeed in today’s knowledge-driven, global economy.

While more FTE (full-time equivalent) students fill slots in two-year institutions, Washington also has a lower percentage of students in four-year research universities and doctoral programs than in the comparison states.

The percentages suggest that to be competitive with peer states in the production of educated workers, the state needs to boost the number of students attending four-year institutions. It can do so in part by encouraging more students to transfer to four-year colleges after graduating from two-year institutions.

Comparison of FTE Enrollment by Level: 2007-08
All Public and Private Institutions



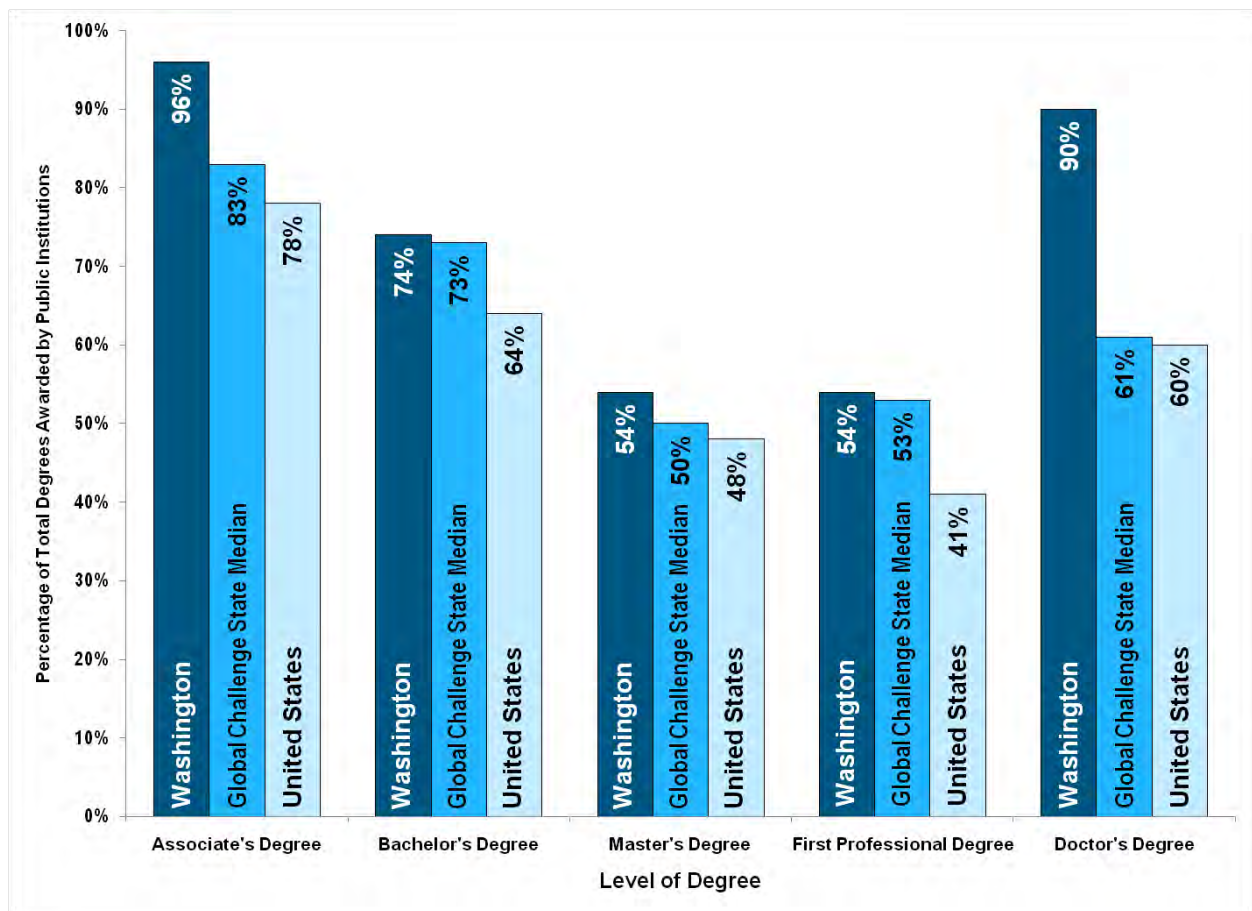
Note: Totals may not add due to rounding.

Source: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2008.

Washington's public institutions produce higher percentage of doctoral, associate degrees than other states

Compared to the rest of the nation, Washington relies heavily on public institutions to produce doctoral and two-year degrees. Only about 10 percent of doctor's degrees are awarded at the state's private institutions, compared to about 40 percent nationally and in the Global Challenge States with which Washington is often compared. Private institutions produce about 4 percent of associate degrees, compared to about 22 percent nationally and about 17 percent in the Global Challenge States.

Percentage of Total Degrees Awarded from Public Institutions by Level, 2006-07



Source: National Center for Education Statistics, Digest of Education Statistics 2008.

Washington tuition and fee costs rank near the middle compared to other states

Washington resident undergraduate students pay somewhat less than the national average for tuition and fees, although relatively small changes in tuition prices can have a significant impact on state rankings. During the 2008-09 academic year, the University of Washington ranked exactly in the middle (25th) among the 50 states in the cost of tuition and fees charged to resident undergraduate students by the various states' public "flagship universities." Washington's resident undergraduate tuition ranked 31st among 46 states with public comprehensive colleges and universities and 25th among 49 states with community colleges.

Among flagship universities, Pennsylvania had the nation's most expensive resident undergraduate tuition and fees in 2008-09 (\$13,706). Wyoming had the lowest (\$3,621). New Jersey's average tuition and fees were highest for states with comprehensive institutions, while New Mexico's was lowest. New Hampshire had the highest community college average, while California had the lowest.

National comparison of resident undergraduate tuition and fees: 2008-09 academic year

	University of Washington	Washington State University	Comprehensive Institutions	Community & Technical Colleges
Resident undergraduate tuition and fees	\$6,697	\$6,720	\$4,819	\$2,730
National comparison	N=50 states	N=50 states	N=46 states	N=49 states
National average	\$7,481	\$7,481	\$5,867	\$2,859
Dollar difference	(\$784)	(\$761)	(\$1,048)	(\$129)
Percentage difference	(10.5%)	(10.2%)	(17.9%)	(4.5%)
Washington rank	25 th	N/A	31 st	25 th

Note: The University of Washington is ranked with institutions categorized as "Flagship Universities" by state higher education agencies in all 50 states. Comprehensive institutions are averaged and then ranked against all other non-flagship schools. Community and technical colleges are ranked against primarily less than four-year public schools.

Source: Higher Education Coordinating Board, *Tuition and Fee Rates: A National Comparison, 2008-09*.

How Washington tuition and fees compare with peer and Western-state institutions

Peer Institution and WICHE State Comparison of Resident Undergraduate Tuition and Fees: 2008-09 Academic Year

	University of Washington	Washington State University	Comprehensive Institutions	Community & Technical Colleges
Resident undergraduate tuition and fees	\$6,697	\$6,720	\$4,819	\$2,730
Peer comparison	N=25 states	N=23 states	N=46 states	N=49 states
Peer average	\$8,681	\$7,906	\$5,867	\$2,859
Washington rank	18 th	11 th	31 st	25 th
WICHE comparison	N=15 states	N=15 states	N=12 states	N=14 states
WICHE average	\$5,764	\$5,764	\$4,729	\$2,414
Washington rank	8rd	N/A	5th	5th

Source: Higher Education Coordinating Board, *Tuition and Fee Rates: A National Comparison*, 2008-09.

Peers:

UW – The comparison group for the University of Washington is all public institutions classified as research universities (category 1) with medical schools.

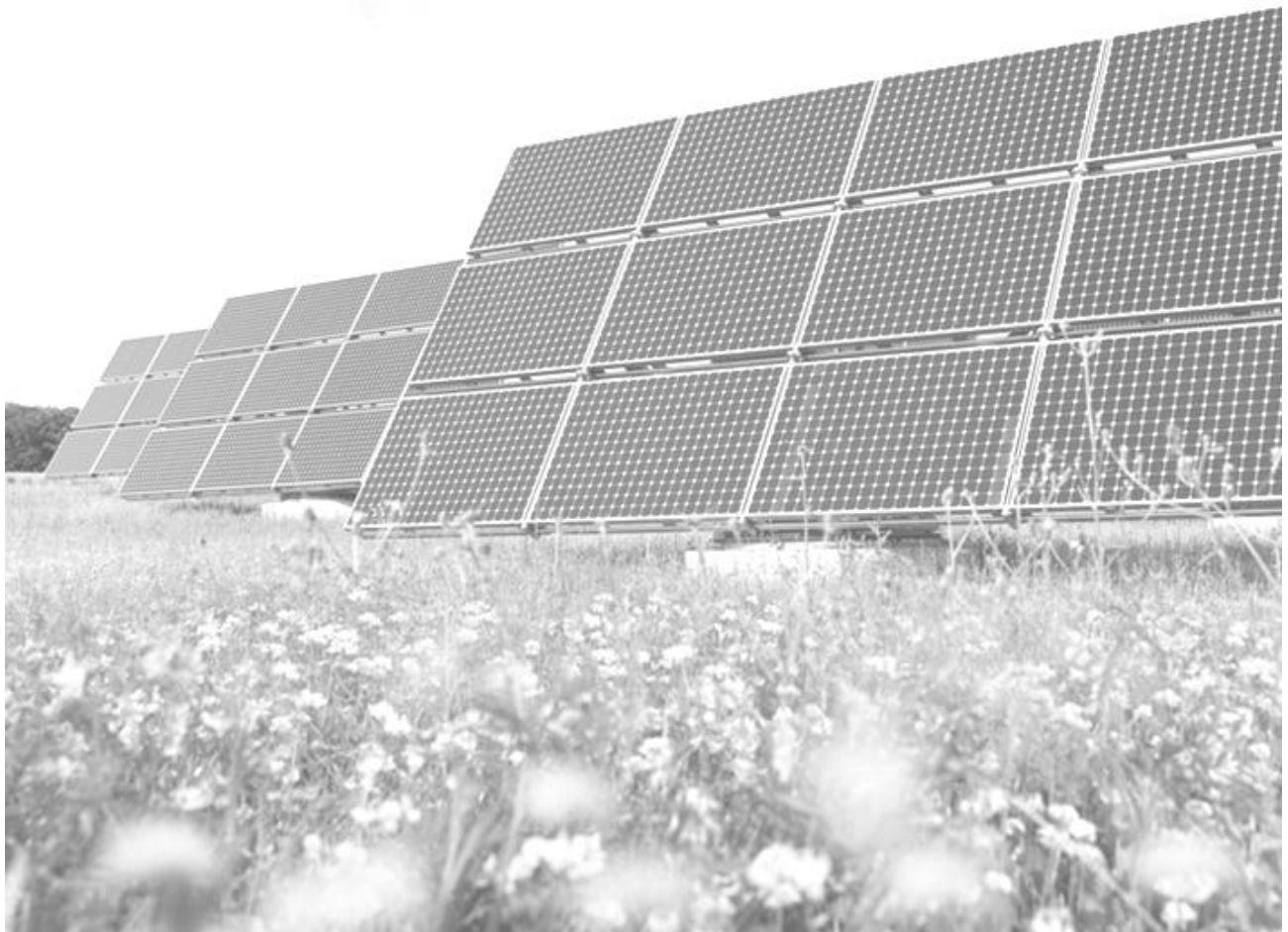
WSU – The comparison group for Washington State University is all public land grant universities classified as research universities (categories 1 and 2) with veterinary schools.

Comprehensive institutions – The comparison group for Central, Eastern, and Western Washington Universities is all public institutions classified as comprehensive colleges and universities (category 1.) The Evergreen State College is also included in the comprehensive average specifically for this chart.

Community and technical colleges – The comparison group for the Washington community and technical college system is all state community college systems.

The Western Interstate Commission for Higher Education (WICHE) includes: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

Chapter VI: Public Benefits of Higher Education



Colleges: a major force in Washington's economy

Washington's public investments in higher education have greatly benefitted the individuals who earn degrees and certificates, the communities where they live and work, and the state as a whole.

Higher education institutions not only serve as incubators of new business growth, they also are major employers in their own right and vital contributors to the economic and social fabric of the communities that host them.

In fiscal year 2007, Washington's universities made \$1 billion in research and development expenditures. Those expenditures:

- Supported 16,000 jobs in the Washington economy;
- Supported an additional 16 jobs in the Washington economy for every 10 university employees engaged in research; and
- Resulted in \$2.1 billion in additional total sales in the Washington economy, yielding about \$200 million in state/local sales and B&O tax revenue.

Economic Impact of Academic Research Expenditures in Washington¹

Economic Impact	\$1 Billion in Annual Academic Research Expenditures
Total Employment (Direct and indirect, 2009)	16,000 jobs
Direct Employment	6,000
Jobs Multiplier (Total Employment/Direct Employment)	2.62
Change in Total Earnings	\$846 million
Earnings Multiplier (Earnings from Total Employment /Earnings from Direct Employment)	1.93
Change in Washington Total Sales	\$2.1 billion

In addition, each \$1 million invested in higher education in Washington also yields returns.

Return on Investment for Higher Education Operations Funding²

Economic Impact	\$1 Million in Operations Funding
Total Employment (Direct and Indirect, 2009)	30 jobs
Direct Employment	20 jobs
Jobs Multiplier (Total Employment/Direct Employment)	1.47
Change in Total Earning	\$1,038,000
Earnings Multiplier (Earnings from Total Employment/Earnings from Direct Employment)	1.62
Change in Washington Total Sales	\$2,120,000

¹ Source: NSF and EMSI, Inc., input-output model based on ESD data.

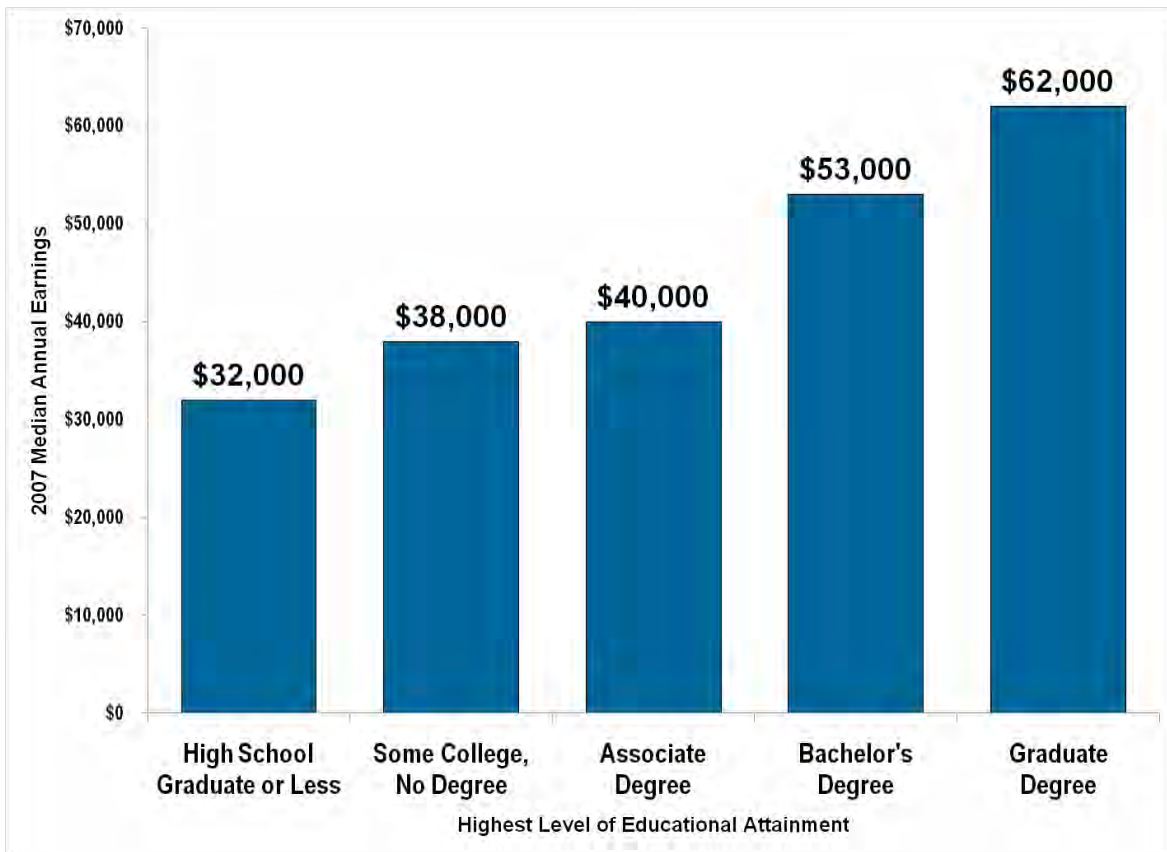
² Source: EMSI, Inc., input-output model based on ESD data.

Educational attainment yields lifelong financial benefits

Individuals have strong financial incentives to earn college degrees and certificates. The state's Employment Security Department has found that wages tend to grow with the level of education required to fill positions. In an analysis of job vacancies in the spring of 2008, positions requiring a high school diploma paid \$11 per hour, while those requiring a bachelor's degree paid \$25.48 per hour.³

Research suggests that increasing the number of educated workers even leads to financial benefits for people who have not attained higher levels of education. One study found that a 1 percent increase in the proportion of the population holding four-year college degrees led to a 1.9 percent increase in the wages of workers without high school diplomas, and a 1.6 percent wage increase for high school graduates.⁴

2007 Median Annual Earnings by Educational Attainment, Ages 25-64



Source: Washington State Population Survey, 2008.

