



## Nebraska's Workforce Challenges

*Governor's Summit on Economic Development*

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SRI International

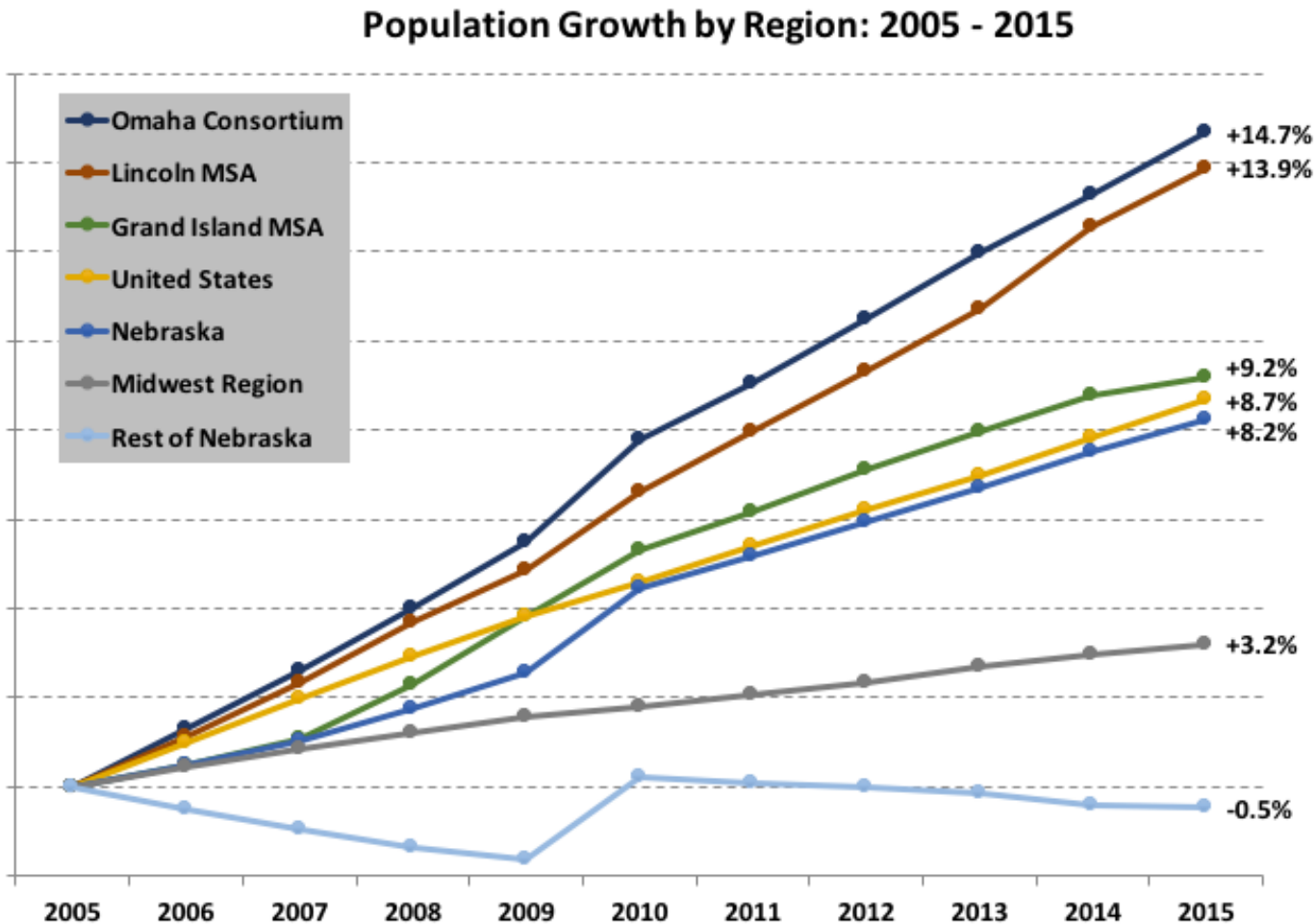
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# Overview of Presentation

- Population
  - Statewide
  - Urban vs. rural
- Education
  - Educational attainment of population
  - Higher education degrees earned
- Occupations
  - Highly concentrated occupations: Median Wages, Employment Growth
  - STEM occupations
- Recommendations

Nebraska's population growth has concentrated in Lincoln and Omaha, while population in the rest of the state has remained flat.

