The “How” of Washington Higher Education:

Missions Across the System, Alternative Delivery Options, and Rational Rules for Growth

System Design Plan Meeting
Room 160 Gray Wolf, Everett Community College
July 20, 2009
“Road Map” for This Meeting

• Mission
• Recap: Where the students are . . . and where the needs are (including new regional analyses)
• Alternative Delivery Options
• Rational Rules for Growth
Recap from a system perspective: Where the students are . . . and where the needs are.

Review questions:

1. Is our mix of sectors—and institutions within sectors—the right one for Washington? (Sectors = public/private, 2-/4-year, research/regional/branches)
2. How and where do we expand predominately baccalaureate-granting institutions?
3. How and where do we expand graduate education and optimize our investments in research activities and graduate education?
4. Are the sectors functioning optimally together? Are we using collaborative arrangements within and across sectors well?
5. What should be the role of the branch campuses? Is their current role the right role to accomplish our system design goals/recommendations?
6. Are our independent institutions operating optimally in Washington?
7. Are centers located where we need them?
8. What alternative delivery options are out there—and which ones are viable for Washington?
9. Are there operational changes that can enhance institutions’ abilities to enroll—and graduate—more students?
Review: Higher Education Missions

• Washington’s 2 major research university main campuses award 35% of all undergraduate degrees in Washington.

• The primary function of branch campuses is to expand regional access to baccalaureate and master’s levels. (RCW 28B.45.030, 040, 050)

• Regional universities’ primary missions are to serve particular regions, provide programs through the master’s degree, focus on applied and professional areas, serve transfer students, and provide programs that are integrated with the region’s CTCs. (RCW 28B.35.050)

• The 10 ICWs provide significant baccalaureate (20%) and graduate (26%) education at the master’s and professional levels.*

• Doctoral level education is almost exclusively provided by the public universities (92%).

• Centers and teaching sites have grown rapidly and awarded over 1,300 bachelor’s degrees in 2005-06, up from less than 800 in 2001.

Source IPEDS. *ICW Schools account for 69% of the Bachelor and Graduate degrees awarded by private institutions in Washington.
How is baccalaureate education delivered?

- The public universities and colleges award the majority of bachelor’s degrees in Washington.¹
- Private colleges and universities award 27% of the bachelor’s degrees in Washington (26% in STEM and 28% in Health).¹
- Community and technical colleges serve a substantial number of freshmen and sophomores who continue to upper division work. Two of every 5 bachelor’s graduates transferred from a community college in Washington.²
- Community colleges provide Applied Bachelor’s degrees at 7 institutions. In 2009, the first 4 pilot programs awarded 57 bachelor’s degrees.³ About 100 B.A.S. students at the CTCs are expected to graduate in 2010.
- The University Centers are a small but very fast-growing sector of higher education, just short of doubling in size over the past 5 years.

Sources: 1-HECB Analysis of 2007-08 IPEDS Degree Awards; 2-SESRC – Transfer Study; 3-SBCTC.
Statewide, over 1/3 of new enrollments each year are students who transfer from the community college.

Proportion of Entering Class in 2007-08 who transferred from a Washington Community or Technical College

<table>
<thead>
<tr>
<th>Institution</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWU</td>
<td>29%</td>
</tr>
<tr>
<td>WSU Pullman</td>
<td>32%</td>
</tr>
<tr>
<td>WWU</td>
<td>32%</td>
</tr>
<tr>
<td>UW Seattle</td>
<td>33%</td>
</tr>
<tr>
<td>CWU</td>
<td>42%</td>
</tr>
<tr>
<td>TESC</td>
<td>43%</td>
</tr>
<tr>
<td>UW Bothell</td>
<td>63%</td>
</tr>
<tr>
<td>WSU Vancouver</td>
<td>64%</td>
</tr>
<tr>
<td>UW Tacoma</td>
<td>65%</td>
</tr>
<tr>
<td>Tri-Cities</td>
<td>69%</td>
</tr>
<tr>
<td>UW Bothell</td>
<td>63%</td>
</tr>
<tr>
<td>WSU Vancouver</td>
<td>64%</td>
</tr>
<tr>
<td>UW Tacoma</td>
<td>65%</td>
</tr>
<tr>
<td>Tri-Cities</td>
<td>69%</td>
</tr>
</tbody>
</table>

2007-08 Transfers

EWU: 29%
WSU Pullman: 32%
WWU: 32%
UW Seattle: 33%
CWU: 42%
TESC: 43%
UW Bothell: 63%
WSU Vancouver: 64%
UW Tacoma: 65%
Tri-Cities: 69%
Shape of Higher Education: Undergraduate education in Washington is disproportionately offered at research institutions and CTCs.
Public degree production has grown rapidly at centers, branch campuses, and other off-campus locations.