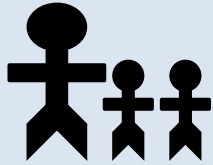
³ Economic Needs Assessment Work Group. (2008). Findings of the Economic Needs Assessment Work Group. Retrieved from <http://www.hecb.wa.gov/boardmtgs/documents/TAB1A.ENAWorkGroupReportv11.pdf>.

⁴ Moretti, E. (2004). Estimating the social return to higher education: Evidence from longitudinal and repeated cross-section data. *Journal of Econometrics*, 121. pp. 175-212. Retrieved from <http://www.econ.berkeley.edu/~moretti/socret.pdf>.

Children benefit from parents who earn degrees and certificates

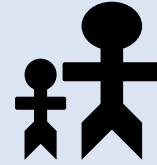
The higher incomes that college-educated persons tend to receive help to lessen the financial burdens of raising a family. These effects are evident in both single-parent and dual-parent families.

Because parents with higher levels of education earn more, their families typically do not rely on federal or state welfare, live below federal poverty guidelines, or use food stamps. Families in which both parents have earned high school degrees report using food stamps nearly three times as often, and federal or state welfare four times as often, as families in which both parents have earned bachelor's degrees. Families in which both parents are high school graduates are more than three times as likely to live below federal poverty guidelines as families in which parents earned bachelor's degrees.



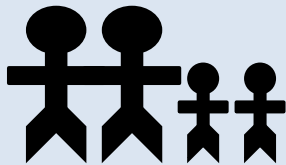
Single parent without a college degree

- Median annual household income: \$24,000
- Number of kids: 2
- Percent reporting use of food stamps: 38.6%
- Percent using state or federal welfare: 18.3%
- Percent living below 200% of federal poverty guidelines: 66.3%



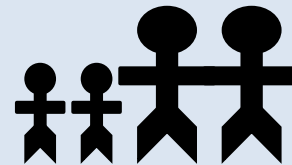
Single parent with a college degree

- Median annual household income: \$45,000
- Number of kids: 1
- Percent reporting use of food stamps: 24.5%
- Percent using state or federal welfare: 9.1%
- Percent living below 200% of federal poverty guidelines: 32.8%



Two parent family where both parents have a high school degree

- Median annual household income: \$61,500
- Number of kids: 2
- Percent reporting use of food stamps: 13.7%
- Percent using state or federal welfare: 4.4%
- Percent living below 200% of federal poverty guidelines: 21.2%



Two parent family where both parents have a bachelors degree

- Median annual household income: \$101,645
- Number of kids: 2
- Percent reporting use of food stamps: 5%
- Percent using state or federal welfare: 0%
- Percent living below 200% of federal poverty guidelines: 6.3%

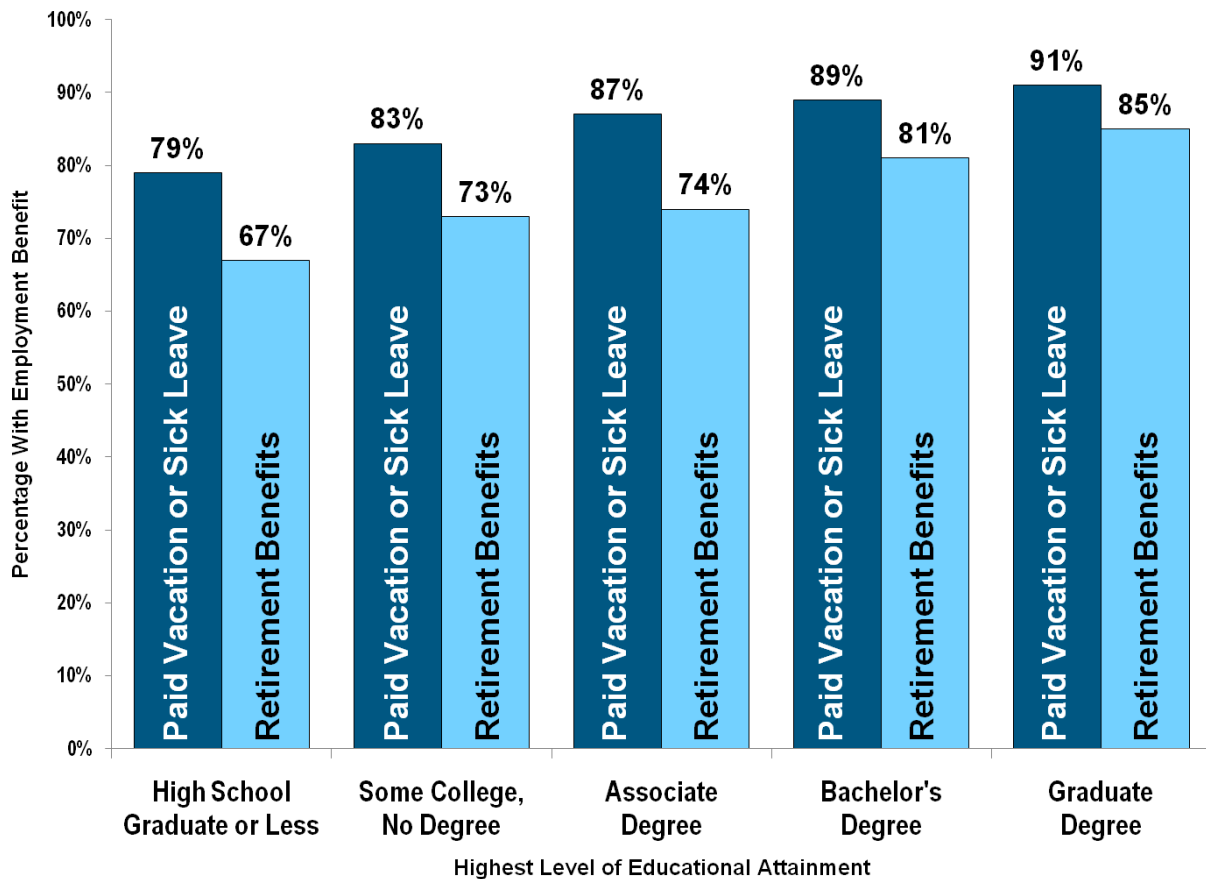
Source: Washington State Population Survey, 2008.

Education leads to more comprehensive employer benefits

In addition to higher annual wages, educational attainment brings other financial benefits to workers and their families. For example, employees with higher levels of education are more likely to work in jobs that offer benefits packages such as paid vacation, sick leave, or company retirement plans.

Employers who need highly trained and educated workers tend to view benefits packages as one way to gain an edge over competing employers. By offering generous benefits packages, some employers also hope to reduce turnover in positions that require trained or experienced staff.

**Employment Benefits by Educational Attainment
Spring 2008, Ages 25-64**

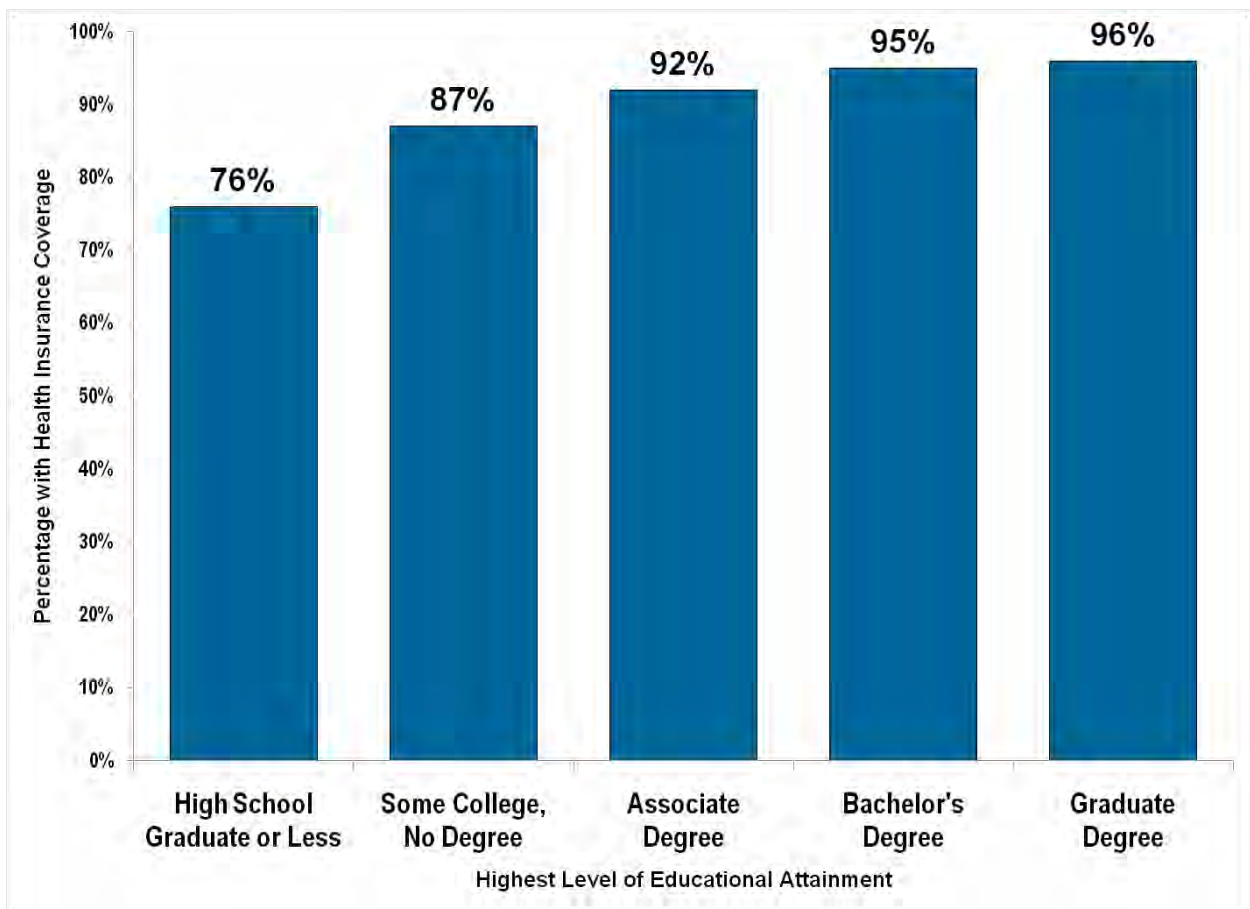


Source: Washington State Population Survey, 2008.

Employer health insurance coverage increases with educational attainment

Individuals with higher levels of postsecondary education are more likely to have health insurance coverage acquired through a source other than the state Basic Health Plan, which provides coverage to low-income persons. Health insurance for higher-income persons typically is acquired through an employer, union, military organization, or by self-purchase.

**Health Insurance Coverage by Educational Attainment
Spring 2008, Ages 25-64**



Note: Includes health insurance provide by employer, union, military, or self-purchased.

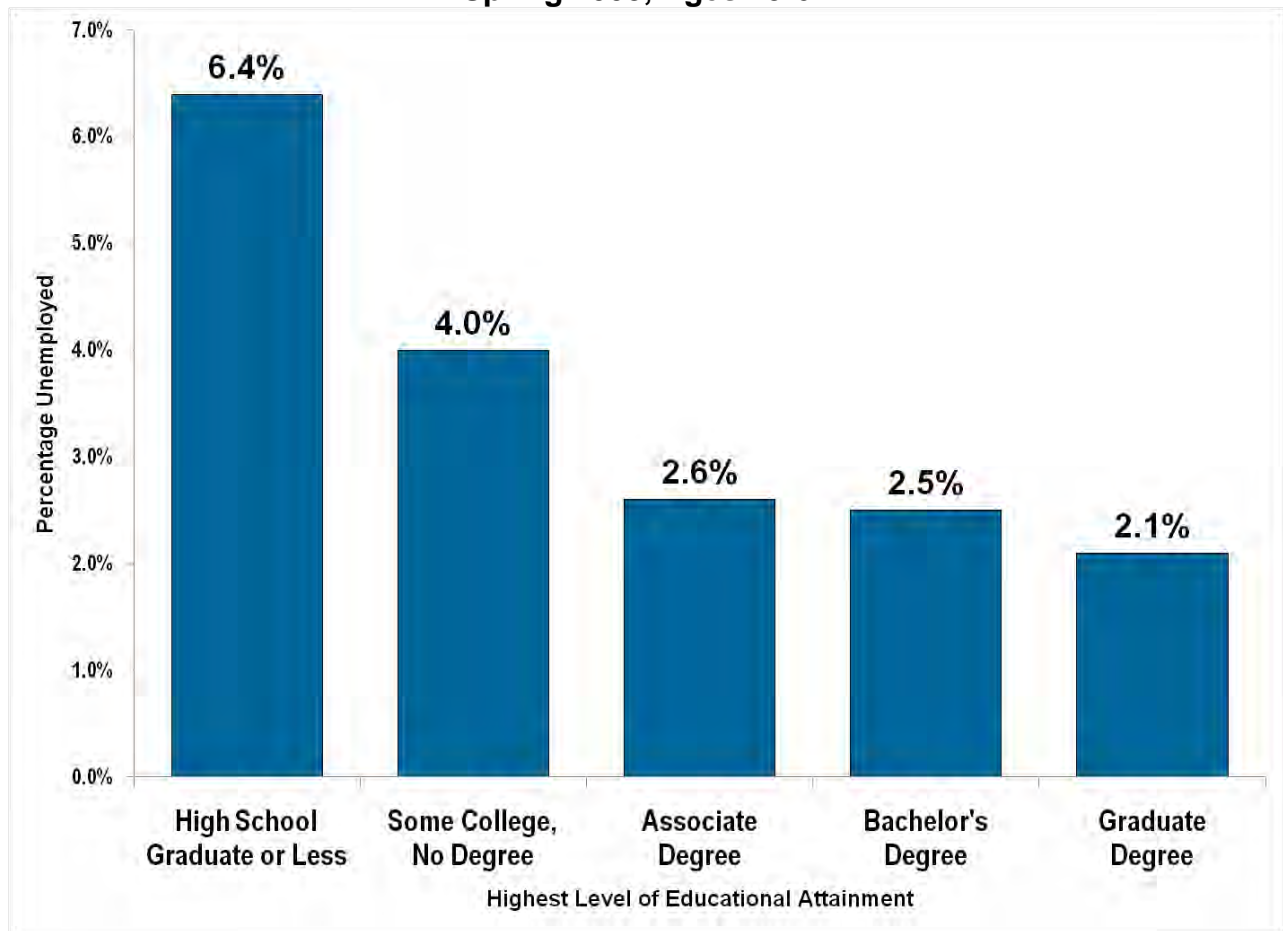
Source: Washington State Population Survey, 2008.

Reduced unemployment rates is one of the social benefits of higher education

While higher wages and expanded economic activity are major benefits of a more highly educated workforce, increasing the state's level of educational attainment has another positive effect—reducing costs associated with social problems such as unemployment, crime, and poor health. Maintaining consistent investments in higher education—even in challenging economic times—is one way to reduce the consequences of these social concerns.

Because individuals with postsecondary degrees or certificates are in high demand in today's knowledge-driven economy, it follows that they will be less likely to face unemployment. Data shows that the percentage of Washington residents who were unemployed in spring of 2008 declined as educational level increased. The data also suggests that more highly educated individuals are less likely to require benefits such as unemployment insurance during their working lives.

**Unemployment by Educational Attainment
Spring 2008, Ages 25-64**

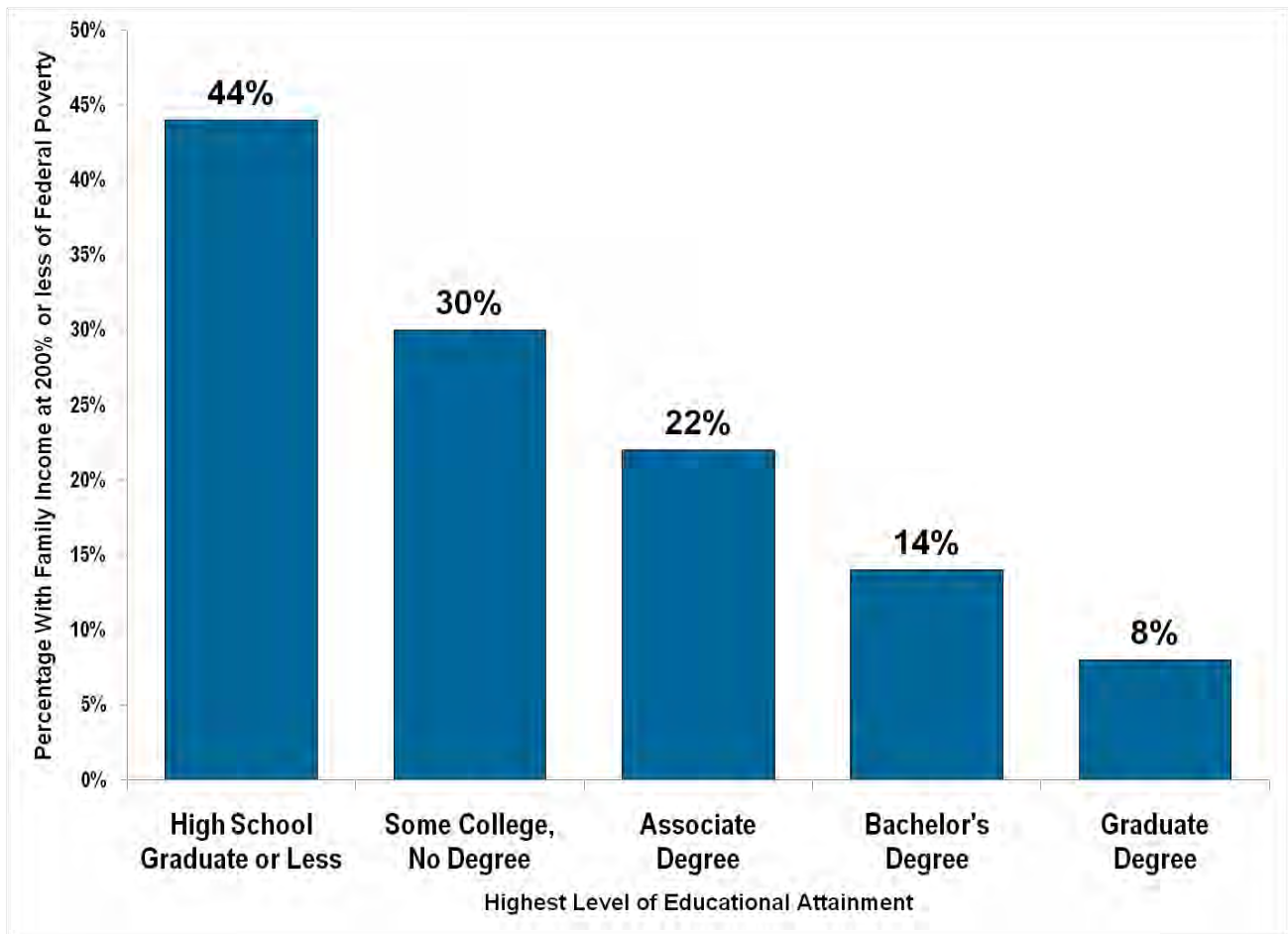


Source: Washington State Population Survey, 2008.