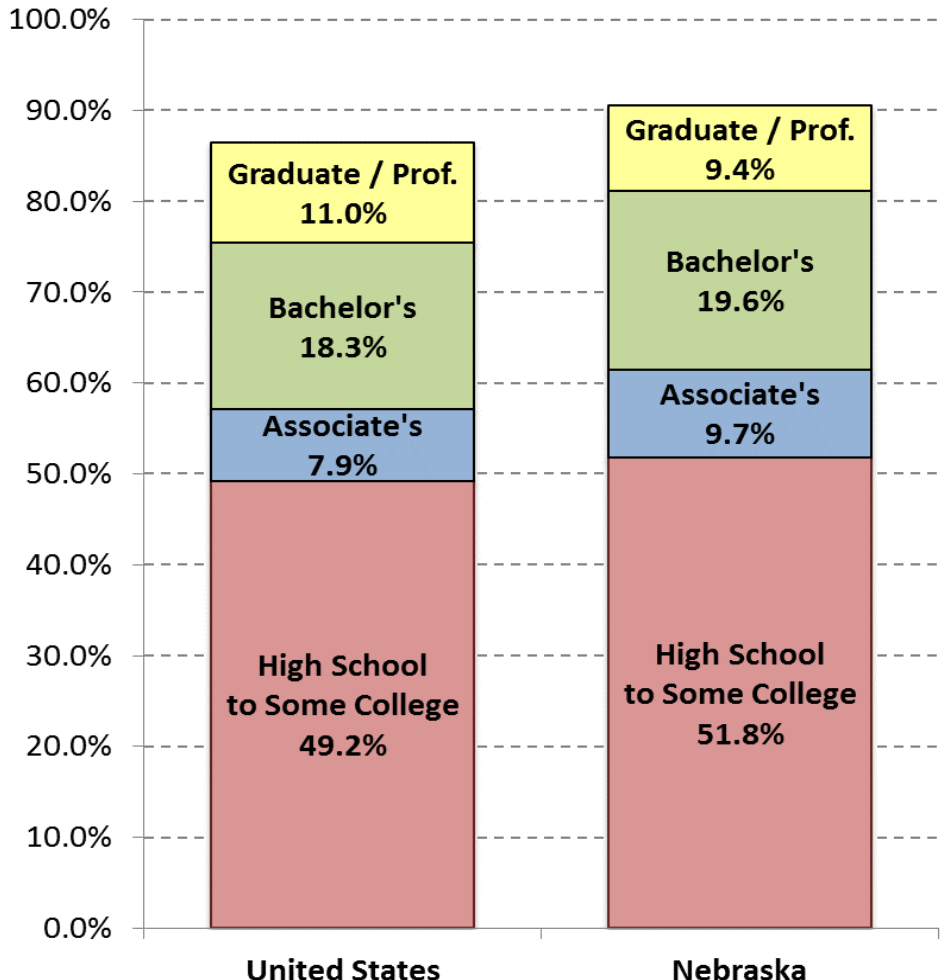


\*Include the Nebraska components of the Omaha-Council Bluffs MSA

Source: SRI analysis of U.S. Census Bureau data

# Nebraska's workforce has slightly higher educational attainment than the national average

**Percent of Population ≥ 25 Years Old  
By Education Level (2014)**