**Baccalaureate Degrees By Location Type**
Public Institutions 2000-01 and 2005-06

- Research Universities 8,416 (50%)
- Comprehensives 6,249 (37.1%)
- Centers, 783 (4.7%)
- Branches 1,375 (8.2%)

**Baccalaureate Growth by Location Type**
2000-01 - 2005-06

- Research Universities 10% (9,292)
- Comprehensives 8% (6,726)
- Centers 69% (1,321)
- Branches 41% (1,933)

Source: 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. Note: "Centers" includes programs offered by all public baccalaureate institutions at various off-site locations and includes WSU distance learning enrollments. "Comprehensives" includes the regional universities and TESC.
Traditionally, underserved ethnic groups (African-American, Hispanic, and Native American) are more likely to enter the four-year system via transfer than as direct entry students.

Among graduates of public institutions:
• Nearly ¾ of Washington’s Asian-American students completed degrees at research institutions.
• Half of the Hispanic graduates attended research institutions and more than attended 1/3 regional campuses, but relatively few attended branch campuses.
• The majority of American Indian/Native Alaskans graduated from regional institutions and 1 in 8 graduated from a center.
• ¼ of African American students graduated from branches and centers, and ½ from research institutions.

Branch campuses and centers serve a larger share of women.

The majority of current branch campus and center graduates are older students.

The majority of graduates at the centers and branches are older students; only about 1/3 of the graduates are under 25, compared to more than 2/3 of the graduates at all institutions.

Bachelor’s Degree Recipient Characteristics by campus type (public only, 2005-06)

- STEM majors make up a larger share of the graduates at research universities than other types of institutions.
- Education majors make up a larger share of the graduates at regional universities and centers than they do at other locations.
- Business majors make up a larger share of the graduates at centers than at branches or main campuses.

Transfer students often enter fields related to specific occupations

- CTC transfers contribute between 1/3 and ½ of students in all broad program major areas.

- Education and Health attract the most transfer students as a proportion of total graduates.

- “Other” includes Law, Agriculture and Natural Resources, and Family and Consumer Sciences.

Summary: Undergraduate Education (Slides #6-13)

- Research universities graduate more students with baccalaureate degrees than regional institutions or branch campuses.
- Branch campuses and centers are growing, attracting older students who are likely to be adult re-entry students.
- Transfer students comprise 1/3 of all new undergrad. annual enrollments. They make up about 2/3 of the students at branch campuses and centers.
- The bulk of transfer students tend to choose applied majors, such as Education and Health.
- More students from under-represented groups enter 4-year institutions via the transfer pathway than directly from high school.
- Different kinds of campuses cater to different majors
  - programs offered at centers tends to be applied;
  - programs offered at research universities favor liberal arts and sciences and targeted applied fields, such as engineering
  - programs at regional comprehensive institutions are similar to those of the research universities, but with more graduates in some applied fields like Education majors;
  - a larger share of graduates at branch campuses complete a Health-related degree (mostly in nursing--the RN-BSN);
  - more Business majors graduate from centers;
  - Arts & Science majors graduate from all types of universities and their branches, but very few from centers.
How is graduate education delivered?

Master’s
- At all public 4-years, including branches and centers
- Heavy reliance on private sector (47% private)
- STEM more reliant on public sector (91% public)
- Health relies on both public and private (72% public)
- Among publics, the regional comprehensives and TESC contribute 23% of all masters, but 43% of Masters in Social/Behavioral Sciences and 35% of Masters in Education

Professional (Primarily Law and Medicine/Health)
- Overall heavy reliance on private sector (48% private)
- Public limited to research university main campuses (1 exception – EWU Doctor of Physical Therapy)
- Medicine/Health relies more on public (84% public)
- Law accounts for half of the professional degrees, of those 75% are awarded by private universities

Doctorate
- Almost exclusively offered by the public sector (92% public) and at research university main campuses
- Publics provide nearly all doctorates in Health and STEM
Public universities provide a large share of STEM and health field graduate and professional degrees, and almost all doctoral degrees.