Poverty levels decline as education levels rise

The financial rewards that accompany higher levels of educational attainment allow many college graduates to live lives that are well above the poverty level. The poverty rate for Washington households supporting bachelor's degree recipients is one-third the rate of households supporting high school graduates only.⁵

Poverty Level by Educational Attainment
2007 Family Income, Ages 25-64



Source: Washington State Population Survey, 2008.

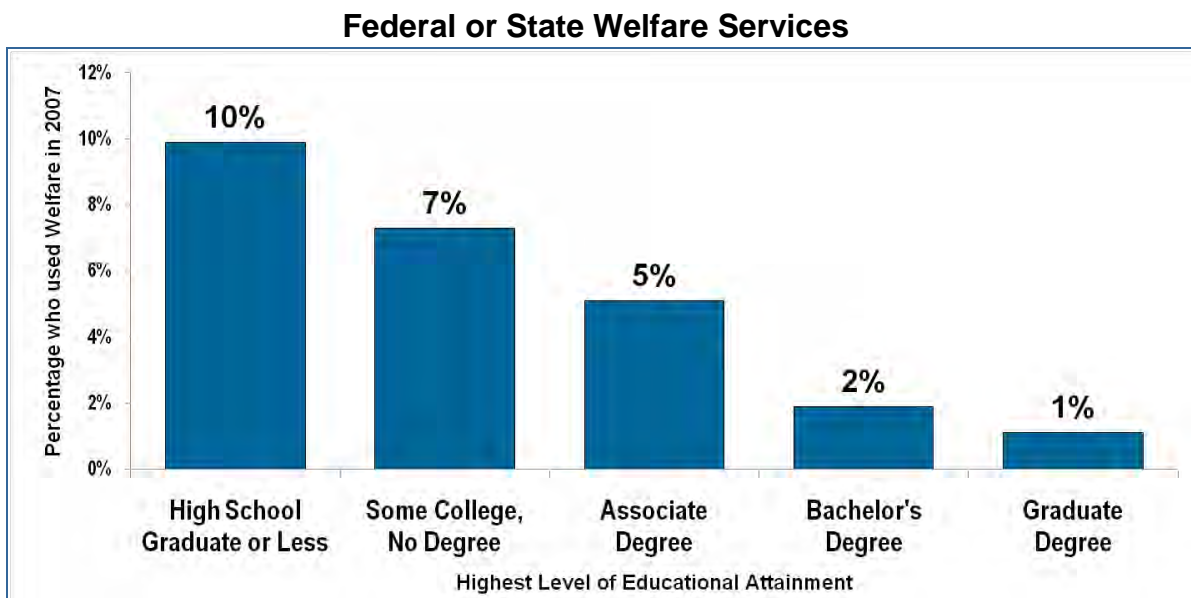
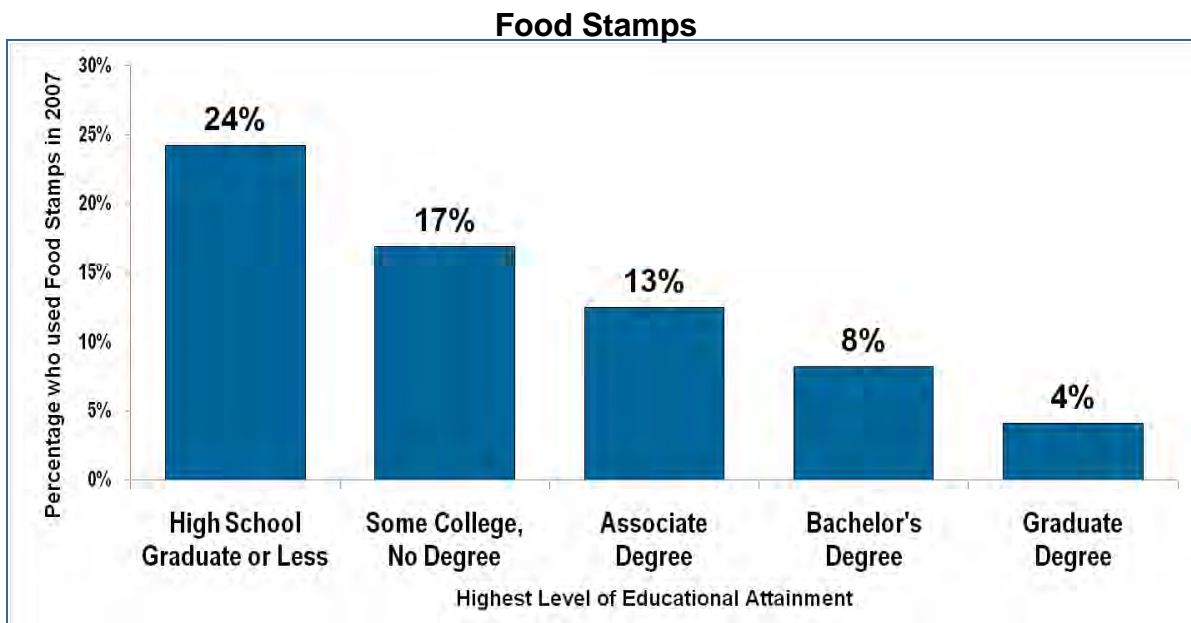
⁵ Baum, S., & Ma, J. (2007). Education Pays. The Benefits of Higher Education for Individuals and Society. New York, New York: College Board.

Increasing education reduces reliance on federal and state social services

The economy's demand for workers with college degrees or certificates means added financial benefits and job security for many of Washington's more highly educated workers. Among college-educated and trained workers, one result is reduced reliance on federal or state social service programs, such as food stamps or federal and state welfare programs.

Reducing the cost of social programs by enabling more families to remain economically self-sufficient is another long-term benefit of continued public investment in higher education.

2007 Use of Federal or State Services by Educational Attainment, Ages 25-64



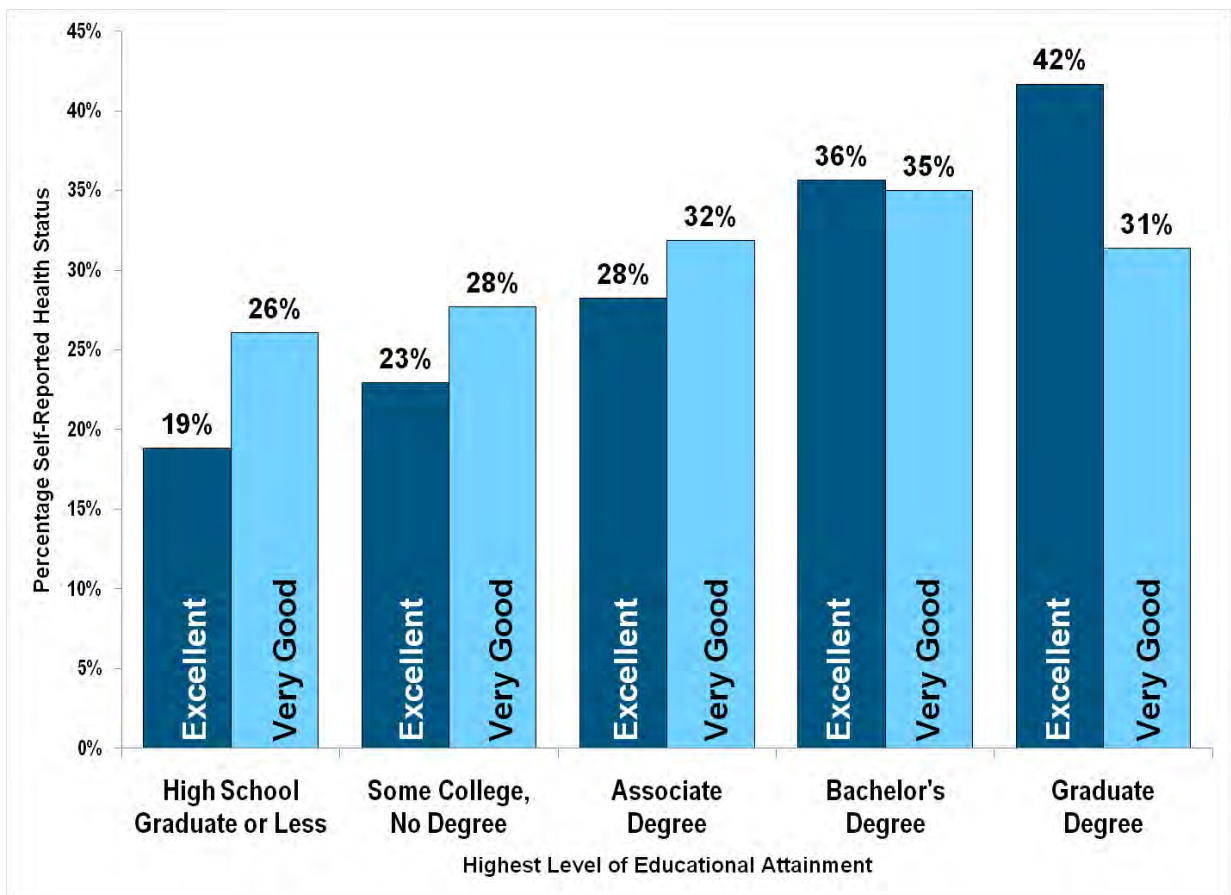
Source: Washington State Population Survey, 2008.

Educated people report feeling healthier

Reducing health care costs and improving the overall health of the population continues to be a major challenge for state and federal governments. Educational level appears to have a relationship to healthy behaviors and perceptions of overall health. For example, studies suggest that college graduates were more likely to heed widespread public warnings about the serious health effects of smoking than those with less education. By 1970, the smoking rate among college graduates had declined to 37 percent, compared to 44 percent for high school graduates.⁶

Nationally, at every age and income level, individuals with higher degree attainment report better health than those with less postsecondary education.⁷ In Washington, the percentage of residents who perceive that their health is either excellent or very good also increases with higher levels of educational attainment.

Self-Reported Health by Educational Attainment
As of Spring 2008, Ages 25-64



Source: Washington State Population Survey, 2008.

⁶ National Center for Health Statistics. (2005). National Health Interview Survey. As cited by Baum, S., & Ma, J. (2007). Education Pays. The Benefits of Higher Education for Individuals and Society. New York, New York: College Board.

⁷ National Center for Health Statistics. (2005). National Health Interview Survey. As cited by Baum, S., & Ma, J. (2007).

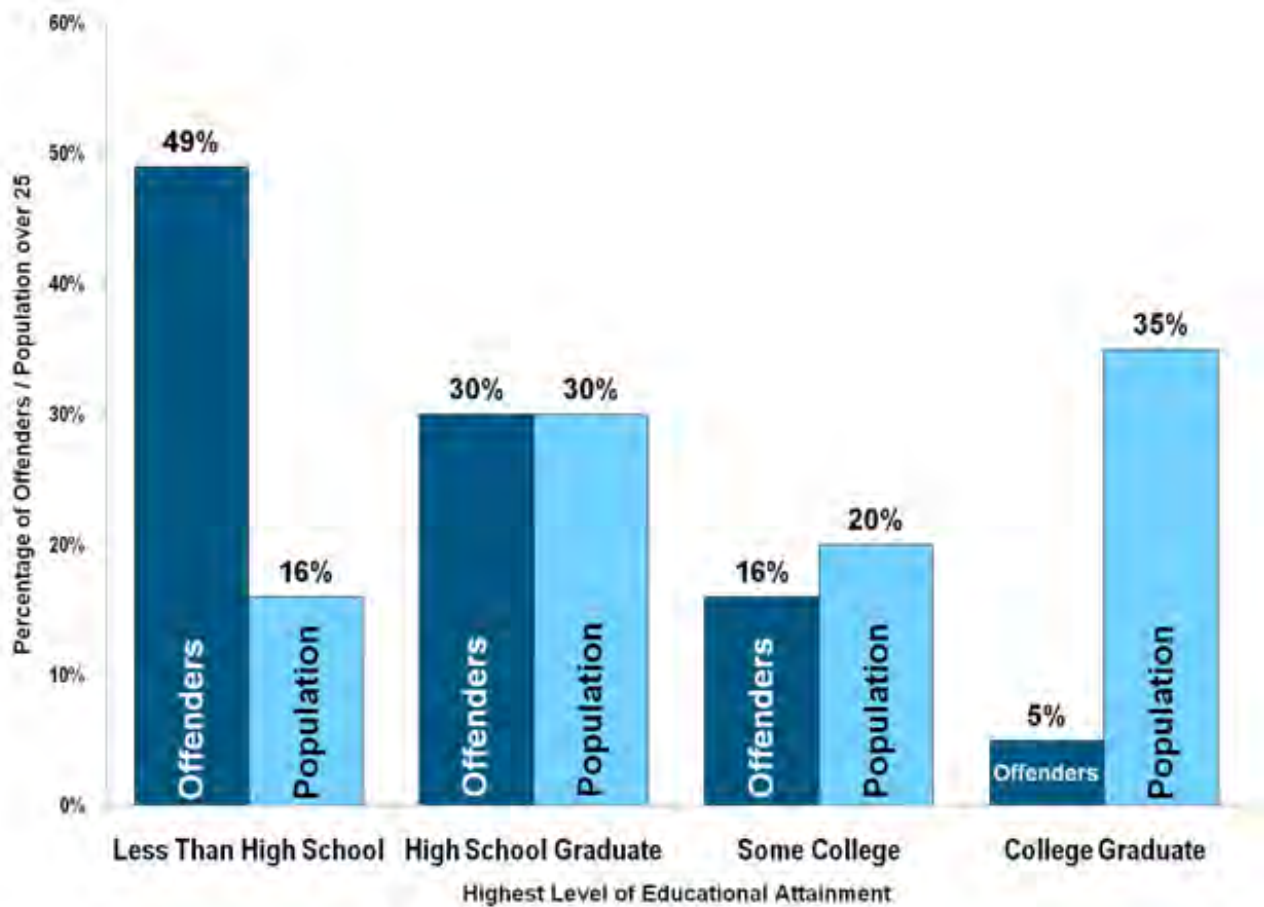
Education reduces propensity of criminal behavior

Studies have long shown a relationship between level of educational attainment and crime. Research exploring this relationship within Washington state could not be found, but national studies suggest that the likelihood of committing a criminal act declines as an individual's education level rises.

The U.S. Department of Justice provides data on offenders sentenced in U.S. District Court by education level. The data show a clear relationship between sentencing and level of education. While 15.5 percent of the U.S. population 25 or older have less than a high school diploma, those with less than a diploma make up nearly half of those sentenced. At the same time, those with a college degree make up 35 percent of the U.S. population but only account for 5.4 percent of those sentenced.

2008 Offenders Sentenced in U.S. District Courts as compared to United States Population 25 and Over, by Education Level

Offenders Sentenced under the U.S. Sentencing Commission Guidelines



Source: Sourcebook of Criminal Justice Statistics Online, www.albany.edu/sourcebook/pdf/t5282008.pdf, Table 5.28.2008.