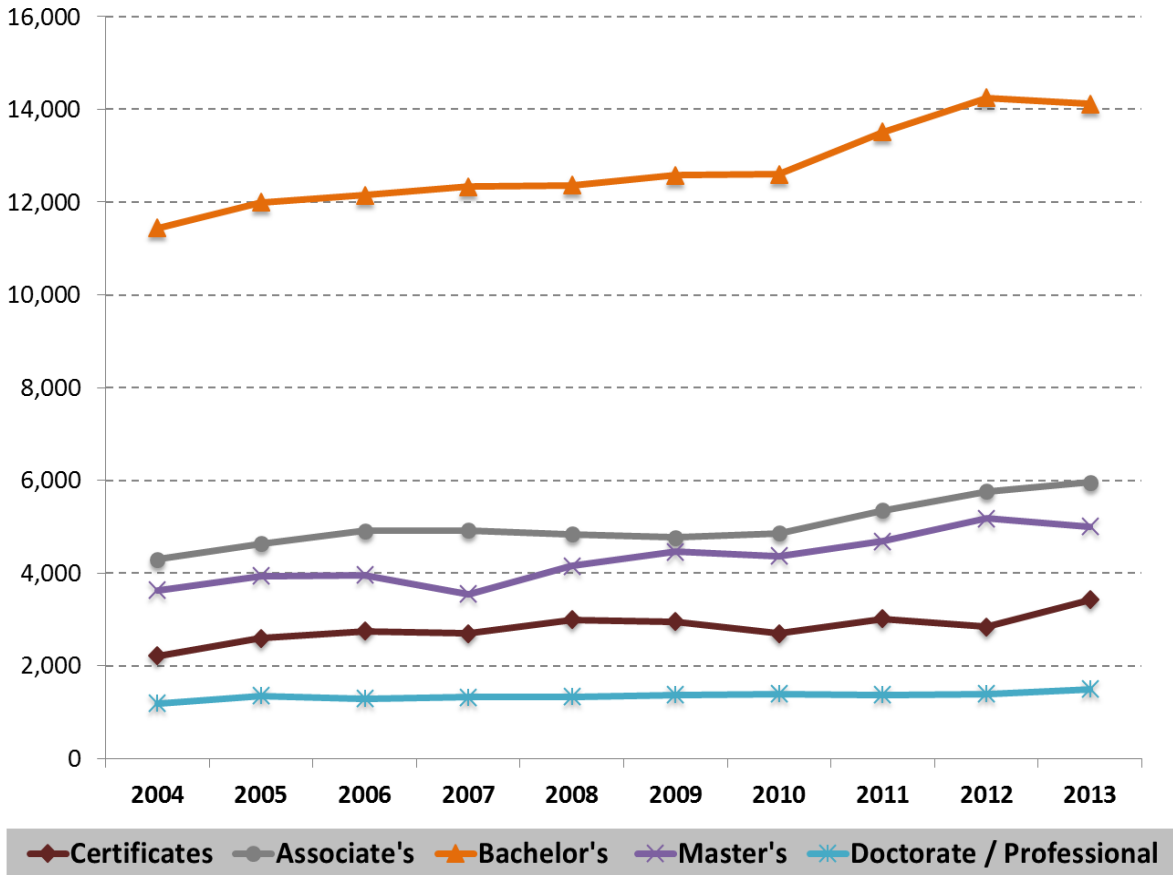


Compared to the national average:

- ◆ Nebraska has a higher high school graduation rate
- ◆ Associate's degrees are more common in Nebraska, and graduate and professional degrees are less common
- ◆ Nebraska has a slightly lower percentage of its population with Bachelor's degrees or higher

