



# Natural Resources Sector

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## Department of Employment, Training & Rehabilitation

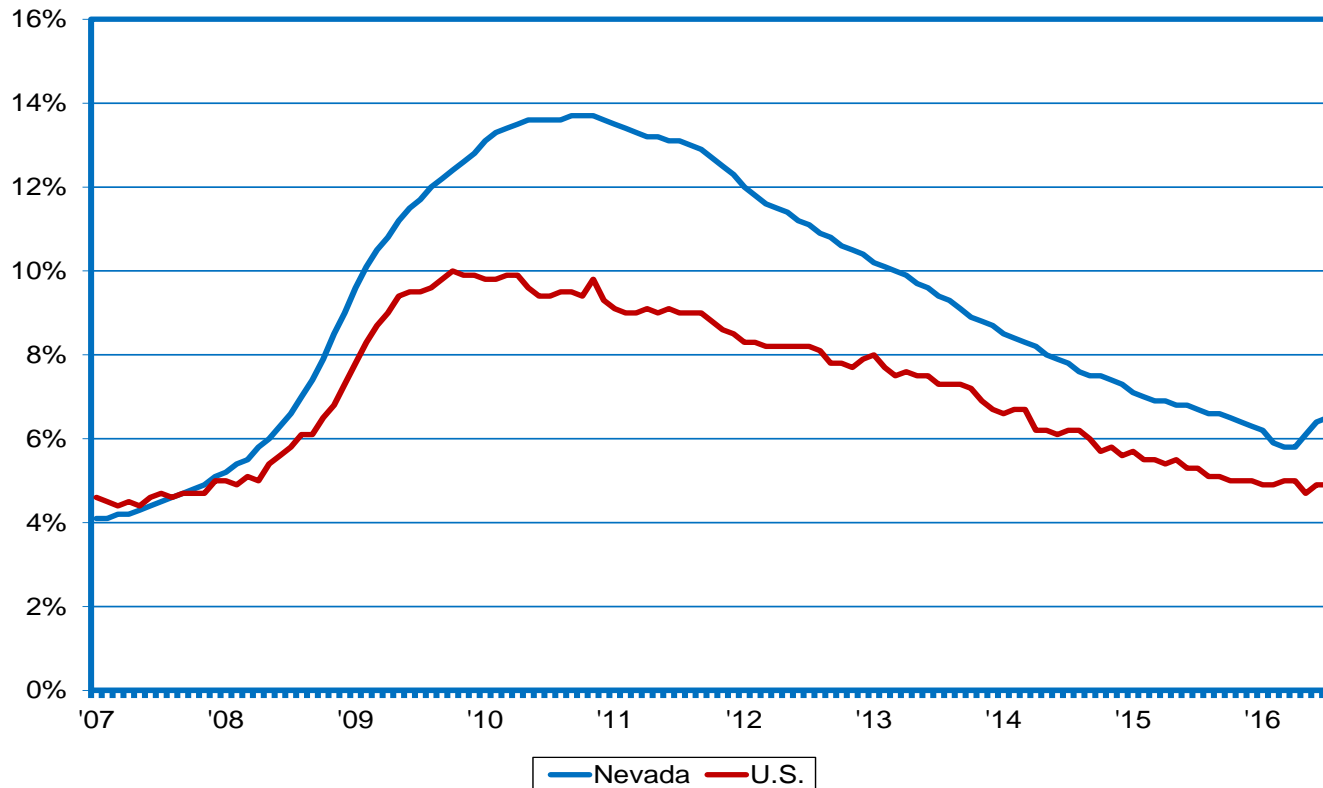
**Bill Anderson, Chief Economist**  
**Christopher Robison, Supervising Economist**

**Prepared by the Research and Analysis Bureau**



# Despite the Recent Uptick in the Jobless Rate; Underlying Trends Still Remain Positive

NV vs. the U.S. unemployment rate (SA)



# Including Discouraged Workers Adds 0.4 Point to the “Official” Rate

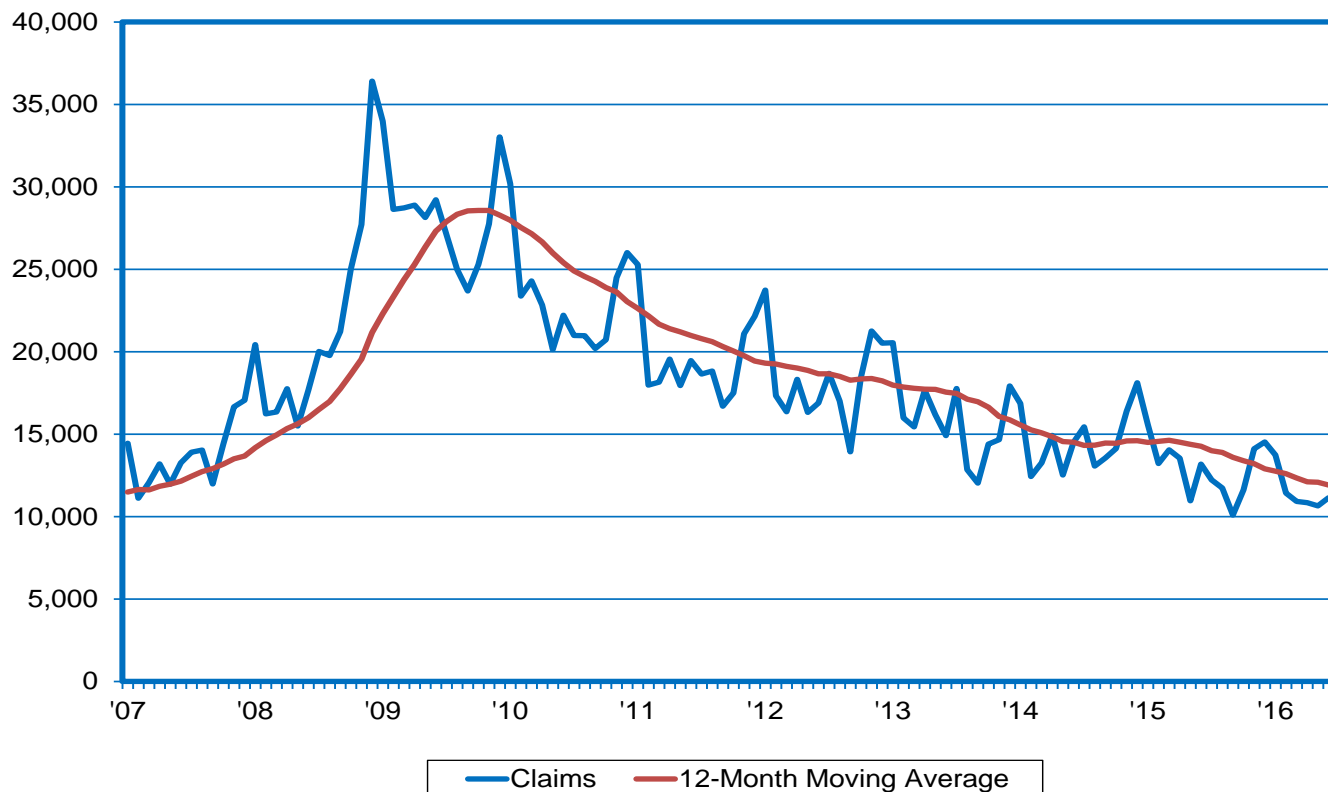
## Alternative Measures Of Labor Underutilization

<b>Alternative Measures of Labor Underutilization (Annual Average - 2015:IIIQ through 2016:IIQ)</b>		
Measure	Underutilization Concept	Level
Official Rate	jobless persons available to take a job who have actively sought work in the past four weeks	6.3%
U-1	jobless 15 weeks or longer	2.7%
U-2	job losers and persons losing a temporary job	3.5%
U-3	similar to official rate	6.7%
U-4	U-3 plus discouraged workers	7.1%
U-5	U-4 plus others marginally attached to the labor force	7.9%
U-6	U-5 plus those employed part-time for economic reasons	13.1%
Official Rate: annual average of 2015:IIIQ through 2016:IIQ		



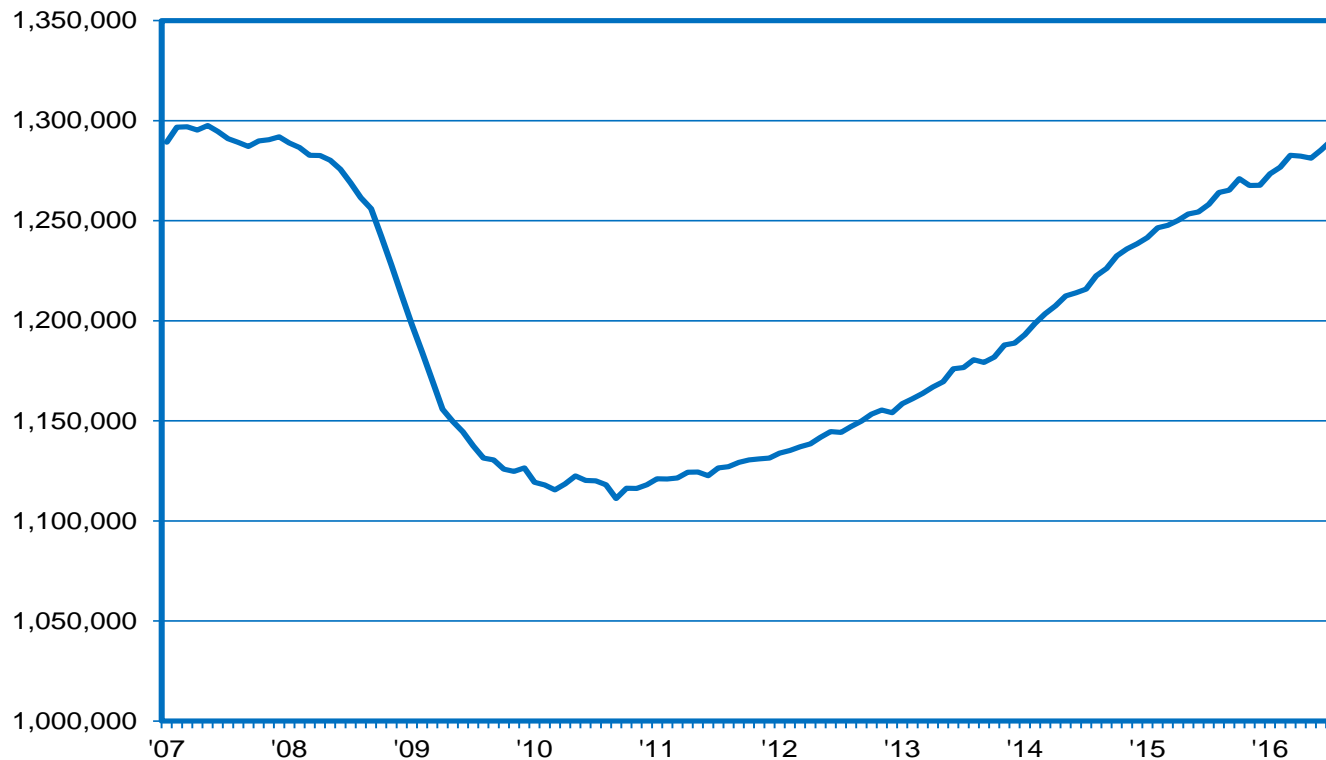
# Initial Claims at Lowest Level in a Decade