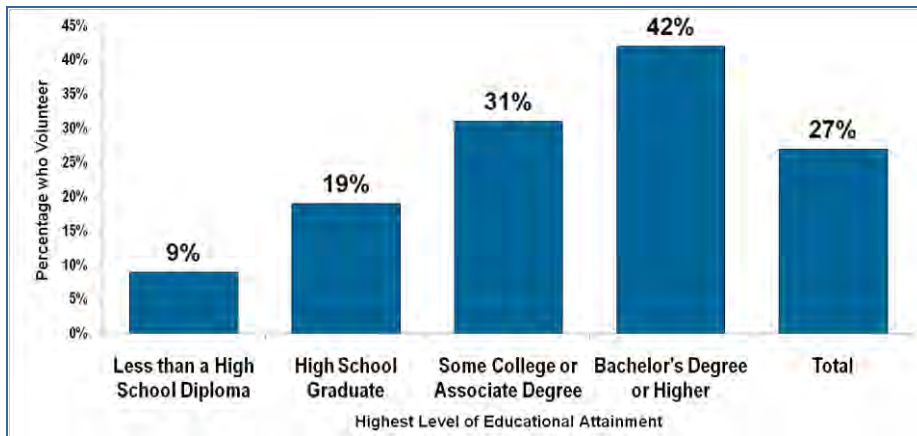
Education influences voting behavior and volunteerism

Society benefits when citizens actively engage in the democratic process and contribute time and resources to improve their communities. Evidence suggests that increasing levels of education are associated with increased voting behavior and participation in charitable or public service activities.

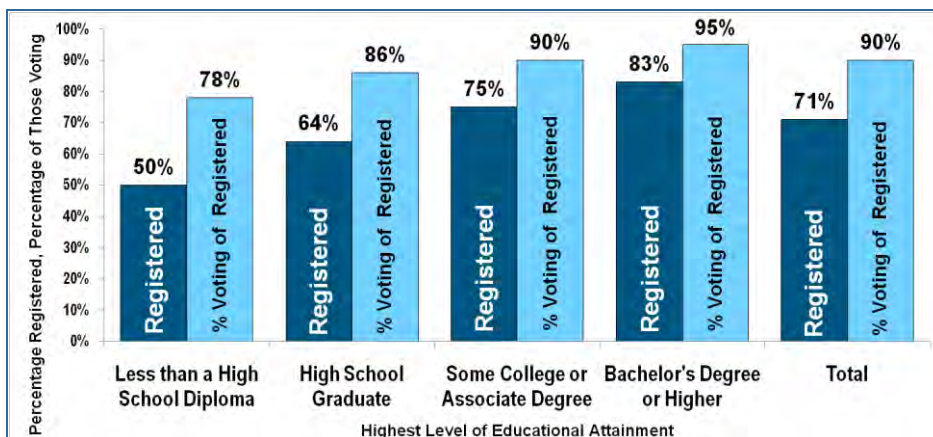
U.S. Census surveys conducted following recent national elections show that adults with higher levels of education are more likely to vote than those with less education. In another Census survey, the percentage of individuals aged 25 and older who engaged in volunteer activities also increased with higher levels of postsecondary education.

Rather than indicating a lack of interest in voting and volunteerism, these findings may suggest that at least some less-educated people face greater hurdles to participation than those with more education. For example, following the November 2008 general election, nearly 40 percent of non-voting survey respondents with high school diplomas or less reported “illness or disability” as a reason for not voting, compared to 23 percent of those with at least some college. Those with less education were also more than twice as likely to report “transportation problems” as a reason for not voting.

2007 United States Volunteerism by Educational Attainment



November 2008 U.S. Voter Registration and Participation



Sources: Volunteerism: Supplement to the September 2007 Current Population Survey. Sponsored by the Corporation for National and Community Service. Voting: U.S. Census Bureau, Current Population Survey 2008.

Chapter VII: Challenges Now and in the Future

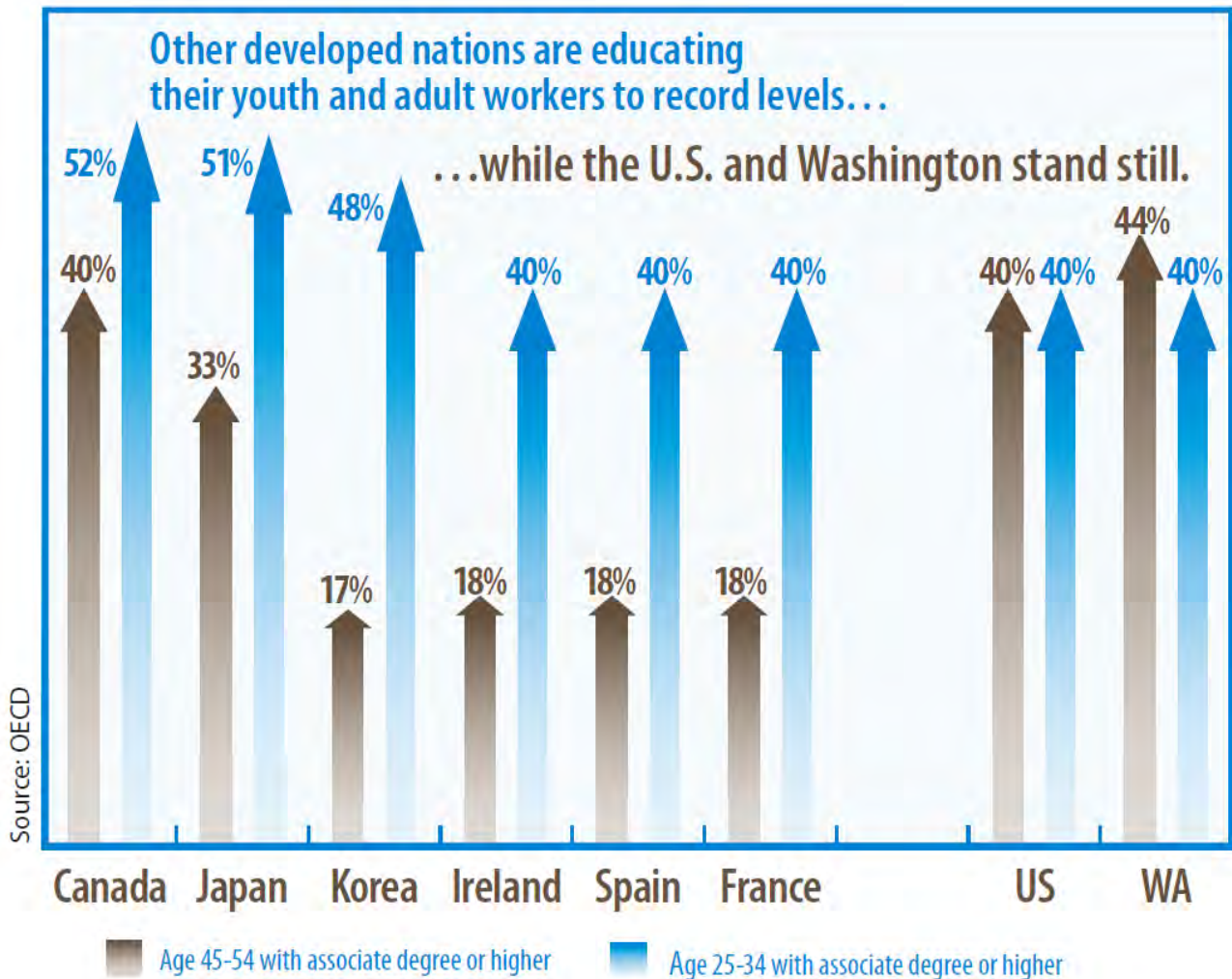


Many younger Washington residents have lower education levels than their parents

Higher education investments in the second half of the 20th Century helped make Washington’s baby boom generation the most educated in state history. That commitment to expand the higher education system helped baby boomers transform Washington’s economy and achieve a high level of financial well being.

But now, many baby boomers are approaching retirement age and their children and grandchildren are not reaching the same levels of educational attainment. That means a smaller proportion have the knowledge and skills necessary to fill today’s education-intensive jobs and to advance the state economy to the next level in an increasingly competitive world.

The bar chart below shows that younger adults in other countries have substantially improved degree attainment compared to their parents’ generation, while younger adults in the U.S. and Washington have not.

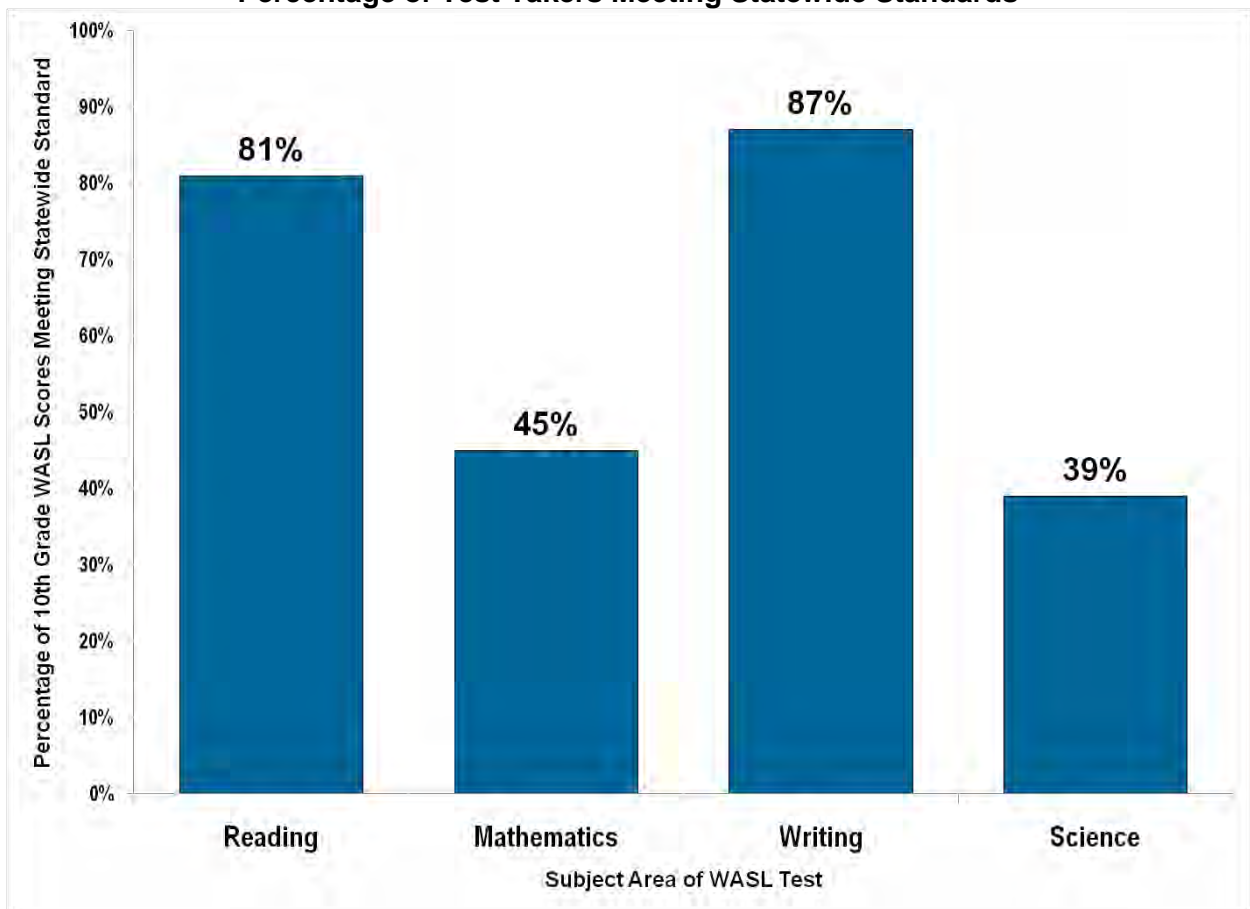


Final year's WASL results show need for continued improvement in science and math

Insufficient academic progress at the K-12 level continues to be a major impediment to the successful completion of college-level work. This is especially true in the areas of science and mathematics, which constitute the educational cornerstones for many of Washington's higher-paying career fields.

The Washington Assessment of Student Learning (WASL) was the state's primary tool for assessing academic progress in the K-12 system from the spring of 1997 until October 2009. The WASL is now being replaced by new assessment tools for grades 3-8 and for high school. While the WASL was controversial, the final year's statewide test results are at least suggestive of performance levels for 10th graders in various subject areas. The results show a particular need for improvement in math and science subjects.

**2008-09 Washington Public Schools 10th Grade WASL Scores
Percentage of Test Takers Meeting Statewide Standards**



Source: Office of Superintendent of Public Instruction, 2009 Washington State Report Card Data.

Nearly a quarter of bachelor's graduates successfully complete remedial coursework

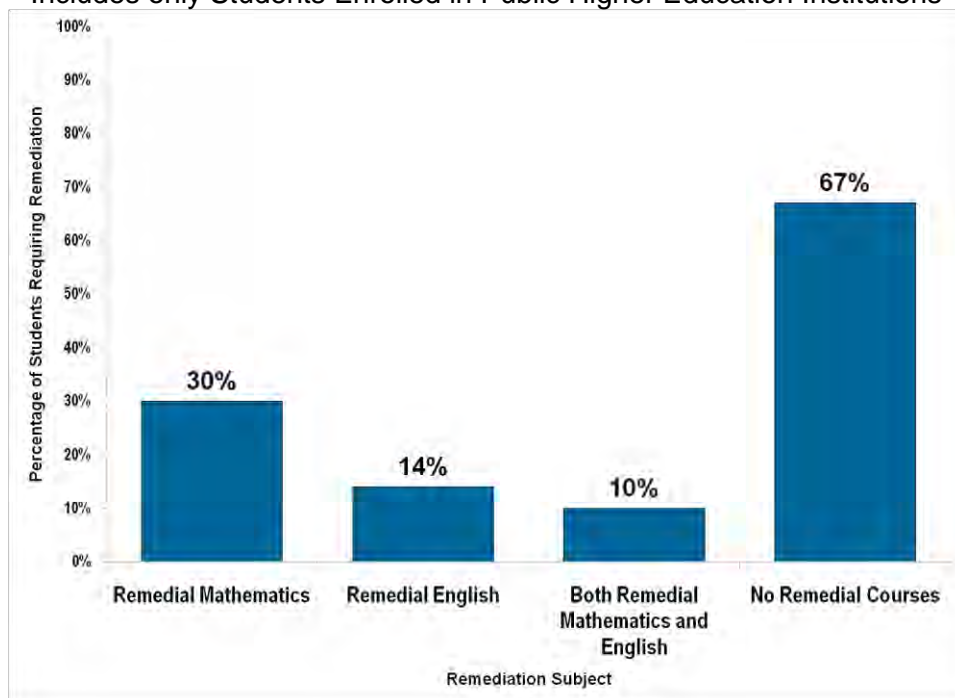
Students enter college with differing skill levels in subjects that are essential to successful completion of degree programs. Many require additional pre-college level coursework. This is most common in English and math and, particularly in math, occurs more often among older students who experience gaps in their education between high school and college.

State high school graduation requirements currently are not aligned with college entrance requirements. Particular problem areas are math and, to a lesser extent, English. In both cases, high school students may graduate without the necessary courses to meet college admission standards. The math requirement will be in alignment for the majority of students in the graduating class of 2013. The English requirement will not be in alignment unless the State Board of Education fully implements its CORE 24 credit framework, which outlines credit requirements needed to prepare students for life after high school. However, 79 percent of students completed English courses needed to meet the minimum college admission requirements.¹

In a recent study, the HECB found that among students graduating from public baccalaureate institutions in 2005-06, over 4,500 (23 percent of the graduates) had successfully completed remedial coursework in English or math at a CTC prior to transfer. In addition, 35 percent of STEM graduates ($n=232$) and 50 percent of business graduates ($n=505$) took pre-college math coursework.

Percentage of High School Graduates Enrolled in Remedial Coursework, Class of 2007

Includes only Students Enrolled in Public Higher Education Institutions



Source: WSU Social and Economic Services Research Center for the Office of Superintendent of Public Instruction, *Washington State Graduate Follow-up Study, Class of 2007*.

¹ Personal Communication, Kathe Taylor, State Board of Education.

² *A Stronger Nation through Higher Education* (February 2009), Lumina Foundation for Education.

Chapter VII: Challenges Now and in the Future

Traditionally non-college-going groups are increasing in the K-12 system

Washington's population is growing racially and ethnically more diverse, a trend that is expected to continue in the years ahead. This is reflected in the growing percentages of minority students in the state's K-12 system. Some of these groups experience higher high school dropout rates and lower levels of college participation than the majority population.

As the minority population continues to grow, the goal of increasing college degree and certificate production will require additional efforts to reduce dropout rates, improve performance, and provide students with the skills and resources necessary to help them succeed at the college level.

Washington State Forecasted Population Age 5-19, by Race/Ethnicity, 2000 to 2030

Race/Ethnicity	Forecast Year						
	2000	2005	2010	2015	2020	2025	2030
Population Age 5-19							
White	945,474	906,869	900,721	903,407	951,040	991,418	1,012,948
Black	49,416	56,851	54,723	52,636	52,616	57,457	59,715
American Indian and Alaska Native	24,229	23,516	22,275	20,953	21,955	23,545	24,382
Asian and Pacific Islander	75,431	82,037	101,144	117,457	134,928	145,813	154,661
Two or More Races	56,587	63,222	70,278	81,775	94,937	114,002	129,756
Hispanic	137,576	171,044	203,955	223,439	232,041	246,552	261,943
TOTAL	1,288,713	1,303,539	1,353,096	1,399,667	1,487,517	1,578,787	1,643,405
Percentage of Population Age 5-19							
White	73%	70%	67%	65%	64%	63%	62%
Black	4%	4%	4%	4%	4%	4%	4%
American Indian and Alaska Native	2%	2%	2%	1%	1%	1%	1%
Asian and Pacific Islander	6%	6%	7%	8%	9%	9%	9%
Two or More Races	4%	5%	5%	6%	6%	7%	8%
Hispanic	11%	13%	15%	16%	16%	16%	16%
TOTAL	100%	100%	100%	100%	100%	100%	100%

Note: Unrounded numbers are not meant to imply precision.

