Is Nebraska Ready for the Economy of the Future?

2004 Nebraska Economic Forums:
Scottsbluff/Gering, Kearney, Norfolk

Chad Wilkerson
Federal Reserve Bank of Kansas City
What Is the “Economy of the Future”?

- Obviously no one knows exactly.
- One respected source over a ten-year horizon is the U.S. Bureau of Labor Statistics, whose economists do detailed projections of industrial and occupational employment every other year.
- This year’s projections are for 2002-2012.
Why Might the Economy of the Future Look Different from the Past/Present?

The short answer is: **Because it always has.**

The longer answer includes such factors as:

- **Technological improvements**
- **Changes in consumer tastes**
- **Expansion of international trade**
- **Aging of the population**

Share of total employment

- Agriculture and Mining
- Manufacturing and Construction
- Trade and Transportation
- Services (health, finance, software, tourism, etc.)
- Government

Percent

- 1950
- 1975
- 2000
U.S. industries projected to GROW the fastest, 2002-2012*

<table>
<thead>
<tr>
<th>High-tech services</th>
<th>Business services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Software publishers</td>
<td>2. Management consulting services</td>
</tr>
<tr>
<td>4. Computer systems design</td>
<td>5. Employment services</td>
</tr>
<tr>
<td>8. Internet services and data processing</td>
<td>10. Machinery &amp; equipment rental</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health and social services</th>
<th>Consumer services</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Residential care facilities</td>
<td>12. Consumer goods rental centers</td>
</tr>
<tr>
<td>6. Rehabilitation services</td>
<td>13. Cable TV programming</td>
</tr>
<tr>
<td>7. Ambulatory health care services</td>
<td>14. Amusement and recreation</td>
</tr>
<tr>
<td>9. Child day care services</td>
<td>15. Transit and ground transportation</td>
</tr>
<tr>
<td>11. Offices of health practitioners</td>
<td></td>
</tr>
</tbody>
</table>

* Among industries with more than 100,000 employees
U.S. industries projected to DECLINE the fastest, 2002-2012*

<table>
<thead>
<tr>
<th>Nondurable manufacturing</th>
<th>Durable manufacturing</th>
<th>Natural resources</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cut and sew apparel mfg.</td>
<td>4. Iron and steel mills</td>
<td>5. Oil and gas extraction</td>
<td>15. Travel arrangement services</td>
</tr>
<tr>
<td>8. Resin and artificial fibers mfg.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Basic chemical mfg.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Among industries with more than 100,000 employees
U.S. occupations with the largest projected GROWTH, 2002-2012*

<table>
<thead>
<tr>
<th>Postsecondary award required</th>
<th>Postsecondary award NOT required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Registered nurses</td>
<td>3. Receptionists</td>
</tr>
<tr>
<td>2. Postsecondary teachers</td>
<td>4. Security guards</td>
</tr>
<tr>
<td>7. Computer systems analysts</td>
<td>5. Home health aides</td>
</tr>
<tr>
<td>8. Computer software engineers</td>
<td>6. Medical assistants</td>
</tr>
<tr>
<td>11. Preschool teachers</td>
<td></td>
</tr>
<tr>
<td>12. Special education teachers</td>
<td></td>
</tr>
<tr>
<td>15. Network systems analysts</td>
<td></td>
</tr>
</tbody>
</table>

* Among occupations with more than 100,000 employees and projected to grow more than 25%
U.S. occupations with the largest projected DECLINE, 2002-2012*

**Postsecondary award required**
15. Travel agents

**Postsecondary award NOT required**
1. Farmers and ranchers
2. Sewing machine operators
3. Word processors and typists
4. Stock clerks and order fillers
5. Secretaries
6. Electronic equipment assemblers
7. Computer operators
8. Postal service mail sorters
9. Loan interviewers and clerks
10. Data entry keyers
11. Telemarketers
12. Team assemblers
13. Order clerks
14. Door-to-door sales workers

* Among occupations with more than 100,000 employees
What Does Being “Ready” for the Economy of the Future Mean?

