PLANNING FOR NEVADA’S FUTURE

Western Nevada College
September 19, 2008
Dr. Jane A. Nichols, Vice Chancellor for Academic & Student Affairs
Nevada System of Higher Education
Nevada: A Look at the Future

- What can we anticipate happening in Nevada in the years to come?
  - Population growth
  - Growth in High School Graduates
  - Educational preparedness of workforce
  - Economy and job demand
  - NSHE enrollment trends
- What are the challenges for education?
Anticipated Population Growth

- Nevada is the fastest-growing state in the US. All race/ethnic groups are growing substantially – with Hispanics expected to account for the majority of future growth.
  - Rapid, but uneven, growth across Nevada
  - Very high growth rate for Clark and Las Vegas, with surprisingly high growth rate for Nye and Lyon Counties
  - Moderate, but substantial, growth in Washoe and surrounding counties, plus Lincoln
  - Declining population in rural areas
In the next 20 years, population growth in Clark County is expected to continue to outpace the rest of the state, followed closely by Lyon and Nye counties.

Source: State of Nevada Demographer
Percent Change in Population by Nevada County (2006-2026)

Source: State of Nevada Demographer
Who will be in this new population?

Percent Change in Nevada's Population by Race/Ethnicity, 2006-2026

- White Not of Hispanic Origin: 37.6%
- Black Not of Hispanic Origin: 69.2%
- American Indian, Eskimo, or Aluet: 53.9%
- Asian or Pacific Islander Not of Hispanic Origin: 94.5%
- Hispanic Origin of Any Race: 131.8%
- TOTAL: 66.3%

Source: State of Nevada Demographer
Nevada's Population by Race/Ethnicity, 2026

Source: State of Nevada Demographer
We know that the new Nevada population will be increasingly Hispanic, Asian and Black...
Nevada’s K-12 System is already seeing this change…. and it will continue

Percent Change in Public High School Graduation by Race/Ethnicity, 2006-07 to 2021-22

- Asian/Pacific Islander: 284.2%
- Hispanic: 318.4%
- Black, non-Hispanic: 107.4%
- American Indian/Alaska Native: 16.7%
- White, non-Hispanic: -14.9%
- Public Total: 69.0%

Source: WICHE
LOSING OUR YOUNG PEOPLE: U.S. ON-TIME HIGH SCHOOL GRADUATION

Losing our young people  
Nevada is 49th again

Transition and Completion Rates from 9th Grade to College, 2006

<table>
<thead>
<tr>
<th></th>
<th>Nevada</th>
<th>Nation</th>
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</thead>
<tbody>
<tr>
<td>For every 100 Ninth Graders</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td># Graduate from High School</td>
<td>51</td>
<td>69</td>
</tr>
<tr>
<td># Enter College</td>
<td>26</td>
<td>42</td>
</tr>
<tr>
<td># Are Still Enrolled Their Sophomore Year</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td># Graduate within 150% Time</td>
<td>10</td>
<td>20</td>
</tr>
</tbody>
</table>

For every 100 Ninth Graders in Nevada…

9.8 will Graduate from College within 150% Time

Source: higheredinfo.org
Nevada High School Graduation Rate by County - Class of 2007

Source: Nevada Department of Education
Statewide High School Graduation Rates by Ethnicity - Class of 2007

- American/Alaskan Native: 60%
- Asian/Pacific Islander: 77%
- Hispanic: 54%
- Black/African American: 52%
- White: 76%

Source: Nevada Department of Education
Graduation Rates by Ethnicity - Class of 2007, Clark and Washoe Counties

Source: Nevada Department of Education
The problem is clear - we are still not successful enough in getting Nevada high school students to graduate, go to college, and finish college.
Nevada College Continuation Rate

Nevada College Continuation Rate
% of NV high school graduates enrolled as first-time, degree-seeking college students in the fall semester immediately following graduation

- Continuing to Postsecondary Ed
- Continuing to NSHE only

Source: IPEDS
Nevada College Continuation Compared to U.S.

College Continuation Rates for Recent High School Graduates - Nevada and U.S.


U.S. College Continuation Rates
Nevada College Continuation Rates

Source: IPEDS and Postsecondary Education Opportunity
NSHE Capture Rate of Recent High School Graduates, Fall 2007, by County

Source: NSHE Remedial Report
If we are not getting recent high school graduates to come to college, perhaps people still enroll later in life. But looking at all Nevadans who are in our colleges and universities, this is not the case. We are 49th.
Some think that Nevada is OK because so many people move here from out of state with college degrees -- but this is not the case. We are 46th.
Percent of Adults 25 to 64 with an Associates Degree or Higher - 2006

Source: U.S. Census Bureau, 2006 American Community Survey Public Use Microdata Sample File
Percent of Adults 25 to 64 with a Bachelors Degree or Higher - 2006

Source: U.S. Census Bureau, 2006 American Community Survey Public Use Microdata Sample File
Nevada’s In-migration is Primarily by an Uneducated Workforce

Migration Rate of Residents 22-29 Years Old (1995 to 2000)

Nevada: 267.8 (Ranked 1st)

Source: higheredinfo.org
In-Migration of Nevada Population Compared to the West and the U.S.