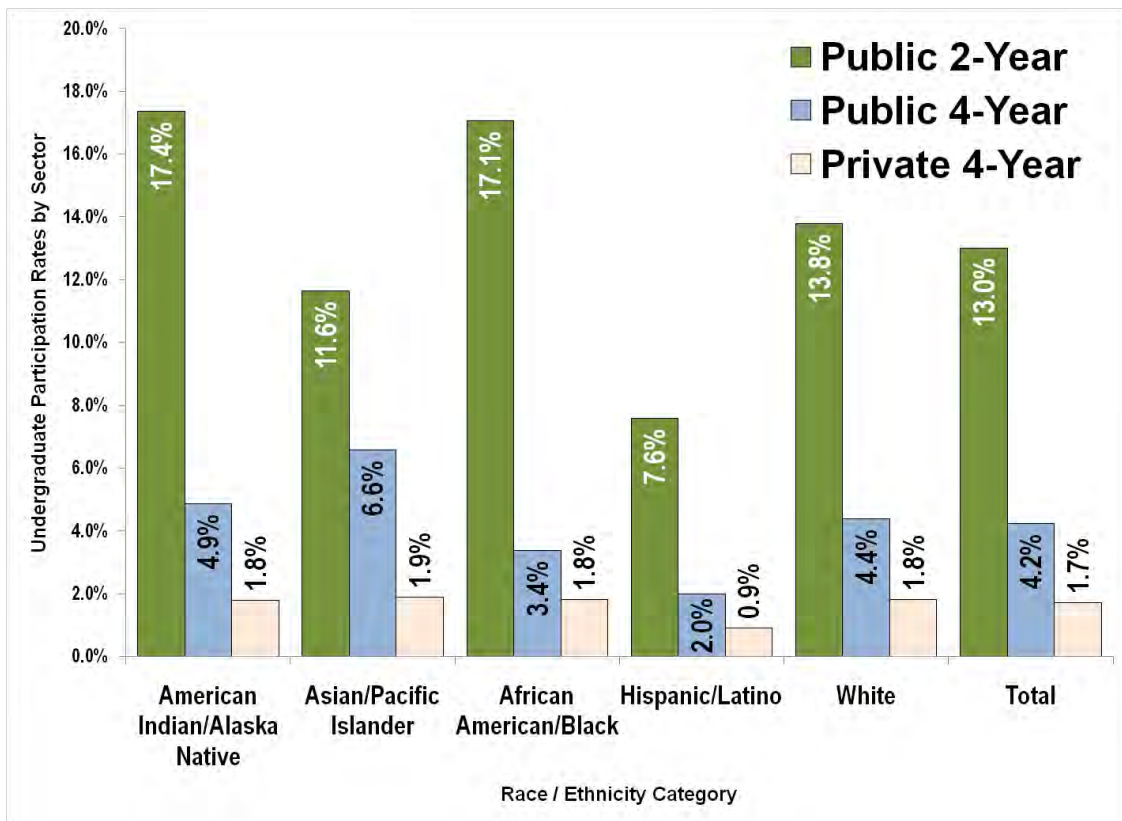
Source: Office of Financial Management, Projections of the Total Population by Age, Gender and Race (including Hispanics) for the State of Washington: 2000-2030, March 2006.

Some racial and ethnic groups have higher college participation rates than others

Racial and ethnic groups differ in their rates of college participation. Variations in family income may account for some of the differences. In addition, a lack of family history of college participation may influence the degree to which subsequent generations are encouraged to pursue postsecondary education.

Among racial and ethnic groups, college participation also varies by the type of institution. For example, participation by 18-44 year-old African Americans is higher than the state average at community and technical colleges, but below the state average at public four-year institutions. Hispanics, the state’s fastest-growing racial and ethnic group, have lower than the state-average participation rates at both community and technical colleges, and public and private baccalaureate institutions.

**Undergraduate Headcount Participation Rates
by Race/Ethnicity and Sector, 2007-08
Population Ages 18-44**



Notes: To align with IPEDS enrollment data, census data for Asians and Pacific Islanders are combined and multiracial distributed among Hispanics and racial groups, except whites. Students with unknown status are then distributed among all the racial/ethnic groups. Nonresident aliens are not included in the analysis.

Sources: Integrated Postsecondary Education Data System, National Center for Education Statistics for 12-month unduplicated enrollments, various academic years. Census Bureau for populations data, downloaded October 26, 2009, from <http://www.census.gov/popest/datasets.html>.

Groups vary in levels of degree attainment relative to their share of the population

As the percentage of Washington citizens from diverse ethnic and racial groups has grown, so has the overall percentage of students from these groups who earn bachelor's degrees at Washington's public and private colleges and universities. In fact, the percentage of minorities who earn bachelor's degrees has grown at a faster pace than their overall share of the population.

However, a closer look shows that minority groups vary in their levels of degree attainment. For example, the percentage of all students earning bachelor's degrees who are Hispanic/Latino is lower than their percentage of the overall population.

As the state's minority population expands, achieving the goal of increased degree production will require continued emphasis on improving degree attainment rates among groups that have had lower levels of college success in the past.

Proportionate Representation of Race/Ethnicity Groups In 2008 Washington Population and 2007-08 Degrees Awarded

Race/Ethnicity	2008 Population	Associate's Degree	Bachelor's Degree	Advanced Degrees
American Indian/ Alaska Native	1.5%	1.6%	1.6%	1.7%
Asian/Pacific Islander	8.3%	8.6%	13.2%	9.4%
African American/Black	3.7%	3.8%	3.3%	3.3%
Hispanic/Latino	8.9%	7.0%	5.1%	4.2%
White	77.6%	79.1%	76.9%	81.4%

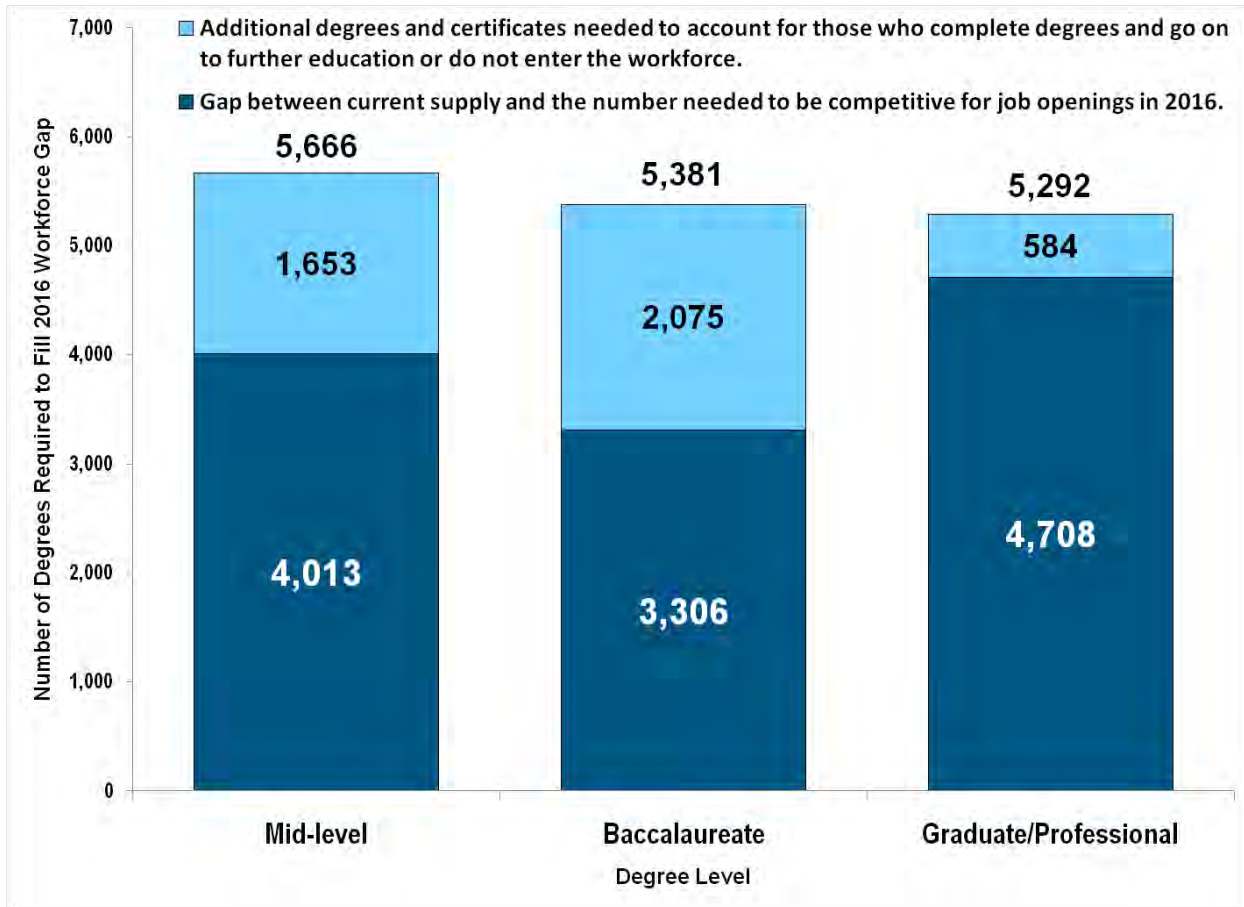
Sources: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2008. U.S. Census Bureau.

Higher education falls short of meeting demand for educated workers

As Washington’s economy continues to develop, workforce forecasting suggests a growing gap between the number of degrees needed to fill emerging jobs and the number being supplied by the state’s higher education institutions. The gap exists across all levels of postsecondary education.

As the chart below illustrates, Washington will need to produce more degrees than the number of jobs that will be available for those degree holders in 2016. The reason is that some graduates at each level choose to continue their educations or pursue non-work activities rather than immediately enter the workforce. Because education is cumulative (a student cannot be admitted to a graduate program without a baccalaureate degree), many of these continuing students eventually help fill the demand for employees in jobs that require higher levels of education.

2016 Certificate and Degree Supply Gaps by Education Level



Source: Higher Education Coordinating Board, State Board for Community and Technical Colleges, and Workforce Training and Education Board Joint Report, *A Skilled and Educated Workforce*, March 2009.

Washington has a pool of students who started college, but never finished

Thousands of Washingtonians have completed at least some college but, for many reasons, have not earned college degrees or certificates. By focusing on the almost 440,000 Washington residents age 18-44 who in 2007 had earned “some college but no degree” and were not currently enrolled in college, the state could “begin to turn the tide fairly quickly”² in growing degree production.

Encouraging more to return to the higher education system to finish degree or certificate programs is one strategy for helping the state fill the growing demand for college-credentialed workers.

**Washington's Residents Age 18-44
Whose Highest Educational Attainment is "Some College, No Degree"**

By Race/Ethnicity	Total with "Some College, No Degree"	% Not Enrolled in College	# Not Enrolled in College
American Indian/ Alaskan Native	5,731	72%	4,110
Asian/Pacific Islander	39,116	61%	23,832
African American/Black	29,275	65%	19,170
White	483,864	71%	344,503
Multi-racial	24,741	63%	15,634
Hispanic	45,632	72%	32,683
TOTAL	628,359	70%	439,932

Source: American Community Survey, 2007, U.S. Bureau of the Census.

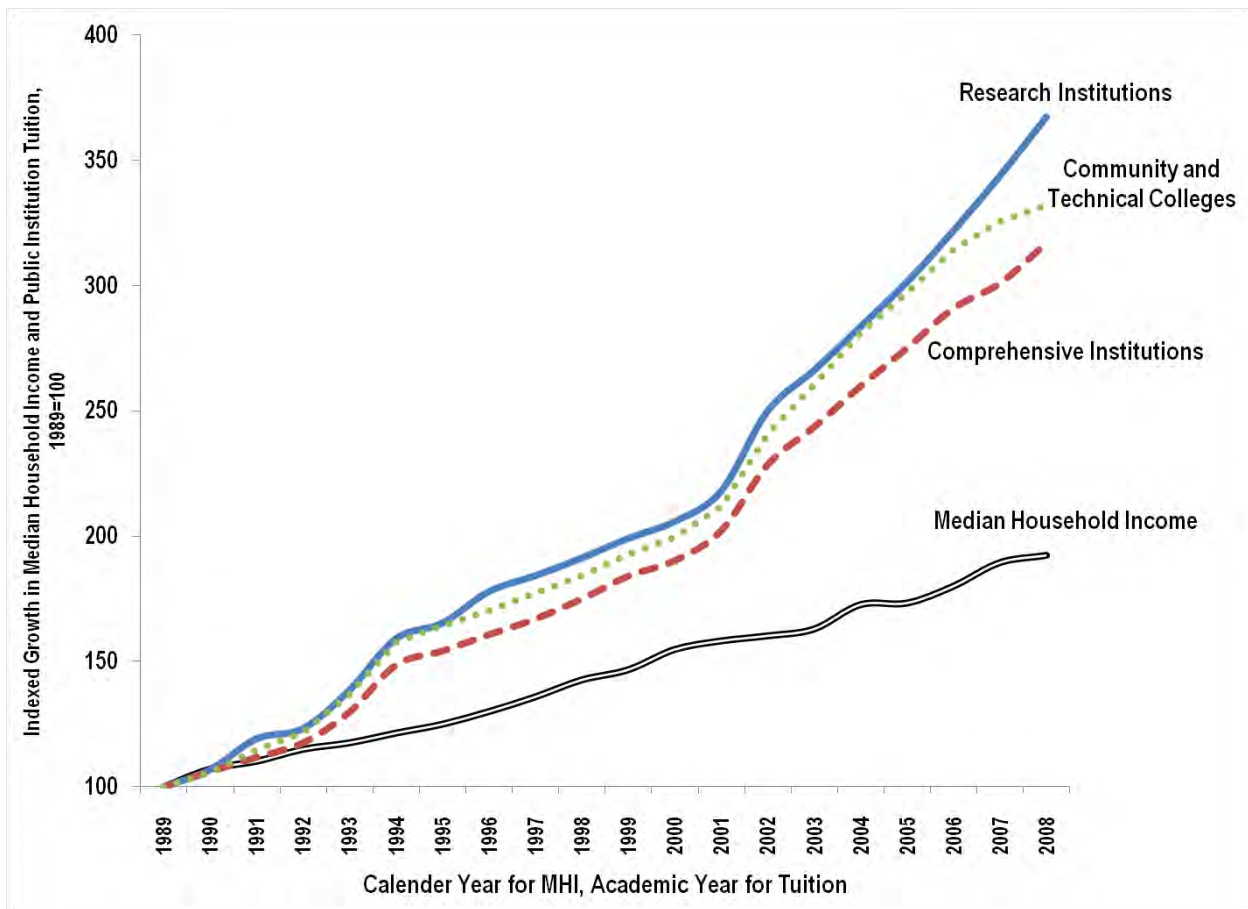
² *A Stronger Nation through Higher Education* (February 2009), Lumina Foundation for Education.

Cost of tuition is increasing faster than personal income growth

College tuition and fees have outpaced family income growth in Washington for more than two decades. This has been the case in each sector of higher education.

The resulting decrease in college affordability for Washington students has been compounded by increasing levels of consumer debt, higher health care costs, and a rising cost of living. Middle-income families and individuals – those who do not qualify for most student financial aid programs – find it harder to save for college and the dollars they do save buy less education than in the past.

Washington Median Household Income and Resident Undergraduate Tuition by Sector, 1989-2008, Indexed, 1989=100



Sources: Office of Financial Management for median household income; Higher Education Coordinating Board Tuition Survey.

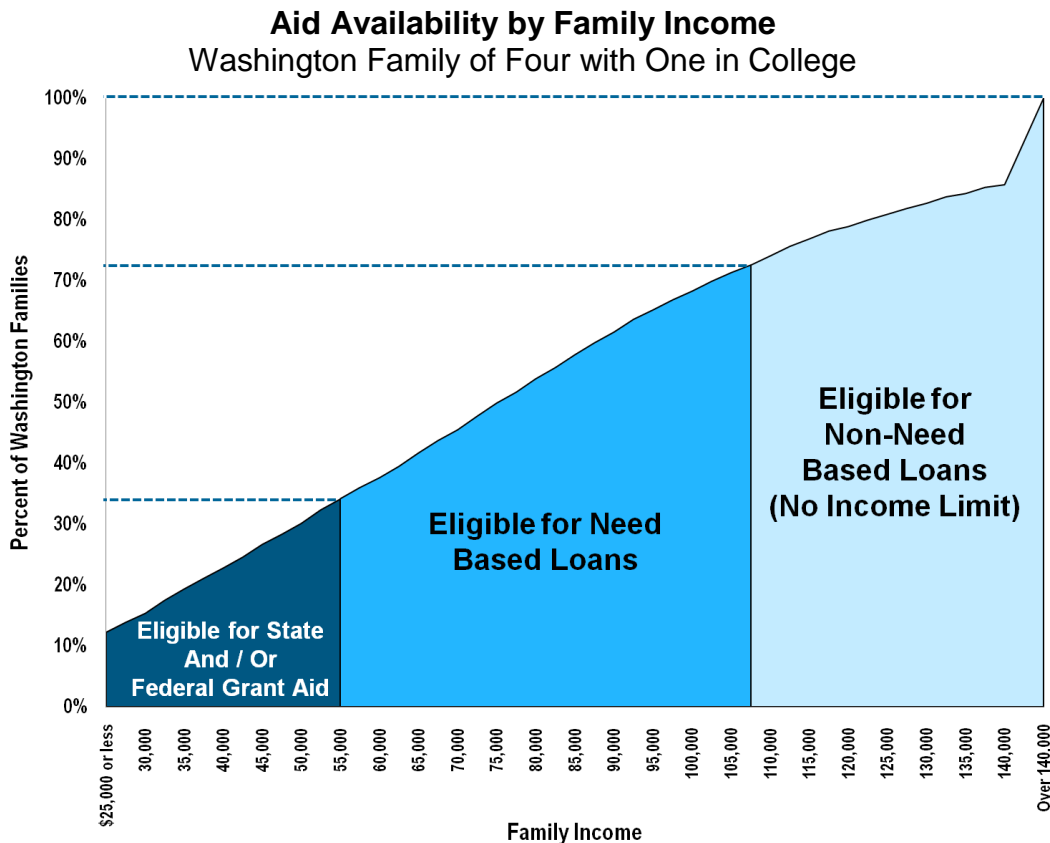
For families, the total cost of college depends on the institution and its tuition rate

Because the cost of instruction is higher at some public and private colleges and universities, the cost of attendance also is higher. Absent loans, scholarships, or other forms of financial assistance, some families will need higher levels of personal income or savings to enroll students in more expensive institutions.