**Public Share of Degree Production 2007-08**

<table>
<thead>
<tr>
<th>Category</th>
<th>2007-08 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Degrees</td>
<td>69%</td>
</tr>
<tr>
<td>Bachelor's degrees</td>
<td>73%</td>
</tr>
<tr>
<td>Master's degrees</td>
<td>74%</td>
</tr>
<tr>
<td>First-professional degrees</td>
<td>77%</td>
</tr>
<tr>
<td>Doctor's degrees</td>
<td>92%</td>
</tr>
<tr>
<td>TOTAL STEM</td>
<td>77%</td>
</tr>
<tr>
<td>Bachelor's STEM</td>
<td>74%</td>
</tr>
<tr>
<td>Master's STEM</td>
<td>74%</td>
</tr>
<tr>
<td>Doctor's STEM</td>
<td>91%</td>
</tr>
<tr>
<td>Total Health</td>
<td>74%</td>
</tr>
<tr>
<td>Bachelor's Health</td>
<td>72%</td>
</tr>
<tr>
<td>Master's Health</td>
<td>68%</td>
</tr>
<tr>
<td>First Professional Health</td>
<td>84%</td>
</tr>
<tr>
<td>Doctor's Health</td>
<td>97%</td>
</tr>
</tbody>
</table>

NOTE: First professional degrees primarily include law and Health/Medicine.
Regional comprehensives, TESC, and branch campuses have a limited role in graduate education.

**Degree Awards by Level and Institutional Sector (2007-08)**

- **Regional (n=9,774)**: 89% Bachelor’s, 11% Masters, 0.3% Professional, 0.1% Doctorate
- **Branch (n = 3,139)**: 81% Bachelor’s, 18% Masters, 0.2% Professional, 5% Doctorate
- **Research (n = 14,974)**: 70% Bachelor’s, 20% Masters, 5% Professional, 5% Doctorate

Source: IPEDS; WSU Institutional Research Office. Branch includes UW and WSU branch enrollments and WSU Distance Learning program.
Graduate education and academic research is an essential component of Washington’s economic development strategy.

• College and university research and development expenditures in Washington approached $1 billion (NSF, Academic R&D Expenditures, FY2007)

• The public research universities account for more than 98% of academic R&D expenditures—77% at UW and 21% at WSU (NSF)

• UW and WSU have generated 227 licenses in the last year transferring technology to the private sector (HECB data)

• Public comprehensive and private institutions expended over $14 million in R&D in FY07 but do not have resources to support technology transfer (NSF)
## Academic Research Creates Jobs Throughout the Washington Economy

<table>
<thead>
<tr>
<th>Economic Impact</th>
<th>$1 Billion in Annual Academic Research Expenditure</th>
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<tbody>
<tr>
<td>Total Employment (Direct and Indirect, 2009)</td>
<td>16,000 jobs</td>
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<tr>
<td>Direct Employment</td>
<td>6,000 jobs</td>
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<tr>
<td>Jobs Multiplier (Total Employment/Direct Employment)</td>
<td>2.62</td>
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<tr>
<td>Change in Total Earnings</td>
<td>$846 million</td>
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<tr>
<td>Earnings Multiplier (Earnings from Total Employment/ Earnings from Direct Employment)</td>
<td>1.93</td>
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<tr>
<td>Change in Washington Total Sales</td>
<td>$2.1 Billion</td>
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</table>

In FY07, Washington’s universities made $1 billion in research and development expenditures. Those expenditures:

- Supported 16,000 jobs in the Washington economy.
- For every 10 university employees engaged in research an additional 16 jobs were created elsewhere in the Washington economy.
- 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.

Source: NSF and EMSI, Inc. input-output model based on ESD data.
Doctoral level education is delivered almost exclusively by the public universities.

University R & D brings almost $1 billion to Washington and results in 16,000 jobs.

Almost all graduate level, high-demand STEM degrees are awarded by public institutions, as well as the majority of degrees in health.

The private sector produces almost half of the master’s degrees and professional degrees, including ¾ of the law degrees.

The regional comprehensives produce about ¼ of all master’s degrees.

All 4-year public institutions—including branches and centers—produce master’s degrees.

Branch campuses award masters degrees at about the same rate as the research institutions, but do not provide doctoral or professional programs.
Washington Higher Education:
Degree Goals by Region
Review: What participation do we need to meet Master Plan degree goals?
If we just depend on population growth, we won’t reach MP goals projected to 2030. Between 2010 and 2030, an additional 11,400 degrees would be required to meet MP goals.

Bachelor's Degree Goals and Expected Growth
2010-2030 Includes Public and Private Institutions

- Bachelor's Degrees
- Bachelor's Degree Awards: IPEDS.
- Degree Goals: 2008 Strategic Master Plan; Projection to 2030 HECB staff calculation based on 2008 Population forecast of 18-44 year olds.

Sources:
Review: There is insufficient capacity at the graduate level to maintain current participation rates. Reaching the Master Plan goals will require nearly doubling planned capacity.

