



HIGHER ED & ECONOMIC DEVELOPMENT

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Job Openings Galore

The monthly level of job openings and hirings (in millions), seasonally adjusted



Source: Department of Labor | WSJ.com

THE WALL STREET JOURNAL.



Real Time Economics

Economic insight and analysis from The Wall Street Journal.



ECONOMY
The U.S. Market in

MINIMUM WAGE

EMPLOYMENT

INFLATION

HOT TOPICS: [WSJ ECONOMIST SURVEY](#) [GRAND CENTRAL NEWSLETTER](#) [CENTRAL BANK WATCH](#) [CENTRAL BANK WATCH](#)

10:28 am ET
Feb 10, 2015

[ECONOMY](#)

Job Openings at 14-Year High as Hiring Returns to Pre-Recession Levels

SEARCH



Real Time Economics

Economic insight and analysis from The Wall Street Journal.



MINIMUM WAGE

EMPLOYMENT

INFLAT

HOT TOPICS: [WSJ ECONOMIST SURVEY](#) [GRAND CENTRAL NEWSLETTER](#) [CENTRAL BANK W](#)

10:17 am ET
Feb 6, 2015

EMPLOYMENT

Economists React to the January Jobs Report: 'Astonishingly Strong'

Before long, the U.S. economy is going to run into a problem that was unimaginable just six months ago: we might run out of people to employ."

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“New Economic Development Playbook”



1. Make attracting, developing, and retaining **talented people** in your communities your top ED priority.



“Education is the single most important factor in driving economic growth.”

CEO for Cities

“Technology has been a key driver of economic growth over the last two decades, fueling the innovation and entrepreneurship that are crucial to long-term economic development and prosperity.

Brookings Institute



One of the most persistent challenges affecting both lagging and thriving state economies is the growing skills gap—the disparity between the skills companies need to drive growth and innovation versus the skills that actually exist within their organizations and in the labor market.

A sizable skills gap impacts other vital dimensions of the economy including exports and international trade, entrepreneurship, and technology, all critical drivers of national competitiveness and economic growth.

US Chamber Foundation, 2014



“Average is Over”

“In the past, workers with average skills, doing an average job, could earn an average lifestyle. Today, average is over. So many more employers have so much more access to so much more above average cheap foreign labor, cheap robotics, cheap software, cheap automation, and cheap genius. Therefore, everyone needs to **find their extra** – their unique contribution that makes them **stand out** in whatever is their field of employment.

Tyler Cowen, “Making It In America”

