The Legislative Role in Promoting Productivity in Higher Education

presented to

WI CHE Legislative Advisory Committee
Boulder, CO
September 28, 2009
The Reality of Higher Expectations

“By 2020, America will once again have the highest proportion of college graduates in the world”
- President Obama, 2/24/09

- State Level Goals
  - Double the numbers in Arizona, Colorado, & Kentucky
  - Global Competitiveness in Minnesota and Texas
  - 40-40-20 in Oregon
Differences in College Attainment (Associate & Higher) Between Younger & Older Adults—U.S. & OECD Countries, 2006

Differences in College Attainment (Associate & Higher) Between Younger & Older Adults—U.S., 2006

Source: U.S. Census Bureau, 2006 American Community Survey (ACS)
Percent of Adults with an Associate Degree or Higher by Age Group - U.S. & Leading OECD Countries

Source: OECD, Education at a Glance 2008
Percent of Adults with an Associate Degree or Higher by Age Group—WICHE States

Source: OECD, Education at a Glance 2007
Percent of Adults with an Associate Degree or Higher by Age Group—WICHE States (continued)

Source: OECD, Education at a Glance 2007
Closing the Gap - Number of Degrees Required Beyond Current Production

- To Meet International Best Performing: 15,600,000
- To Close Equity Gap: 10,500,000
- To Meet Manpower Demands: 16,200,000
Educational Attainment (Percent)

Current, In 2025 with Current Degree Production, and Best-Performing Countries in 2025

Current % of Adults Age 25-64 with College Degrees, 2005:
- 37.4%

Projected % in 2025 with Current Annual Degree Production:
- 41.9%

Projected % in 2025 with Current Annual Degree Production and Net Migration:
- 45.9%

% Needed to Reach Best-Performing Countries by 2025:
- 55.0%
<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Individuals to Match Best-Performing Countries (55%)</td>
<td>94,510,473</td>
</tr>
<tr>
<td>Number of Individuals (Age 25-44) Who Already Have Degrees</td>
<td>31,382,831</td>
</tr>
<tr>
<td>Additional Degree Production Needed (2005 to 2025)</td>
<td>63,127,642</td>
</tr>
<tr>
<td>Degrees Produced at Current Annual Rate of Production</td>
<td>40,605,747</td>
</tr>
<tr>
<td>Additional Residents with College Degrees from Net Migration</td>
<td>7,045,932</td>
</tr>
<tr>
<td>Additional Degrees Needed</td>
<td>15,626,080</td>
</tr>
<tr>
<td>Additional Degrees Needed per Year (Currently Produce 2,135,924 in All Sectors)</td>
<td>781,304</td>
</tr>
<tr>
<td>Increase in Annual Associate and Bachelor’s Degree Production Needed (in Public Sector Only)</td>
<td>52.8%</td>
</tr>
</tbody>
</table>
How Can the U.S. Reach International Competitiveness?

Current Degree Production Combined with Population Growth and Migration and Improved Performance on the Student Pipeline Measures

- Degrees Produced 2005-25 with Current Rate of Production: 40,605,747
- Additional Degrees from Population Growth: 1,255,167
- Additional Degrees from Net Migration of College-Educated Residents: 7,045,932
- Reaching Best Performance in High School Graduation Rates by 2025: 1,265,118
- Reaching Best Performance in College-Going Rates by 2025: 3,270,900
- Reaching Best Performance in Rates of Degree Production per FTE Student: 7,347,209

Total Degrees Produced 2005-25 If All of the Above: 60,790,073

Degrees Needed to Meet Best Performance (55%): 63,127,642

Source: 2005 ACS, PUMS
The “Gap” - Difference in Annual Degrees Currently Produced and Annual Degrees Needed to Meet Benchmark

Accounting for Migration

U.S. = 781,301 (a 52.8% increase in the public sector)

Source: U.S. Census Bureau, PUMS and Population Projections, IPEDS Completions Survey 2004-05
Even Best Performance with Traditional College-Age Students at Each Stage of the Educational Pipeline Will Leave Gaps in More than 30 States