initial claims for unemployment insurance



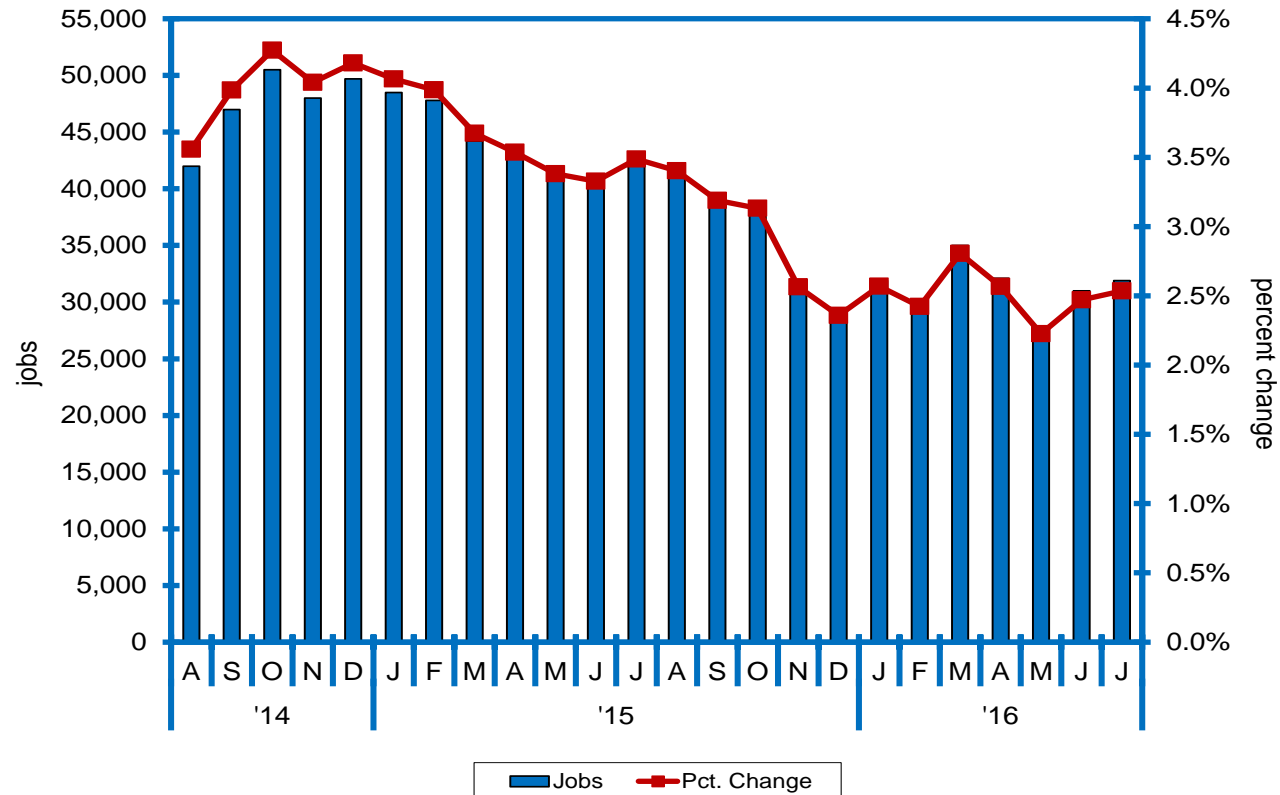
# Jobs Continue to Advance; Since 2011, Monthly Gains Recorded in all but 8 Months

nonfarm jobs in Nevada (SA)



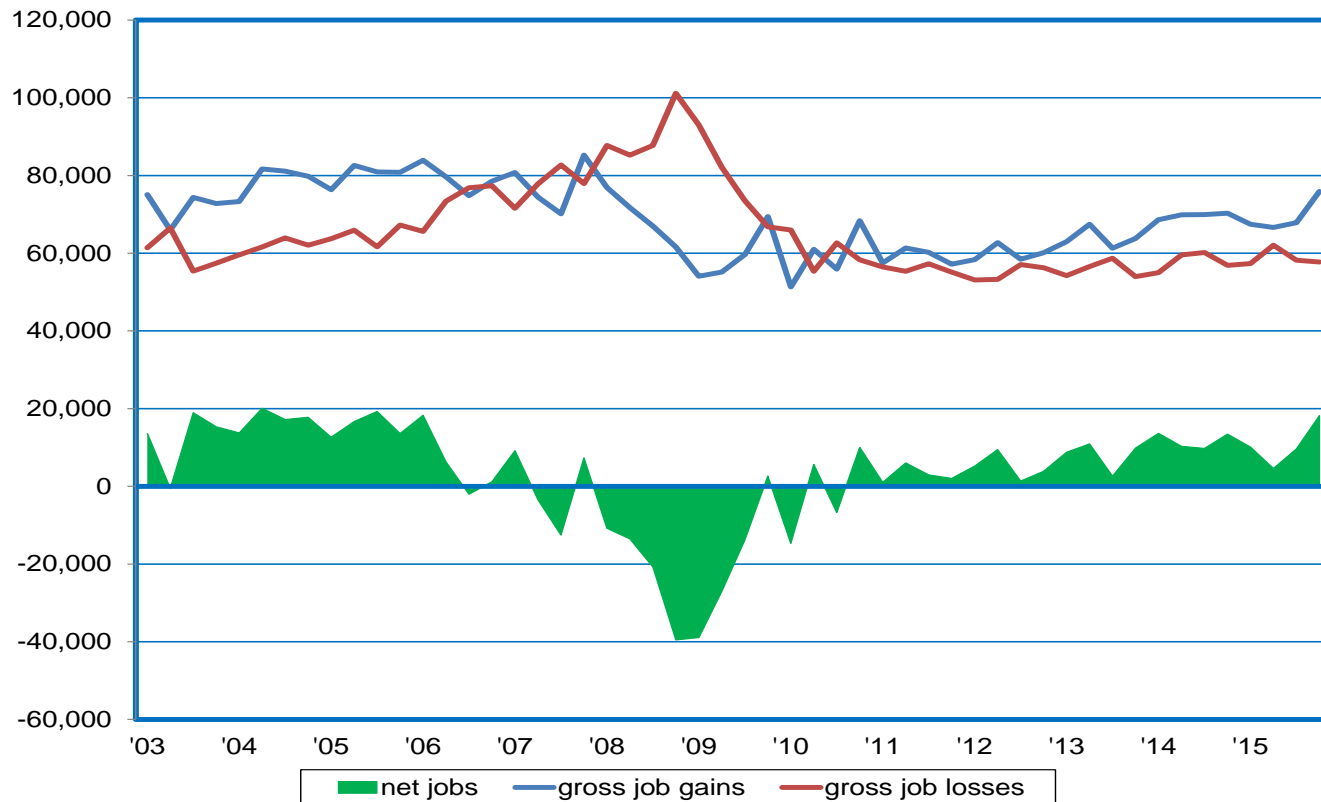
# Job Growth Holding Relatively Steady at an Annualized Rate of 30K-35K

job growth (SA; year-over-year)



# Job Gains>Losses in 21 Straight Quarters; 2015:IVQ Net Gain Strongest in a Decade

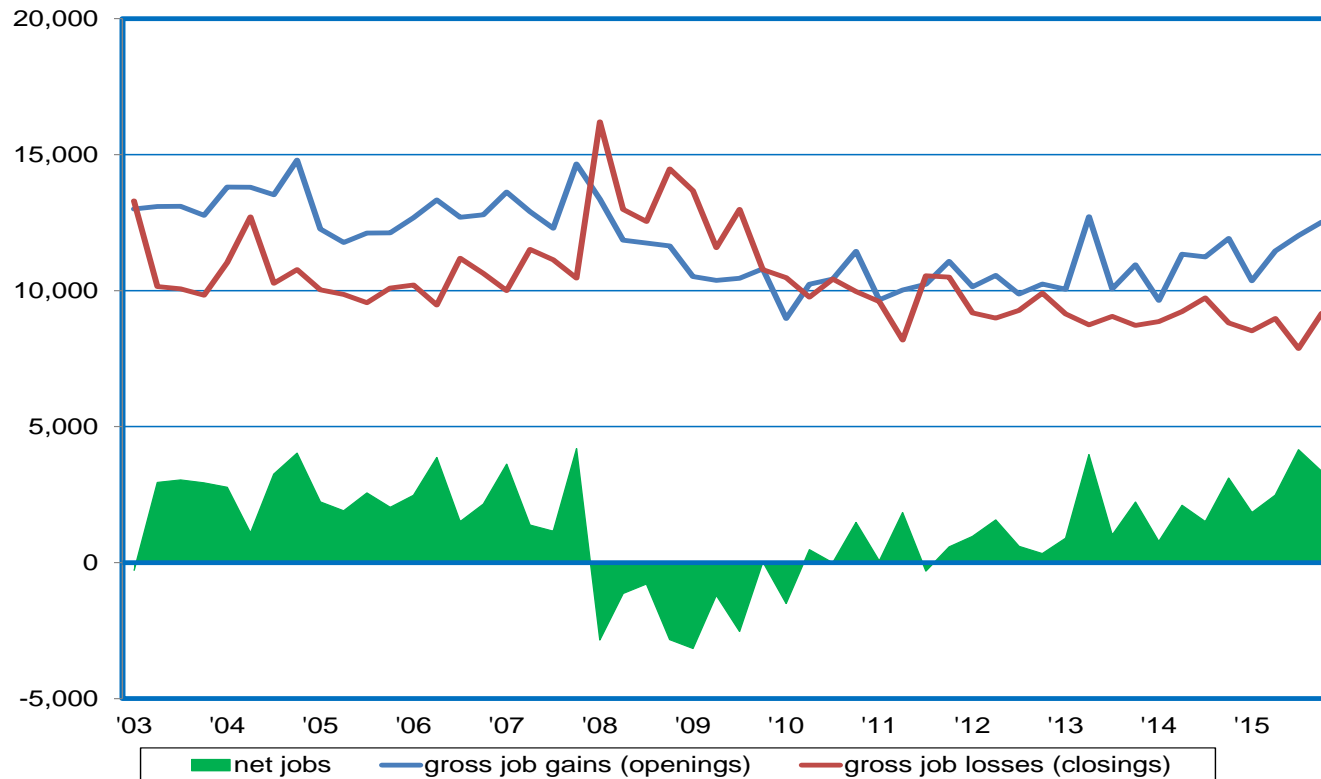
private sector gross job gains vs. gross job losses (SA)