# Nebraska's higher education institutions have increased degree production, particularly certificates

Postsecondary Degrees Awarded by Nebraska Institutions

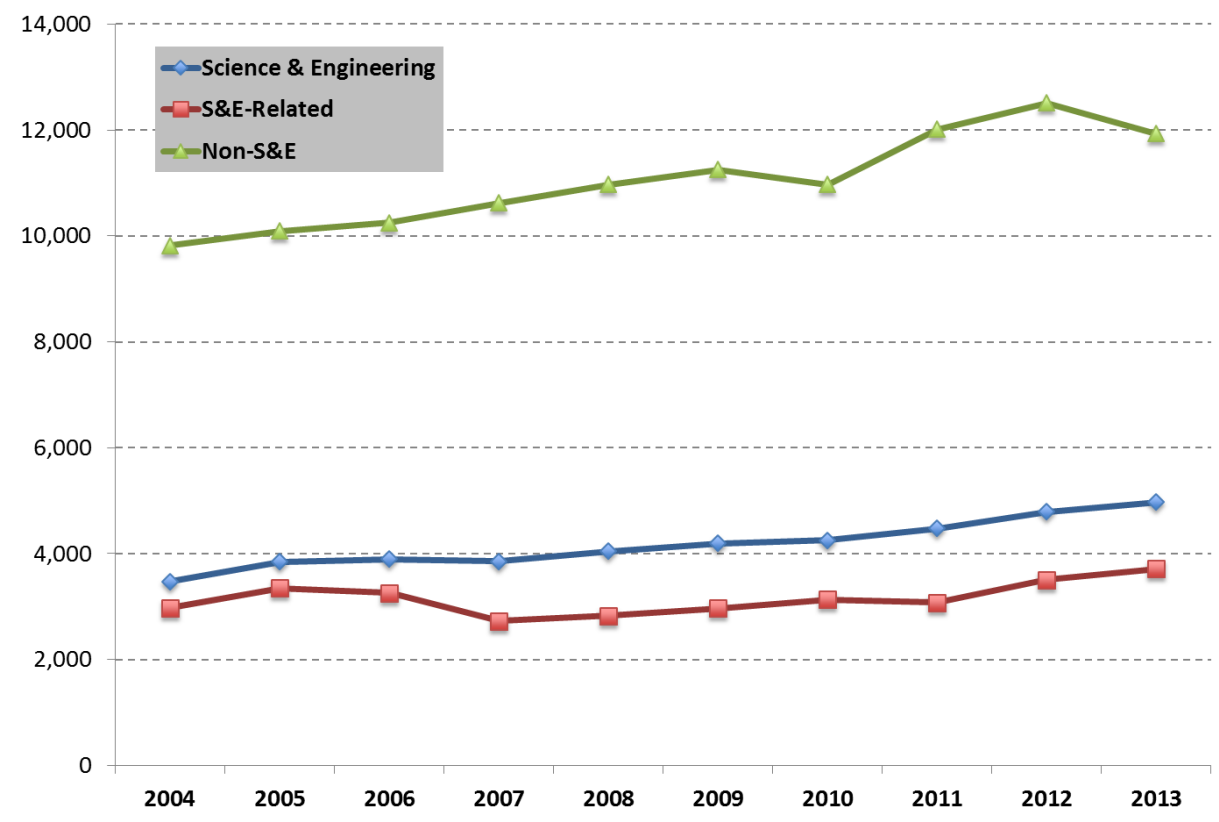


- ◆ About 30,000 students received higher education degrees or certificates in Nebraska in 2013.
- ◆ Bachelor's degrees accounted for 47% of the total, about 14,000 total.
- ◆ The University of Nebraska System awards about one-third of all degrees, including about one-half of all Bachelor's degrees.
- ◆ Total degrees awarded increased by nearly 32% from 2004 to 2013.
- ◆ Certificates grew most rapidly, increasing by 55%.

Source: National Center for Education Statistics

# Science & Engineering degrees account for a small share of the total, but are increasing faster than other fields

Degrees Awarded by Disciplinary Category (Bachelor's or Higher)



