

The Conference Board Special Webcasts

The Conference Board New Risk Index on Occupational Labor Shortages
November 20, 2019



Some of the critical questions and issues we will be answering today

- In which occupations of the almost 500 available, the risk of labor shortages in the next decade will be the highest?
- Why labor shortages are more visible in blue-collar and manual services occupations than in white-collar jobs?
- Why healthcare occupations are at a high risk?
- Why STEM occupations, on average, experience low risk?



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Today's Presenters



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The Challenge of Labor Shortages

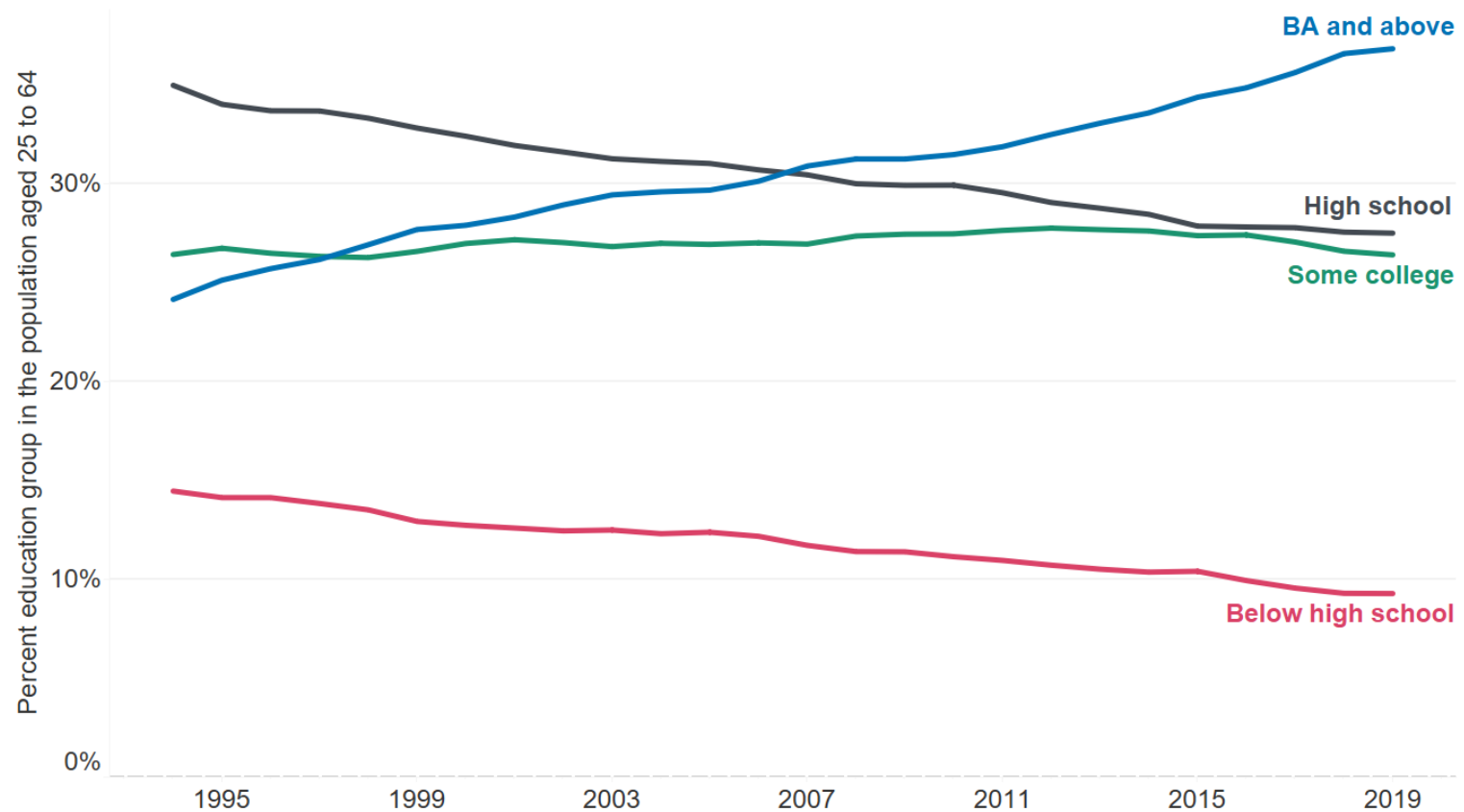
Labor markets are tight, but more so for blue-collar occupations than for highly educated white-collar jobs

- In a span of 10 years, the US economy moved from the weakest labor market since the Great Depression to one of the tightest
- Labor markets for blue-collar and manual services workers are much tighter than for highly educated white-collar workers, the exact opposite of prevailing trends in recent decades
- The extreme shift in labor market conditions in the past decade is not a coincidence, but a result of a perfect storm in which several long-term trends converge at the same time
- On a granular occupational level, there is interesting variation
- Our Labor Shortages Risk Index tries to answer: In which occupations of the almost 500 available, the risk of labor shortages in the next decade will be the highest



The drop in working-age population is in the non-BA population only

The share of population aged 25 to 64 by education group, 1994 to 2019.



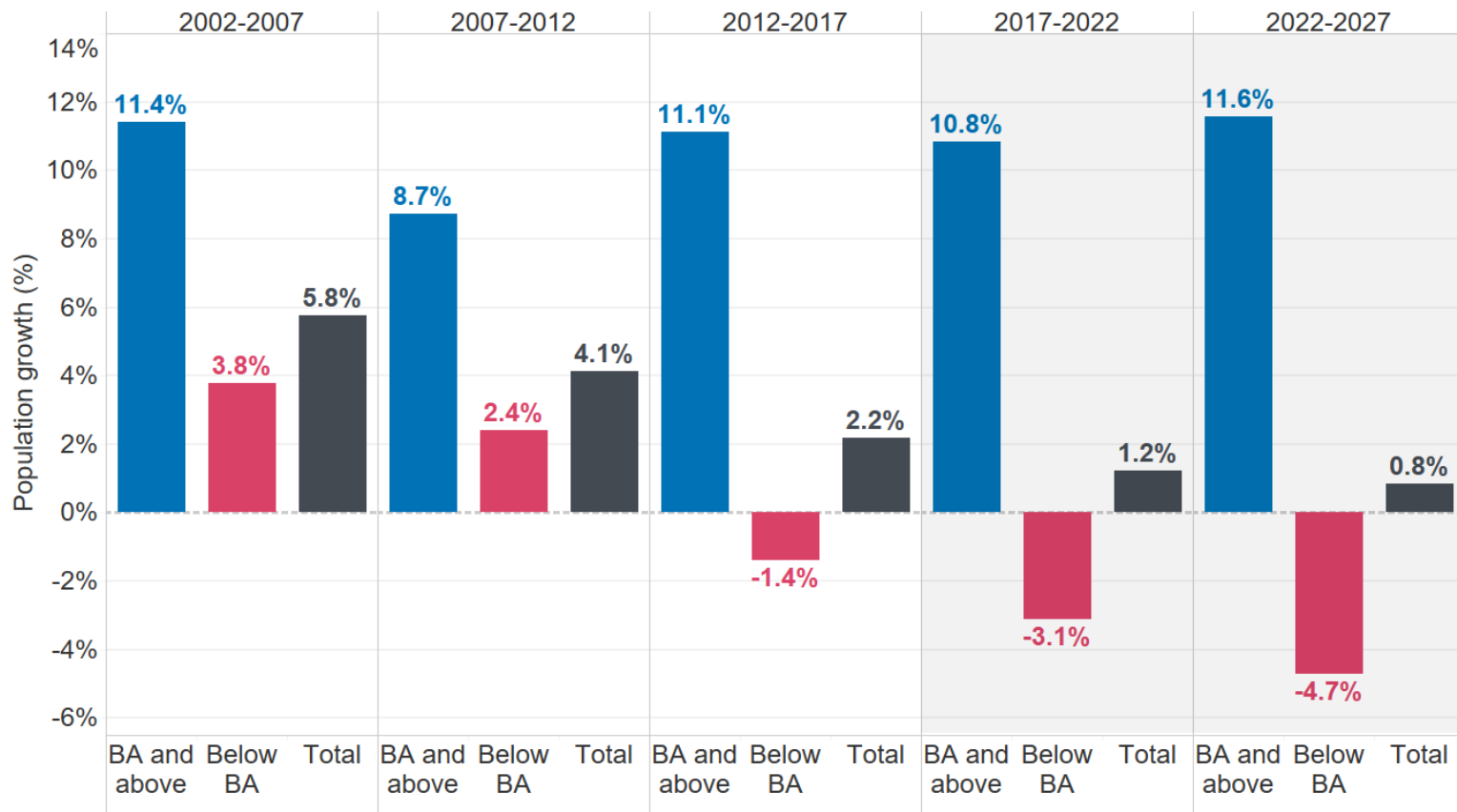
Note: 2019 represents the last 12 available months — August 2018 to July 2019.

Source: The Conference Board using microdata from the U.S. Current Population Survey.



And that trend will actually accelerate

Working-age population (aged 20 to 64) growth by education, 2002 to 2027.