Migration Rate of Residents 25 Years and Older (2005)
### Nevada’s Challenge: Educational Attainment of Workforce, Age 25-64

<table>
<thead>
<tr>
<th></th>
<th>Assoc or More</th>
<th>Rank</th>
<th>BA or More</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada</td>
<td>29.0%</td>
<td>46</td>
<td>21.3%</td>
<td>47</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, 2006 American Community Survey (higheredinfo.org)
Workforce Age 25-64: States that we are ahead of:

- Associates: Mississippi, Louisiana, Arkansas, West Virginia
- Bachelor’s: Arkansas, Mississippi, West Virginia

Source: US Census Bureau, 2006 American Community Survey (higheredinfo.org)
Educational Attainment of YOUNG Workforce, 25-34

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<td>Nevada</td>
<td>27.9%</td>
<td>49</td>
<td>20.7%</td>
<td>48</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, 2006 American Community Survey (higheredinfo.org)

NCHEMS predicts that Nevada will lose ground in the percentage of its workforce that is college-educated. The most substantial growth will occur in the “less than high school” and “high school only” populations.
But, perhaps, Nevada does not need college graduates since our jobs do not require them...
Employment by Occupation (Nevada), 2005

- Wholesale Trade: 3.2%
- Transportation, Warehousing, and Utilities: 5.0%
- Retail Trade: 11.0%
- Public Administration: 4.2%
- Professional Scientific, Management, Administrative, Waste Management Services: 9.5%
- Other Services (Except Public Admin.): 4.1%
- Manufacturing: 4.7%
- Information: 1.7%
- Finance Insurance, Real Estate, Rental and Leasing: 7.0%
- Educational, Health, Social Services: 12.8%
- Construction: 11.6%
- Arts, Entertainment, Recreation, Accommodation and Food Services: 23.8%
- Agriculture, Forestry, Fishing and Hunting, and Mining: 1.3%

Source: higheredinfo.org
Nevada seemed to do well with what we had in the past … but we have fallen sharply from 127% of national average income in 1960 to 105%.

**Per Capita Personal Income 2007 ($)**

- **Nation**: $38,611
- **Nevada**: $40,480

Source: Bureau of Economic Analysis
Nevada’s Unusual Story

- “Chance for College” Ranking: 49th
- Enrollment of population in higher education: 49th
- Per Capita Personal Income: Nevada HIGHER than the National Average, but only slightly
- Unemployment Rate: Nevada 5.5 now HIGHER than National 4.8 (February, 2008)

Conclusion: Historically, education has not been pursued nor was it necessary in Nevada for employment at higher than national salaries.
But the future projections for jobs in Nevada tell a different story...
Change in Nevada's Workforce and Population Ages 19-64 (2006-2016)

Percent Change in Population (Ages 19-64)

- Total, All Occupations: 38.2%
- Architecture and Engineering: 33.8%
- Arts, Design, Entertainment, Sports, and Media: 32.6%
- Building and Grounds Cleaning and Maintenance: 32.3%
- Business and Financial Operations: 37.5%
- Community and Social Services: 35.1%
- Construction and Extraction: 33.6%
- Education, Training, and Library: 42.2%
- Farming, Fishing, and Forestry: 31.8%
- Food Preparation and Serving Related: 11.3%
- Healthcare Practitioners and Technical: 36.3%
- Healthcare Support: 36.0%
- Installation, Maintenance, and Repair: 42.2%
- Legal: 26.6%
- Life, Physical, and Social Science: 30.0%
- Management: 35.0%
- Office and Administrative Support: 24.0%
- Personal Care and Service: 4.7%
- Production: 34.2%
- Professional/Computer/Mathematical: 44.0%
- Protective Service: 28.4%
- Sales and Related: 31.2%
- Transportation and Material Moving: 33.7%

Source: DETR
Change in Las Vegas Workforce and Clark County Population Ages 19-64 (2006-2016)