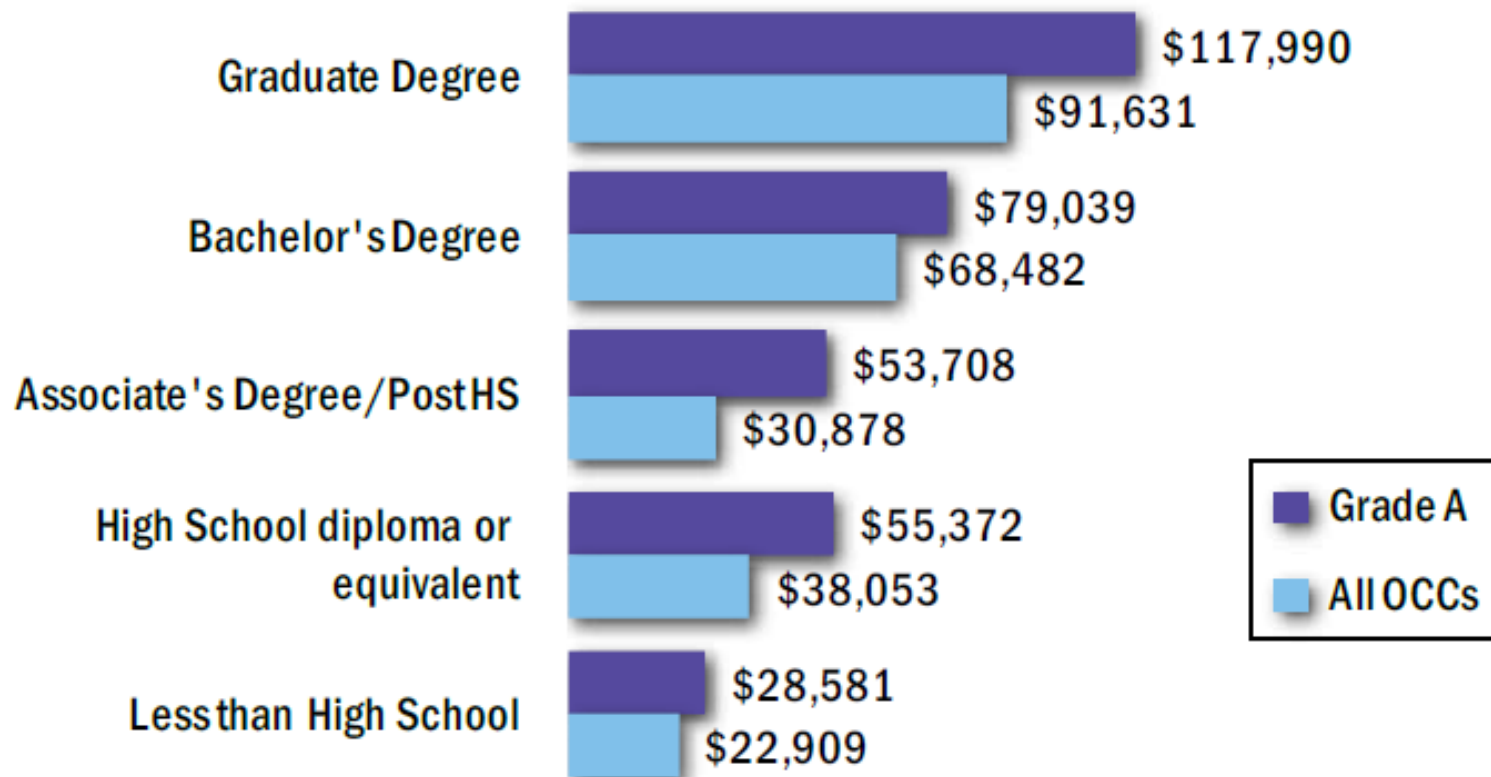




EMPLOYMENT DATA

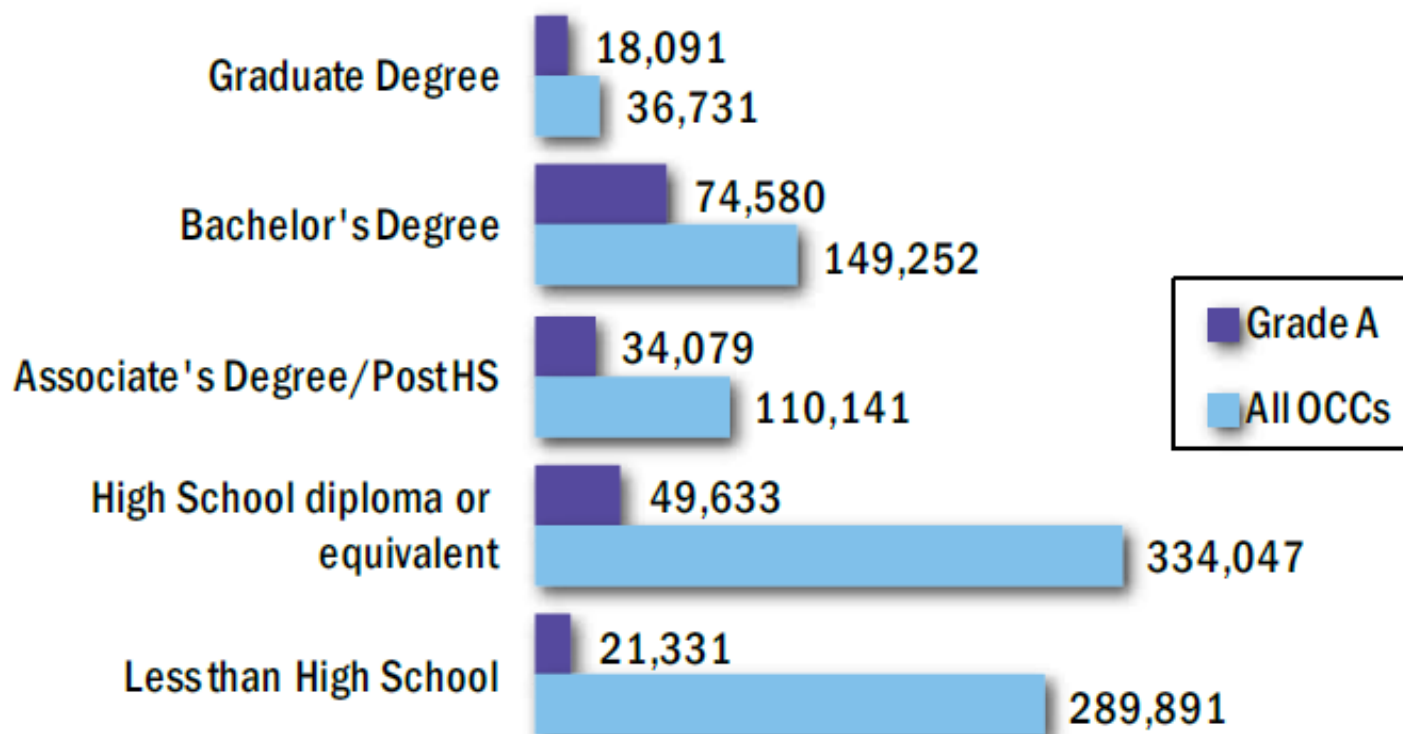


Average Annual Wage of Grade A Careers



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Total Openings for Grade A Careers



M I S S O U R I

Top Grade A Careers

Grade A occupations are projected to experience the greatest percentage of growth between 2012 and 2022. Some of these occupations were hard hit by the recession started in 2008, and are projected to experience a return to growth, while others are part of a growing industry such as healthcare. These occupations cover a wide range of career opportunities, and require short, medium and long term education and training.



NOW Occupations

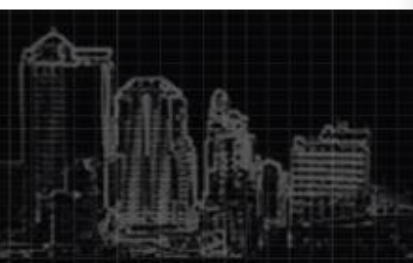
Title	Openings	Avg Wage
Personal Care Aides	11,318	\$19,398
Construction Laborers	7,617	\$41,129
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	7,551	\$60,638
Sales Representatives, Services, All Other	6,036	\$53,079
Medical Secretaries	5,823	\$30,801
Insurance Sales Agents	4,185	\$57,587
Painters, Construction and Maintenance	2,396	\$49,462

NEXT Occupations

Title	Openings	Avg Wage
Registered Nurses	21,004	\$58,037
Carpenters	7,097	\$49,187
Licensed Practical and Licensed Vocational Nurses	6,601	\$37,800
Managers, All Other	5,027	\$98,711
Computer User Support Specialists	4,452	\$47,667
Electricians	4,273	\$54,978
Plumbers, Pipefitters, and Steamfitters	2,806	\$60,324

