MONTANA’s Education Pipeline
Montana in Two Dimensional Space
Montana’s Challenges: The Big Three

The Demand Dilemma

The Leaky Pipeline

Constrained Finances
The 1st Challenge – The Demand Dilemma

- Precipitous Projected drop in college enrollment

WHY?
U.S. is very diverse, but growth will be significant

Percent Change in Number of Public and Nonpublic High School Graduates by State, U.S., 2001-02 (actual) and 2017-18 (projected)

A couple of neighbors face growth that is off the charts

Percent Change in Number of Public and Nonpublic High School Graduates by State, U.S., 2001-02 (actual) and 2017-18 (projected)

Others will see substantial growth

Some will see manageable growth
Some will see modest growth
Some states will see manageable declines

Percent Change in Number of Public and Nonpublic High School Graduates by State, U.S., 2001-02 (actual) and 2017-18 (projected)

Some of you will face significant declines

Percent Change in Number of Public and Nonpublic High School Graduates by State, U.S., 2001-02 (actual) and 2017-18 (projected)

Projections of High School Graduates to 2018 by race/ethnicity – Montana

American Indian/Alaska Native (689 to 732)
Asian/Pacific Islander (108 to 177)
Black (33 to 60)
Hispanic (169 to 299)
White (9,629 to 7,216)

The Second Challenge – the Leaky Pipeline

Two Dimensions of High School completion

The Good News

- In Montana, 78.1% of 9th graders earned high school diplomas (good, but a 3% decline, 1996-2000)
- In the WICHE West – it’s 69.8%
- In the U.S. – it’s 68.1%
Leaks continued – high school completion

The Bad News

Averages mask the two Montanas
18 to 24 year olds with a high school diploma or equivalent – Montana

Source: U.S. Census Bureau
Leaks Continued – Post-secondary participation

*Measuring Up 2002 gives a D+

- WICHE data looks better
  - Montana – 53.8%
  - WICHE West – 48%
  - U.S. – 56.1%
Leaks continued -- Completing college

- Measuring Up 2002: C on Completion
First-year retention rates at four-year institutions, 2002

- Wisconsin: 80.9%
- Wyoming: 78.0%
- Nebraska: 76.2%
- United States: 73.6%
- North Dakota: 71.5%
- New Mexico: 70.9%
- South Dakota: 69.7%
- Kansas: 69.5%
- Montana: 67.3%

Source: ACT Institutional Survey
First-year retention rates at two-year institutions, 2002

- South Dakota: 57.0%
- Wyoming: 55.0%
- United States: 54.8%
- New Mexico: 51.6%
- Nebraska: 51.5%
- Kansas: 51.0%
- Wisconsin: 48.7%
- Montana: 43.9%
- North Dakota: NA

Source: ACT Institutional Survey
Graduation rates for research institutions, 2002

- Wisconsin: 67.1%
- United States: 62.2%
- Nebraska: 54.4%
- Wyoming: 54.3%
- Kansas: 53.8%
- South Dakota: 51.0%
- North Dakota: 48.8%
- New Mexico: 45.7%
- Montana: 43.1%

Source: NCES, IPEDS 2002 Graduation Rates
Graduation rates for other four-year institutions, 2002

- Wisconsin: 52.1
- United States: 48.2
- Nebraska: 47.2
- Kansas: 44.3
- South Dakota: 42.0
- Montana: 39.7
- North Dakota: 37.0
- New Mexico: 31.1
- Wyoming: No Other Four-Year Institutions

Source: NCES, IPEDS 2002 Graduation Rates
Graduation rates for two-year institutions, 2002

South Dakota: 60.6%
Wyoming: 52.2%
North Dakota: 44.0%
Nebraska: 43.2%
Wisconsin: 39.6%
Kansas: 37.7%
Montana: 30.2%
United States: 29.1%
New Mexico: 12.9%

Source: NCES, IPEDS 2002 Graduation Rates
So What?

- World leaders in higher education attainment:
  - Canada, Finland, Ireland, Japan, Korea

- Second Tier:
  - U.S., Australia, Belgium, France, Norway, Spain, Sweden, U.K.

