# 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?

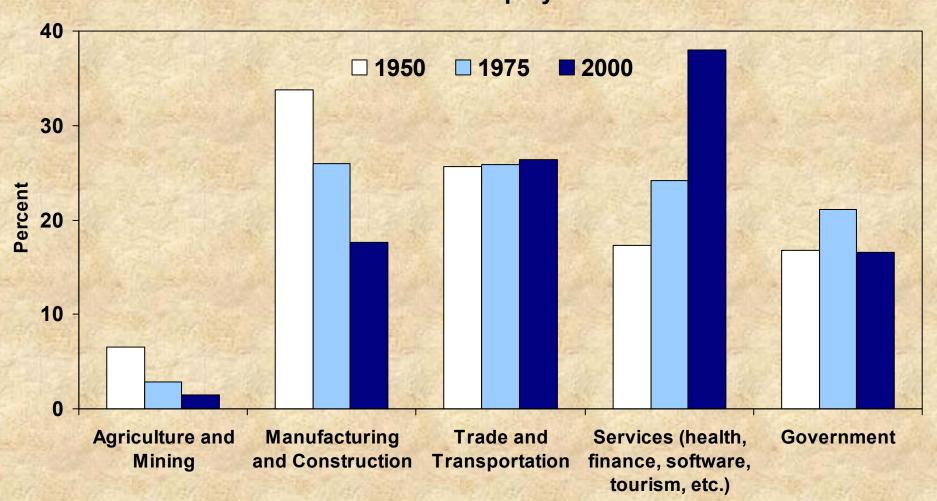
The short answer is: Because it always has.

The longer answer includes such factors as:

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

### Major economic sectors' share of U.S. employment in 1950, 1975, and 2000

Share of total employment



### U.S. industries projected to GROW the fastest, 2002-2012\*

#### **High-tech services**

- 1. Software publishers
- 4. Computer systems design
- 8. Internet services and data processing

#### **Health and social services**

- 3. Residential care facilities
- 6. Rehabilitation services
- 7. Ambulatory health care services
- 9. Child day care services
- 11. Offices of health practitioners

#### **Business services**

- 2. Management consulting services
- 5. Employment services
- 10. Machinery & equipment rental

#### **Consumer services**

- 12. Consumer goods rental centers
- 13. Cable TV programming
- 14. Amusement and recreation
- 15. Transit and ground transportation

<sup>\*</sup> Among industries with more than 100,000 employees

### U.S. industries projected to DECLINE the fastest, 2002-2012\*

#### Nondurable manufacturing

- 1. Cut and sew apparel mfg.
- 2. Textile mills
- 3. Fabric mills
- 7. Paper mills
- 8. Resin and artificial fibers mfg.
- 10. Basic chemical mfg.

#### **Natural resources**

- 5. Oil and gas extraction
- 9. Natural gas distribution
- 12. Agricultural products
- 14. Petroleum refining

#### **Durable manufacturing**

- 4. Iron and steel mills
- 6. Computer mfg.
- 11. Aerospace product mfg.
- 13. Semiconductor mfg.

#### **Other**

15. Travel arrangement services

<sup>\*</sup> Among industries with more than 100,000 employees

### U.S. <u>occupations</u> with the largest projected GROWTH, 2002-2012\*

#### Postsecondary award required

- 1. Registered nurses
- 2. Postsecondary teachers
- 7. Computer systems analysts
- 8. **Computer** software engineers
- 9. Management analysts
- 10. **Computer** support specialists
- 11. Preschool teachers
- 12. Special education teachers
- 15. Network systems analysts

#### Postsecondary award NOT required

- 3. Receptionists
- 4. Security guards
- 5. Home health aides
- 6. Medical assistants
- 13. Social service assistants
- 14. Dental assistants

<sup>\*</sup> Among occupations with more than 100,000 employees and projected to grow more than 25%