LATER Occupations

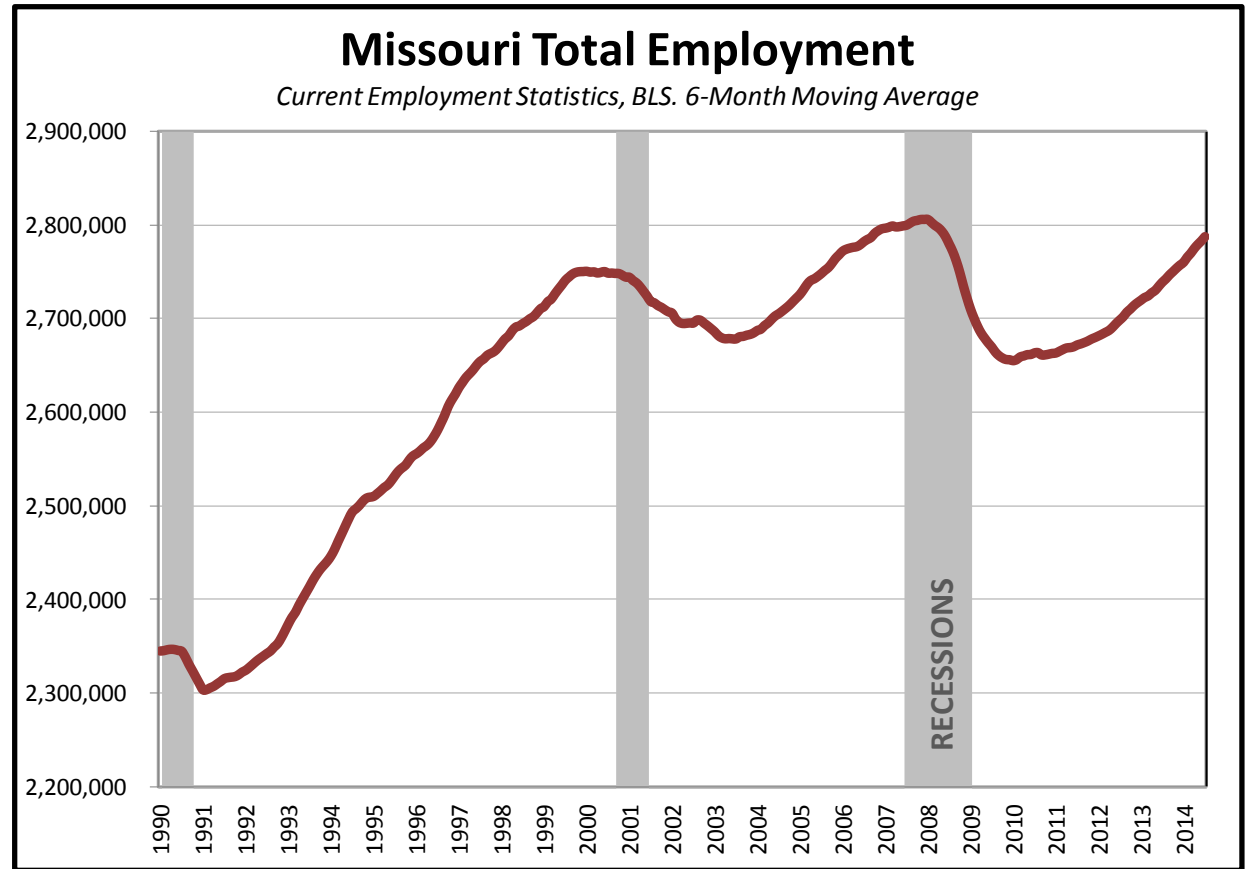
Title	Openings	Avg Wage
General and Operations Managers	15,031	\$91,952
Accountants and Auditors	10,935	\$65,144
Elementary School Teachers, Except Special Education	7,451	\$48,463
Middle School Teachers, Except Special and Career/Technical Education	4,491	\$53,377
Computer Systems Analysts	3,877	\$80,068
Lawyers	3,812	\$116,183
Software Developers, Applications	3,224	\$85,772



Employment Trends

Missouri is
reaching peak
employment
again in 2015.

CY 2014: Largest
1 year job
increase since
1997.



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MO Employment Growth by 2022

New Jobs will be created....

2012 Employment
2.84 Million

2022 Projected Employment
3.09 Million

Growth
255,000

But Replacement Jobs also needed....