Differing tuition rates are a major factor contributing to differing attendance costs. As tuition increases, the overall cost of attendance and, consequently, family income requirements also rise, unless these increases can be offset by financial aid through grants, scholarships, and loans – from federal, state, institutional sources, or personal family savings.

The table below shows family income cut-off points for various sources of aid based on family income and attendance at one of the state’s public research universities. A family of four sending an 18-year-old unmarried student to one of Washington’s research universities during the 2009-10 academic year needed an annual income of \$108,500, absent other sources of financial assistance, family savings, personal savings, or GET savings.

As the chart shows, there is no income limit on non-need based loans. A family of four that earns less than \$108,500 with a student attending a Washington research university would likely be eligible to receive at least some need-based loans. Seventy-four percent of four-member families in Washington fall into this income category. A similar family earning less than about \$55,000 (34 percent of families) would likely receive need based grants (state, federal, or both).



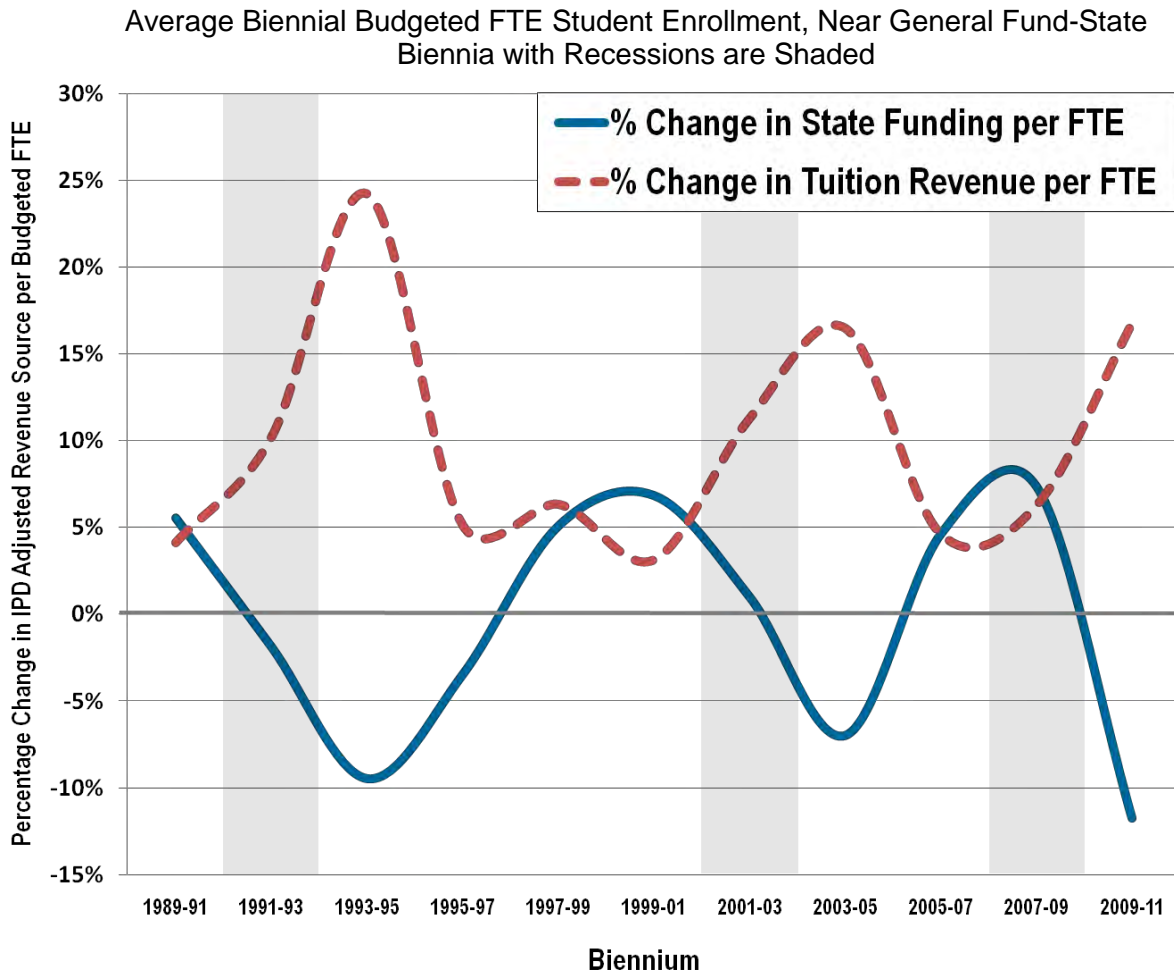
Sources: HECB analysis of financial aid data, American Community Survey Three-Year, 2005-07, dataset.

Economic cycles impact state support and tuition levels (percent change over time)

Washington has a history of state support for higher education going back to the mid-19th Century. But unlike basic education, that support is discretionary. State government is not required to provide a particular level of higher education for its citizens.

Higher education historically has represented the largest source of discretionary funding in the state operating budget. During times of declining state revenue, leaders often have reduced state support for higher education to help balance the budget. At the same time, they have shifted more of the cost of higher education to students by raising tuition and fees. When the revenue picture improves, state funding for higher education has grown at a faster rate than tuition.

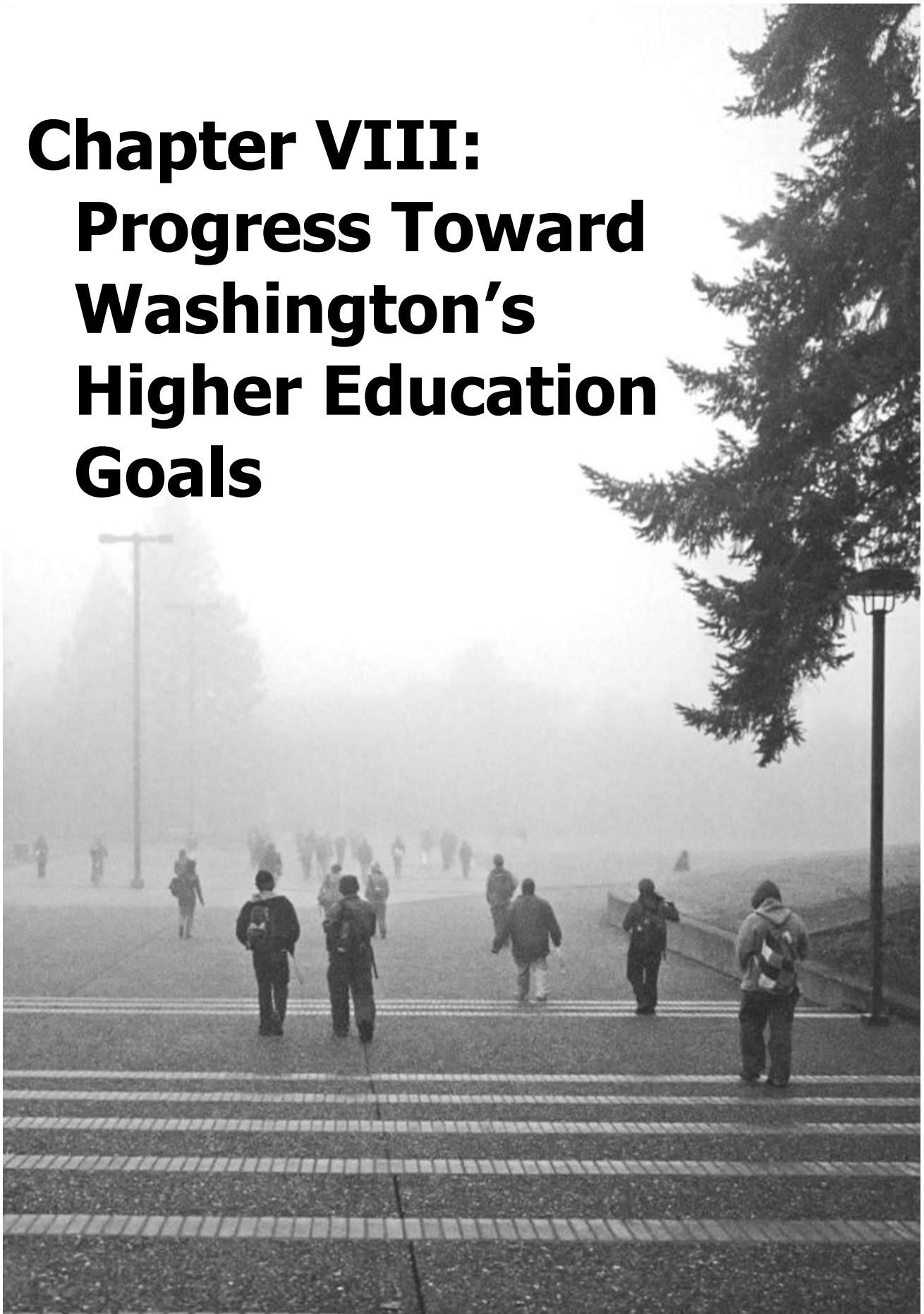
Percentage Change in IPD Adjusted State Biennial Funding Per Budgeted FTE for Higher Education as Compared to Percentage change in IPD Adjusted Tuition Revenue per FTE



Notes: 2009-11 Funding and FTE levels reflect enacted 2009-11 budget.

Sources: Higher Education Coordinating Board analysis of Legislative Evaluation and Accountability Program Committee higher education finance data.

Chapter VIII: Progress Toward Washington's Higher Education Goals

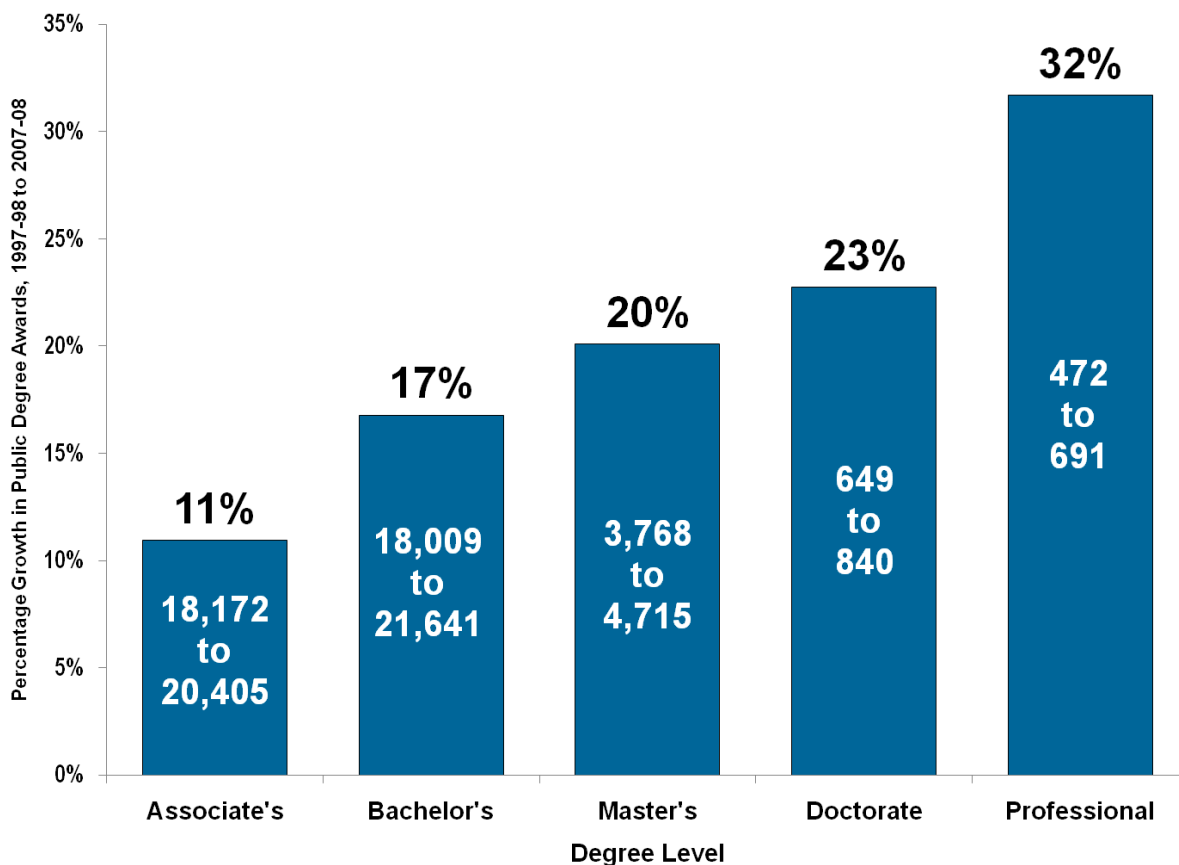


Degree production has grown over the past decade

The number of degrees awarded by Washington's public and private four-year colleges and universities has steadily risen over the past decade. This was true for bachelor's, master's, doctorate, and professional degrees.

In the public sector, degree production growth reflects increased higher education funding over the decade in response to increasing levels of demand. Reductions in the higher education budget due to the state's current fiscal challenges could reduce the number of spaces available for students pursuing college degrees.

**Washington Public Institution Degree Award Growth by Award Level
1997-98 to 2007-08**



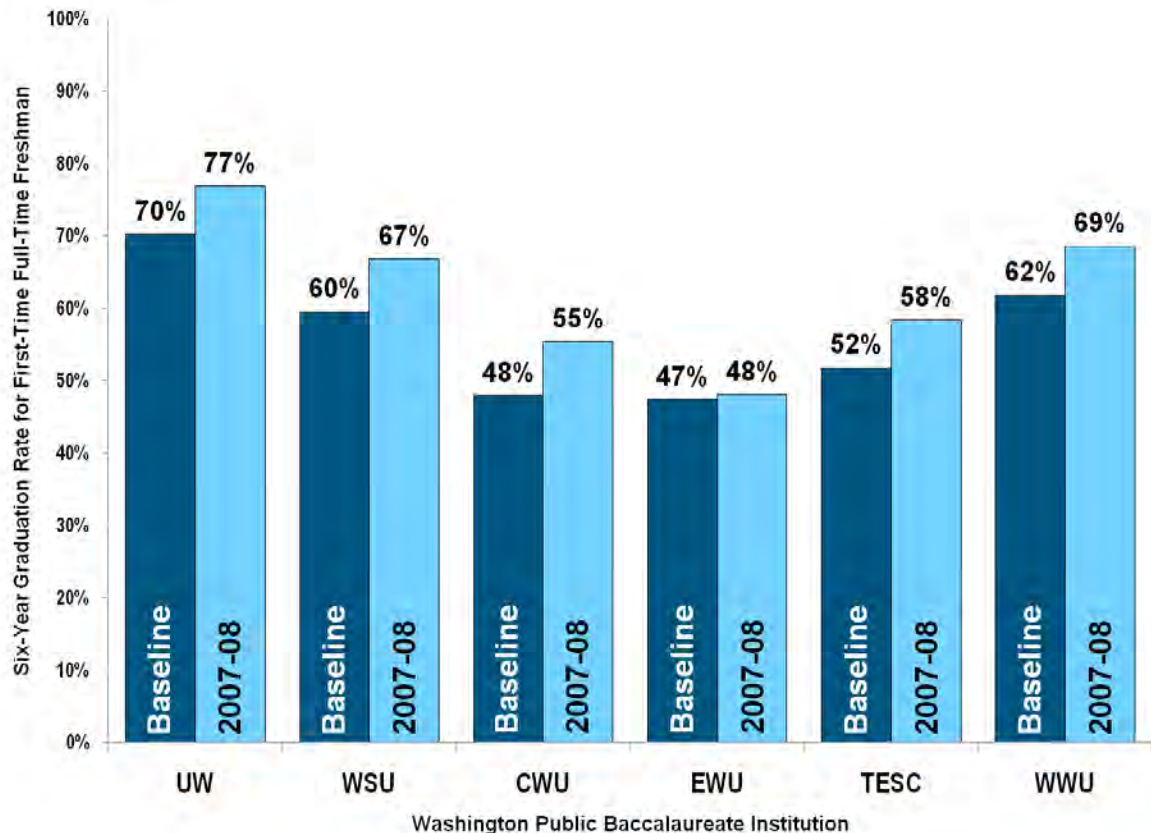
Source: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2008.