Graduate Degree Goals and Capacity
Includes Public and Private Institutions

Sources:
Graduate Degree Awards: IPEDS
Degree Goals: 2008 Strategic Master Plan; Projection to 2030 HECB staff calculation based on 2008 Population forecast of 18-64 year olds
Institutional Degree Award Plans: 2008 Enrollment Capacity Study, HECB, 2008
**Review:** 10,300 CTC Output Growth Needed (2010-2030) to Meet Employer Demand and *Master Plan* Bachelor's Degree Goal - 5,100 Growth from Population Changes (Status Quo Expected Output), 5,200 from Policy

Projected Need for CTC Outputs (Transfer & Prepared for Work)
Versus Projected Output Based on Population Growth Only and No Change in Student Success

Transfer output: Based on CTC transfer count used in Role of Transfer in Bachelor's Degree analysis - 12,400 in 2007-08 (80 percent with transfer with associate degrees)

Workforce output: Prepared for work count - includes degree, certificates and apprenticeship plus students with a year of technical credits or industry certification

Source: SBCTC projection.
Snohomish, Pierce, South Sound to Coast, Southwest, and Spokane and Northeast regions all lack significant capacity to meet degree goals.

By-Region Share of 4-Year Undergraduate Degree Production Increases to Reach Degree Goal by 2030


Please see notes on next slide
### Undergraduate Degrees: Table and Notes

<table>
<thead>
<tr>
<th>Current Degree Production</th>
<th>Northwest</th>
<th>Snohomish</th>
<th>King</th>
<th>Pierce</th>
<th>South Sound to Coast</th>
<th>Southwest</th>
<th>Central &amp; Southeast</th>
<th>Spokane &amp; Northeast</th>
<th>Private</th>
<th>Out of State</th>
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<tr>
<td></td>
<td>2,400</td>
<td>2,050</td>
<td>7,790</td>
<td>1,980</td>
<td>1,220</td>
<td>1,200</td>
<td>2,590</td>
<td>2,170</td>
<td>8,280</td>
<td>1,820</td>
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<td>Possible Degree Increases</td>
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<td>Planned Capacity</td>
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<td>Planned Capacity</td>
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<td></td>
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<tr>
<td>From Population Growth</td>
<td>280</td>
<td>230</td>
<td>250</td>
<td>180</td>
<td>190</td>
<td>230</td>
<td>400</td>
<td>330</td>
<td>820</td>
<td>180</td>
</tr>
<tr>
<td>From Improving Regional Participation Rates</td>
<td>550</td>
<td>150</td>
<td>10</td>
<td>850</td>
<td>80</td>
<td>520</td>
<td>530</td>
<td>40</td>
<td>1,070</td>
<td>240</td>
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<tr>
<td>Additional Needed to Reach 2030 Goal</td>
<td>500</td>
<td>430</td>
<td>900</td>
<td>540</td>
<td>260</td>
<td>370</td>
<td>550</td>
<td>400</td>
<td>1,140</td>
<td>340</td>
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<tr>
<td>Planned Capacity from 2008 Capacity Study</td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Total</td>
<td>1,429</td>
<td>0</td>
<td>910</td>
<td>180</td>
<td>106</td>
<td>562</td>
<td>2,297</td>
<td>128</td>
<td>3,030</td>
<td>1,300</td>
</tr>
</tbody>
</table>

**Notes:**
- The degree goal includes public and private baccalaureate degrees. Additional private share required to hit the goal is allocated based on the assumption that the privates maintain their relative market share. ICW capacity only is included as private capacity.
- Participation rate improvements include improvements in K-12 preparation and high school graduates' college-going rates; improvements in transfers from 2-year to 4-year programs; increasing numbers of adult re-entries, particularly those who have "some college, no degree" educational attainment; and increasing the numbers of those with a "high school diploma or less" educational attainment level to begin college.
- Heads-to-degrees ratio and percentage of baccalaureate degrees awarded by private 4-year institutions based on data from IPEDS.
- The population is those age 18-44 whose highest educational level is less than a bachelor's degree.
- Capacity data taken from 2008 HECB Capacity Study. Headcount estimated from provided FTE by using actual data from Fall 2008 OFM Higher Education Enrollment Report, Headcount from Table 1 and FTE from Table 2. Includes On campus, Off campus, and On and Off Campus students. Headcount to FTE ratio is the average of all public baccalaureate institutions, weighted by enrollment. Capacity estimates assume available operating funds and some additional capital construction at branch campuses and WWU waterfront expansion. Includes both state-funded and non state-funded degrees and enrollments as reported by institutions. Please see capacity study for further clarification on capacity data.
Graduate Degrees: Chart

All regions except Central and Southeast require significant additional capacity to meet graduate and professional degree goals. This will require increases at private institutions as well as public institutions.