In order to reach international competitiveness by 2025, the U.S. and 32 states cannot close the gap with even best performance with traditional college students. They must rely on the re-entry pipeline—getting older adults back into the education system and on track to attaining college degrees.
FINANCIAL ENVIRONMENT

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The Flow of Funds

- Economy
- Available State and Local Govt. Funds
- Higher Education
  - Student Aid
  - Appropriations/Grants
  - Tuition
  - Scholarships & Waivers
  - Student Aid (Restricted)

- Federal Government
  - Stimulus Funds
  - Donors
    - Foundations
    - Corporations
  - • K-12
  - • Corrections
  - • Health Care
  - • Other Govt.

- Institutions

The Flow of Funds - State

- Economy
  - Available State and Local Govt. Funds
    - Federal Government
      - Stimulus Funds
        - K-12
        - Corrections
        - Health Care
        - Other Govt.
    - Higher Education
      - Student Aid
      - Appropriations/Grants
        - Tuition
      - Institutions
        - Scholarships & Waivers

- Tax Policy
First, recognize that many state governments have serious financial problems.

And they’re not going to recover quickly.
State Tax Capacity and Effort—Indexed to U.S. Average

Source: State Higher Education Executive Officers (SHEEO)
Projected Budget Gap for Fiscal Year 2010

Source: National Conference of State Legislatures, 2009
Projected State & Local Budget Surplus (Gap) as a Percent of Revenues, 2016

Source: NCHEMS; Don Boyd (Rockefeller Institute of Government), 2009
Second, recognize that for most states - and for most public institutions - the stimulus package is not an answer.

- But it will slow the impact
- And it can buy enough time to adjust to substantially changed circumstances
After stimulus wanes, gaps could approximate 4% of spending, or $70 billion, even under the “Low-Gap” Scenario

"Low-Gap" Scenario:
State General Revenue Minus Expenditures With and Without Federal Stimulus

Source: Don Boyd (Rockefeller Institute of Government), 2009
After stimulus wanes, gaps could approach 7% of spending or $120 billion under the “High-Gap” scenario.

"High-Gap" Scenario:
State General Revenue Minus Expenditures With and Without Federal Stimulus

Source: Don Boyd (Rockefeller Institute of Government), 2009
Third, recognize that the big population growth will be in students of color. In the main these will be individuals of modest means.

Therefore there are real limits as to how high tuition can go before price affects participation and completion.
Change in Population Age 25-44 By Race/Ethnicity, 2005-2025

Source: U.S. Census Bureau
Difference Between Whites and Next Largest Race/Ethnic Group in Percentage of Adults Age 25-34 with an Associate Degree or Higher, 2000

Source: U.S. Census Bureau, PUMS (based on 2000 Census)
Percentage of Children in the Lowest and Highest U.S. Family Income Quartiles by Race/Ethnicity (2006)

<table>
<thead>
<tr>
<th>State</th>
<th>Low Income Quartile</th>
<th>High Income Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White and Asians</td>
<td>Other Race/Ethnicities</td>
</tr>
<tr>
<td>Alaska</td>
<td>10.2</td>
<td>26.1</td>
</tr>
<tr>
<td>Arizona</td>
<td>12.4</td>
<td>34.8</td>
</tr>
<tr>
<td>California</td>
<td>11.8</td>
<td>30.1</td>
</tr>
<tr>
<td>Colorado</td>
<td>12.1</td>
<td>33.5</td>
</tr>
<tr>
<td>Hawaii</td>
<td>16.4</td>
<td>15.8</td>
</tr>
<tr>
<td>Idaho</td>
<td>18.0</td>
<td>35.5</td>
</tr>
<tr>
<td>Montana</td>
<td>19.5</td>
<td>38.8</td>
</tr>
<tr>
<td>Nevada</td>
<td>11.7</td>
<td>28.6</td>
</tr>
<tr>
<td>New Mexico</td>
<td>15.7</td>
<td>39.5</td>
</tr>
<tr>
<td>North Dakota</td>
<td>16.0</td>
<td>35.3</td>
</tr>
<tr>
<td>Oregon</td>
<td>17.0</td>
<td>38.4</td>
</tr>
<tr>
<td>South Dakota</td>
<td>11.8</td>
<td>44.2</td>
</tr>
<tr>
<td>Utah</td>
<td>11.1</td>
<td>31.8</td>
</tr>
<tr>
<td>Washington</td>
<td>14.3</td>
<td>36.3</td>
</tr>
<tr>
<td>Wyoming</td>
<td>18.3</td>
<td>26.6</td>
</tr>
<tr>
<td>United States</td>
<td>14.8</td>
<td>37.4</td>
</tr>
</tbody>
</table>
Collective Cost to States, Assuming Tuition Stays the Same