State baccalaureate institutions producing degrees at faster pace

Many students today take more than four years to finish college, often because of work and family commitments. The U.S. Department of Education reports that students earning bachelor’s degrees take, on average, about 55 months to complete degrees—counting only those who didn’t stop for more than six months during this time. Those who attended multiple institutions took longer to complete degrees—59 months on average for those attending two institutions and 67 for those attending three.¹

In Washington, the percentage of students who enter public four-year colleges and universities as freshmen and earn baccalaureate degrees within six years has increased. This is a measure of increasing efficiency on the part of institutions in the production of baccalaureate degrees.

**Six-Year Graduation Rates, First-Time Full-Time Freshmen
Washington Public Institutions**



Note: Baseline is the annual average of 1997-98 to 2001-02.

Source: Higher Education Coordinating Board, *Higher Education Accountability Report*, 2007-08.

¹ Retrieved December 10, 2009, from <http://nces.ed.gov/fastfacts/display.asp?id=40>.

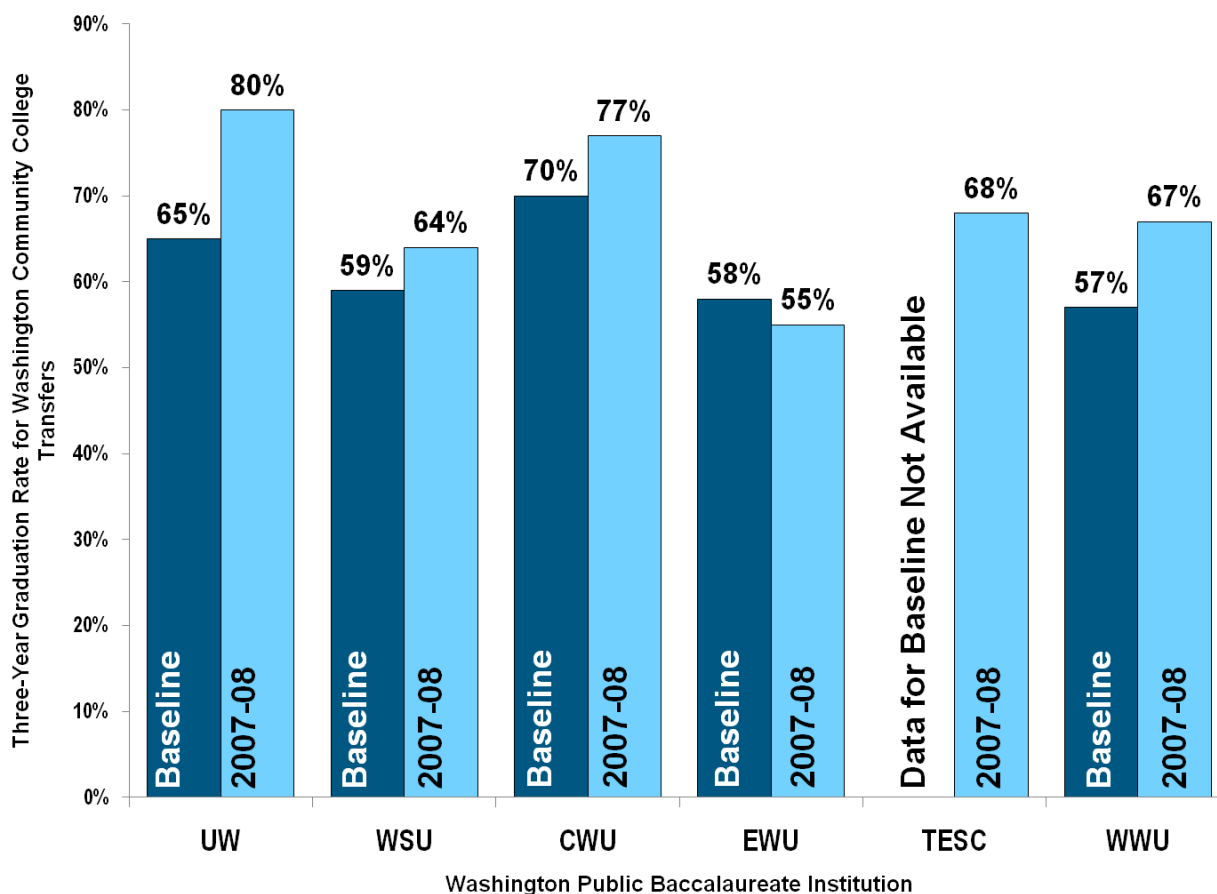
Graduation rate for transfer students has improved

The number of students who graduate within three years after transferring to Washington’s public baccalaureate institutions has increased by nearly 10 percent from a five-year baseline period of 1997-98 to 2007-08. This measure represents the performance of the higher education system as a whole, not just the two-year college system.

Completing degrees in a timely manner is important – doing so launches students’ careers more quickly, allowing them to become productive members of the workforce sooner and over a longer period. Timely completion also frees up space at colleges to serve more students. It is difficult to improve outcome measures like graduation rates, but Washington institutions are doing just that.

Washington Public Baccalaureate Three-Year Graduation Rate for Transfer Students with an Associate Degree from a Washington Community College

Baseline (Annual Average of 1997-98 to 2001-02) to 2007-08



Source: Higher Education Coordinating Board, *Higher Education Accountability Report*, 2007-08.

A large majority of Washington freshmen who attend four-year public institutions return for the sophomore year

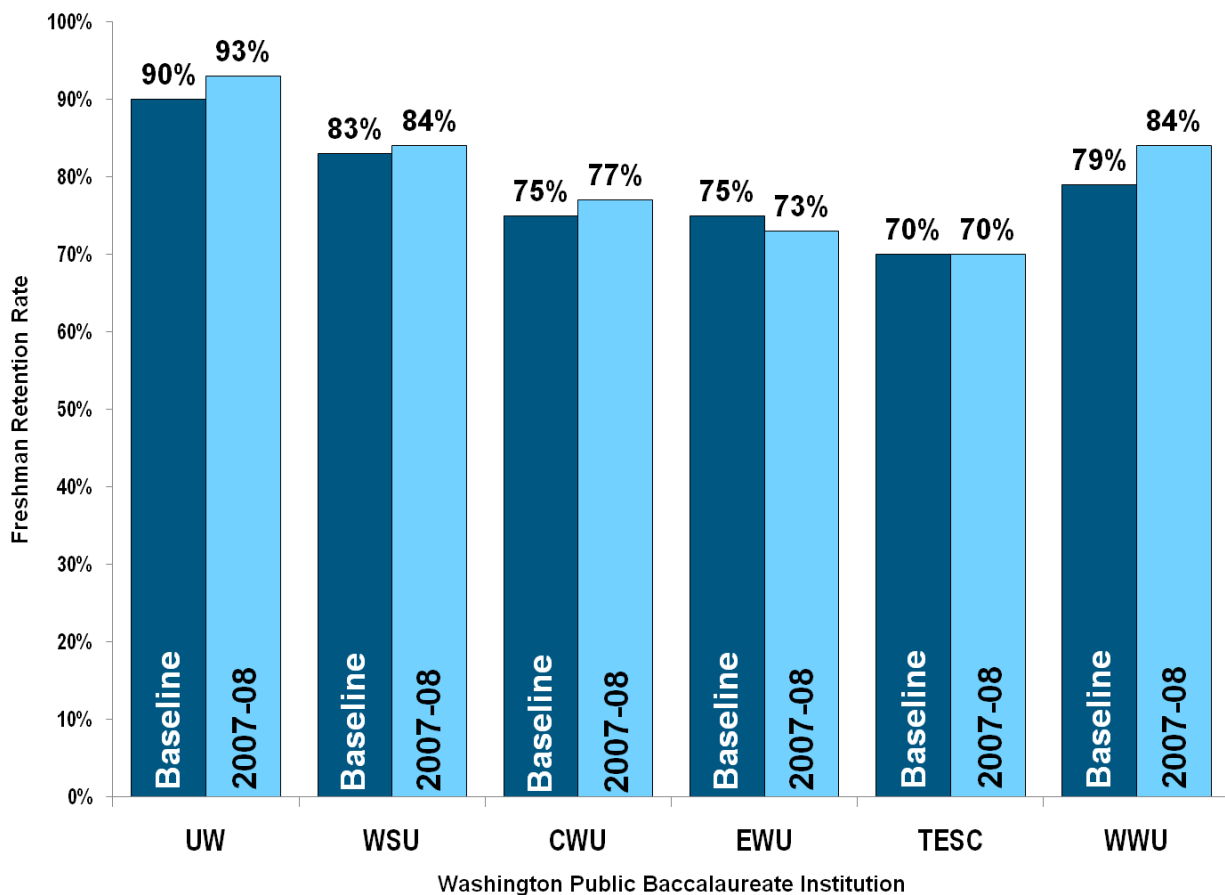
Enrolling more freshmen students is only the first step to increase degree production and make higher education available to more Washingtonians. Also critical is the successful transition from freshman to sophomore status.

In general, Washington public baccalaureate institutions see freshmen return for the second year of study at high rates consistently around 85 percent.

Institutions show variation in freshman retention rates, due in part to the differing mix of students they serve. Rates can also change over time. For example, Western Washington University's retention rate has risen from about 79 percent at the start of the decade to about 84 percent in 2007-08.

Freshmen to Sophomore Year Retention, Washington Public Baccalaureate

Baseline (Annual Average of 1997-98 to 2001-02) to 2007-08



Source: Higher Education Coordinating Board, *Higher Education Accountability Report*, 2007-08.

Colleges experience moderate growth in production of graduate degrees

The annual production of graduate degrees at Washington's public and private colleges and universities showed a moderate increase of about 15 percent between 2002 and 2008.

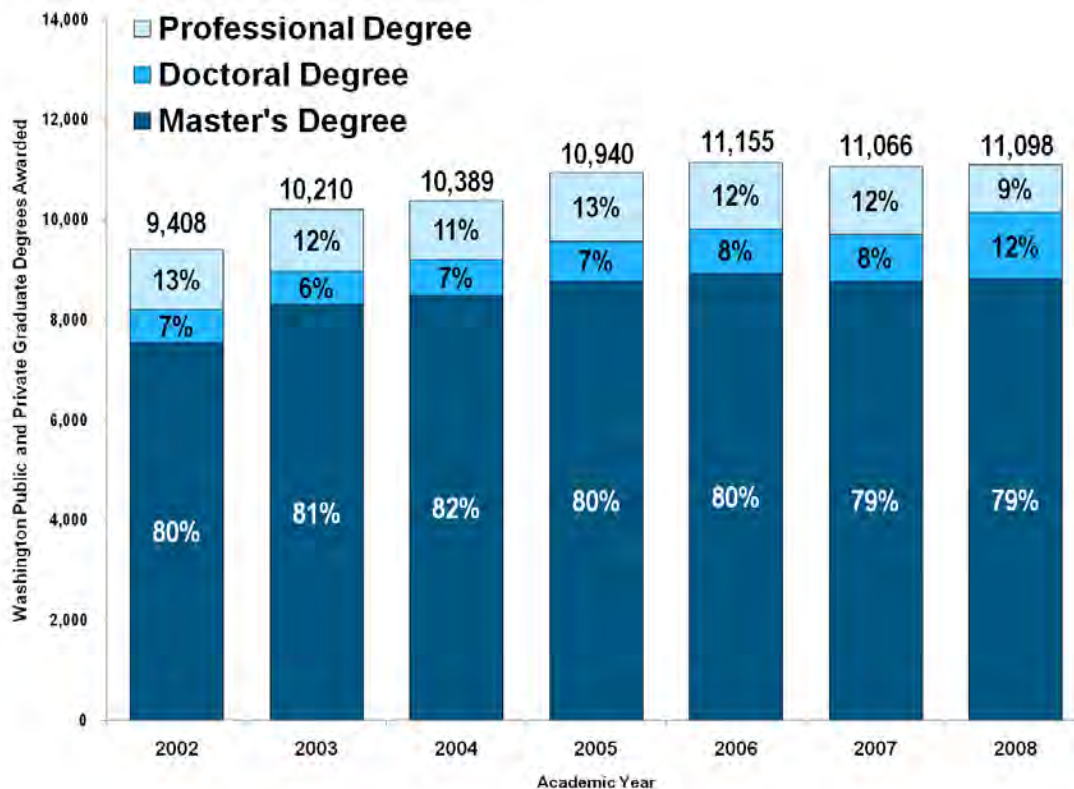
Among the public institutions, graduate degree production rose about 19.1 percent between a five-year baseline period from 1997-2002 until 2008.

Since the early part of the decade, graduate degree growth has been driven primarily by the University of Washington. A notable increase occurred at Eastern Washington University prior to 2004-05, but production has declined since then.

Not surprisingly, master's degrees are by far the most common graduate degree awarded. Business, Education, Health, and Social Sciences are the most common major areas of study.

About 90 percent of the state's doctoral degrees are produced in the state's public institutions, while private institutions play a more significant role in the production of master's and "first-professional" degrees (almost exclusively degrees in law and medicine). In 2008, nearly 46 percent of the state's master's and first-professional degrees were awarded by private institutions.

Graduate Degrees Awarded in Washington
Includes Public and Private Institutions Reporting Degrees Awarded in Washington



Note: Totals may not add due to rounding.

Source: Integrated Postsecondary Education Data System (U.S. Department of Education), fall 2008.

Public institutions produce biggest share of degrees in high demand fields

Although the current economic downturn has temporarily reduced overall demand for workers, demand appears to remain strong for certain occupations such as engineers and computer/software specialists. The long-term outlook, particularly in high demand fields, remains bright. Fields that are expected to continue to be in high demand include engineering, software engineering, computer science, architecture, and health care.

Washington relies heavily on public colleges and universities to produce baccalaureate and graduate degree holders in the high demand health and STEM fields (science, technology, engineering, and mathematics). In 2007-08, public institutions produced 77 percent of the baccalaureate and graduate degrees in the STEM fields, and 74 percent in the health fields.

Public institutions have greatly increased high demand degree production since 2001. The total number of high demand degrees and certificates awarded by public institutions has grown by 36 percent since 2001-02. Allied Health and Health Sciences and Construction Management have shown consistent and steady increases in degrees conferred since 2001-02. Allied Health and Health Sciences have grown a staggering 63 percent since 2001-02. The number of graduates in math, biological, and physical sciences has increased by 27 percent since 2001-02. Although the number of graduates in engineering leveled off last year, they remain 7 percent higher than the total for 2003-04.

Annual High-Demand Degree Awards, 2001-2008

High Demand Instructional Program Areas	Academic Year						
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Allied Health & Health Sciences	4,443	5,018	5,946	6,395	6,995	7,019	7,226
Computer and Information Sciences	1,435	1,877	1,899	1,516	1,222	1,191	1,183
Engineering Technologies and Technicians	1,456	1,936	2,176	1,823	1,821	1,840	1,915
Engineering, Four-Year Only	1,293	1,264	1,255	1,262	1,293	1,347	1,343
Math, Biological & Physical Sciences, Four-Year Only	1,862	1,974	1,949	2,133	2,215	2,396	2,374
Transfer High Demand (STEM), Two-Year Only	860	1,056	1,281	1,111	1,059	1,013	1,129
Construction Management, Two-Year Only	29	44	84	94	125	253	304
Public Higher Education Total	11,378	13,169	14,590	14,334	14,730	15,059	15,474

Source: GMAP - Economic Vitality Measures.

<http://performance.wa.gov/EconomicVitality/EV101509/WorkforceSkills/HighDemanddegreesand/Pages/default.aspx>

Diversity increasing among new faculty members

Across all sectors of Washington’s public higher education system, today’s students are ethnically more diverse than the faculty that teach them. However, new hires at the public colleges and universities are helping increase diversity to levels that more closely reflect the student population in the future.

Statistics show that public four-year institutions rely more heavily on the international pool of faculty candidates to fill positions than do private four-year institutions or community and technical colleges. About 15 percent of new faculty hires between fall 2005 and fall 2007 were nonresident aliens, compared to about 2 percent at private baccalaureate institutions and less than 1 percent at community and technical colleges.

**Faculty and Student Population by Race/Ethnicity
Washington Public Higher Education Institutions**

Race/Ethnicity	Washington Public Undergraduate Student Population	Washington Public Graduate Student Population	All Public Faculty, Fall 2007	Public Newly Hired Faculty, Fall 2005-07
White Non-Hispanic	75.0%	81.7%	86.2%	81.0%
Black Non-Hispanic	2.9%	2.7%	2.3%	2.7%
Hispanic	4.8%	3.5%	3.1%	5.6%
Asian or Pacific Islander	13.3%	9.1%	7.1%	8.8%
American Indian or Alaska Native	1.8%	1.9%	1.3%	1.9%
Multiple/Other	2.2%	1.1%	0.0%	n/a
TOTAL	100.0%	100.0%	100.0%	100.0%

Sources: State Board for Community and Technical Colleges’ personnel data, fall 2008; Integrated Postsecondary Education Data System staff survey; American Community Survey; PCHEES data system.

Chapter IX: Next Steps



We need to significantly increase degree production

Washington will need to produce more mid-level, bachelor's, and graduate degrees to meet the needs of the state economy, and to remain competitive with the other Global Challenge States with which it is often compared.