By-Region Share of 4-Year Graduate and Professional Degree Production
Increases to Reach Degree Goal by 2030

- Planned Capacity from 2008 Capacity Study
- Additional Needed to Reach 2030 Goal
- From Improving Regional Participation Rates
- From Population Growth


Please see notes on next slide
## Graduate Degrees: Table and Notes

<table>
<thead>
<tr>
<th></th>
<th>Northwest</th>
<th>Snohomish</th>
<th>King</th>
<th>Pierce</th>
<th>South Sound to Coast</th>
<th>Southwest</th>
<th>Central &amp; Southeast</th>
<th>Spokane &amp; Northeast</th>
<th>Private</th>
<th>Out of State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Degree Production</td>
<td>490</td>
<td>320</td>
<td>1,870</td>
<td>350</td>
<td>280</td>
<td>360</td>
<td>890</td>
<td>750</td>
<td>5,100</td>
<td>1,350</td>
</tr>
<tr>
<td>Possible Degree Increases</td>
<td>Planned Capacity</td>
<td>Possible Degree Increases</td>
<td>Planned Capacity</td>
<td>Possible Degree Increases</td>
<td>Planned Capacity</td>
<td>Possible Degree Increases</td>
<td>Planned Capacity</td>
<td>Possible Degree Increases</td>
<td>Planned Capacity</td>
<td>Possible Degree Increases</td>
</tr>
<tr>
<td>From Population Growth</td>
<td>90</td>
<td>60</td>
<td>120</td>
<td>50</td>
<td>30</td>
<td>90</td>
<td>140</td>
<td>100</td>
<td>650</td>
<td>170</td>
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<tr>
<td>From Improving Regional Participation Rates</td>
<td>30</td>
<td>260</td>
<td>680</td>
<td>100</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>1,030</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>Additional Needed to Reach 2030 Goal</td>
<td>230</td>
<td>220</td>
<td>900</td>
<td>200</td>
<td>110</td>
<td>150</td>
<td>160</td>
<td>170</td>
<td>2,340</td>
<td>840</td>
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<tr>
<td>Planned Capacity from 2008 Capacity Study</td>
<td>71</td>
<td>0</td>
<td>372</td>
<td>190</td>
<td>10</td>
<td>220</td>
<td>567</td>
<td>128</td>
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<td>Total</td>
<td>359</td>
<td>71</td>
<td>540</td>
<td>0</td>
<td>1,790</td>
<td>372</td>
<td>190</td>
<td>140</td>
<td>10</td>
<td>250</td>
</tr>
</tbody>
</table>

### Notes:
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Summary Slide: Degree Goals by Region (Slides 22-28)

- Washington will need about 8,000 bachelor’s and 8,000 master’s degrees, over and above what population growth will contribute, by 2030 to reach Master Plan goals.
- An additional 5,000 CTC certificates and degrees will also be needed.
- In all but 3 regions (Northwest, King, Central and Southwest), institutions’ stated capacity is far less than what higher ed. needs for undergraduate education.
- At the graduate level, the greatest need will be in King and Snohomish counties; however, institutions’ planned growth is far less than will be needed in all but 2 regions (Southwest, and Central and Southeast).
- The planned growth of the ICW schools is less than half of the total growth needed in the private sector to meet the Master Plan goals.
Alternative Approaches to Program Delivery
Alternatives to Program Delivery

• Expansion of Applied Baccalaureate Degrees
  http://www.acteonline.org/uploadedFiles/About_CTE/files/AppBacClntentory.pdf

• “Upside Down” degrees  http://www.evergreen.edu/admissions/upsidedown.htm

• Consortia programs
  – St. Petersburg College University Partnership Center www.upcspc.com
  – Oregon’s Nursing Education Consortium www.ocne.org

• Competency Based Degree programs - Western Governors’ University
  www.wgu.edu

• Adult Re-entry programs http://www.wku.edu/wkufinish/; http://www.usf4you.usf.edu/

• Dual Credit – Advanced Placement, International Baccalaureate, College in High School, Running Start

• Dual Enrollment Programs (CTC / Baccalaureate) – UWB
  http://www.uwb.edu/students/prospective/de/

• Co-Admission – WSU  http://online.wsu.edu/future_students/community_college.aspx
Alternatives to Program Delivery

• Greater use of alternative Scheduling (weekend, evening, block scheduling)

• More eLearning options (100% online courses and/or programs; hybrid courses)

• More explicit use of private sector in program delivery and planning

• Accelerated Degree Programs
  – Ivey Tech: [http://www.ivytech.edu/evansville/studentservices/lfasttrack.html](http://www.ivytech.edu/evansville/studentservices/lfasttrack.html)
  – Whitworth: [http://www.whitworth.edu/Academic/Department/AdultDegree/AcceleratedFormat.htm](http://www.whitworth.edu/Academic/Department/AdultDegree/AcceleratedFormat.htm)