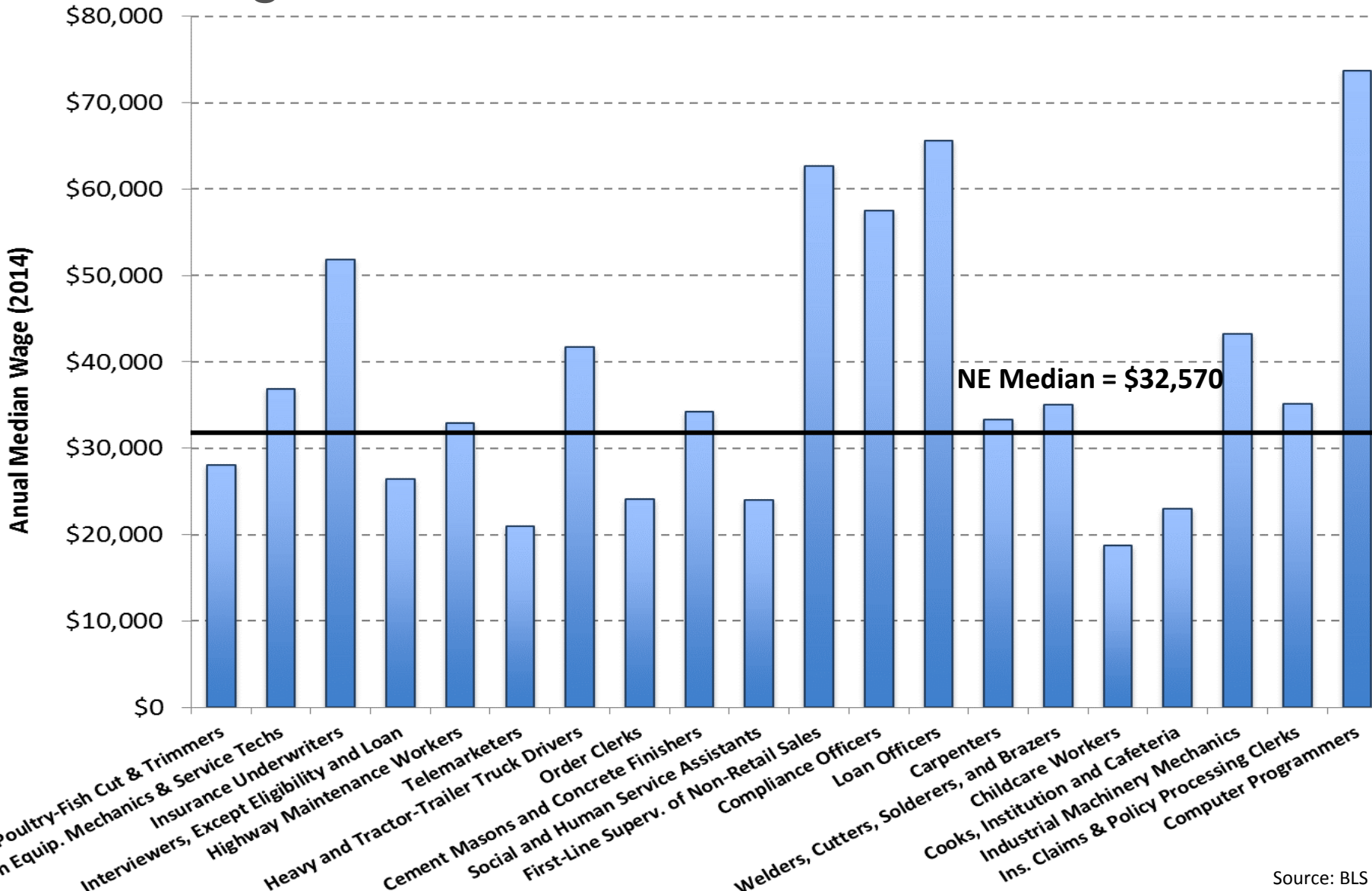
- ◆ In 2013, 58% of degrees awarded (Bachelor's or higher) were in fields outside of science and engineering (S&E), while 24% were in S&E fields and 18% were in S&E-related fields (i.e., health, technical, science education).
- ◆ S&E fields still account for a small share of the total, but collectively are the fastest growing segment.
- ◆ From 2004 to 2013, the number of degrees in non-S&E fields increased by 22%, while degrees in S&E-related fields increased by 25%, and S&E fields increased by 43%.

# Graduation Rate (ACGR) for Nebraska (School Year 2013-2014)

| Population                      | Graduation Rate | State Rank |
|---------------------------------|-----------------|------------|
| <i>Total</i>                    | 89.7%           | 2          |
| American Indian / Alaska Native | 69%             | 28         |
| Asian / Pacific Islander        | 78%             | 49         |
| Hispanic                        | 82.8%           | 8          |
| Black                           | 81%             | 6          |
| White                           | 92.8%           | 4          |
| Economically Disadvantaged      | 82.4%           | 6          |
| Limited English Proficiency     | 60%             | 34         |
| Students with Disabilities      | 72%             | 10         |

SOURCE: U.S. Department of Education, National Center for Education Statistics.