## U.S. <u>occupations</u> 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

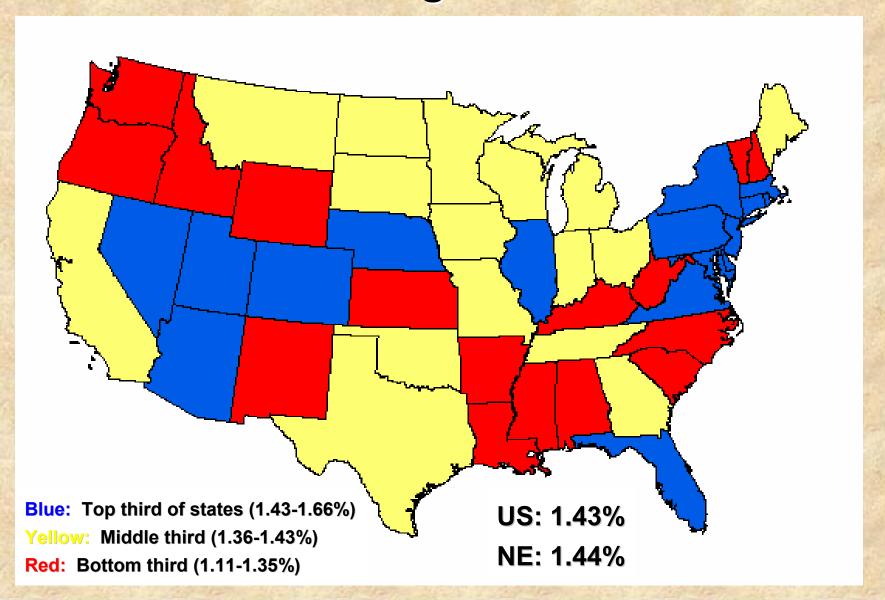
<sup>\*</sup> Among occupations with more than 100,000 employees

## 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



### 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

<sup>\*</sup> Bold industries are those in which Nebraska is highly concentrated

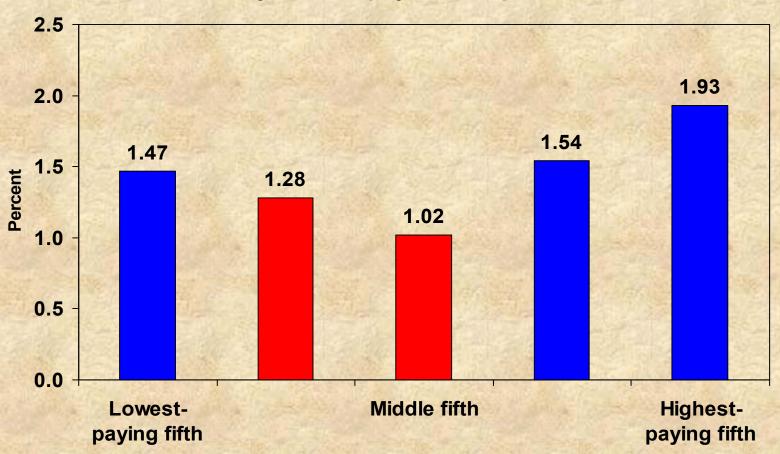
## Top 10 NEGATIVE contributors to Nebraska's 2012 employment projection\*

- 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

<sup>\*</sup> Bold industries are those in which Nebraska is highly concentrated

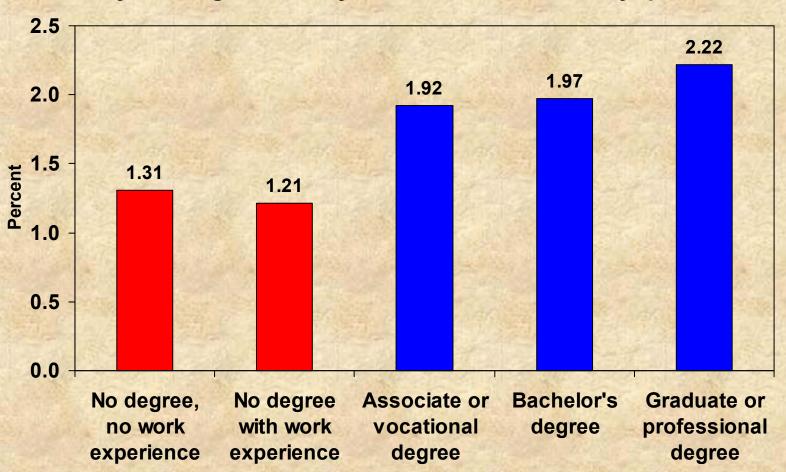
## Are the Nebraska jobs projected to grow high-paying or low-paying?

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



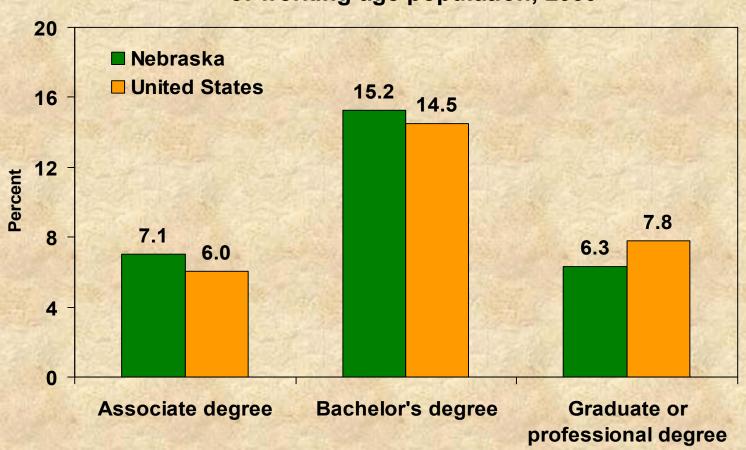
### Do the Nebraska jobs projected to grow require high education levels?