The state's *2008 Strategic Master Plan for Higher Education in Washington* called for a 40 percent annual increase in degree and certificate production in 10 years. The national recession and resulting cutbacks in Washington's higher education budgets have added to the challenge of achieving that already ambitious goal.

The accompanying table takes a longer look by showing the number of additional degrees needed to increase degree production in 2030 by 40 percent over 2009. The goal is entirely consistent with the Obama Administration's goal of a 60 percent increase in baccalaureate degree production throughout the nation.

Even if Washington's degree production keeps pace with population growth—a *big if*, given the current challenges facing higher education—we'd only reach a third of the state's degree goals by 2030. Accomplishing more will require significant investment in policies that will increase participation rates across the state.

Additional Degrees to Reach 2030 Production Targets

Level	Population Growth	Policy Growth	Total
Mid-level	5,100	5,200	10,300
Baccalaureate	3,500	7,900	11,400
Graduate	1,600	7,700	9,300
TOTAL	10,200	20,800	31,000

We need to prepare more high school graduates to succeed in college

Each year, thousands of Washington high school students either drop out of school or do not continue their education at the postsecondary level. The state can move closer to achieving its degree-production goals by adopting policies that ensure more students graduate from high school ready and willing to continue at the college level.

Improvements in science and math readiness are particularly important to increase the number of college graduates in the science, technology, engineering, and math (STEM) fields that are in strong demand in Washington. However, today’s students are insufficiently prepared in these fields unless they do considerable remedial work:

- In 2008, 12 percent of high school graduates failed to meet the minimum public four-year college admissions standards in science.
- 31 percent of 2008 high school graduates did not take a math course in their senior year of high school and 52 percent did not take a science class.
- Only 55 percent of 2008 high school graduates met the new CORE 24 minimum graduation requirements in science; 89 percent met the math requirement.

Washington Residents Age 18-44 Whose Highest Educational Attainment is a High School Diploma or Less

By Race/Ethnicity	Total “High School or Below”	Percent Not Enrolled in School	Number Not Enrolled in School
American Indian/Alaska Native	21,781	92%	19,935
Asian/Pacific Islander	57,715	86%	49,848
African American/Black	41,475	91%	37,810
White	612,231	90%	551,613
Multi-racial	29,109	88%	25,628
Hispanic	189,866	95%	180,161
Total	952,177	91%	864,995

Source: 2007 American Community Survey.

We need to provide more opportunities for working adults to begin or complete college work

Encouraging more adult learners to pursue college degrees and certificates is another way the state can meet future demand for trained and educated workers. This large pool of potential college graduates includes both first-time and returning students. Across the country, adult learners are getting older, with average ages in the late 30's and early 40's. National data project continued growth in adult-learner enrollments.¹ As the table below shows, there are many adults who don't go on to college—who could. Even if two percent continue, that's a significant number that could help Washington make progress in raising the state's educational attainment levels.

Policies that would encourage additional adults to enroll in college should take into account the personal circumstances that prevent or discourage many from beginning or continuing their college educations. For example, adults may already be working or have family obligations. Unlike recent high school graduates, they may no longer be able to rely on parents or other family members to help pay for college. As a result, many believe they lack sufficient financial means to pursue a college education.

Educational Pathways Include Large Numbers of Students Who Should be Encouraged to Consider Entering or Furthering College Education

Potential Students Continue Further in Higher Education	2006-07 Completers/Residents	Percent Who Currently Continue in Higher Education
High School Graduates*	65,300	57%
GED Completers	16,600	39%
Private Vocational School Certificates	12,700	Not Available
CTC Technical Degrees	7,350	13%
CTC Transfer Associate Degrees	12,540	71%
Adults 18-44 with “a high school diploma or less”**	952,200	9%
Adult Re-entry – 18-44 with “some college/no degree”**	628,400	30%

*Total graduates and estimated potential based on percentage of respondents who reported continuation of college.

**There may be duplicate counting of re-entry adults and private vocational school certificates and/or some adults with high school diploma or less and high school graduates or GED completers.

Sources: OSPI 2007 *Graduate Follow-up Study* (SESRC); GED Testing Data (SBCTC); SBCTC Completions Files; Private Vocational School data from WTECB; adult re-entry and adults with no college experience from 2007 American Community Survey.

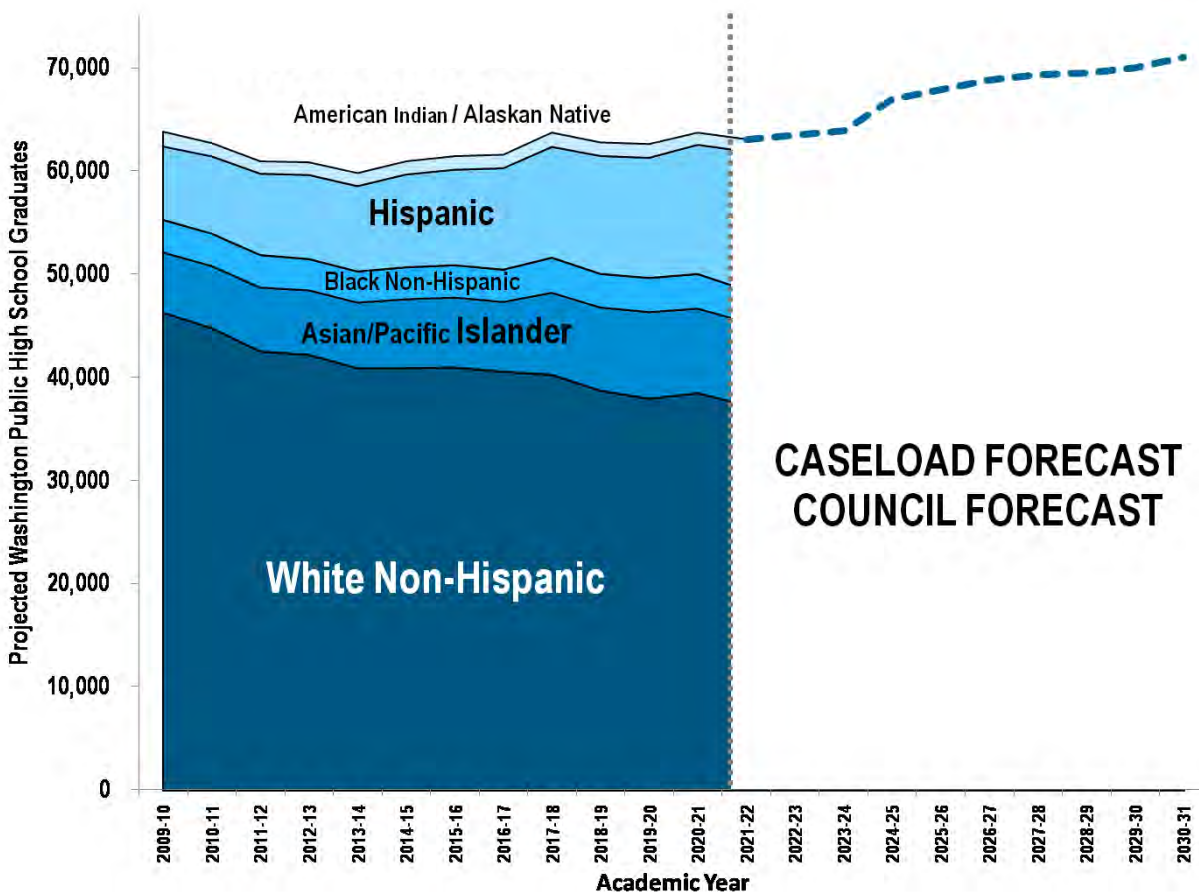
¹ Aslanian, C. *Adult Students: A Profile of Demand Among Classroom and Online Adult Students*. Aslanian Group. 2008. Accessed at <http://www.aslaniangroup.com/resources/default.asp>, May 20, 2009.

We need to encourage more students from under-represented groups to go to college

The ethnic and minority portion of Washington’s population is growing. The state’s high school graduating classes will become more diverse, but the overall number of graduates is projected to increase just slightly.

Hispanics, the fastest growing segment of the population, have historically been under represented among students in Washington colleges and universities. Therefore, to increase the overall number of high school graduates who go on to college and eventually earn degrees, greater efforts will be needed to increase the college-going participation rate among minority groups, but especially Hispanics.

**Projected Washington State High School Graduates
2009-2031**



Sources: Western Interstate Commission on Higher Education, *Knocking on the College Door 2008*; Washington State Caseload Forecast Council, Basic Education Caseload Forecast.

We need to make college affordable for more low- and middle-income students

The full cost of attending college is beyond the reach of many Washington students and their families. In recent years, tuition costs have risen at a far more rapid pace than personal income or inflation. The national recession has further pinched family pocket books and made it even harder to save for college. Finally, the state's fastest-growing demographic groups include many low-income families for whom college may seem an unrealistic dream.

Washington has a history of providing financial aid to help cover college costs that families are unable to provide themselves. Without a continued commitment to such resources, Washington's ambitious goal of providing the trained and educated workers needed to meet the demands of its knowledge-based economy in the 21st Century will be even more difficult to achieve.

Glossary of Acronyms and Terms



Glossary of Acronyms and Terms

AAUP: American Association of University Professors, which conducts an annual salary survey. Its data is augmented with other organizations' data.

Building Fees: Building fees, in addition to operating fees, are the two components of statutory tuition. Building fees are used to cover debt service on the institution's buildings.

Degrees granted: Bachelor's, master's, doctorates, and first professional degrees are reported for the public and independent four-year institutions. Associate degrees are reported only for the public community and technical colleges. (Note: in Washington, professional degrees are awarded in five general areas: medicine, dentistry, pharmacy, veterinary medicine, and law.)

Distance learning: Distance learning is the general term used to describe educational activities that occur when teachers and students are physically separated for at least part of the instructional time. Distance learning includes use of the Internet, satellite transmissions, cable networks, and other technologies.

eLearning: As compared to distance learning, e-learning is a more specific term applied to the use of digital and online technologies to provide educational opportunities any place, any time.

Enrollment: The number of individual students – i.e., headcount – for the fall quarter (or semester) of an academic year.

Fiscal year: The fiscal year begins July 1 and ends June 30 of the following calendar year. FY 2007 began on July 1, 2006.

FTE: Full-Time Equivalent. This is calculated by taking the total credit hours at a university/college and dividing by the normal full-time credit-hour load. In Washington, the normal full-time load is 15 credit hours for undergraduates and 10 credit hours for graduate students.

Full-time/part-time enrollment: According to IPEDS, a full-time undergraduate is enrolled for 12 or more credits per semester/quarter. A full-time graduate student is enrolled for 9 or more credits. These definitions apply to headcount enrollment at four-year institutions. At community and technical colleges, full-time enrollment (state-supported) is 10 or more credits.

Gardner-Evans Bonds: Gardner-Evans Bonds were authorized by the 2003 Legislature to help finance branch campus construction. These instruments helped the system rapidly ramp up facilities development between 2003 and 2009. The funds, totaling \$750 million, were earmarked for projects to modernize and restore existing facilities, as well as provide additional capacity for future enrollment demand. The authority to issue Gardner-Evans Bonds ended in 2009 when the Legislature chose not to renew it.

Geographic origin: This category classifies students by their home address at the time of their initial application. In-state refers to those from Washington state; out-of-state includes other U.S. states, territories, and possessions; foreign refers to other countries.

Glossary of Acronyms and Terms

Global Challenge States (GCS): The GCS are states that have been identified as having a high potential to succeed in today's knowledge-driven, global economy. Included are Washington, Massachusetts, California, New Jersey, Connecticut, Colorado, Virginia, and Maryland.

GMAP: Government Management Accountability and Performance. Program created by Governor Gregoire to hold state agencies accountable for delivering results. GMAP helps state agencies measure and improve their performance, and achieve results that matter to citizens.

HECB: The Higher Education Coordinating Board is a 10-member citizen board appointed by the Governor and approved by the state Senate. The HECB administers the state's student financial aid programs and provides strategic planning, coordination, monitoring, and policy analysis for higher education in Washington.

HEER: The Higher Education Enrollment Report is produced by the state Office of Financial Management (OFM). Data cover enrollment in the six public four-year institutions and are collected each term. This source is used for several tables. (Some minor differences exist between HEER and IPEDS headcount information due to different definitions.)

IPD: The Implicit Price Deflator is a common measure of inflation, calculated by the United States Bureau of Economic Analysis. It measures the difference between the nominal value of all goods and services in the economy as compared to real value over time.

IPEDS: The Integrated Postsecondary Education Data System (which is part of the United States Department of Education) is a national survey conducted annually by the National Center for Education Statistics. It covers many areas including enrollment and degrees granted. All degree information in this report is taken from IPEDS. For enrollment, IPEDS is used whenever possible for the public four-year institutions; IPEDS is always used for enrollment in the independent institutions.

LEAP: The Legislative Evaluation and Accountability Program committee data are used for information on State General Fund expenditures. LEAP was created by the Washington Legislature in 1977 to be the Legislature's independent source of information and technology for developing budgets, communicating budget decisions, tracking budget and revenue activity, consulting with legislative committees, and providing analysis on special issues.

Level of enrollment: The source of data is IPEDS. "Lower division" is calculated as all freshmen, all other first-year and all second-year students, and half of the unclassified undergraduates. "Upper division" are third-year students, fourth-year and beyond, and half of the unclassified undergraduates. "Graduate" and "professional" students are listed separately. In some cases, lower division and upper division are combined as "undergraduates," and a combined "post-baccalaureate" category includes graduate and professional enrollment.

MIS: The Management Information System provides a series of reports on enrollment in the community and technical colleges. The data used in this document primarily came from the Student Management Information System (SMIS). These reports are prepared by the State Board for Community and Technical Colleges (SBCTC).

Glossary of Acronyms and Terms

NCES: The National Center for Education Statistics (part of the United States Department of Education) collects the yearly IPEDS data. NCES also provides state-by-state compilations of data, which were used to calculate participation rates and state rankings.

NCHEMS: The National Center for Higher Education Management Systems provides state-by-state data on enrollment; NCHEMS uses IPEDS data as their source. NCHEMS information was used by OFM to calculate college participation rates from 1981 through 1988.

OFM: The Office of Financial Management for the state of Washington. OFM provides HEER data, budget information, fiscal services, and policy support that the Governor, Legislature, and state agencies utilize to serve the citizens of Washington.

Operating Fees: Operating fees, in addition to building fees, are the two components of statutory tuition. Operating fees are primarily used to fund the instructional activities of an institution.

OSPI: The Office of the Superintendent of Public Instruction is the primary agency charged with overseeing K-12 education in Washington. OSPI issues a report annually on graduation and dropout rates for Washington's public high schools.

PCHEES: The Public Centralized Higher Education Enrollment System is maintained by the Office of Financial Management and is used to track enrollments at public four-year institutions for budgeting and research purposes.

Race/ethnicity categories – as defined by the U.S. Department of Education for the IPEDS survey.

- **Nonresident Alien:** A person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely.
- **Black, Non-Hispanic:** A person having origins in any of the black racial groups of Africa (except those of Hispanic origin).
- **American Indian or Alaskan Native (Native American):** A person having origins in any of the original peoples of North America or who maintains cultural identification through tribal affiliation or community recognition.
- **Asian or Pacific Islander:** A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or Pacific Islands. This includes people from China, Japan, Korea, the Philippine Islands, Samoa, India, and Vietnam.
- **Hispanic/Latino(a):** A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- **White, Non-Hispanic:** A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).
- **Race/Ethnicity Unknown:** This category is used ONLY if the student did not select a racial/ethnic designation, and the postsecondary institution finds it impossible to place the student in one of the aforementioned racial/ethnic categories.

Glossary of Acronyms and Terms

SBCTC: The State Board for Community and Technical Colleges is the source for enrollment data for these institutions. The State Board is required to provide general supervision and control over the state system of community and technical colleges.

STEM: STEM fields are currently identified as high demand fields, which include science, technology, engineering, and mathematics.

Services and Activities Fees: Services and activities fees are in addition to tuition charged to support student activities.

Technology Fees: Technology fees are charged at some institutions to support technology enhancements available to students.

Tuition: Statutory tuition consists of two components: operating fees, which are primarily used to fund instructional activities of an institution, and building fees, which are used to cover debt service on the institution's buildings.

University Centers: University centers house educational programs offered by one or more baccalaureate institutions whose main campuses are elsewhere in Washington or in another state. Centers are often located on community college campuses.

WASL: The Washington Assessment of Student Learning (WASL) was the state's primary tool for assessing academic progress in the K-12 system from the spring of 1997 until October 2009. The WASL has been replaced by two new assessment tools – the Measurements of Student Progress (MSP) and the High School Proficiency Exam (HSPE).

WFAA: The Washington Financial Aid Association is a professional membership organization of individuals whose aim is to promote higher education through the availability, support, and administration of student financial assistance programs.

WICHE: The Western Interstate Commission for Higher Education is a regional organization created by the Western Regional Education Compact, adopted in the 1950s by western states. WICHE is an interstate compact created by formal legislative action of the states and the U.S. Congress. Fifteen states are members of WICHE. Three gubernatorial-appointed commissioners from each state govern WICHE. WICHE was created to facilitate resource sharing among the higher education systems of the West.

WTECB/WTB: The Workforce Training and Education Coordinating Board advises the Governor on workforce development policy, ensures that the state's workforce preparation services and programs work together, and evaluates performance. The Board also advocates for the non-baccalaureate training and education needs of the workers who account for about 75 percent of Washington state's workforce.