# Nebraska Top 20 Highly Concentrated Jobs: Median Wage



Source: BLS

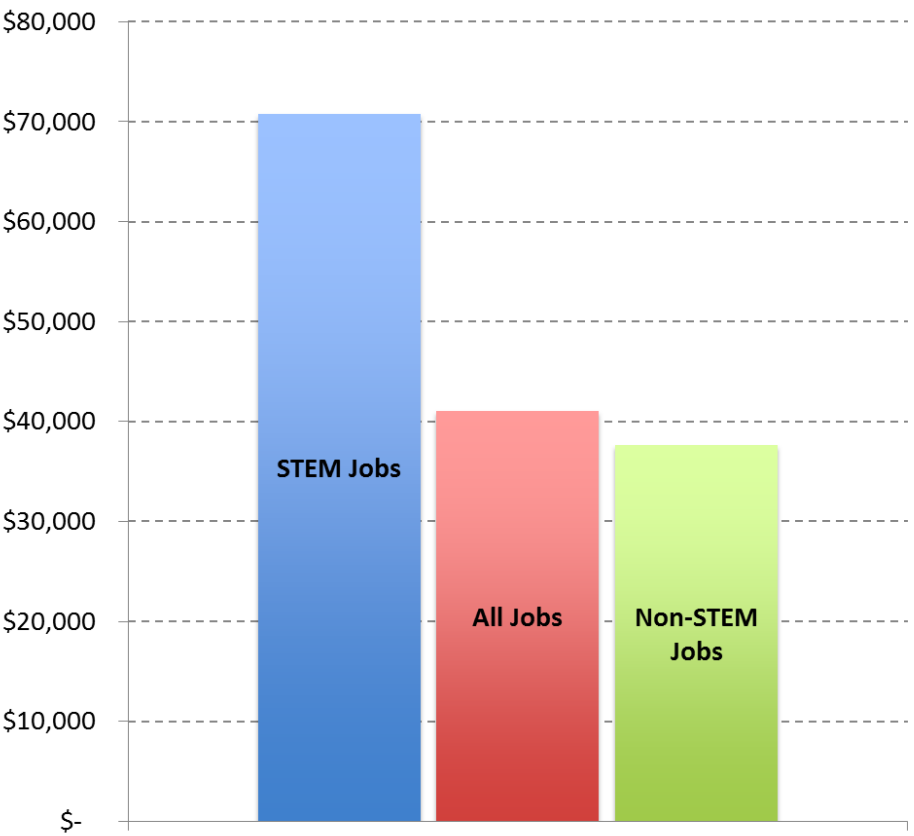


# Business & Financial Operations occupations are prevalent among high-growth, higher wage jobs

| Occupation   | 2010 – 2014 Employment Growth (%) | Median Annual Wage | Location Quotient | 2014 Jobs |
|--|-----------------------------------|--------------------|-------------------|-----------|
| Industrial Machinery Mechanics                     | 73.1%                             | \$43,250           | 1.52              | 3,340     |
| Insurance Underwriters                             | 28.3%                             | \$51,880           | 2.9               | 1,860     |
| Carpenters   | 28.2%                             | \$33,360           | 1.57              | 6,770     |
| Compliance Officers                                | 28.1%                             | \$57,550           | 1.64              | 2,830     |
| First-Line Supervisors of Non-Retail Sales Workers | 23.2%                             | \$62,640           | 1.75              | 3,030     |
| Welders, Cutters, Solderers, and Brazers           | 15.1%                             | \$34,990           | 1.57              | 4,050     |
| Computer Programmers                               | 13.9%                             | \$73,720           | 1.48              | 3,120     |
| Loan Officers                                      | 11.6%                             | \$65,600           | 1.6               | 3,360     |

# STEM occupations are higher-paying and faster growing than other occupations in Nebraska

Average Annual Wages by Occupational Category in Nebraska (2014)



|                      | 2004 Jobs | 2014 Jobs | Annual Job Growth (%) | Avg. Annual Wage |
|----------------------|-----------|-----------|-----------------------|------------------|
| All Occupations      | 861,730   | 927,500   | 0.7%                  | \$41,080         |
| STEM Occupations     | 38,510    | 45,920    | 1.8%                  | \$70,684         |
| Non-STEM Occupations | 773,690   | 821,870   | 0.6%                  | \$37,601         |

Source: BLS

In order to pursue the strategic goals identified at the outset Nebraska should address the following workforce challenges:

- General shortage in all regions given very low unemployment
- Acute shortage of IT and other STEM graduates in high pay, fast growing occupations
- Acute shortage of workers with qualifications in the building trades
- Failure to integrate underserved and non-English speaking populations into the pipeline
- Above average time to degree in the University of Nebraska system
- Loss of teachers through the credentialing pipeline

Workforce responses could include the following:

- An increase in subsidies for graduates who stay in the state, and various kinds of internships and short courses
- Increase students in the pipeline through out-of-state recruitment and high school programs with wide stakeholder engagement
- Design and implement a funding formula or other incentives for four year institutions that reward success in faster graduation rates and increased STEM graduates