New Job Openings
255,000

+

Replacement Jobs
665,000

=

Total Openings
920,000

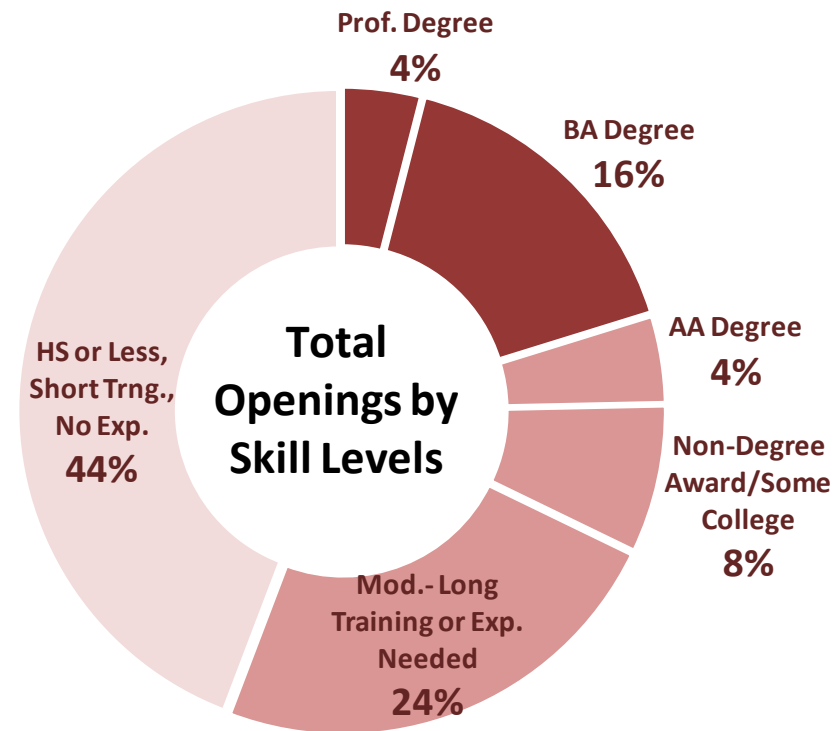
2012-2022 Occupational Projections, MERIC . Occupations include payroll workers and the self-employed.



Projected Employment Growth by 2022

920,000 Total Job Openings

Occupation	Total Openings	% of Total	Median Wage
High Skill	186,000	20%	\$66,000
Middle Skill	327,000	36%	\$35,100
Low Skill	407,000	44%	\$24,400
Total	920,000	100%	\$32,300



2012-2022 Occupational Projections, MERIC . 2013 median wage from Occupational Employment Statistics Program, MERIC.

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Annual Demand for Mid-High Skill Jobs

56% of Job Openings need Middle-to-High Skills

51,300 Annual Openings for Middle-to-High Skill Workers

Can Unemployed Meet the Need?