# Opening Gains>Closing Losses Last 17 Quarters; Net Gain=3,400 in 2015:IVQ

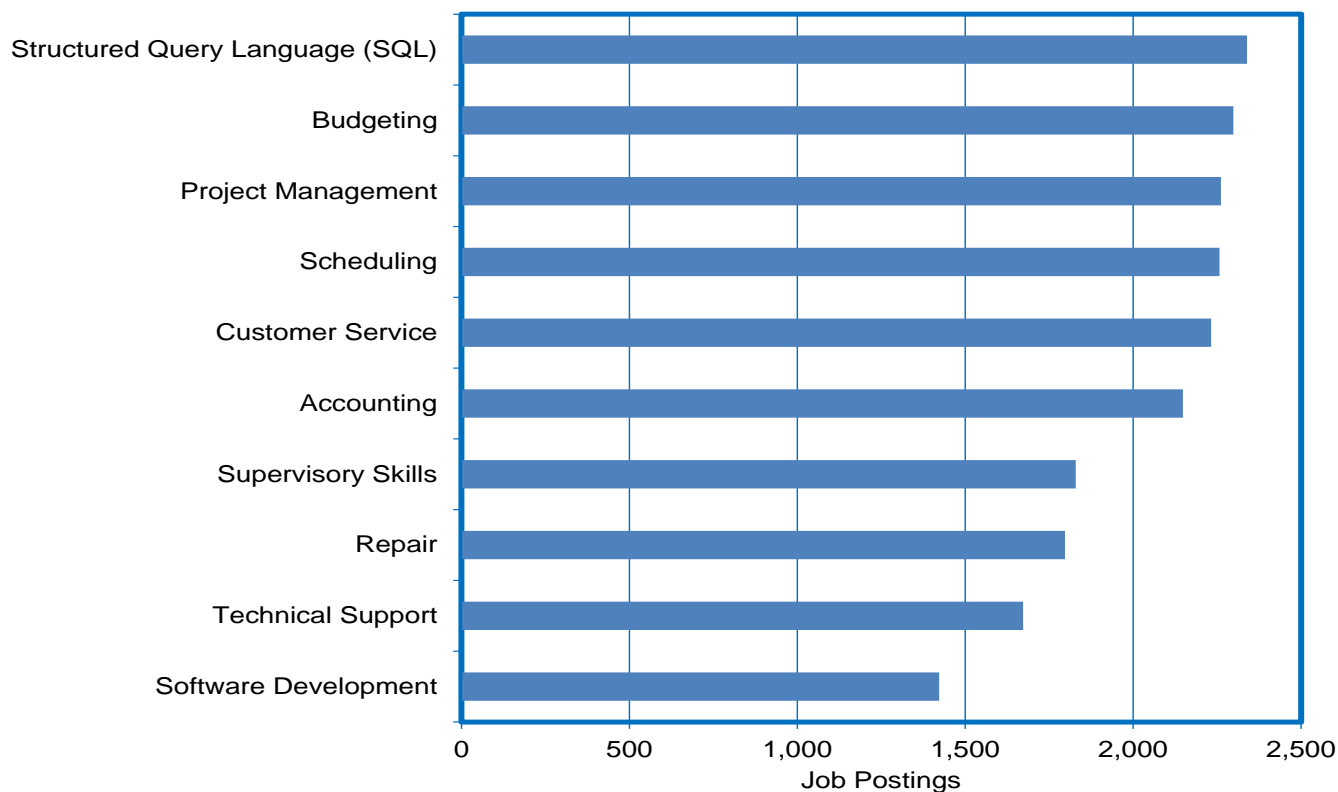
gross job gains vs. gross job losses in opening & closing establishments (SA)





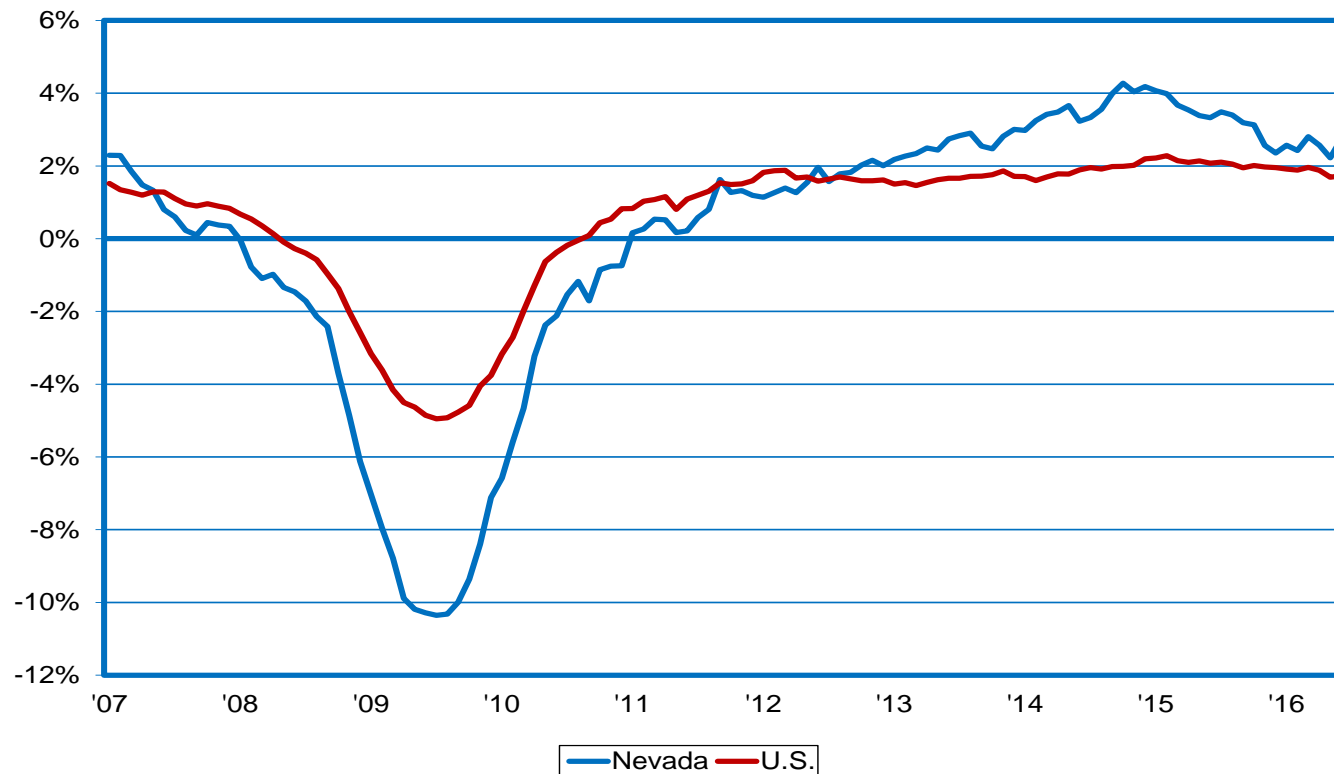
# There are a Variety of STEM-Related Skills in Demand Based Upon On-Line Job Ads

STEM skills in demand over past 12 months



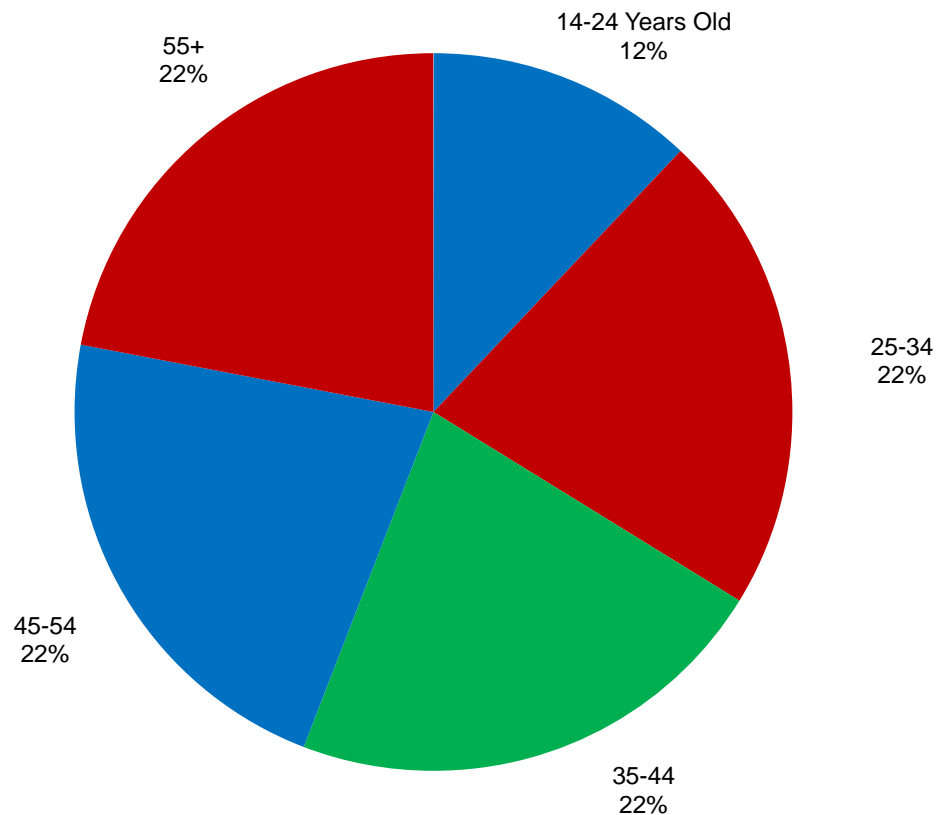
# Nevada Job Growth Exceeds Nation in 48 Straight Months; 2.7% vs. 1.7% in June

job growth (year-over-year)