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



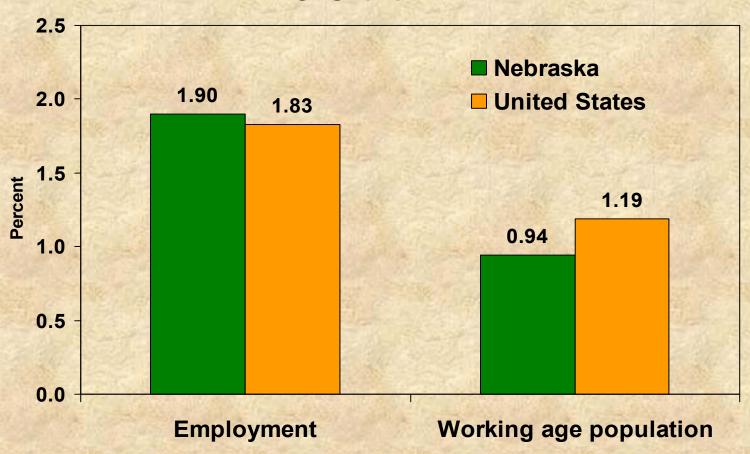
## Does Nebraska have a highly educated workforce?

Educational attainment as share of working age population, 2000

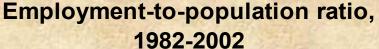


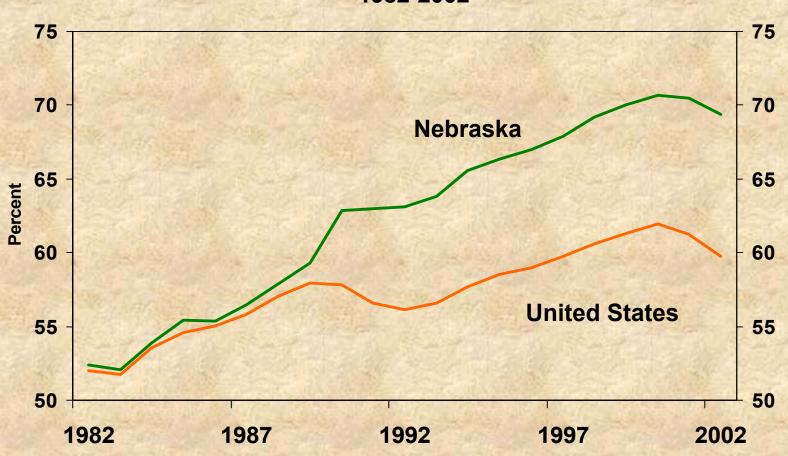
## How did Nebraska meet its projected growth in the 1992-2002 period?

Growth in employment and working age population, 1992-2002



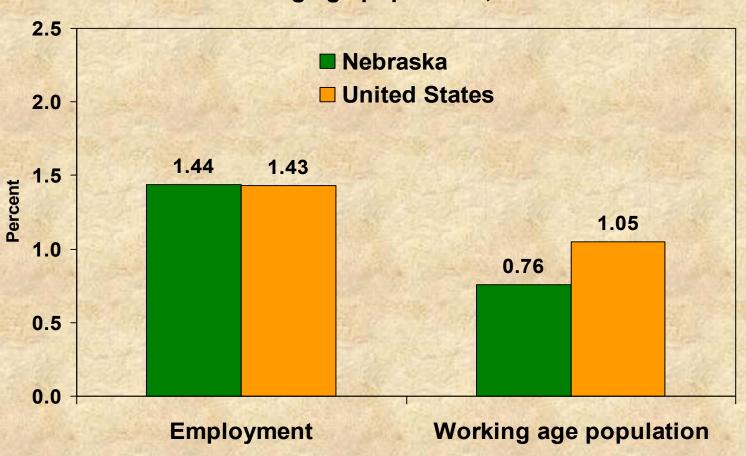
### It attracted a large share of its current population into the workforce





### What is the situation heading forward?

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



### 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	<b>59.7</b>

### 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 ②
  - Emphasize the state's low cost-of-living, familyfriendly atmosphere, and cultural amenities
  - Ensure that 21<sup>st</sup> century infrastructure is in place
  - Maintain and improve a solid education system