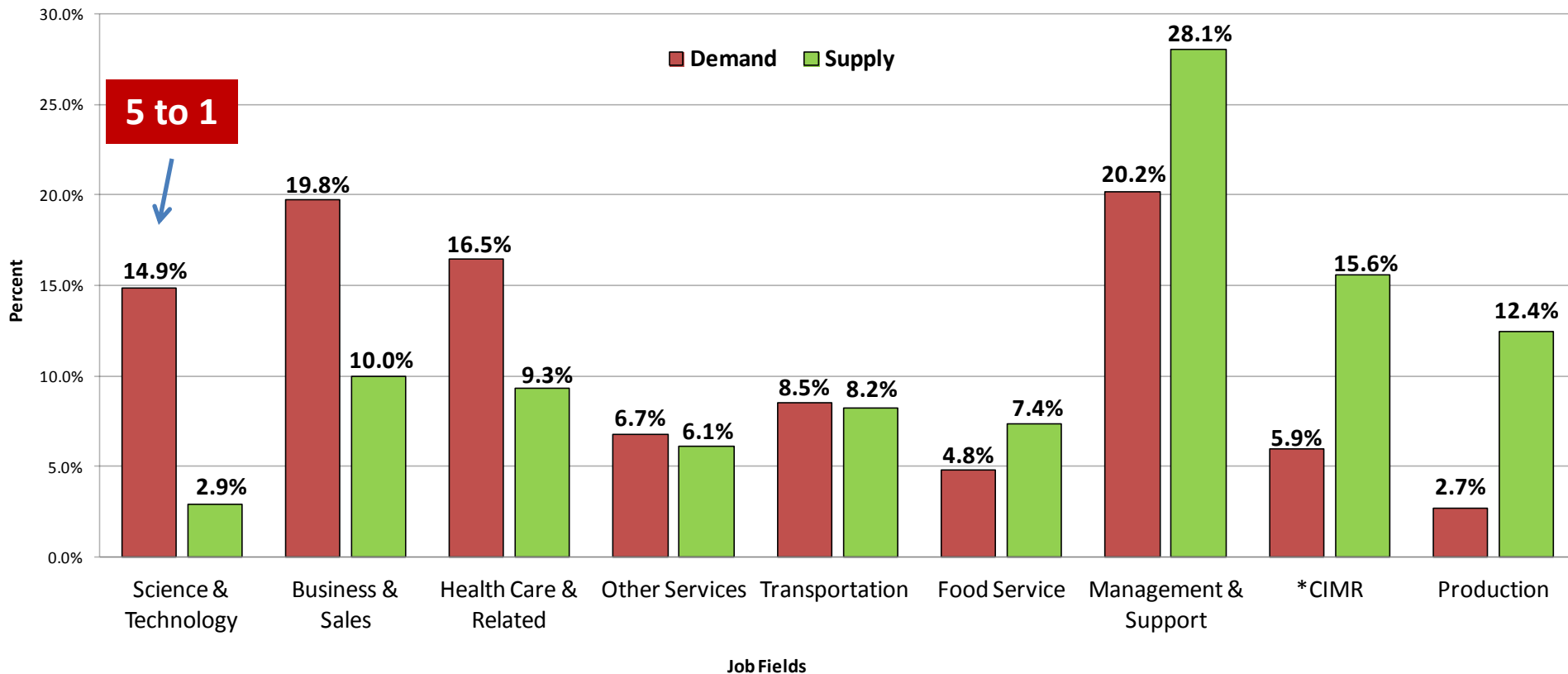
143,000 Unemployed (+25 Older) in 2013

- 77,000 (54%) have Some College or College Degrees
- Highest Rate of Unemployment in Construction
- **Some Yes, but Others need New Skills...**

2012-2022 Occupational Projections, MERIC . 2013 Unemployment information http://www.bls.gov/opub/gp/pdf/gp13_15.pdf. and 13_19.pdf



Missouri Labor Supply and Demand



In 2014 Too Few Jobseekers Chasing Opportunities in **STEM, Business, and Healthcare**

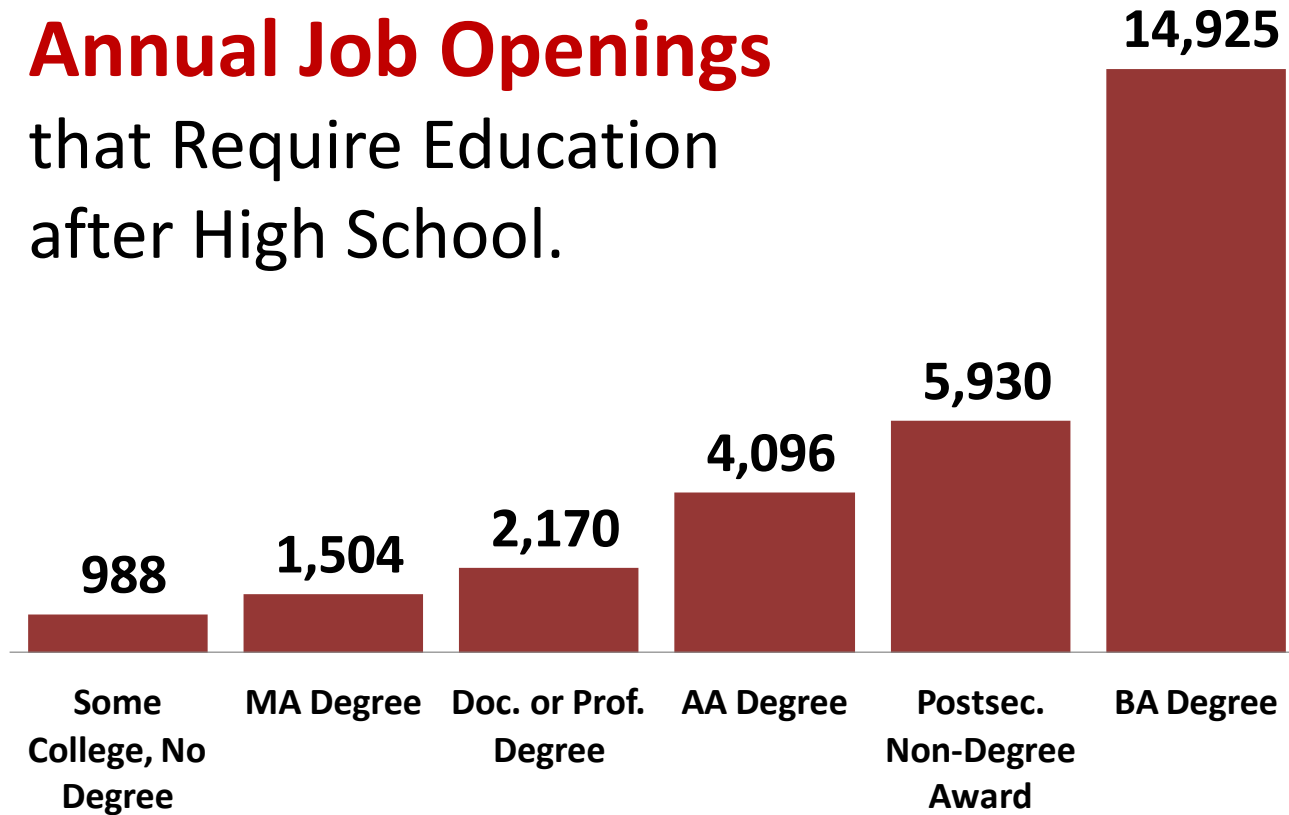
*Construction/Install./Maint. & Repair. Sources: Burning Glass Labor Insight, Online Job Ads Jan. 2014-Dec. 2014, Active Jobseekers, Dec. 2014, mo.jobs.gov.