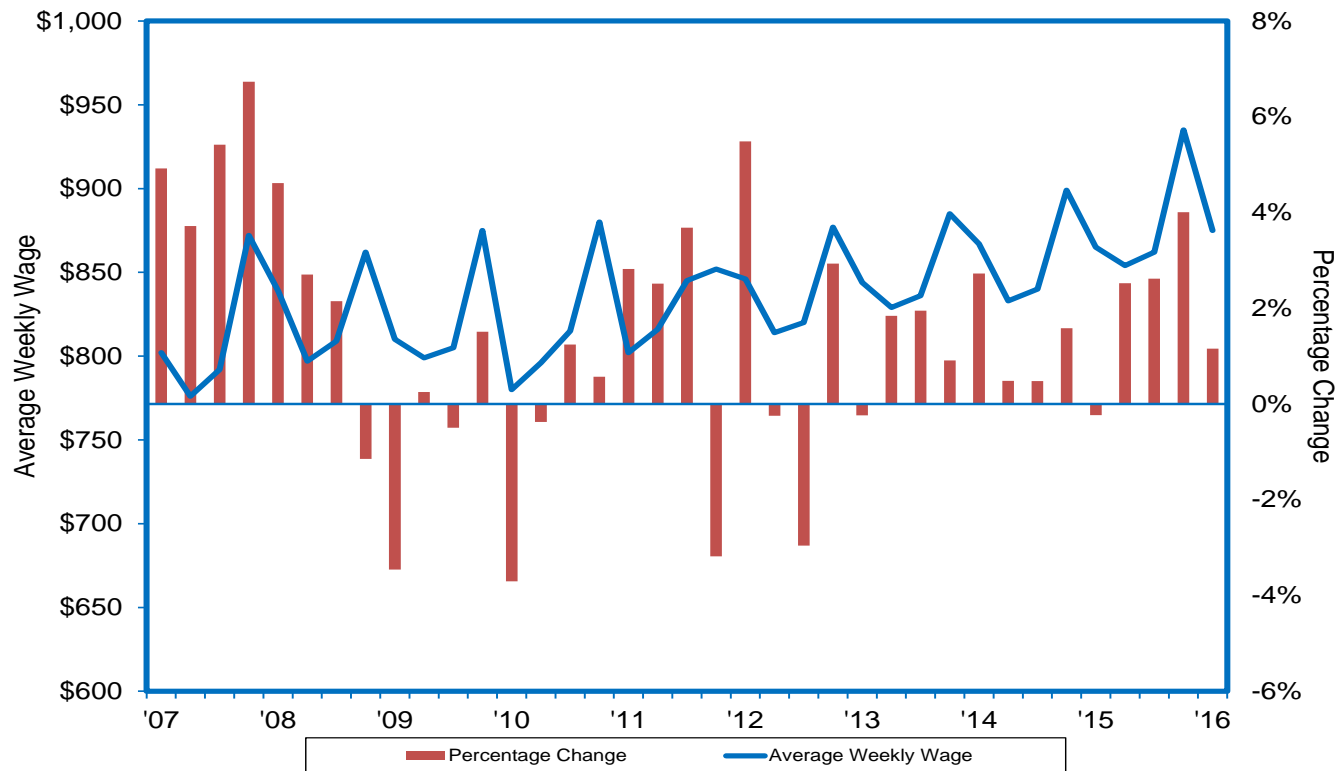
# 44% of Nevada's Workforce is at Least 45 Years Old; 39% a Decade Ago

2015:IIIQ Nevada workforce by age



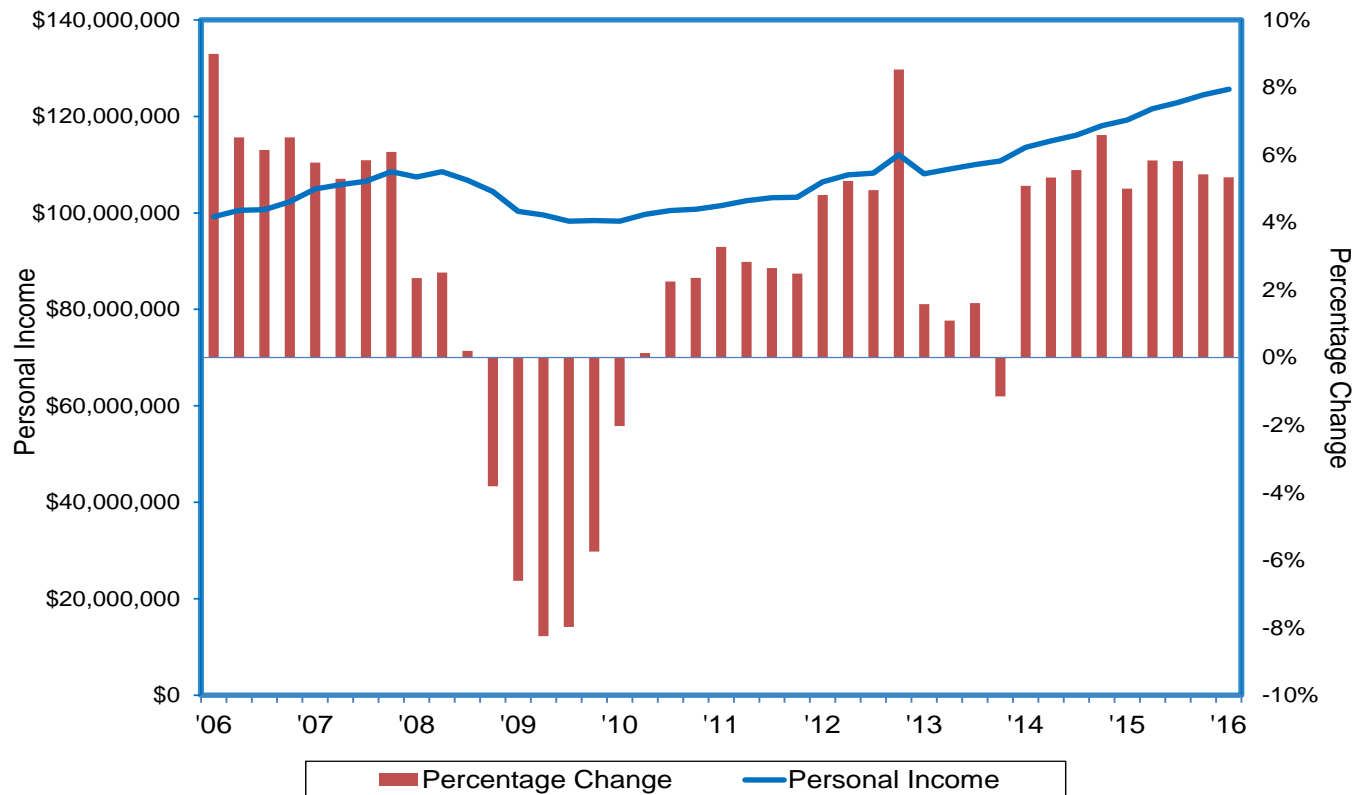
# Nevada Wages at \$875/Week in 2016:IQ; A Record-High for the Qtr.; Up 1.2% Over 2015