Source: OECD Statistics, Annex 3 – Table 2.5
Leaks continued – We serve certain populations poorly

Increasing share of population from communities that higher education traditionally has not served well.

- Communities of Color: Will supply a larger percentage of Montana’s high school grads by 2012: Up from 11% today to 14% in ten years
- Native American high school grads will make up 8% of the total
- Hispanics only growing population – from 2% to 3.3%
Another challenge for Montana: In 2000, Native Americans represented

- 6.4% of the Montana population
- 4.3% of full-time first-time freshmen
- 2.2% of those awarded associate degrees*
- 2.8% of those awarded bachelor’s degrees

*92% from tribal colleges
Historic Success, or lack thereof, of low-income students

- In the U.S.: Participation dropped from 27.5% to 23.1% between 1999 and 2001.
- In Montana: 27.9% of low income participation.
### Percentage of 1992 high school graduates attending college in 1994

<table>
<thead>
<tr>
<th>Achievement Quartile</th>
<th>SES Quartile</th>
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<tbody>
<tr>
<td>Highest</td>
<td>Lowest</td>
</tr>
<tr>
<td></td>
<td>Highest</td>
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<tr>
<td></td>
<td>Lowest</td>
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<table>
<thead>
<tr>
<th></th>
<th>Lowest</th>
<th>Highest</th>
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<tbody>
<tr>
<td></td>
<td>36%</td>
<td>78%</td>
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<td></td>
<td>77%</td>
<td>97%</td>
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*Source: Access Denied, Department of Education, February 2001*
The 3rd Challenge – Limited Resources

- State appropriations make up 33.1% of funding for Montana’s baccalaureate institutions. The WICHE average: 42.9%

- Montana funds its two-year institutions at a rate of 18.9%. The WICHE average: 36.6%
State and local surplus or shortfall as a percent of baseline revenues

Source: National Center for Higher Education Management Systems (NCHEMS)
Access is at risk

- Montana trails the West and the rest in need-based financial assistance.
- State need-based aid
  - Montana - $62
  - WICHE average - $238
  - U.S. average - $316
The Makings of *The Brewing Storm*

Declining demand

Increasingly difficult-to-serve clientele

Limited finances
The Brewing Storm – Facing The Challenge

- The solutions for higher education lie both within and outside higher education in Montana – your revenue structure won’t support your anticipated level of public services

- Planning is essential

- Leadership makes the real difference
Outside Solutions: Interstate collaboration makes sense, if done smartly.

- Other states can help fill excess capacity (i.e., WICHE’s WUE program)
- Other states can help Montana focus its resources (i.e., WICHE’s PSEP program)
- In/Pre-Service Teacher Prep & Certification
Internal Solutions

If states perform like the top states on high school graduation and college-going and the participation of 25 to 49 year-olds

<table>
<thead>
<tr>
<th>State</th>
<th>High School Graduation and College-going</th>
<th>Participation of 25 to 49 year-olds</th>
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</thead>
<tbody>
<tr>
<td>Wisconsin</td>
<td>47,978</td>
<td>58,403</td>
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<tr>
<td>Kansas</td>
<td>31,852</td>
<td>16,126</td>
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<tr>
<td>Nebraska</td>
<td>17,756</td>
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<td>New Mexico</td>
<td>16,563</td>
<td>11,701</td>
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<td>Montana</td>
<td>16,049</td>
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<tr>
<td>South Dakota</td>
<td>15,267</td>
<td>9,794</td>
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<tr>
<td>North Dakota</td>
<td>8,993</td>
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<tr>
<td>Wyoming</td>
<td>0</td>
<td>20,251</td>
</tr>
</tbody>
</table>

Source: NCES Common Core Data, NCES IPEDS Residency and Migration and Fall Enrollment Files, U.S. Census Bureau
P-20 in Montana

- Policies In Sync
- Teachers & Teaching
- Curriculum and Standards
- Outreach
- Financing the Enterprise
- Data & Accountability