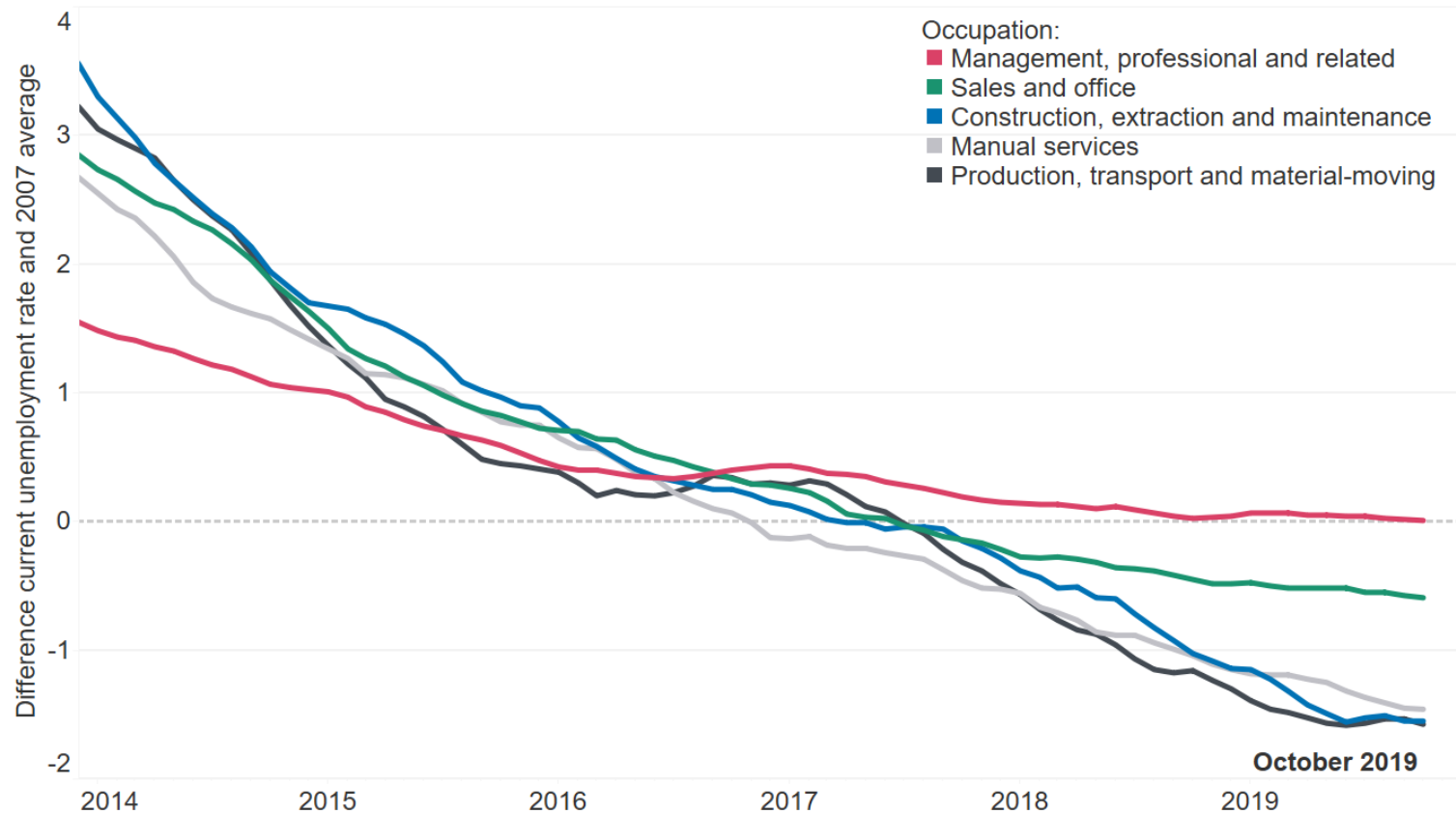


Source: The Conference Board; US Census Bureau; microdata from the American Community Survey.



Blue-collar and manual services occupations experience the tightest labor markets

Unemployment rates by occupation group, difference to 2007 rates, 12-month moving average.

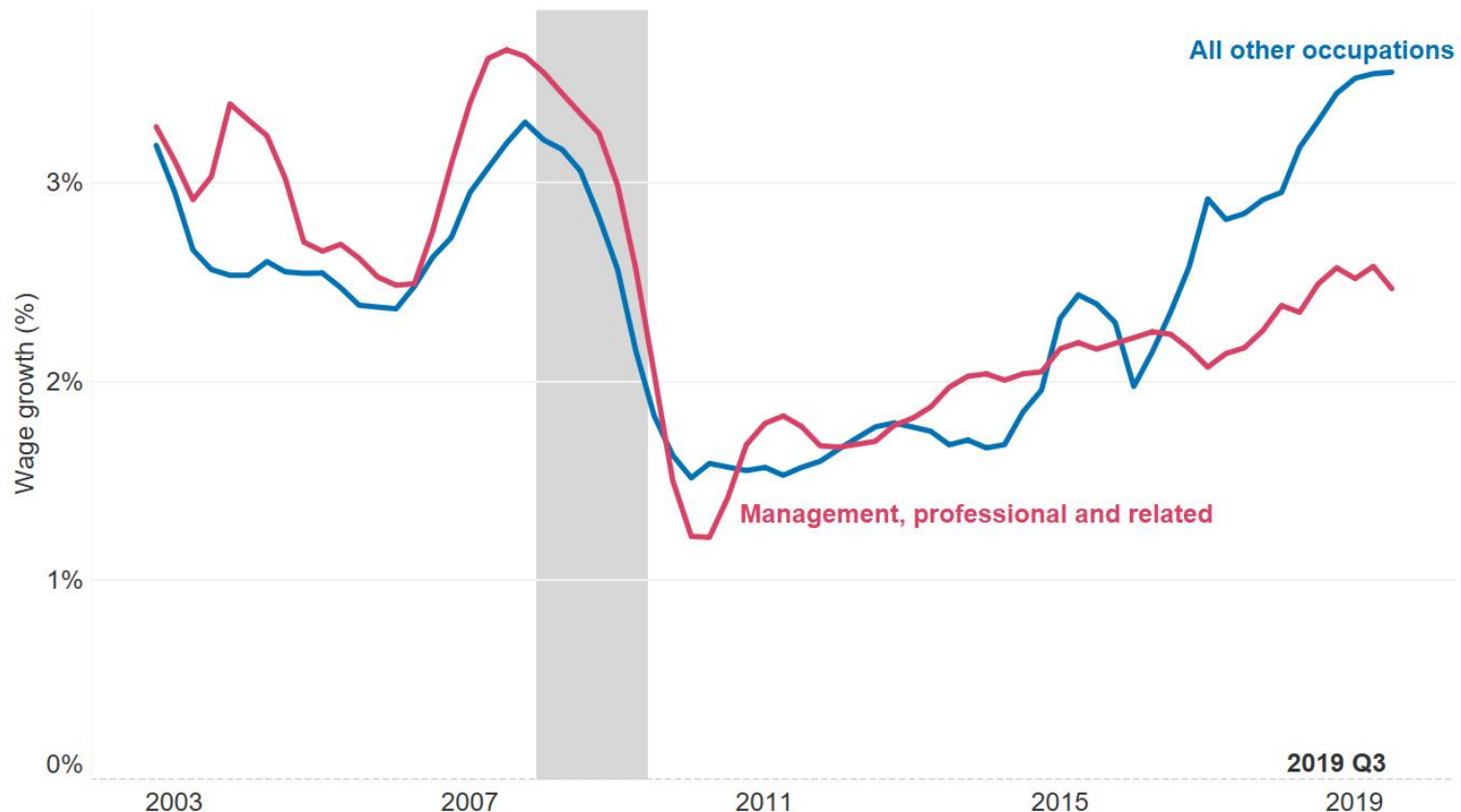


Source: US Bureau of Labor Statistics.



Wages are accelerating, especially for new hires and for blue-collar and manual services occupations

Year-over-year growth in the Employment Cost Index (wages and salaries), 4-quarter moving average, 2002Q4 to 2019Q3.