$31 Billion  =  Annual Costs of Additional Students at Current $ per Student

$78.2 Billion  =  Current State Contribution

39.7%  =  Percent Increase in Annual State Support Needed
Average Cost to Students, Assuming No Additional State Investment

$2,565 = Additional Annual Costs to Students at Public Four-Year Institutions

47.9% Increase in Tuition and Fees
(Currently $5,355)

$1,824 = Additional Annual Costs to Students at Public Two-Year Institutions

108.8% Increase in Tuition and Fees
(Currently $1,677)
Additional Annual Costs at Current Funding Levels
Per Student to States & Localities to Reach Benchmark
Keeping Tuition the Same

(Dollars in Millions)
U.S. = 31 Billion
The Imperative of Improved Productivity

• The country – and most states – can’t afford the necessary gains doing business as usual

• And there is evidence that productivity gains are possible
Performance Relative to Funding: Bachelors Degrees Awarded per 100 FTE Undergraduates (Public Bachelors and Masters)

Source: NCES, IPEDS
Approaches to Achieving Greater Productivity

• Build cost-effective systems
• Change the academic production function
• Reduce demand each student places on the system
• Reduce leaks in the pipeline
Building Cost-Effective Systems

• More appropriate mix of institutions
• Create new types of providers
• Effective collaboration among institutions
• More efficient use of existing resources
Changing the Academic Production Function

• Create programs of cost-effective size (elimination in some cases, collaboration in others)

• Reengineer curricula

• Reengineer course delivery

• Change composition and deployment of human assets
Reducing Demands Each Student Places on the System

• Students come to college fully prepared (no remediation)
• Accelerated learning
• Minimize “rework”
• Improve rates of course completion
• Reduce credit hours to degree
• Encourage use of assessment/“test out” options
• Learning in the workplace/credit for experience
Reducing Leaks in the Pipeline

• Curricula Alignment
• Financial Aid incentives
• Early-warning systems
• Improved consumer information
Expectations

• Maintain access – serve an increasing number of students
• Maintain affordability to both students and the state

Invest stimulus funds in:
• Developing more cost-effective ways of doing business
• Paying for the transition
Short-Term Actions

• Be clear about goals & accountability measures
  – Degree production
  – Reduced cost/degree

• Create a Coherent Financing Plan
  – Align policies regarding appropriations to institutions, tuition, & student aid policies
  – Treat different sectors differentially
  – “Reset” base funding levels

• Invest more (reduce less) state appropriations in institutions that must contribute most to student access and success
• Protect need-based financial aid

• Mandate increases in instructional productivity
  – SCHs per FTE faculty
  – Have a plan for use of savings
    • Invest in reform
    • Return to General Fund
Long-Term Actions

- Refocus institutional missions
  - Directly
  - Through de-funding certain programs/functions
- Require certain programs to be self-supporting (e.g., MBA)
- Align state & federal student aid programs – leave no federal money on the table
- Administer need-based aid as a state – not institutional – program
- Tackle developmental education on a statewide basis
  - Consider a separate delivery entity
- Undertake a policy audit with an eye toward eliminating unnecessary bureaucracy
- Adopt a strategy for investing in productivity enhancement
  - Course redesign on a system-wide basis
  - Retrofitting buildings for energy efficiency
  - Reengineered business processes
  - Inter-institutional collaboration
For More Information

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and visit

NCHEMS Information Center for Higher Education
Policymaking and Analysis

www.higheredinfo.org