Nevada average weekly wages



# Personal Income Growth Hovering in the Mid-Single Digits in the Silver State

Nevada personal income



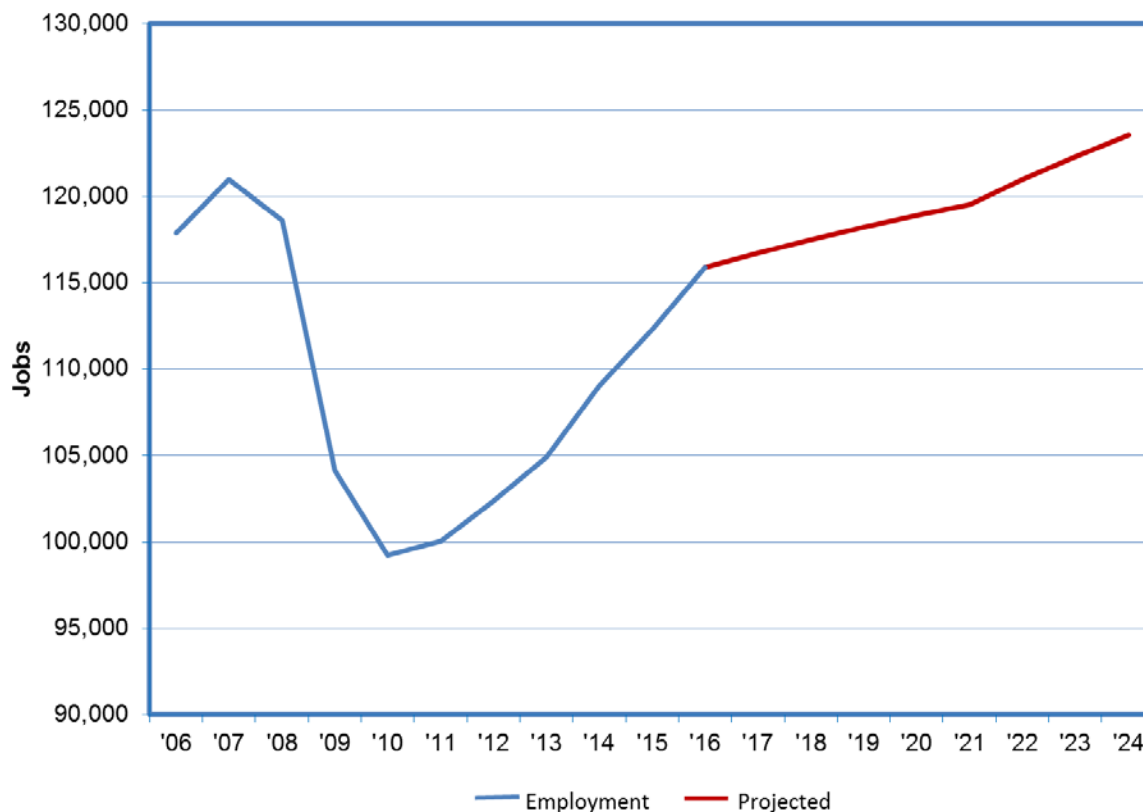
# Natural Resources Sector

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# Employment Projection

117,900 jobs in 2016; 123,600 jobs projected by 2024



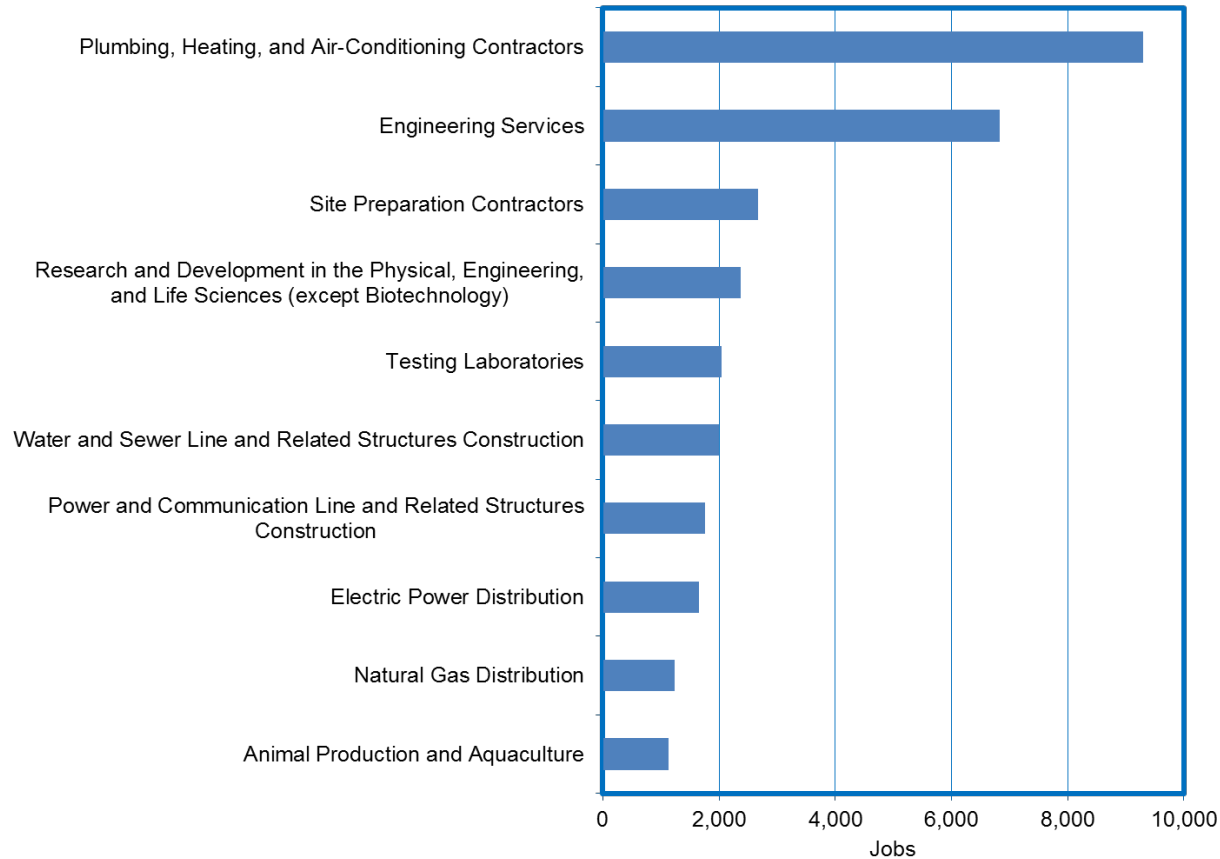
Source: Economic Modeling Specialists Intl. (EMSI)





# Largest Natural Resources Industries

## 2016 employment

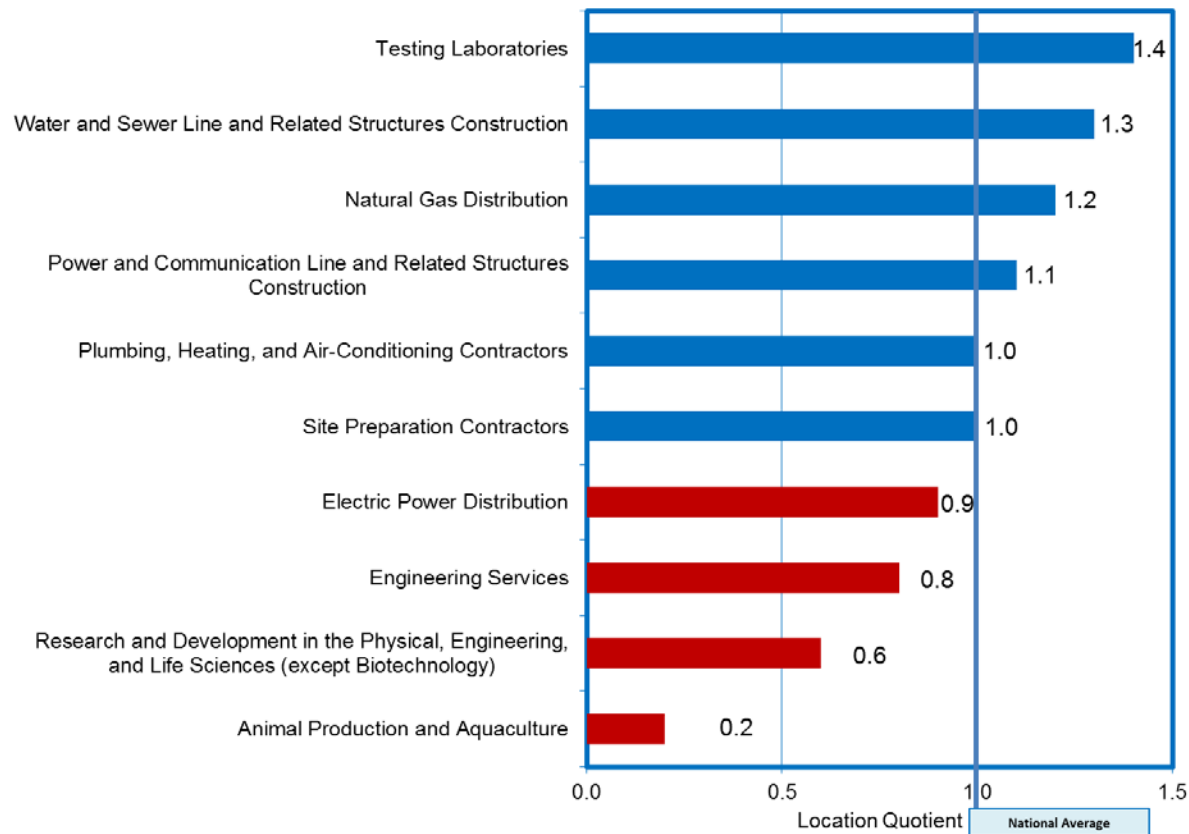


Source: *Economic Modeling Specialists Intl. (EMSI)*



# Regional Competitive Advantage

## natural resources industries

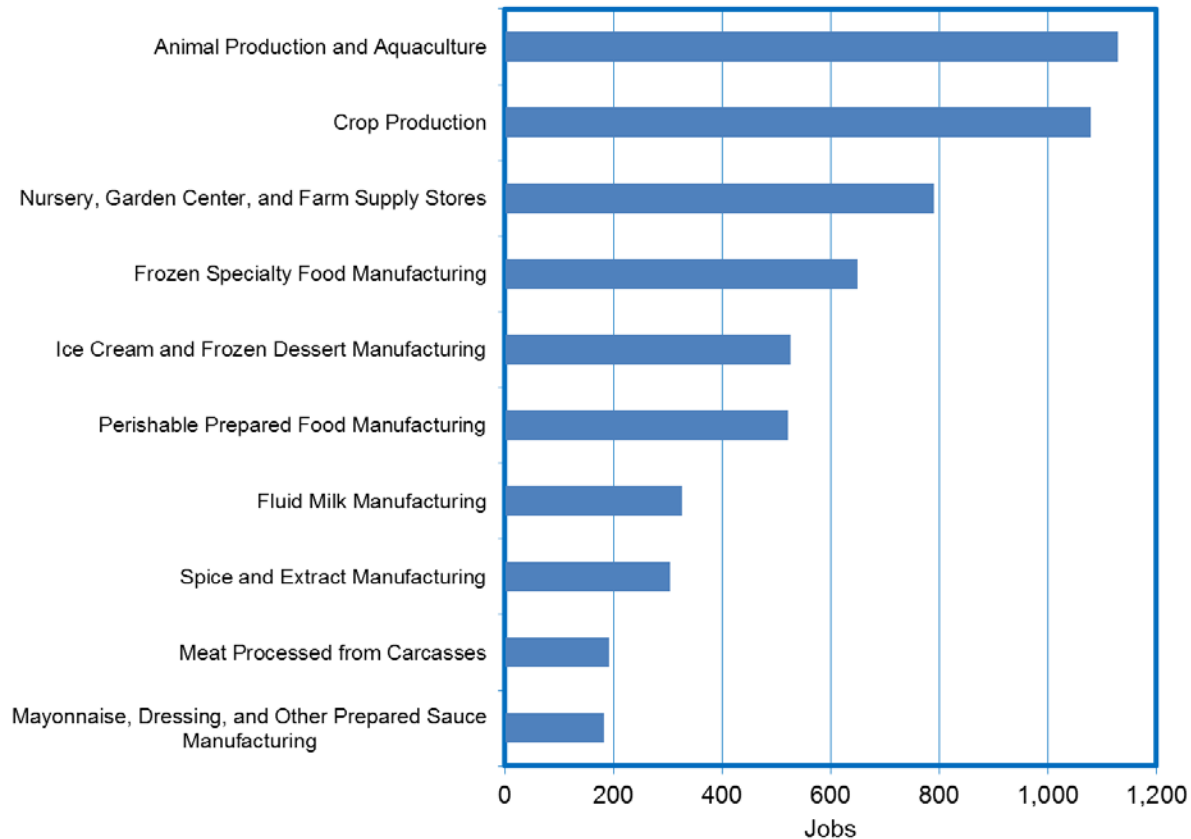


Source: Economic Modeling Specialists Intl. (EMSI)