• Credit for Prior Learning
  – Prior Learning Assessment [http://www.sbctc.ctc.edu/college/_e-assesspriorlearning.aspx](http://www.sbctc.ctc.edu/college/_e-assesspriorlearning.aspx)
  – College-Level Examination Program (CLEP) - [http://www.collegeboard.com/student/testing/clep/about.html](http://www.collegeboard.com/student/testing/clep/about.html)

• Continue improvements in Student Transfer - Direct Transfer Agreement, Associate of Science Transfer, Major Related Programs [http://www.hecb.wa.gov/research/issues/transfer.asp](http://www.hecb.wa.gov/research/issues/transfer.asp)

• More Flexible Transfer (1+3, 2+2, 3+1)

• GED Bridge Programs
Alternative Admission / Enrollment Options

• High School / College Dual Enrollment
  – Examples: Running Start (17,000 students\(^1\)), Tech Prep (24,000 students\(^2\)), College in the High School (7,500 students\(^2\)), Advanced Placement (30,175 students\(^3\)), International Baccalaureate (340 students\(^2\)).
  – **Advantages**: Potential savings on tuition; provides students early exposure to college-level coursework.

• Community College / Baccalaureate Dual Admission
  – Student is admitted to both the community college program, and provisionally admitted to the baccalaureate program.
  – **Advantages**: Student receives advising support from both institutions to ensure smooth transfer and has assurance of admission of conditions are met.

• Community College / Baccalaureate Dual Enrollment
  – Students take courses concurrently from the community college and the baccalaureate institution.
  – **Advantages**: Students are able to enroll and take courses at both institutions; coordination of advising and financial aid; allows students more flexibility in course scheduling than 2+2 model.

---

2) OSPI – 2007-08.
3) 2008 graduates who scored 3 or higher on at least 1 exam, SAT State Report.
Applied Baccalaureate Programs provide a transfer pathway for graduates of technical associate degree programs.

• Criteria for approval of Applied Baccalaureates *(hand-out)*
• Applied Bachelor’s programs provide specific baccalaureate pathways for technical degree (AAS-T) graduates
• These degrees are often referred to as Bachelor of Applied Science (BAS) degrees. However, in many cases other degree designation may apply (e.g. BA, BS, BSN)
• BAS - Public Baccalaureates - CWU, EWU, WSU, UWB, UWT
• BAS - Private Baccalaureates - PLU, City U, U of Phoenix, DeVry U
• Upside Down Degrees - focus on liberal arts in junior and senior year, TESC, SPU, Whitworth
• BAS – Community and Technical Colleges
  – 2007: Bellevue, Olympic, Peninsula, South Seattle
  – 2009: Columbia Basin, Lake Washington, Seattle Central

Students taking online courses tend to be older, undergraduate students familiar with college; 1/2 prefer asynchronous academic/student services.

- Adult learner, employed, with family obligations
- 95% have access to computer at work and/or home
- Prefer asynchronous – their time, their place
- Learning preferences
  - Classroom 50%
  - Hybrid 30%
  - Online 20%
- 50% completed some college
- Among the interested:
  - Bachelor: 40%, Associate: 25%, Masters: 25%
  - 2/3 enroll in an institution in their region
  - Increasing use of blogs, chats, podcasts, other interactive elements of Web 2.0

### National Patterns in Online Ed  
(in order of market demand)

<table>
<thead>
<tr>
<th>Four-Year Degree Fields</th>
<th>Two-Year Degree Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Business</td>
<td>• Business</td>
</tr>
<tr>
<td>• Education</td>
<td>• Health</td>
</tr>
<tr>
<td>• Health</td>
<td>• Computers</td>
</tr>
<tr>
<td>• Engineering</td>
<td>• Education</td>
</tr>
<tr>
<td>• Computers</td>
<td>• Engineering Technologies</td>
</tr>
<tr>
<td>• Psychology</td>
<td>• Liberal Arts</td>
</tr>
<tr>
<td>• Social Science</td>
<td>• Precision Production</td>
</tr>
<tr>
<td>• Communications</td>
<td>• Trades</td>
</tr>
<tr>
<td>• Biological/Life Science</td>
<td>• Legal Studies</td>
</tr>
<tr>
<td></td>
<td>• Visual and Performing Arts</td>
</tr>
</tbody>
</table>

Source: Aslanian.
Online FTES have grown at 20% a year. The forecast slows the growth this decade to 10% and the following decade to 5%.

Hybrid FTES are expected to grow rapidly in this decade, then like online growth, slow to 5% a year growth.

*SOURCE: This slide developed by SBCTC.
eLearning Share of All FTES*

80% of students taking online courses also take face-to-face courses.

Adding hybrid to the mix, by 2030 all students will enroll each year in at least one hybrid or online course. Most students will take only courses that are hybrid or online.

85% of all courses will be either online or hybrid by 2030.