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Jobs and Education

Annual Job Openings

that Require Education
after High School.



2012-2022 Occupational Projections, MERIC. Job openings include growth and replacement needs for an occupation.

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STEM



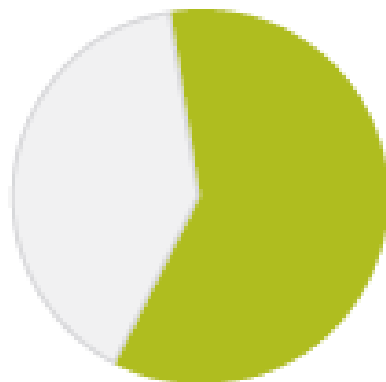
What are Businesses Saying?

Business Roundtable of U.S. Company C.E.O.s
126 Employers Surveyed in Fall 2014

- **60%** of Job Openings require **basic STEM literacy**
- **42%** of Job Openings require **advanced STEM knowledge**
- Biggest Gaps:
 - **Advanced Computer Skills**
 - **Quantitative Knowledge Skill**

Source: <http://businessroundtable.org/sites/default/files/reports/BRT-SkillGap.pdf>





60%
of new jobs in
the 21st century
will require STEM
skills possessed
by only



20%
of the current
workforce

Source: National
Commission on
Mathematics and
Science for the
Twenty-first
Century

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STEM SKILLS ARE IN DEMAND

In Missouri, STEM skills have stayed in demand even through the economic downturn.

STEM:
3.1 jobs for every
1 unemployed person



Non-STEM:
3.7 unemployed people for every **1 job**



Source:
<http://changetheequation.org/sites/default/files/vital-pdfs/MO-CTEq-vital-signs.pdf>

Why STEM Education Matters

1. STEM is where the jobs are.
 - STEM jobs will grow by 17 % over the next 10 years compared to 9.8% for non-stem.
2. STEM workers make higher salaries.
 - 26% more on average; Less likely to experience job loss.
3. Decline in STEM knowledge capital is reducing the basic scientific research that leads to growth.