# Largest Agriculture Industries

## 2016 employment

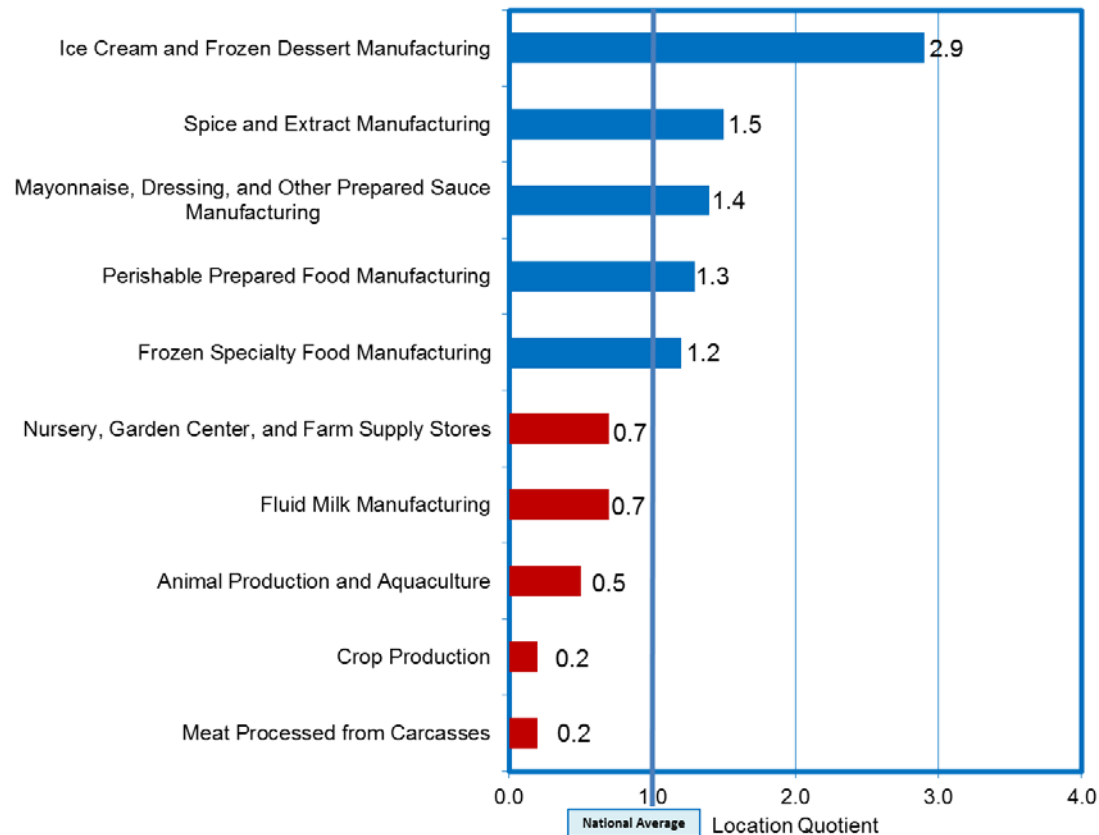


Source: *Economic Modeling Specialists Intl. (EMSI)*



# Regional Competitive Advantage

## agriculture industries

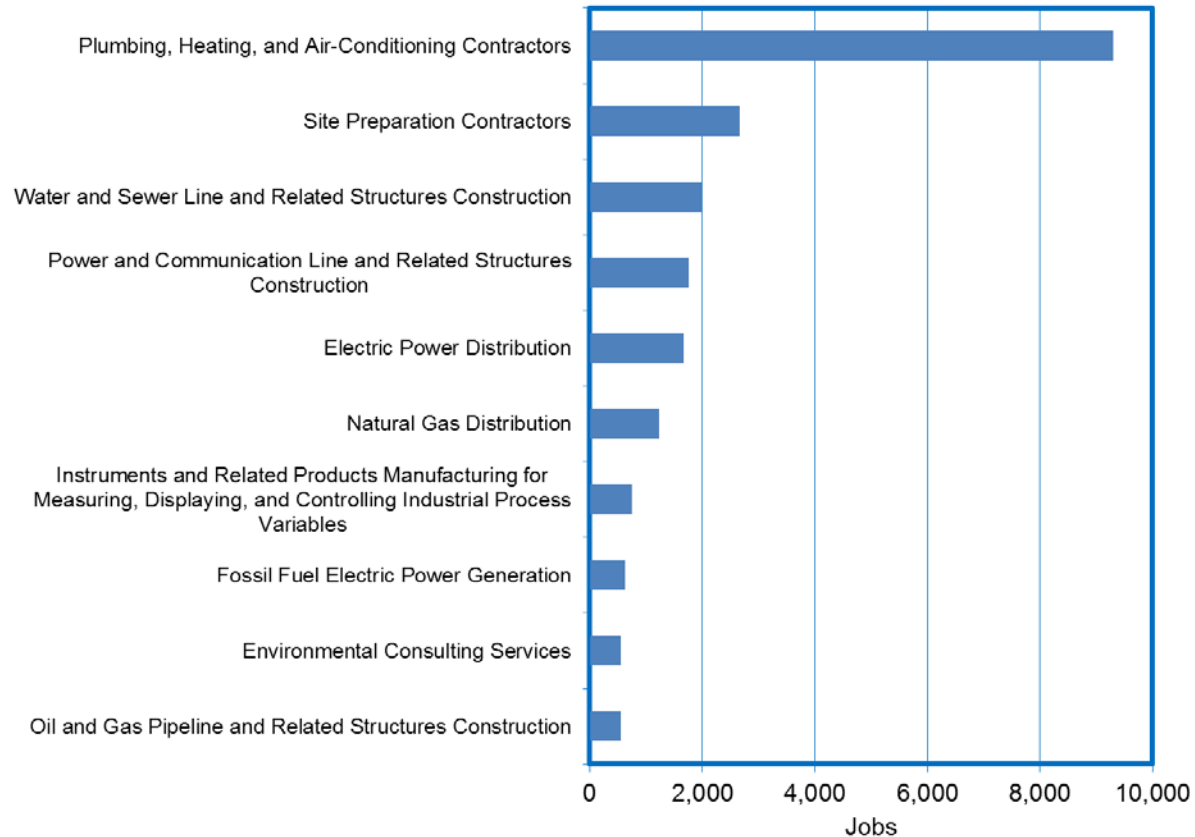


Source: Economic Modeling Specialists Intl. (EMSI)



# Largest Clean Energy Industries

## 2016 employment

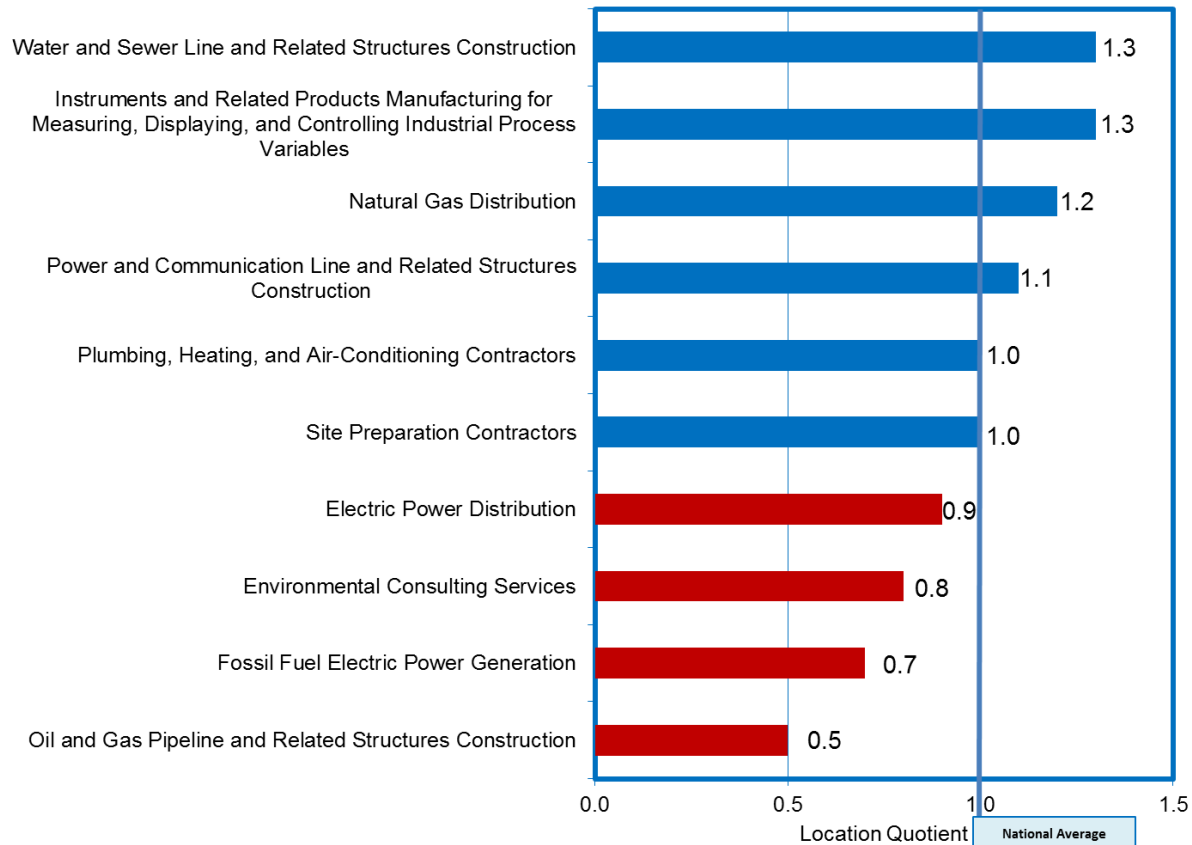


Source: *Economic Modeling Specialists Intl. (EMSI)*



# Regional Competitive Advantage

## clean energy industries



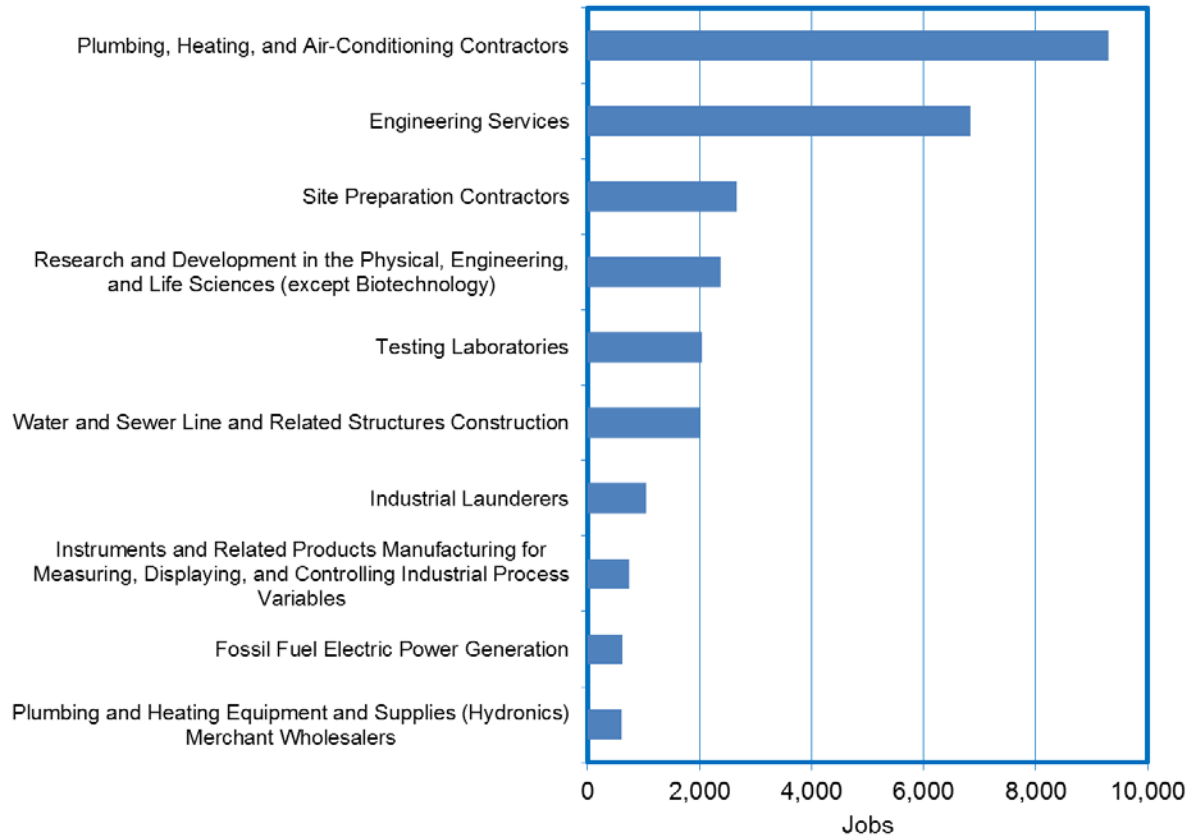
Source: Economic Modeling Specialists Intl. (EMSI)