Percent Change in Population (Ages 19-64)
- Total, All Occupations: 38.0%
- Architecture and Engineering: 33.4%
- Arts, Design, Entertainment, Sports, and Media: 34.6%
- Business and Financial Operations: 44.3%
- Community and Social Services: 38.3%
- Construction and Extraction: 38.8%
- Education, Training, and Library: 35.5%
- Farming, Fishing, and Forestry: 18.2%
- Food Preparation and Serving Related: 42.8%
- Healthcare Practitioners and Technical: 40.3%
- Healthcare Support: 49.2%
- Installation, Maintenance, and Repair: 39.5%
- Legal: 28.1%
- Life, Physical, and Social Science: 35.7%
- Management: 39.4%
- Office and Administrative Support: 26.8%
- Personal Care and Service: 38.0%
- Production: 48.0%
- Professional/Computer/Mathematical: 49.1%
- Protective Service: 33.8%
- Sales and Related: 32.9%
- Transportation and Material Moving: 36.1%

Source: DETR
Change in Reno Workforce and Washoe County Population Ages 19-64 (2006-2016)

Percent Change in Population (Ages 19-64)

- Total, All Occupations: 21.4%
- Architecture and Engineering: 30.0%
- Arts, Design, Entertainment, Sports, and Media: 22.7%
- Building and Grounds Cleaning and Maintenance: 28.4%
- Business and Financial Operations: 23.0%
- Community and Social Services: 33.7%
- Construction and Extraction: 29.3%
- Education, Training, and Library: 30.6%
- Farming, Fishing, and Forestry: 21.7%
- Food Preparation and Serving Related: -3.8%
- Healthcare Practitioners and Technical: 29.3%
- Healthcare Support: 26.2%
- Installation, Maintenance, and Repair: 29.6%
- Legal: 21.7%
- Life, Physical, and Social Science: 24.0%
- Management: 25.2%
- Office and Administrative Support: 22.8%
- Personal Care and Service: 15.8%
- Production: 26.0%
- Professional/Computer/Mathematical: 37.1%
- Protective Service: 18.2%
- Sales and Related: 22.5%
- Transportation and Material Moving: 28.6%

Source: DETR
### Change in Workforce and Population Ages 19-64 for the Balance of the State (2006-2016)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, All Occupations</td>
<td>16.7</td>
</tr>
<tr>
<td>Construction and Extraction</td>
<td>10.4</td>
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<tr>
<td>Community and Social Services</td>
<td>22.6</td>
</tr>
<tr>
<td>Education, Training, and Library</td>
<td>16.8</td>
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<tr>
<td>Business and Financial Operations</td>
<td>19.1</td>
</tr>
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<td>21.9</td>
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<td>Agriculture and Engineering</td>
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<tr>
<td>Health, Physical, and Social Science</td>
<td>21.6</td>
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<tr>
<td>Management</td>
<td>18.7</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>32.7</td>
</tr>
<tr>
<td>Sales and Related</td>
<td>29.9</td>
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<tr>
<td>Production</td>
<td>30.4</td>
</tr>
<tr>
<td>Professional/Computer/Mathematic</td>
<td>42.1</td>
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<tr>
<td>Protective Service</td>
<td>8.1</td>
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<tr>
<td>Personal Care and Service</td>
<td>10.1</td>
</tr>
<tr>
<td>Office and Administrative Support</td>
<td>3.6</td>
</tr>
<tr>
<td>Production</td>
<td>29.3</td>
</tr>
<tr>
<td>Food Preparation and Serving Related</td>
<td>5.6</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
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<td>Healthcare Practitioners and Technical</td>
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</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>29.3</td>
</tr>
</tbody>
</table>

Source: DETR
Nevada: Percent Change in Occupations Requiring Some College

<table>
<thead>
<tr>
<th></th>
<th>Percent Growth</th>
<th>State Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>47.7%</td>
<td>#1</td>
</tr>
<tr>
<td>BA+</td>
<td>45.1%</td>
<td>#1</td>
</tr>
<tr>
<td>Combined</td>
<td>46.3%</td>
<td>#1</td>
</tr>
</tbody>
</table>

Source: NGA
More Jobs Requiring More College for All People

If Hispanics/Latinos, African-Americans, and Native Americans achieved the same levels of education as Whites by 2020, Nevada’s personal income would increase by $2.2 Billion (in 2000 $).

Source: National Center for Higher Educational Management Systems
We have to have more college-educated Nevadans in the context of a rapidly growing diverse population.

Is higher education doing its part?
Graduation Rates – Nevada Universities

University Graduation Rates
% of first-time, full-time, degree-seeking students graduating with a bachelor's degree within 150% of expected time (6 years)

<table>
<thead>
<tr>
<th>Year</th>
<th>Graduation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>42.4%</td>
</tr>
<tr>
<td>2004</td>
<td>44.7%</td>
</tr>
<tr>
<td>2005</td>
<td>46.1%</td>
</tr>
<tr>
<td>2006</td>
<td>43.8%</td>
</tr>
<tr>
<td>2007</td>
<td>43.1%</td>
</tr>
</tbody>
</table>

Source: IPEDS Graduation Rate Report
Community College Graduation Rates

% of first-time, full-time, degree-seeking students earning a degree or certificate within 150% of expected time (3 years for an associate degree, 1.5 years for a certificate)

Source: IPEDS Graduation Rate Report
Family Income and College Participation

- The national average in 2005 for 18 to 24 year olds enrolled in college from low income families was 25.4%.
- The college participation rate for Nevada students from low income families is 14.9%.
- Only one other state has a lower rate: Alaska; again Nevada ranks 49th.