*SOURCE: This slide developed by SBCTC.
Summary: Alternative Delivery Options (Slides #27-34)

- Alternative delivery options can provide additional access to higher ed. for targeted student groups.
- For traditional students entering directly from high school, several dual enrollment options exist.
- For adult, re-entry and other non-traditional students, attractive options include online and alternative scheduling options, as well as accelerated, credit for learning, and flexible transfer arrangements.
RATIONAL RULES FOR GROWTH

Matrix for Developing Higher Education Delivery
Recap: Degree Goals

To reach Master Plan degree goals by 2030, Washington higher education will need to go beyond increases in degree production that can be gained by population growth alone. Policies and alternative delivery options need to produce an additional:

• 8,000 bachelor’s degrees
• 8,000 graduate degrees
• 5,000 CTC certificates and degrees
Educational pathways include large numbers of students who should be encouraged to consider entering or furthering college education.

<table>
<thead>
<tr>
<th>Potential students continue further in higher education</th>
<th>2006-07 Completers/Residents</th>
<th>% Who continue in higher education</th>
<th># Who continue (2006-07)</th>
<th>Targeted Policy Improvements</th>
<th>Additional # who might continue</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Graduates*</td>
<td>65,300</td>
<td>57%</td>
<td>37,200</td>
<td>65% (+8%)</td>
<td>5,200</td>
</tr>
<tr>
<td>GED Completers</td>
<td>16,600</td>
<td>39%</td>
<td>6,500</td>
<td>65% (+26%)</td>
<td>4,300</td>
</tr>
<tr>
<td>Private Vocational School Certificates</td>
<td>12,700</td>
<td>n/a**</td>
<td>n/a**</td>
<td>10%</td>
<td>1,300</td>
</tr>
<tr>
<td>CTC Technical Degrees</td>
<td>7,350</td>
<td>13%</td>
<td>950</td>
<td>30% (+17%)</td>
<td>1,300</td>
</tr>
<tr>
<td>CTC Transfer Associate Degrees</td>
<td>12,540</td>
<td>71%</td>
<td>8,900</td>
<td>80% (+9%)</td>
<td>1,100</td>
</tr>
<tr>
<td>Adults 18-44 with &quot;a high school diploma or less&quot;***</td>
<td>865,000</td>
<td>9%</td>
<td>77,800</td>
<td>11% (+2%****)</td>
<td>17,400</td>
</tr>
<tr>
<td>Adult Re-entry - 18-44 with &quot;some college, no degree&quot;***</td>
<td>440,000</td>
<td>30%</td>
<td>132,000</td>
<td>32% (+2%****)</td>
<td>8,800</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39,400</td>
</tr>
</tbody>
</table>

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.

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

**Continuation data are not currently available.

***There may be duplicate counting of re-entry adults and Private Vocational School certificates and of "some adults with high school diploma or less" and high school graduates or GED completers.

****State participation rate average = 1.88.
Rationale for Increase in % Who Go On

• HS Graduates: 57% to 65%, with better preparation (CORE24, etc.) and greater motivation from programs like GEAR UP and College Bound Scholarship.
• GED Completers: 39% to 65%.
• Private Vocational School certificates: 10%, which is somewhat less than technical degree earners. These are certificate earners so more difficult to motivate to go on.
• CTC Technical Degrees: 13% to 30%, with increases in Applied Baccalaureate degree programs and other alternative options.
• CTC Transfer Associate Degrees: 71% to 80%, with more transfer options, better preparation for transfer, and encouragement.
• Adults 18-44 with “a high school diploma or less:” 9% to 11%. This is a difficult population to encourage to enter college; however, an important one. The 2% increase is based on the OFM state average participation rate of 1.88.
• Adult Re-entry – 18-44 with “some college, no degree:” 30% to 32%. These are individuals with some college experience and, therefore, a prudent place to start to increase degree production. The 2% increase is based on the OFM state average participation rate of 1.88.
Principles for Rational Rules for Growth

- The new programs, sites, centers or campuses:
  - are compatible with the HECB’s *Master Plan* policies and priorities;
  - are based on demand demonstrated through actual enrollments; supply additional capacity not adequately provided by existing higher education providers;
  - can be scaled to meet anticipated future demand;
  - leverages resources of the existing system of higher education;
  - provides the most cost efficient alternative to meet needs of students, employers, and the community; and
  - are educationally and economically justified based upon the priorities and needs of the citizens of Washington.

- Options requiring a substantial commitment of resources should first operate as a University Center or University Partnership Center to clearly demonstrate demand.

- Adding a new degree level represents a change in mission. This type of institutional expansion should not have a detrimental effect on overall current degree production.