# Largest Water Technology Industries

## 2016 employment



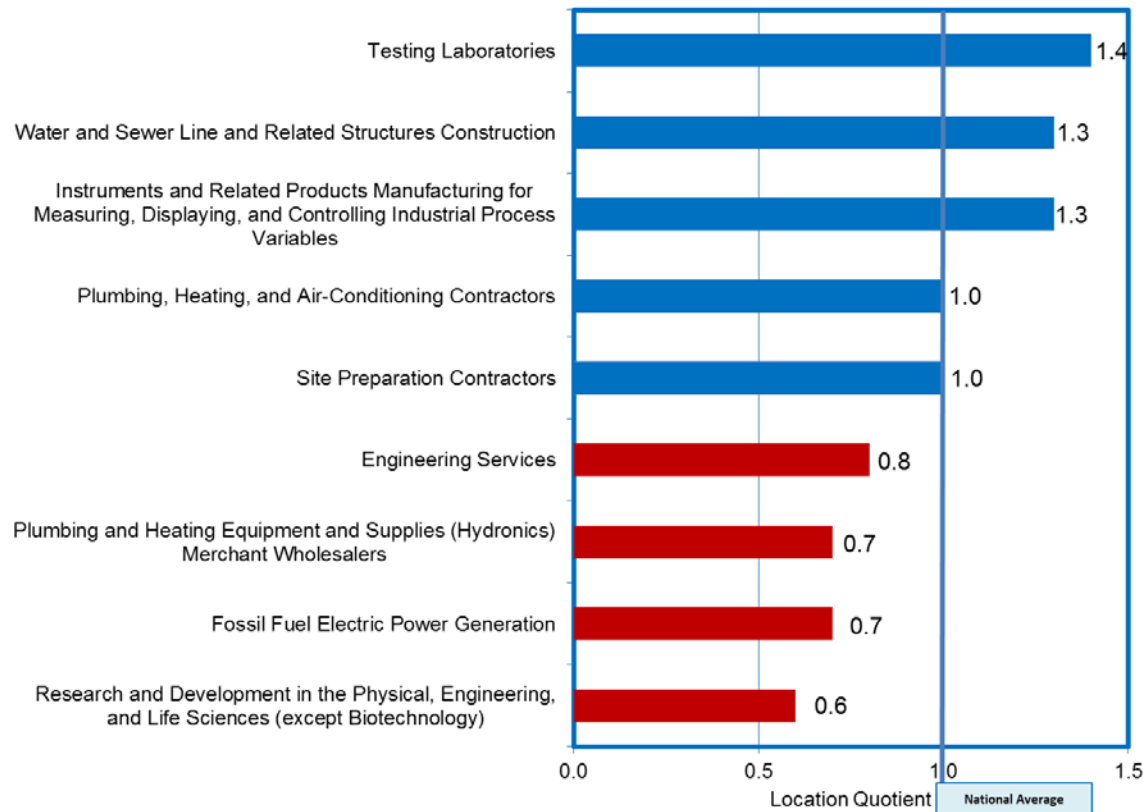
Source: *Economic Modeling Specialists Intl. (EMSI)*





# Regional Competitive Advantage

## water technology industries



Source: Economic Modeling Specialists Intl. (EMSI)



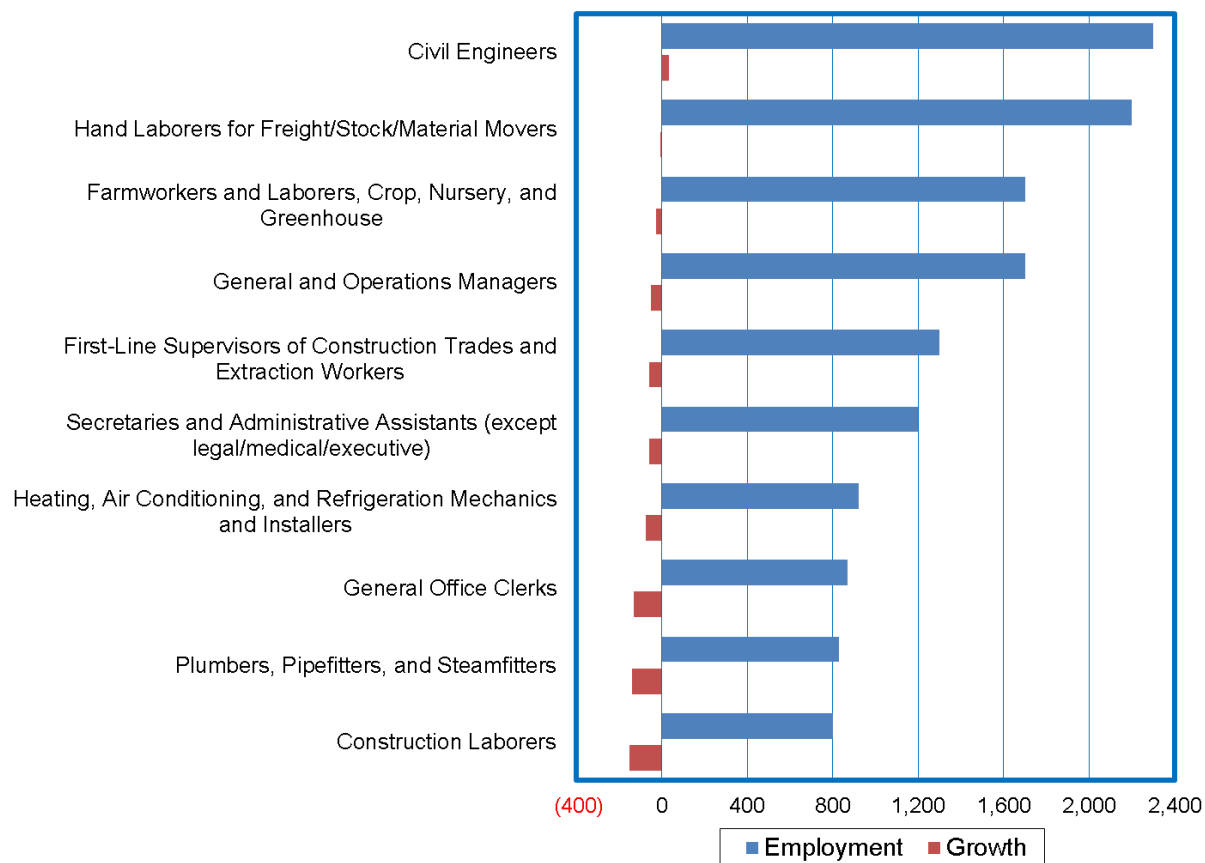
# Industries vs. Occupations

*Although the sector councils are designed to address employment needs in specific industries, this work can only be accomplished by examining and training individuals at the occupational level.*



# Natural Resources Occupations

2016 employment and projected growth by 2024

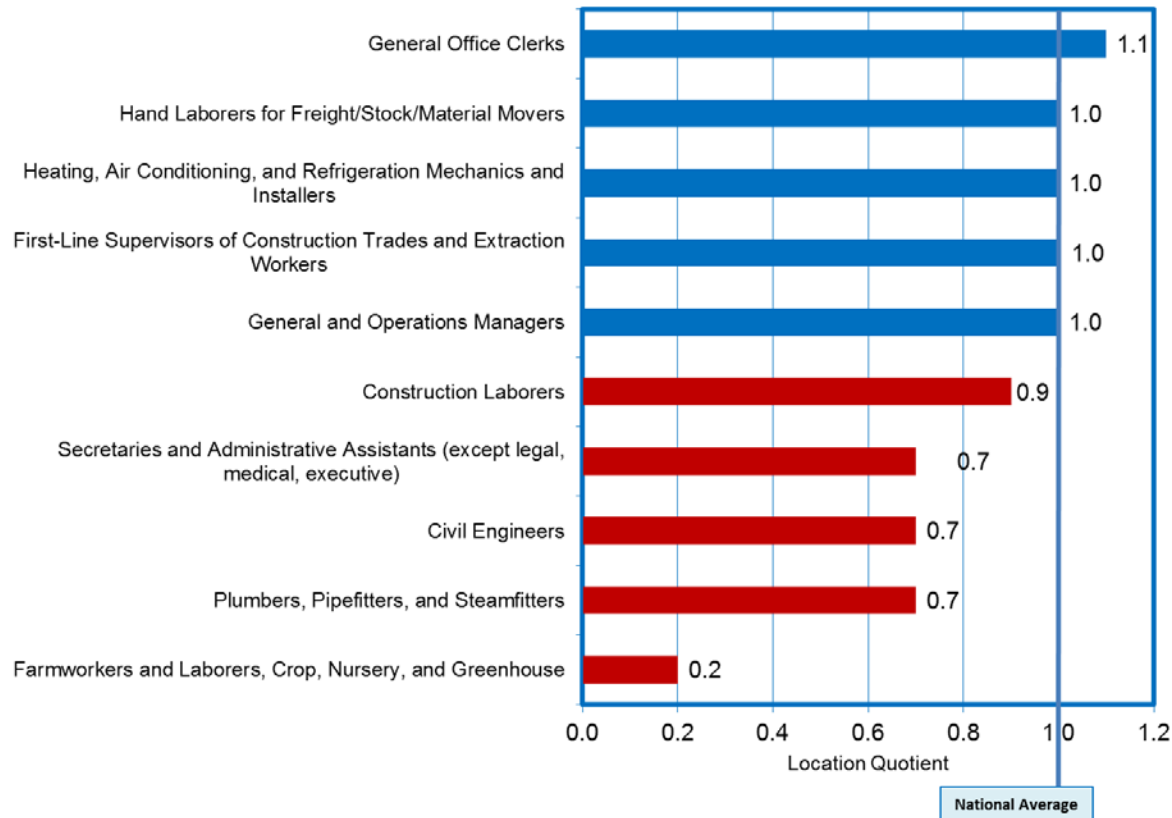


Source: Economic Modeling Specialists Intl. (EMSI)