Source: Postsecondary Education Opportunity February 2007
Attendance Patterns:
Part-time Enrollment as % of Full-time Enrollment

Attendance Patterns:
Percent Retained at any NSHE Institution

NSHE Persistence Rates by Institutional Type
% of First-time, Full-time, Degree-seeking Freshmen Returning to any NSHE Institution for a Second Year of Enrollment

- Entering Fall 2003, Returning Fall 2004
- Entering Fall 2004, Returning Fall 2005
- Entering Fall 2005, Returning Fall 2006
- Entering Fall 2006, Returning Fall 2007

Universities: 84.3%, 83.7%, 81.7%, 84.3%
Community Colleges: 69.8%, 65.2%, 63.1%, 68.3%
State College: 57.4%, 65.7%, 70.2%, 66.1%

Source: NSHE Data Warehouse
2007 NSHE Graduation Rates by Ethnicity

Source: IPEDS
Projected NSHE Enrollment just gets us further and further behind

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment as percent of Nevada’s Population, Ages 19-64</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>6.41</td>
</tr>
<tr>
<td>2007</td>
<td>6.40</td>
</tr>
<tr>
<td>2008</td>
<td>6.37</td>
</tr>
<tr>
<td>2009</td>
<td>6.34</td>
</tr>
<tr>
<td>2010</td>
<td>6.28</td>
</tr>
<tr>
<td>2011</td>
<td>6.23</td>
</tr>
<tr>
<td>2012</td>
<td>6.20</td>
</tr>
<tr>
<td>2013</td>
<td>6.18</td>
</tr>
<tr>
<td>2014</td>
<td>6.15</td>
</tr>
</tbody>
</table>

If enrollment and population trends continue as projected – Nevada will be losing ground in years to come.
Not Just a Nevada problem

- 7 nations already lead the US in degree attainment (Belgium, Canada, Ireland, Japan, Norway, South Korea, Sweden)
- U.S. ranks among top 5 countries in proportion of young people who enroll in college, but ranks 16th today in proportion who finish college
- American colleges award about 18 degrees annually for every 100 full time students enrolled, compared to 25 for other countries

Not Just a Nevada problem

- The United States needs to educate an additional 15.6 million people with either bachelor’s or associate degrees by 2025.
- 781,000 degrees a year on top of current levels or a 37% increase nationally.
- 55% of the US adult population needs to have a college degree (the level projected for Canada, Japan and South Korea).
- Nevada had 28.6% of its adult population with a college degree in 2005.

Differences in College Attainment (Associate and Higher) Between Younger and Older Adults—U.S. and OECD Countries, 2005

NSHE and P-12 have to...

- Work together to Recruit, Retain, and Graduate more students, particularly from groups traditionally underrepresented in the successful completion of educational goals.

- Create policies and strategies to improve recruitment, retention, and graduation rates for students, in both K-12 and higher ed.
NSHE and K-12 have to…

- Grow a **clearer** transparent student success pipeline from K-12 to higher education
  - Coordinate curriculum
  - Share test content and results
  - Share data on students K-12 to NSHE to work
- Build a culture of **full-time** college attendance for Nevadans, both vocational and academic tracks
Examples of Policy Initiatives

- Strengthen and verify default high school curriculum’s outcomes in relation to skills and knowledge
  - Clark County common Algebra II test
  - Early warning based on ACT/SAT test scores
- Dual enrollment programs for high school seniors, especially those that get students to come on NSHE campuses
Examples of Policy Initiatives

- Millennium Scholarship course requirements effective Fall 2009
- Advanced Diploma as automatic university admission
- Earlier consistent communication with students and parents on importance of courses and grades
In such a climate, where the very motives of each side in the debate are often impugned, it is easy to lose sight of what should be our common goal. We may disagree about means and methods, but we should be united in our commitment as educators and citizens to the ultimate end in view, exemplified in the words of no less a thinker than John Dewey. A century ago he wrote, “What the best and wisest parent wants for his own child, that must the community want for all its children. Any other ideal for our schools is narrow and unlovely; acted upon it destroys our democracy.”

Lloyd Bond and The Carnegie Foundation for the Advancement of Teaching