- Existing transfer policies and freshmen admission standards may need to be reviewed.
### Examples from Arizona and Texas

<table>
<thead>
<tr>
<th>Teaching Site</th>
<th>Washington (current policy)</th>
<th>Arizona NAU “Expand on Demand”</th>
<th>Texas Supply / Demand Pathway (Rule §5.78)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 FTE or Less</td>
<td>Up to 300 Students</td>
<td>Leased Space and Part-Time Faculty</td>
<td>“Test the market” Discontinue if Enrollments Don’t Materialize</td>
</tr>
<tr>
<td>1-3 Programs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Center</th>
<th>150 – 1,500 FTE</th>
<th>Up to 3,000 Students</th>
<th>Increased Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two or more programs</td>
<td>Dedicated Space on CC campus and Dedicated Faculty</td>
<td></td>
<td>Board Designated</td>
</tr>
<tr>
<td>May be Multi-Institutional</td>
<td></td>
<td></td>
<td>May be Multi-Institutional</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>“System Campus”</th>
<th>May First Operate as Site or Center</th>
<th>More Comprehensive Role and Mission</th>
<th>Operates first as a Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislature Must Authorize</td>
<td>President and Separate Admin. Structures</td>
<td>Enrollment of 3,500.</td>
<td>Requires Legislative Action</td>
</tr>
</tbody>
</table>
Northern Arizona University “Expand on Demand”

**SMALL POPULATION**
(up to 300 students, or 2,900 student credit hours)
- Face-to-face and electronically-delivered courses
- Leased space at community colleges or community facilities
- Typically using local practitioners as part-time faculty

**MEDIUM POPULATION**
(up to 3,000 students, or 29,100 student credit hours)
- Facilities on community college campuses
- More face-to-face classes
- Dedicated/joint NAU community college faculty

**LARGE POPULATION**
(thousands of baccalaureate students)
- Costs grow with comprehensive role of university
- Costs grow with separate president, administrative offices
- Costs grow with masters, athletics, research

**ABOR and Legislature $**: Current funding plus standard per student (22:1)

**ABOR and Legislature $**: Facilities and operations costs of $1 million/site initially plus 22:1

**ABOR and Legislature $**: Campus, facilities, operations costs of $20-$40 million per campus plus 22:1

Source: Northern Arizona University Presidential Response to Arizona Board of Regents Redesign Document.
### Rational Rules for Growth

The idea that capacity follows demand.

<table>
<thead>
<tr>
<th>Teaching Sites</th>
<th>CTC Applied Baccalaureate Programs</th>
<th>University Center (single institution)</th>
<th>University Partnership Center (multiple institutions)</th>
<th>Branch/Affiliated Campus</th>
<th>Regional Comp. Campus</th>
<th>Research Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 FTE or fewer</td>
<td>- ? -</td>
<td>100-1,500 FTE</td>
<td>100-5,000 FTE</td>
<td>1,000-5,000 FTE</td>
<td>4,000 FTE or more</td>
<td>10,000 FTE or more</td>
</tr>
<tr>
<td>1-3 programs</td>
<td>Targeted Programs</td>
<td>2 or more programs</td>
<td>2 or more programs</td>
<td>Wide array of programs, including freshmen, targeted professional</td>
<td>Comprehensiva program offerings</td>
<td>Comprehensive program offerings including doctoral level programs</td>
</tr>
<tr>
<td>May include temporary/cohort programs</td>
<td>Build on Workforce Degrees and Certificates</td>
<td>Upper division and masters level</td>
<td>Upper division and masters level</td>
<td>Additional capital needs depends upon growth</td>
<td>Additional capital needs depends upon growth</td>
<td>Additional capital needs depends upon growth</td>
</tr>
<tr>
<td>Leased Space</td>
<td>Leverage existing capital</td>
<td>Leverage some resource – New capital likely required</td>
<td>Leverage some resource – New capital likely required</td>
<td>Significant commitment of resources</td>
<td>Substantial commitment of resources</td>
<td>Substantial commitment of resources</td>
</tr>
<tr>
<td>Low overhead</td>
<td>Relatively low marginal cost</td>
<td>Significant commitment of resources</td>
<td>Significant commitment of resources</td>
<td>Additional capital needs depends upon growth</td>
<td>Substantial commitment of resources</td>
<td>Substantial commitment of resources</td>
</tr>
<tr>
<td>Single institution</td>
<td>Part of Workforce Mission</td>
<td>Single university partner</td>
<td>Multi-institutional</td>
<td>May first operate as a center or teaching site</td>
<td>May first operate as a center or branch</td>
<td>May first operate as a center, branch or regional comprehensive</td>
</tr>
</tbody>
</table>

Some funding flows to a managing partner

Legislature must authorize

Legislature must authorize

Legislature must authorize