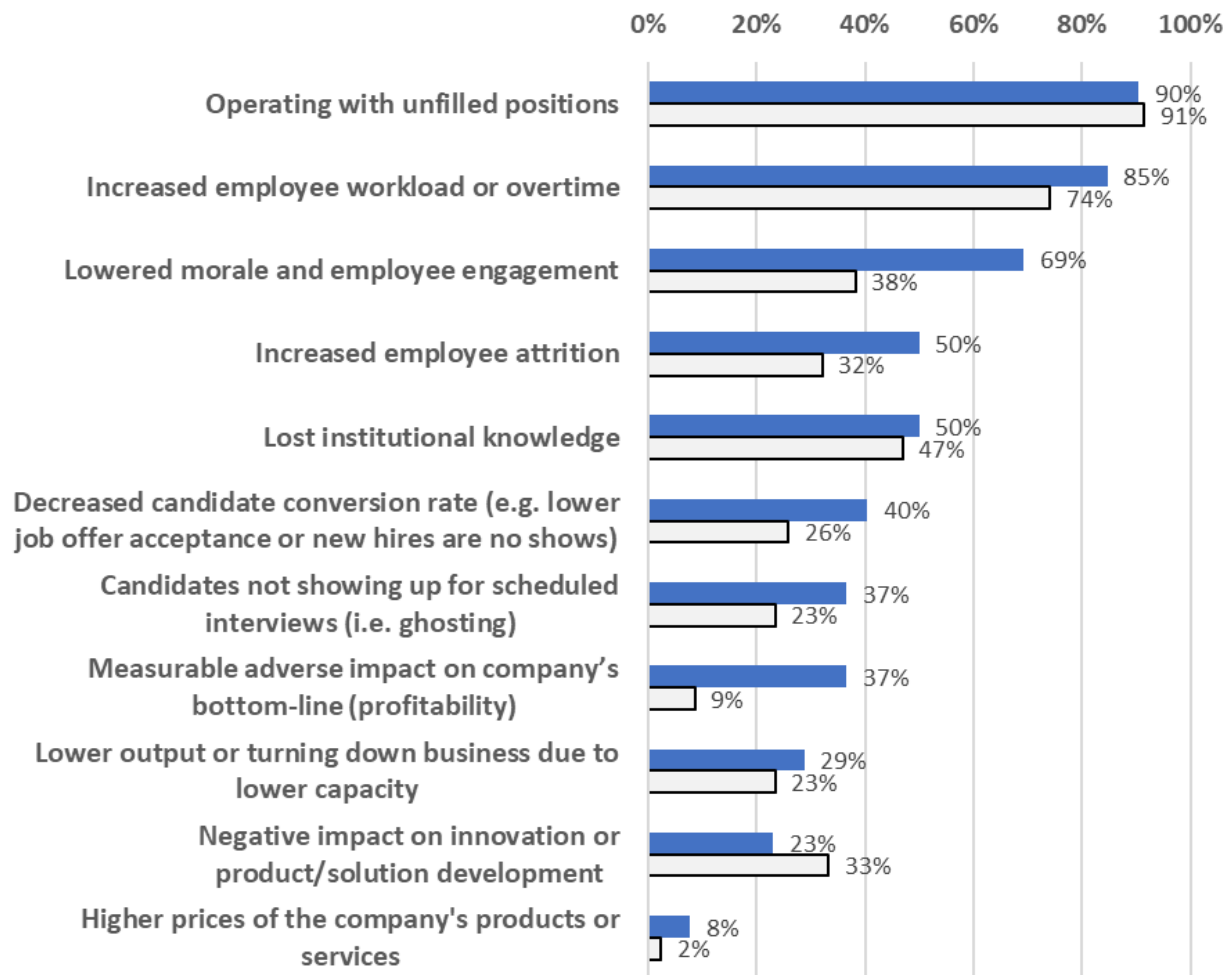
Source: US Bureau of Labor Statistics and calculations by The Conference Board.



Blue-collar companies are feeling the business impacts of labor shortages much more severely than white-collar companies

Percentage of respondents experiencing each business impact as a result of recruitment and/or retention difficulties

■ Companies with mostly blue-collar workers □ Companies with mostly white-collar workers



Source: The Conference Board Labor Shortages Solutions Survey, 2019



Weaker supply, but not weaker demand

- The combination of the trends above is leading to a labor force with a rapidly growing share of college graduates, most of them uninterested in blue-collar and manual services jobs, and a shrinking number of non-college graduates.
- A decline in the supply of blue-collar and manual services workers would not have been a problem if the demand for them was shrinking as well.
- But this is not the case. The demand for these workers continues to grow, partly due to the unprecedented slowdown in labor productivity in the past decade, especially in manufacturing.
- The result: One of the tightest labor markets in the past 50 years, and in some blue-collar and manual services occupations, the tightest one.
- As a result, there are large implications for employers and workers.



The Conference Board Occupational Labor Shortages Risk Index

Why do we have an Occupational Labor Shortages Risk Index?

- On a national level, the US labor market has become very tight, but on a **granular occupational level**, there is interesting variation
- Not every **organization or occupation** will be equally affected by labor shortages
- Our **Labor Shortages Risk Index** tries to answer: In which occupations of the almost 500 available, the risk of labor shortages in the next decade will be the highest?
- Our labor shortages index is, to our knowledge, **the only analytical framework** that compares the risk of labor shortages across occupations using the same metrics



What is the Labor Shortages Risk Index?

- The Labor Shortages Risk Index is a **forward-looking analytical framework** that compares almost 500 available occupations across several components that have an impact on labor shortages
- The index is divided into **three main subindexes**:
 - ✓ The **Demand-supply** Index:
 - Measures the gap between the number of **job openings** that will have to be filled in the next decade versus the number of new **entrants** to the occupation
 - Employment growth over the next decade, entrants, exits
 - ✓ The **Flexibility** Index:
 - If a shortage occurs, some occupations could **adapt more easily**
 - Automation probability, certification requirements, offshorability, teleworking, share of part-time workers, and share of immigrants
 - ✓ The **Education** Index
 - It will be more difficult for the economy to supply the needed labor if the occupation **requires a high level of education, training, and experience**
 - Average years of schooling, training requirements, and experience



How to read the index and which data was used?

- The Labor Shortages Risk Index **weighs every standardized component** and the result is presented by:
- A **percentile ranking** of the 474 occupations in our analysis.
 - ✓ 100% for a given occupation means that it faces a higher shortage risk than all other occupations
 - ✓ 50% for a given occupation means that it faces higher shortage risk than half of all occupations
- We constructed separate percentile rankings for occupations **with a BA and those without (non-BA)**
- An **interactive online tool** will be made available exclusively for members of The Conference Board
- **The Conference Board** used data from the following sources:
 - ✓ US Bureau of Labor Statistics, IPUMS-CPS, IPUMS-ACS, Frey and Osborne (2013), Blinder (2007)



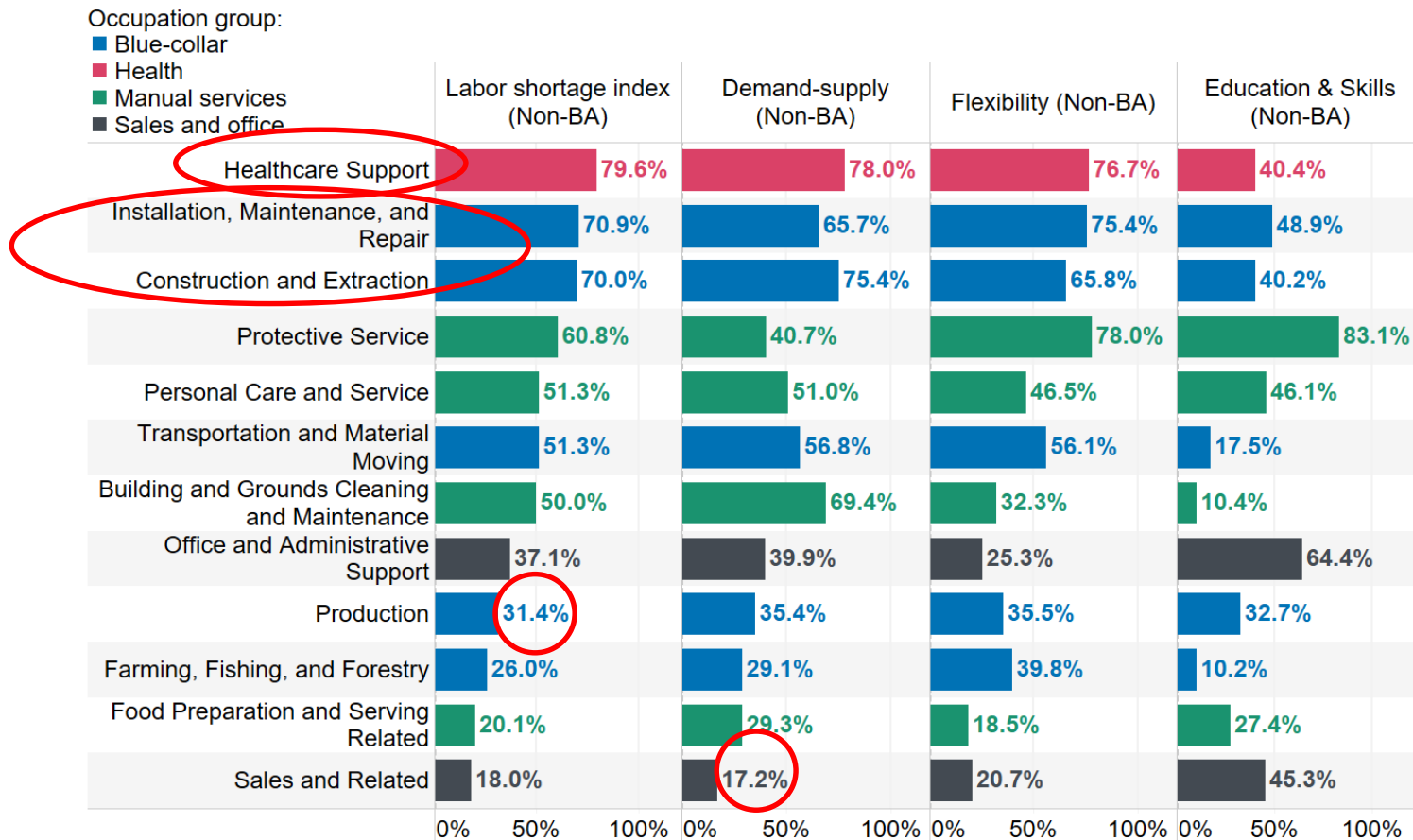
Across non-BA occupations, labor shortages will be most visible in health and construction, installation, and repair