- Is Nebraska’s current industrial structure favorable for expected changes in the U.S. economy, in terms of both quantity and quality of jobs likely to be created?

- Will Nebraska’s labor supply be able to meet the demands of the future economy?
Projected annual job growth, 2002-2012, if states’ industries grow at national rate

- **US**: 1.43%
- **NE**: 1.44%

**Blue**: Top third of states (1.43-1.66%)
**Yellow**: Middle third (1.36-1.43%)
**Red**: Bottom third (1.11-1.35%)
Top 10 POSITIVE contributors to Nebraska’s 2012 employment projection*

1) Cut and sew apparel manufacturing
2) **Internet services and data processing**
3) **Truck transportation**
4) Aerospace product manufacturing
5) **Community care facilities for the elderly**
6) Power generation and supply
7) Computer manufacturing
8) Fabric mills
9) Paper mills
10) Semiconductor manufacturing

* Bold industries are those in which Nebraska is highly concentrated
Top 10 NEGATIVE contributors to Nebraska’s 2012 employment projection*

1) Employment services
2) Rail transportation
3) Ambulatory health care services
4) Insurance carriers
5) Management consulting services
6) Educational services
7) Software publishers
8) Rehabilitation services
9) Agricultural products
10) Offices of health practitioners

* Bold industries are those in which Nebraska is highly concentrated
Are the Nebraska jobs projected to grow high-paying or low-paying?

Projected annual employment growth, 2002-2012, by median pay of occupations

<table>
<thead>
<tr>
<th>Percent</th>
<th>Lowest-paying fifth</th>
<th>Middle fifth</th>
<th>Highest-paying fifth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.47</td>
<td>1.28</td>
<td>1.93</td>
</tr>
</tbody>
</table>
Do the Nebraska jobs projected to grow require high education levels?

Projected annual employment growth, 2002-2012, by training needed by workers to become fully qualified

- No degree, no work experience: 1.31
- No degree with work experience: 1.21
- Associate or vocational degree: 1.92
- Bachelor’s degree: 1.97
- Graduate or professional degree: 2.22
Does Nebraska have a highly educated workforce?

Educational attainment as share of working age population, 2000

- Associate degree: Nebraska 7.1%, United States 6.0%
- Bachelor's degree: Nebraska 15.2%, United States 14.5%
- Graduate or professional degree: Nebraska 6.3%, United States 7.8%
How did Nebraska meet its projected growth in the 1992-2002 period?

Growth in employment and working age population, 1992-2002

<table>
<thead>
<tr>
<th></th>
<th>Employment</th>
<th>Working age population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nebraska</td>
<td>1.90</td>
<td>0.94</td>
</tr>
<tr>
<td>United States</td>
<td>1.83</td>
<td>1.19</td>
</tr>
</tbody>
</table>
It attracted a large share of its current population into the workforce

Employment-to-population ratio, 1982-2002

Nebraska

United States
What is the situation heading forward?

Projected growth in employment and working age population, 2002-2012

<table>
<thead>
<tr>
<th></th>
<th>Nebraska</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>1.44</td>
<td>1.43</td>
</tr>
<tr>
<td>Working age population</td>
<td>0.76</td>
<td>1.05</td>
</tr>
</tbody>
</table>
Can Nebraska do it again?

Employment to working age population ratio, 2002

1. Nebraska  69.4%
2. Minnesota  68.9
3. North Dakota  67.4
4. Delaware  67.2
5. Wisconsin  66.5

UNITED STATES  59.7
Summary

- Nebraska’s industrial structure is favorable for the expected “Economy of the Future”

- The jobs “projected” to grow the fastest in Nebraska are in high-paying occupations that require high education levels

- A high employment-to-population ratio likely means Nebraska will have a difficult time finding the workers to grow at its “projected” rate
Conclusions

- Nebraska is positioned pretty well for the Economy of the Future.

- What to do about population growth?
  - Move the mountains/ocean to Nebraska 😊
  - Emphasize the state’s low cost-of-living, family-friendly atmosphere, and cultural amenities
  - Ensure that 21st century infrastructure is in place
  - Maintain and improve a solid education system