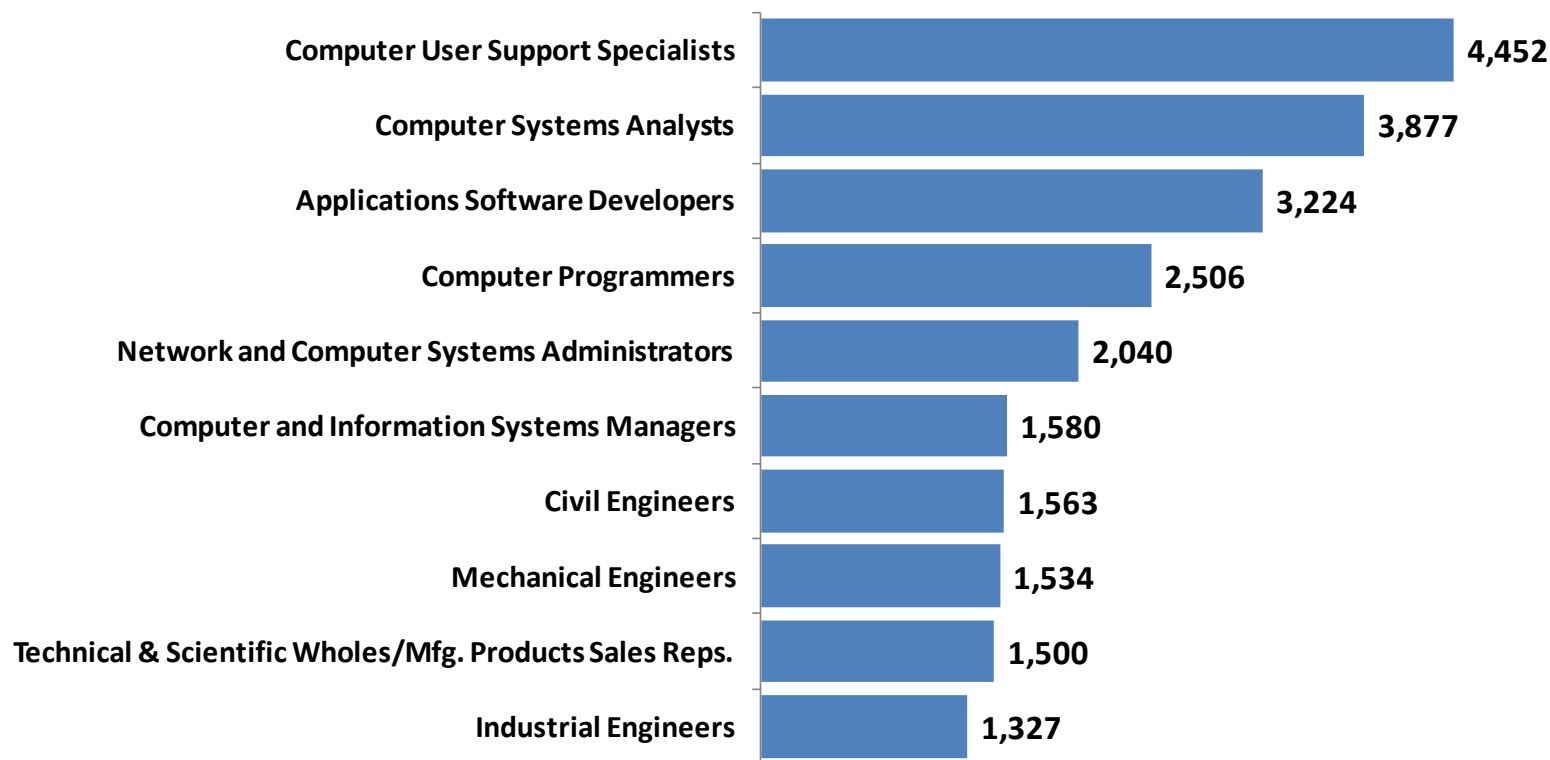
Why STEM Education Matters

4. United States is failing to produce enough skilled STEM workers.
 - **60%** of the new jobs that will open in the 21st century will require skills possessed by only **20%** of the current workforce.
 - U.S. may be short as many as **3 million** high-skills workers by 2018.
 - **2/3** of those jobs will require at least some post-secondary education.
 - American universities, however, only award about **1/3** of the bachelor's degrees in science and engineering as Asian universities.



Top Missouri STEM Job Openings 2012-2022

Technologists and Engineers Top List



2012-2022 STEM Occupational Projections, MERIC. http://www.missourieconomy.org/pdfs/stem_top_openings.pdf.





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