- Some of the main takeaways from our research on non-BA occupations:
 - ✓ **Healthcare support** occupations have the largest shortages because of a strong expected surge in demand due to an aging population
 - ✓ In all **blue-collar** occupations there will be **many retirements** and **few new entrants**
 - ✓ The difficulty to **automate and offshore** construction, installation, and repair occupations, means these are at the highest risk across blue-collar jobs
 - ✓ **Production** jobs are projected to experience a decline in employment over the next decade and face the highest risk of automation and offshoring
 - ✓ Employers have generally more flexibility in filling open positions in **sales and office occupations** because of a higher probability to **automate, offshore, telework**, and there are limited **certification** requirements



Across Non-BA occupations, shortages are most visible in healthcare support, but also in blue-collar jobs like installation

The overall, demand-supply, education, and flexibility index across non-BA occupations



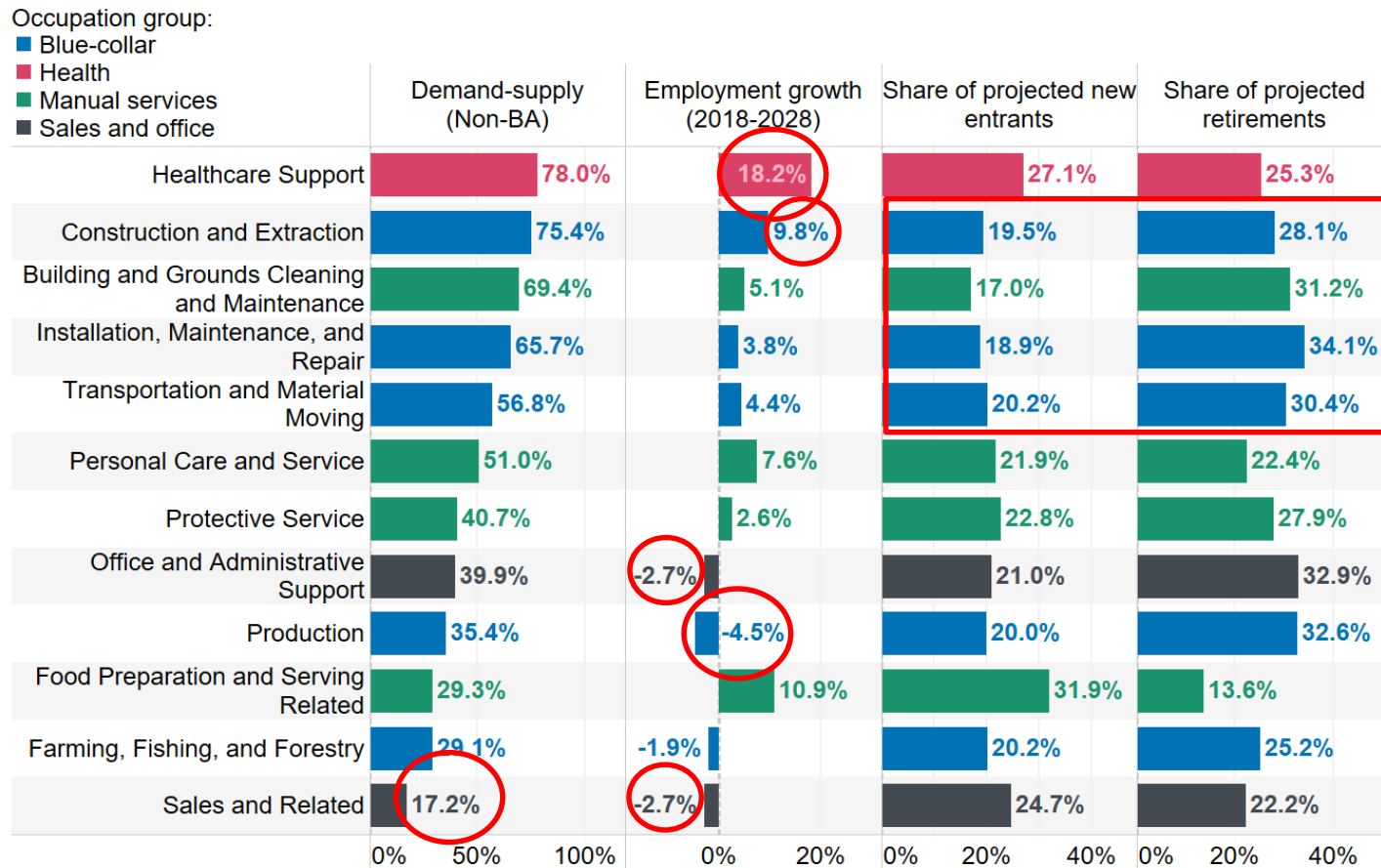
Companies most impacted by labor shortages use a mix of solutions to attract workers to blue-collar roles

- **Tactical** recruitment and retention solutions
 - ✓ Enhancing referral programs, increasing social media, using staffing firms
 - ✓ Making managers accountable for retention, conducting stay interviews
- Reevaluating **job requirements** and **relaxing hiring criteria**
 - ✓ Reworking job descriptions based on core competencies
 - ✓ Lowering experience and skill requirements
- Increasing **training** and developing **talent pipelines**
 - ✓ Developing integrated work programs with colleges, HS, and trade schools
 - ✓ Expanding internships and apprenticeships
- Increasing work schedule **flexibility**
 - ✓ e.g., floating start times, half-shifts, shift swapping
- Recruiting underserved populations such as **women, veterans, the disabled, and immigrants**



Most occupations have large shares of retirements, but varying employment growth is driving the differences

The demand-supply index with its components, across non-BA occupations



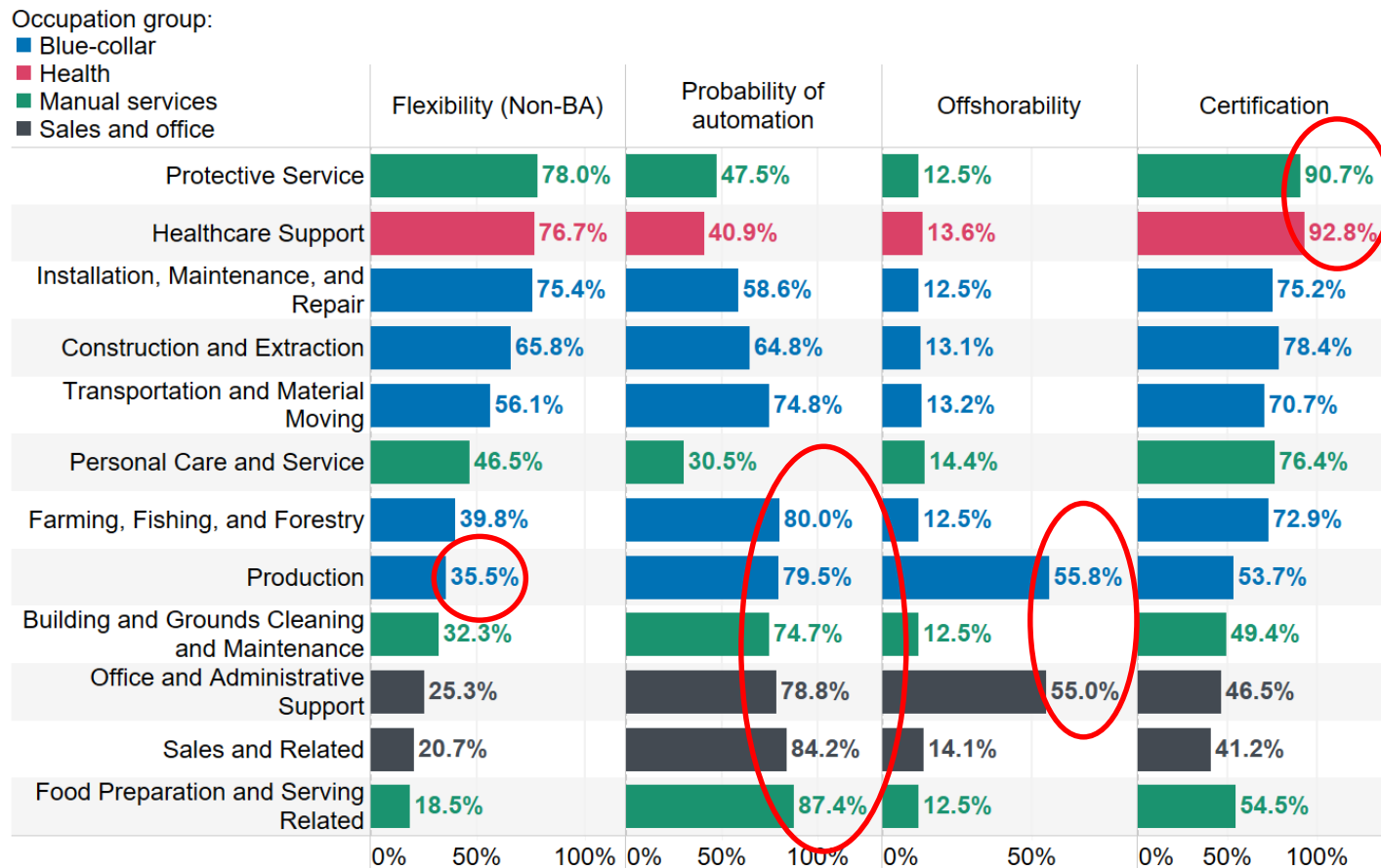
Employers are reluctant to invest in retention efforts of mature workers, which may be short-sighted