# Regional Competitive Advantage

## natural resources occupations

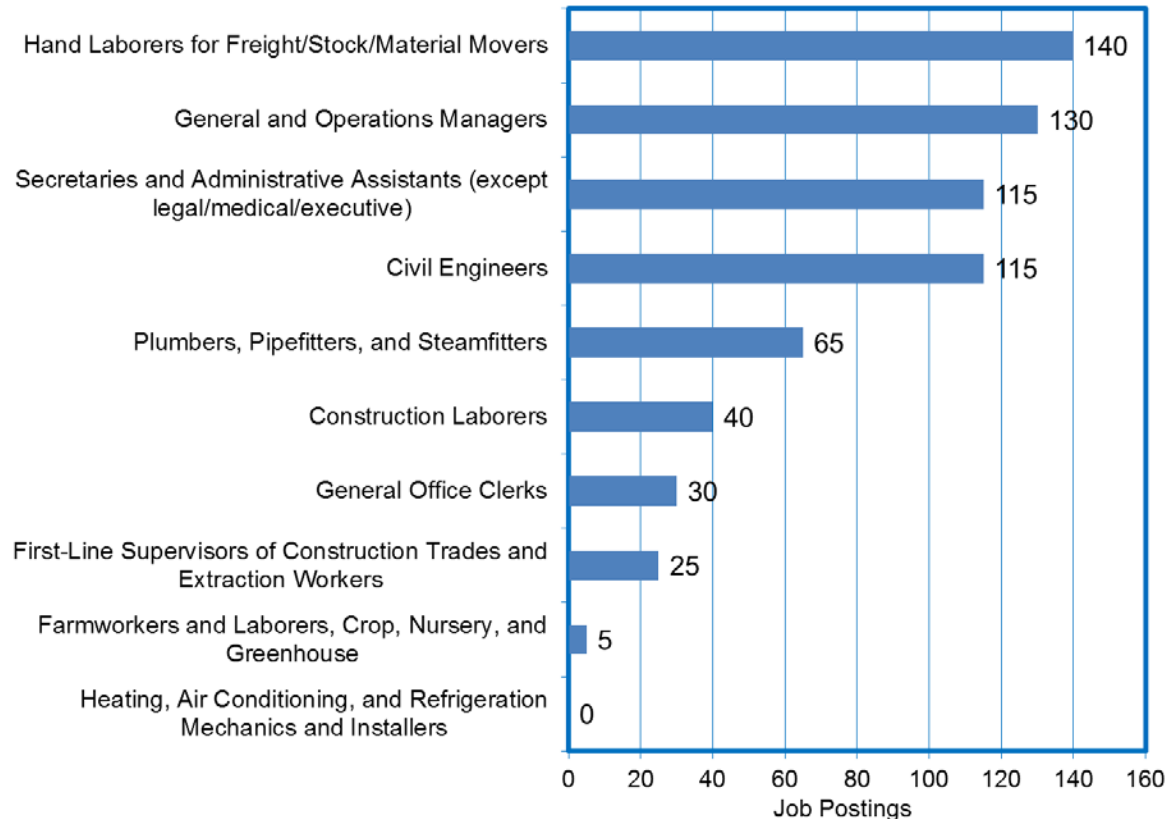


Source: Economic Modeling Specialists Intl. (EMSI)



# Largest Occupations by Ad Volume

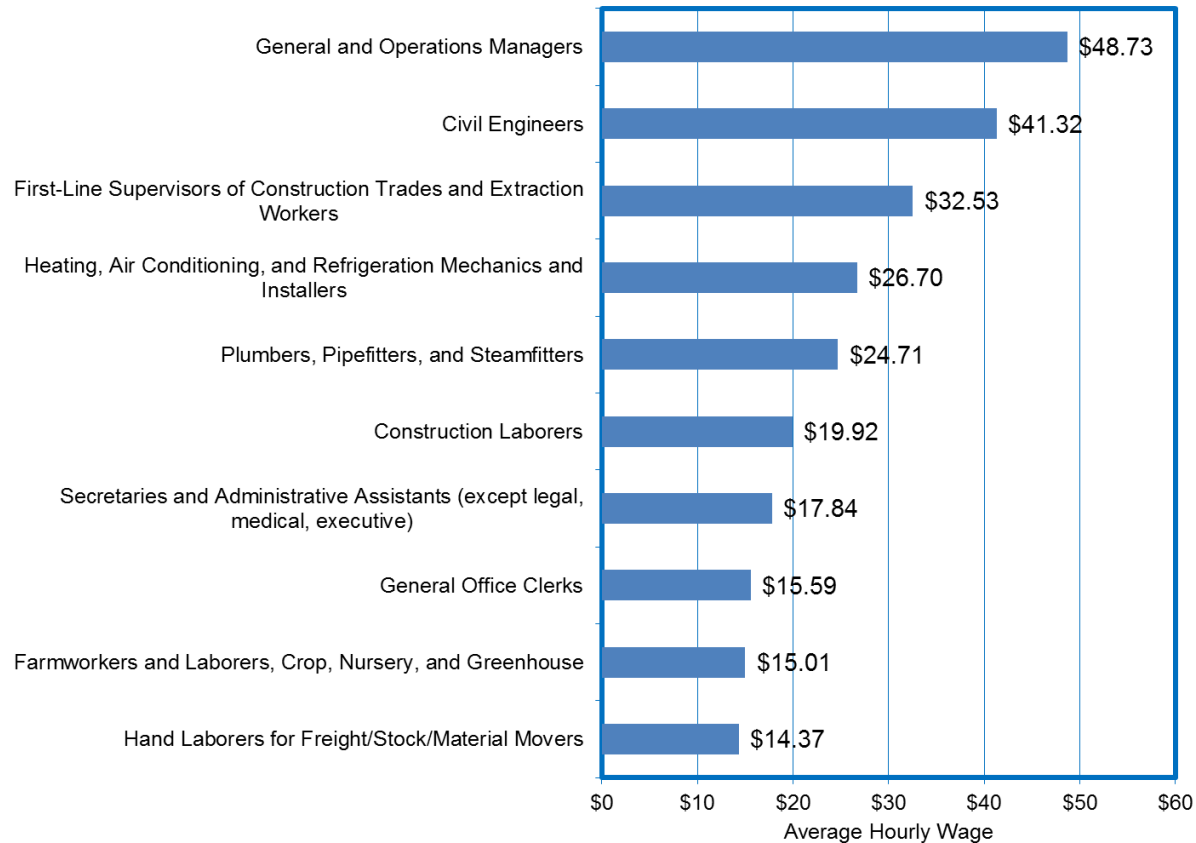
natural resources online job postings



Source: Labor Insight/Burning Glass Technologies



# 2016 Average Hourly Wages



Source: Economic Modeling Specialists Intl. (EMSI)





# O-NET Occupational Skills and Attributes Reports

## O\*NET Occupation Profile - Pipefitters and Steamfitters

<b>Tools</b> Hoists Pneumatic grinders Screwdrivers Air Compressors Adjustable wrenches	<b>Skills</b> Active Listening Critical Thinking Reading Comprehension Speaking Time Management	<b>Knowledge</b> Mechanical Building and Construction Design Public Safety and Security Engineering and Technology
<b>Technologies</b> Analytical or scientific software Computer aided design CAD software Project management software Office suite software Spreadsheet software	<b>Abilities</b> Arm-Hand Steadiness Control Precision Manual Dexterity Near Vision Deductive Reasoning	<b>Work Activities</b> Inspecting Equipment, Structures, or Material Making Decisions and Solving Problems Monitor Processes, Materials, or Surroundings Coordinating the Work and Activities of Others Processing Information

Source: Occupational Information Network (O-NET)





# Natural Resources Occupations

## skills specified in online job ads

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Baseline Skills	Specialized Skills	Data Software Skills
Physical Demand Building Effective Relationships Mathematics Writing Communication Skills Organizational Skills Positive Disposition Leadership Project Planning and Development Skills Research	PipeFitting Repair Inspection Construction Management Mathematics Commercial Construction Fire Protection Plumbing Record Keeping Transporting	No data available

*Source: Labor Insight/Burning Glass Technologies*



# Aligning Economic and Workforce Development

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*A consensus ranking of high demand occupations that align with economic development priorities specific to natural resources*



# Clarifications and Limitations

- ❑ Location Quotients (LQs) are used to identify potential sources of competitive advantage, or areas of regional specialization. LQs measure the relative concentration of a given industry or occupation in a state relative to the nation.
- ❑ LQs are calculated by dividing the proportion of the state's economic activity in an industry or in an occupation, by the proportion of the nation's economic activity in that same industry or occupation.
- ❑ LQs of 1.2 or higher indicate some degree of specialization. LQs of 0.8 to 1.2 indicate normal distribution of industry within the region. LQs of less than 0.8 may indicate that the region may be deficient.
- ❖ Limitations of on-line job postings:
  - ❑ Jobs requiring low skills/low wages tend to use alternative methods of attracting job seekers and are under represented in online ads.
  - ❑ Internal company hiring and union hiring are often not captured by online ads.
  - ❑ Online job posting volume does not necessarily correlate with the level of job openings or hiring.
  - ❑ The percentage of job postings that specify a certification is small limiting how representative the data is.
  - ❑ Algorithmic ad parsing can lead to miscoding occupations and skills due to similarities between abbreviations and other letter combinations, etc.



# Clarifications and Limitations

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- ❑ In online job postings Burning Glass reports licenses and certifications together.
- ❑ The mean salary data in job postings reflects the salary listed by employers in job postings, adjusted to be equivalent to a full-time, annual wage. If a salary range is specified, the median of the range used.
- ❑ High ad volume often occurs for occupations/industries that are having difficulty finding qualified candidates, high turnover positions/recurring openings, or when companies are building large candidate pools.
- ❑ Online job postings should only be used with caution when developing/analyzing time series trends due to the constant changes in the rate of online advertising usage and in the methods used for collecting the data.



# For Additional Information, Please Contact

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