- **Lowest ranked retention strategy** overall was “Providing new incentives to retain older workers in full or partial capacity”
 - ✓ Most companies **do not have formal programs** for retiring workers
- Driven by several concerns:
 - ✓ Company **already** has a large proportion of mature workers
 - ✓ Increasing **compensation costs** (especially benefit costs)
 - ✓ Aging and declining worker **productivity**
 - ✓ Limiting promotion opportunities of **younger workers**
- Retaining mature workers by **formalizing programs** and offering appealing **job characteristics**
 - ✓ Flexible work schedules & phased retirements
 - ✓ Physical accommodations (lower physical effort, automation)
 - ✓ Training & engagement opportunities (“returnships”, mentoring)



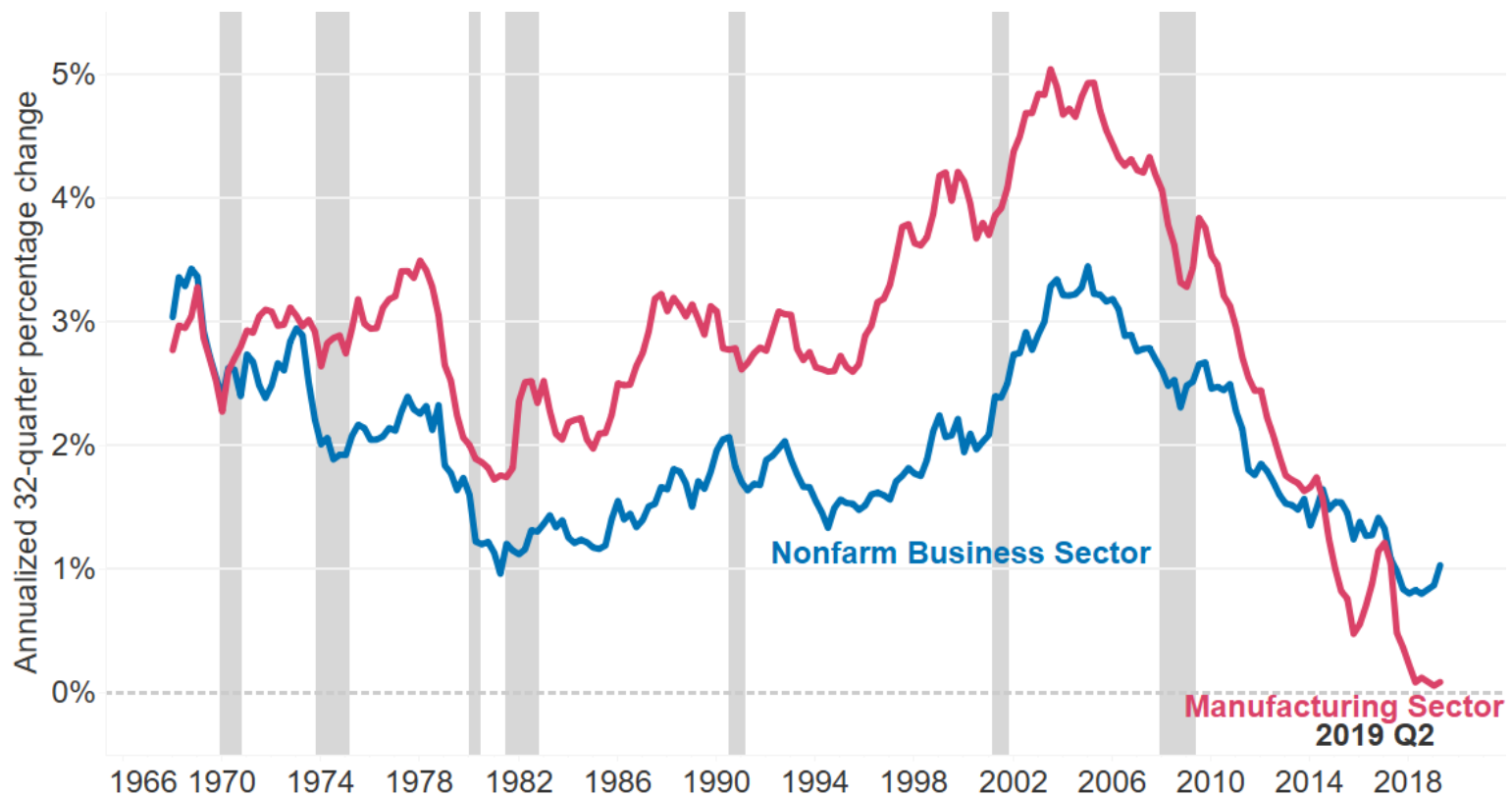
Probability of automation and offshoring partly explain why production occupations have lower risk of a shortage

The flexibility index with selected components, across non-BA occupations



Productivity growth has been historically weak in the last decade – little job displacement by technology

Real output per hour for the nonfarm business sector and manufacturing, 32-quarter percentage change, annualized, 1968Q1 to 2019Q2.

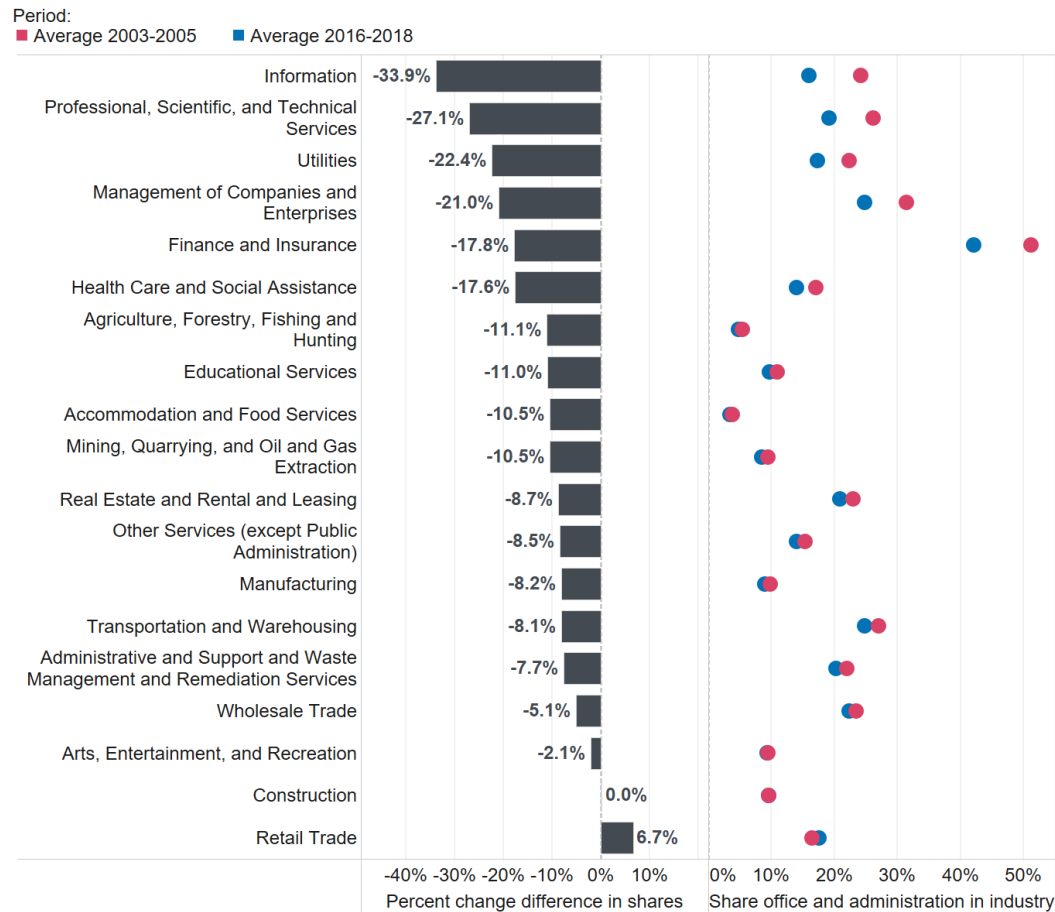


Source: US Bureau of Labor Statistics



Fast decline in office and administrative support jobs in industries with more technologically advanced companies

The share of office and administrative support occupations by industry and the percentage change difference in the shares, average of 2003-2005 and 2016-2018

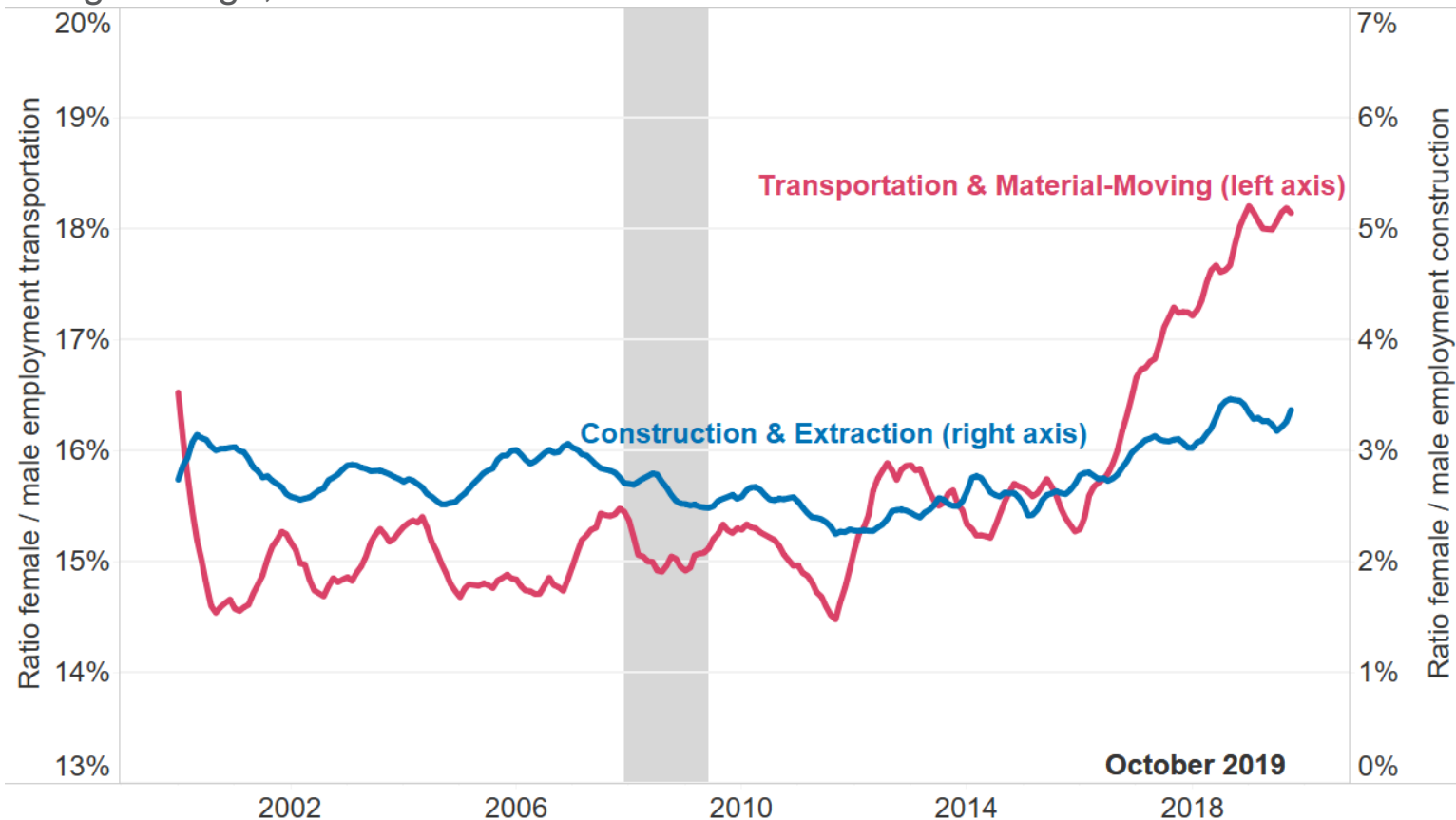


Source:
US Bureau of Labor
Statistics



Employers are hiring more women in male-dominated occupations, most visibly in transportation occupations

Share of women in transportation and construction and extraction occupations, 12-month moving average, 2001 to October 2019.



Source: U.S. Bureau of Labor Statistics.



Attracting women to traditionally male-dominated roles by making them feel safe and included in the workplace

- Offering peer **support and recognition** for women in male-dominated industries
 - ✓ Online forums and employee groups focused on **minimizing obstacles** faced by women
 - ✓ The Manufacturing Institute's STEP Ahead Awards - elevating **female role models** and inspiring other women to join the industry
- Focusing on **safety and physical** accommodations
 - ✓ Providing women with work wear and Personal Protective Equipment that fits them properly (smaller hard hats and fall protection harnesses)
 - ✓ In trucking, offering “female-friendly” vehicle packages (ergonomically designed seats, automatic transmissions)
 - ✓ Paying for hotel rooms so women can avoid sleeping in truck rest stops
- Accommodating women's **social and family obligations**
 - ✓ Altering trucking routes so women are home more often



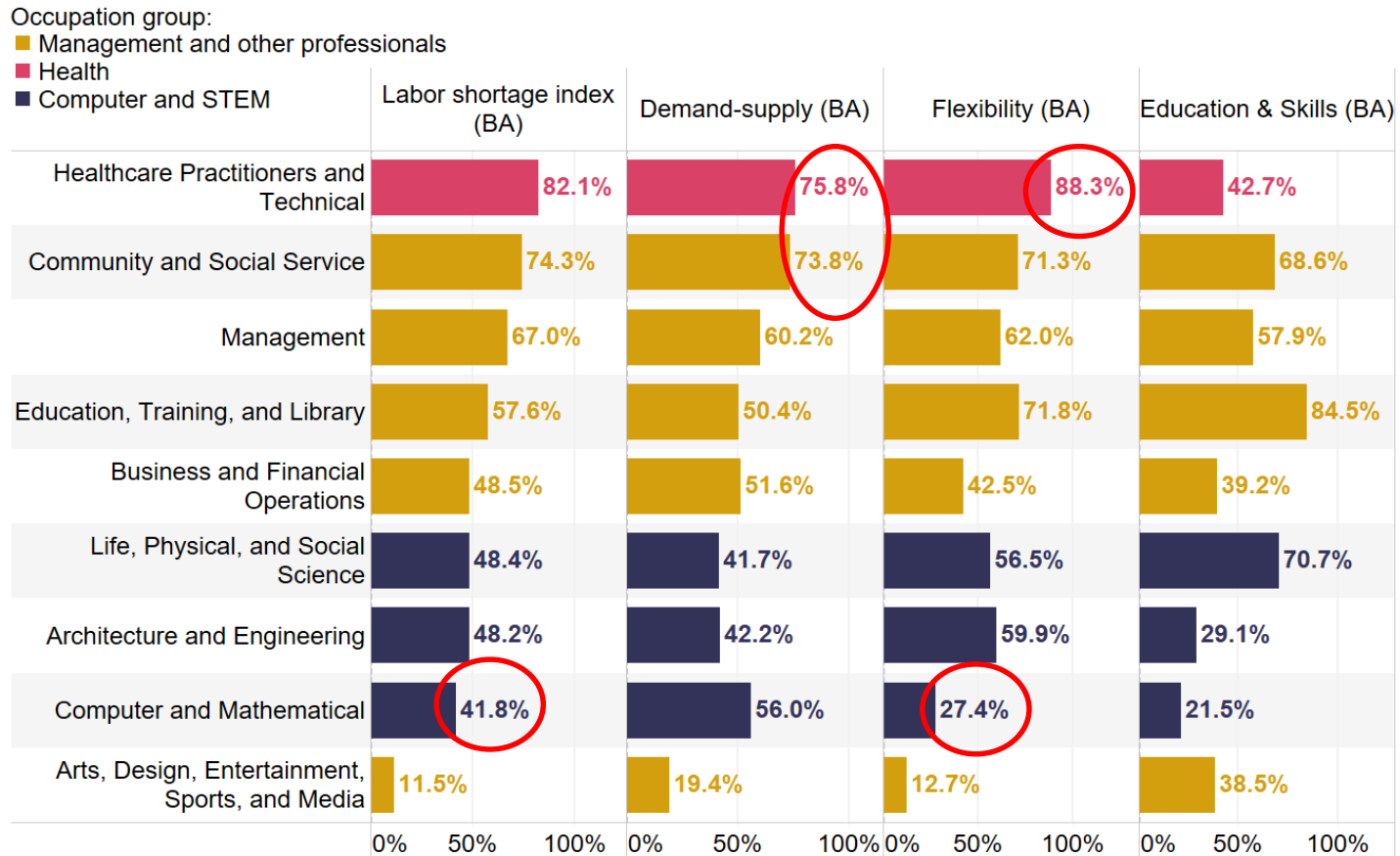
Across BA occupations, it is healthcare practitioners that are at risk of shortages—Computer and STEM less impacted

- Some of the main takeaways from our research on BA occupations:
 - ✓ The demand for **Healthcare practitioners** will be strong over the next decade:
 - Strong expected employment growth due to an aging population
 - Certification and education requirements are high
 - Employers will have limited flexibility to deal with a shortage
 - ✓ **Computer and STEM** occupations have generally less shortages because of:
 - Large supply of new entrants and relatively few retirements
 - High flexibility to fill open positions with teleworkers, workers overseas, or immigrants
 - Educational attainment less important for computer jobs



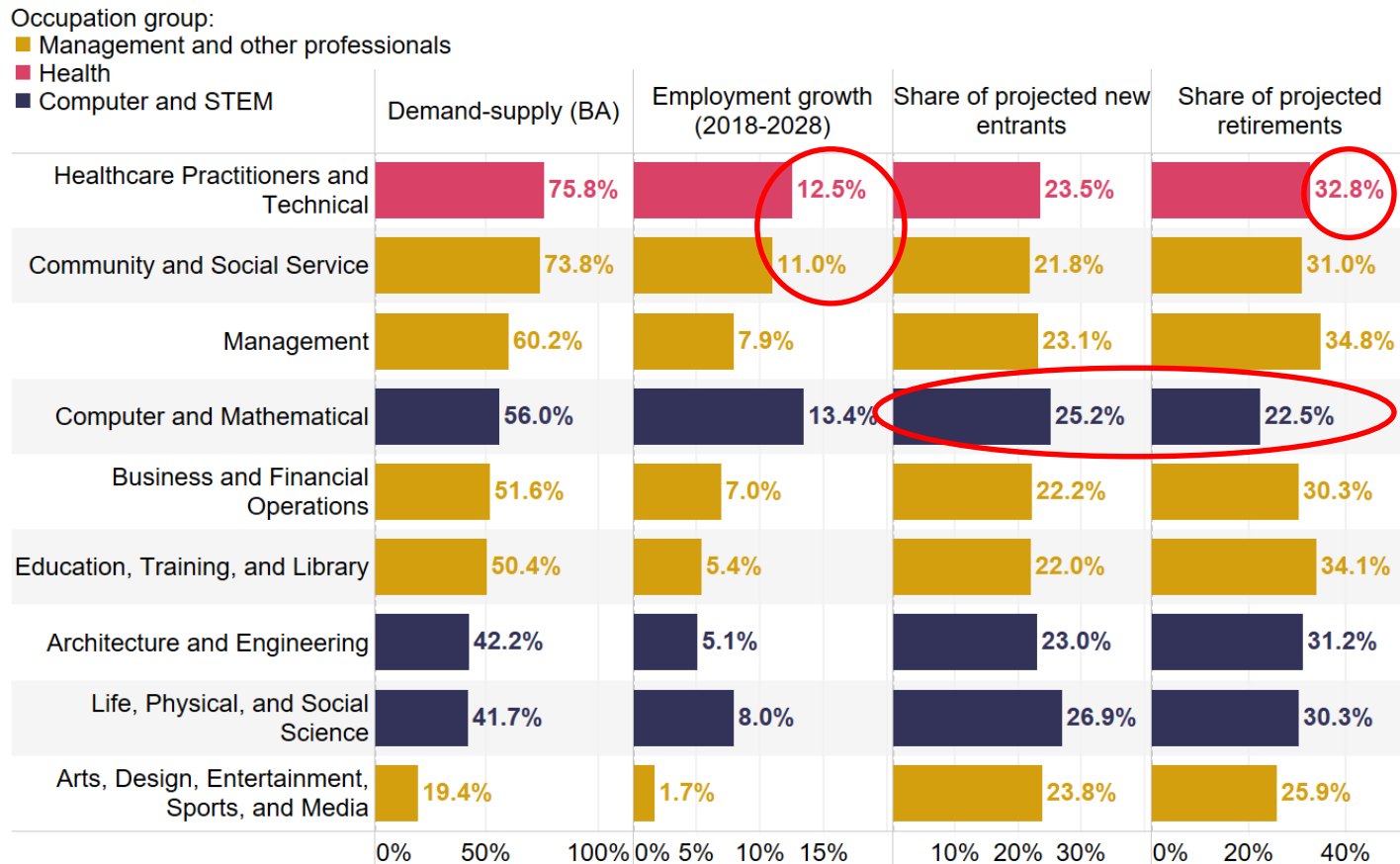
Also across BA occupations, healthcare should expect shortages---less so computer and STEM occupations

The overall, demand-supply, education, and flexibility index across occupations that generally require a BA



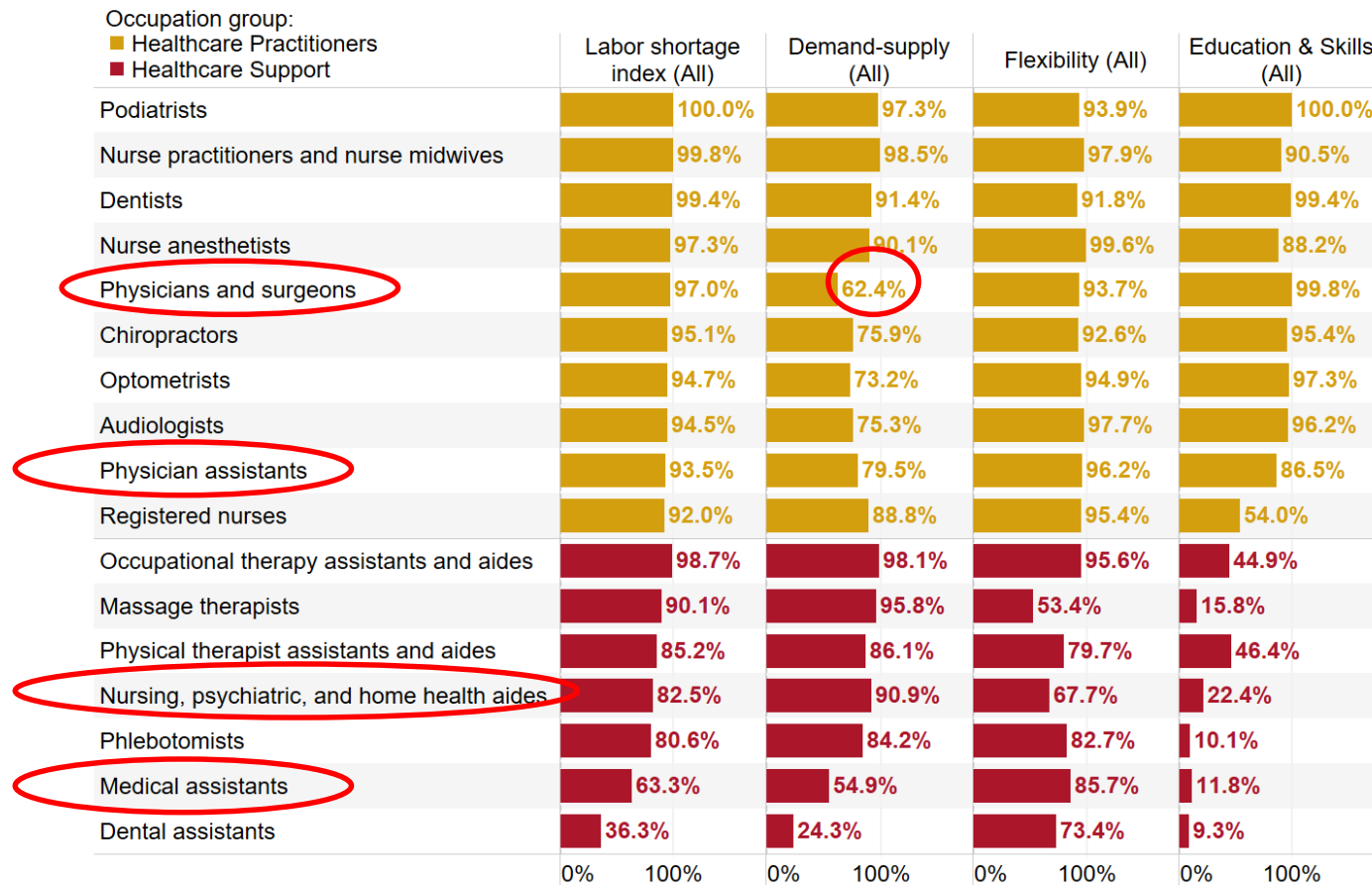
Most occupations have large shares of retirements, but varying employment growth is driving the differences

The demand-supply index with its components, across occupations that generally require a BA



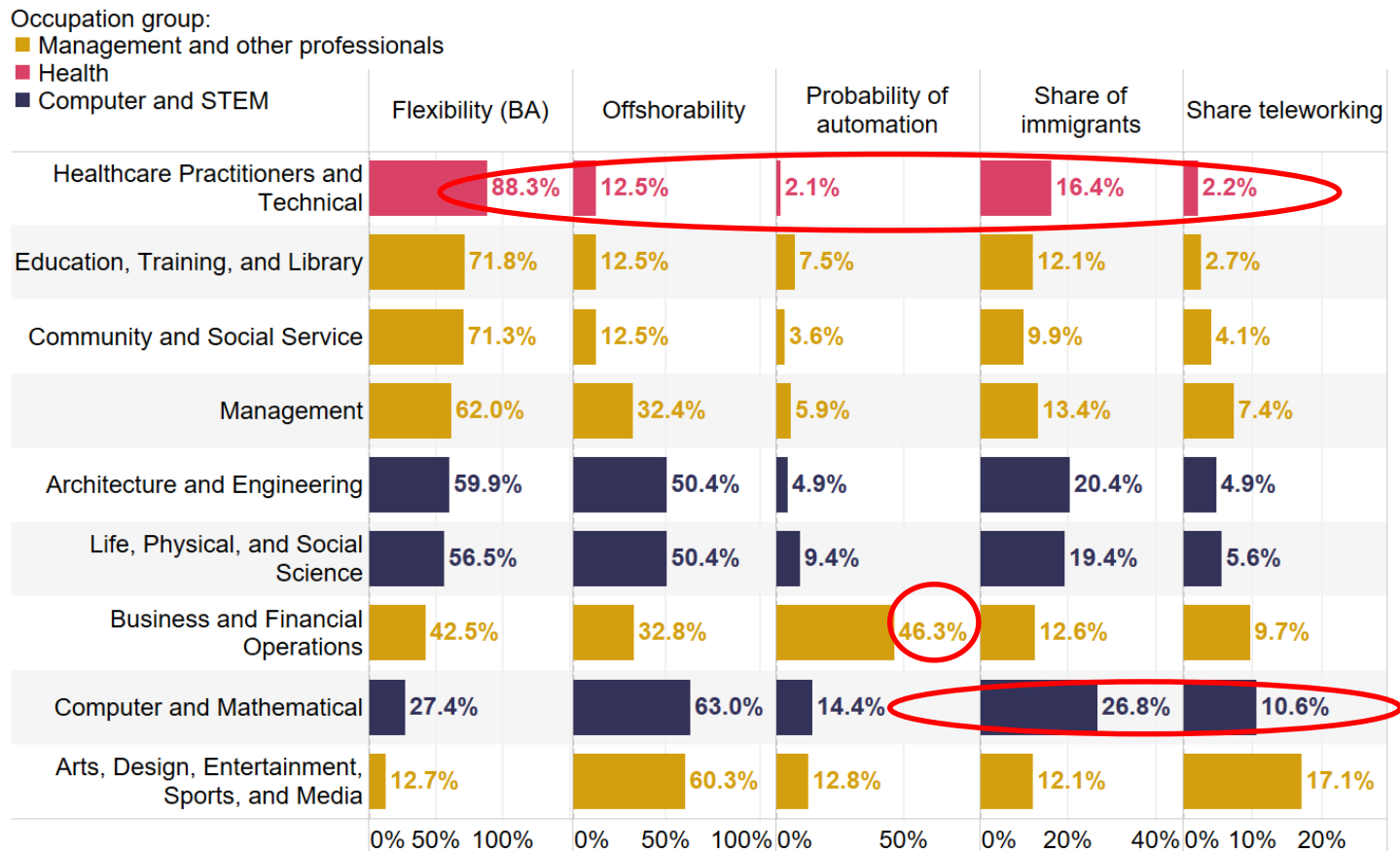
Most healthcare occupations will be in high demand, have limited flexibility, and require strong education credentials

The overall, demand-supply, education, and flexibility index across selected healthcare occupations



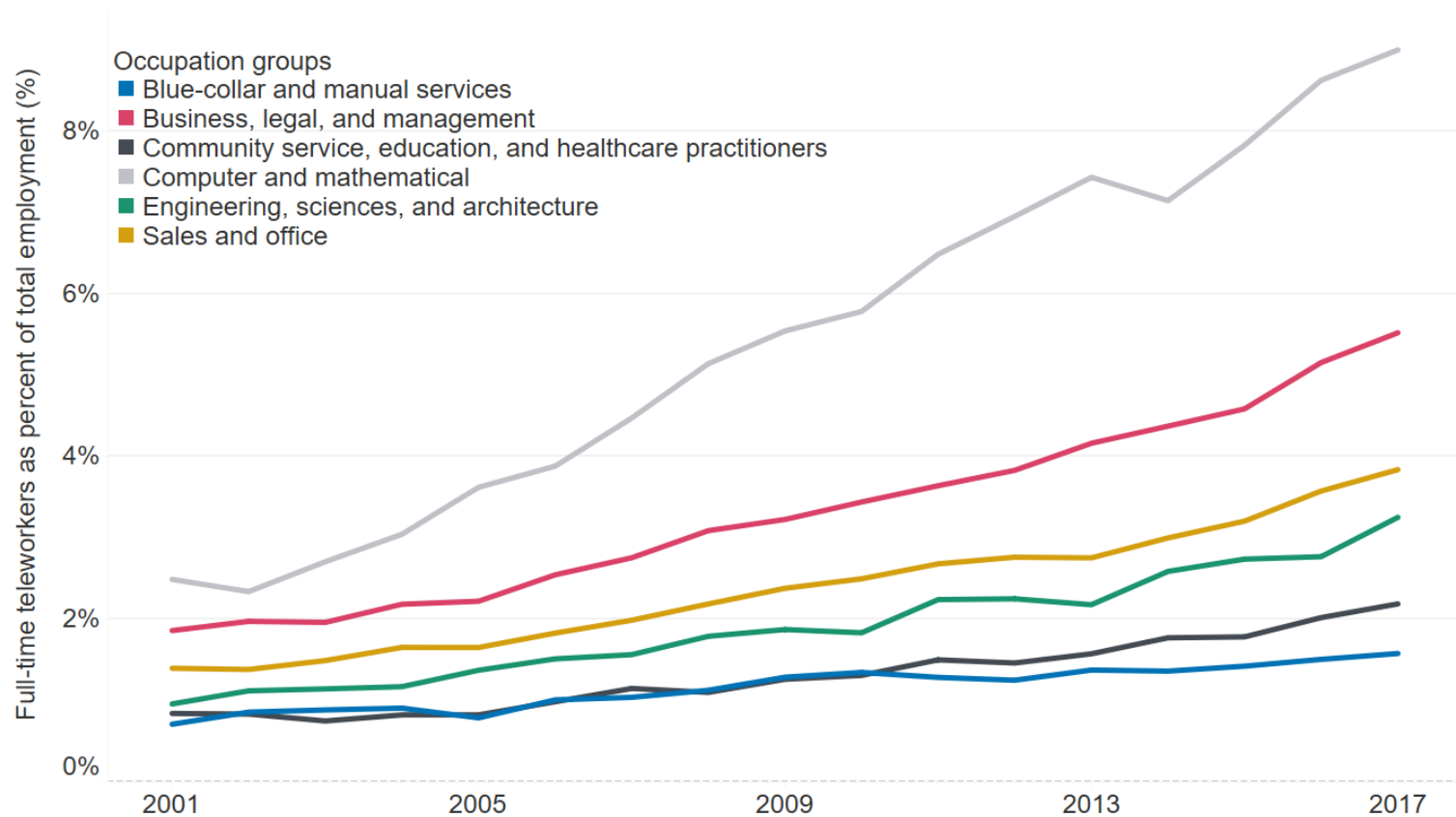
In computer occupations, larger shares of immigrants and teleworkers means more flexibility to find workers

The flexibility index with selected components, across occupations that generally require a BA



Teleworking has been steadily growing, most visibly in computer and mathematical occupations

Share of full-time employees who work primarily from home, 2001 to 2017.

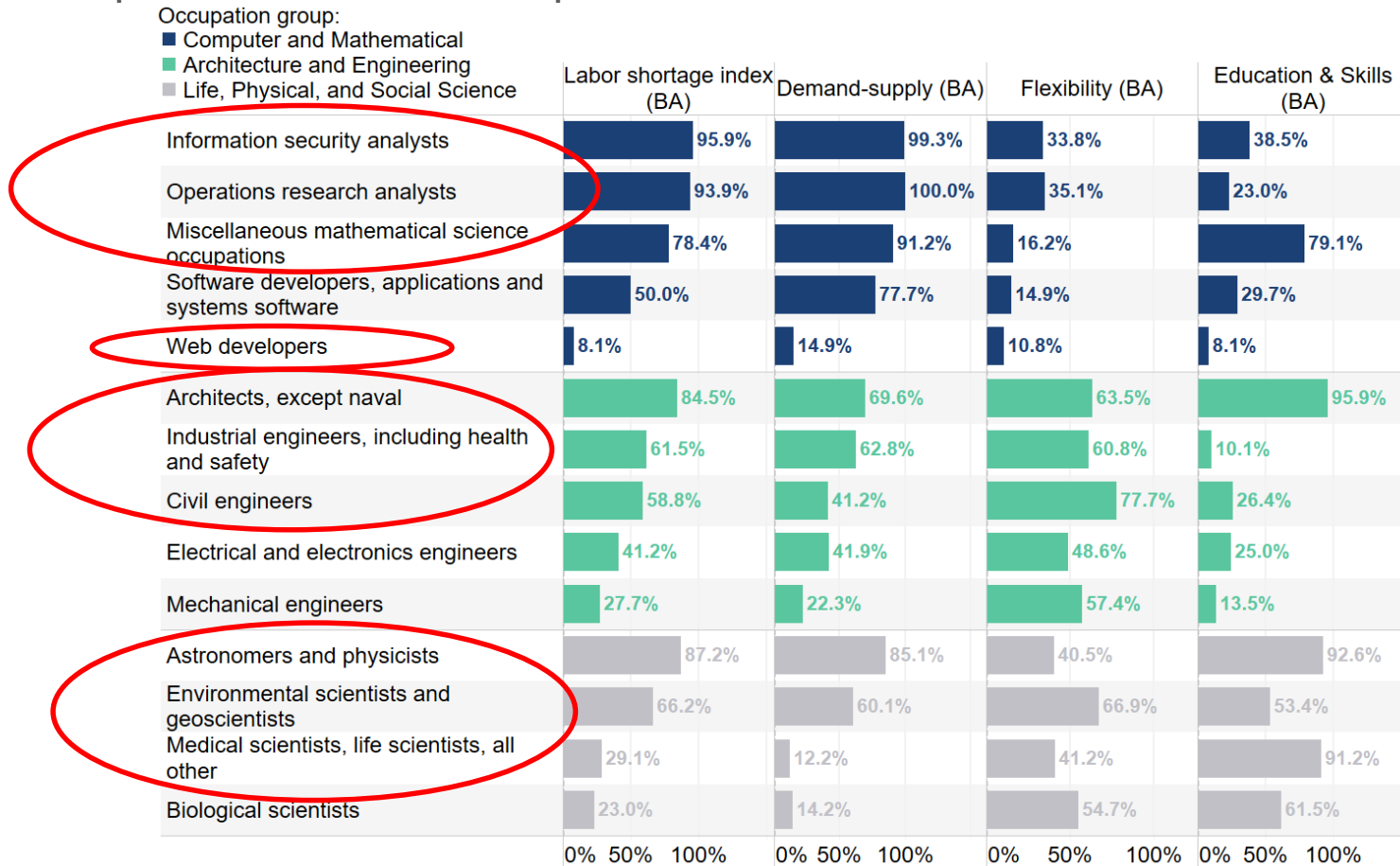


Source: IPUMS-ACS, University of Minnesota



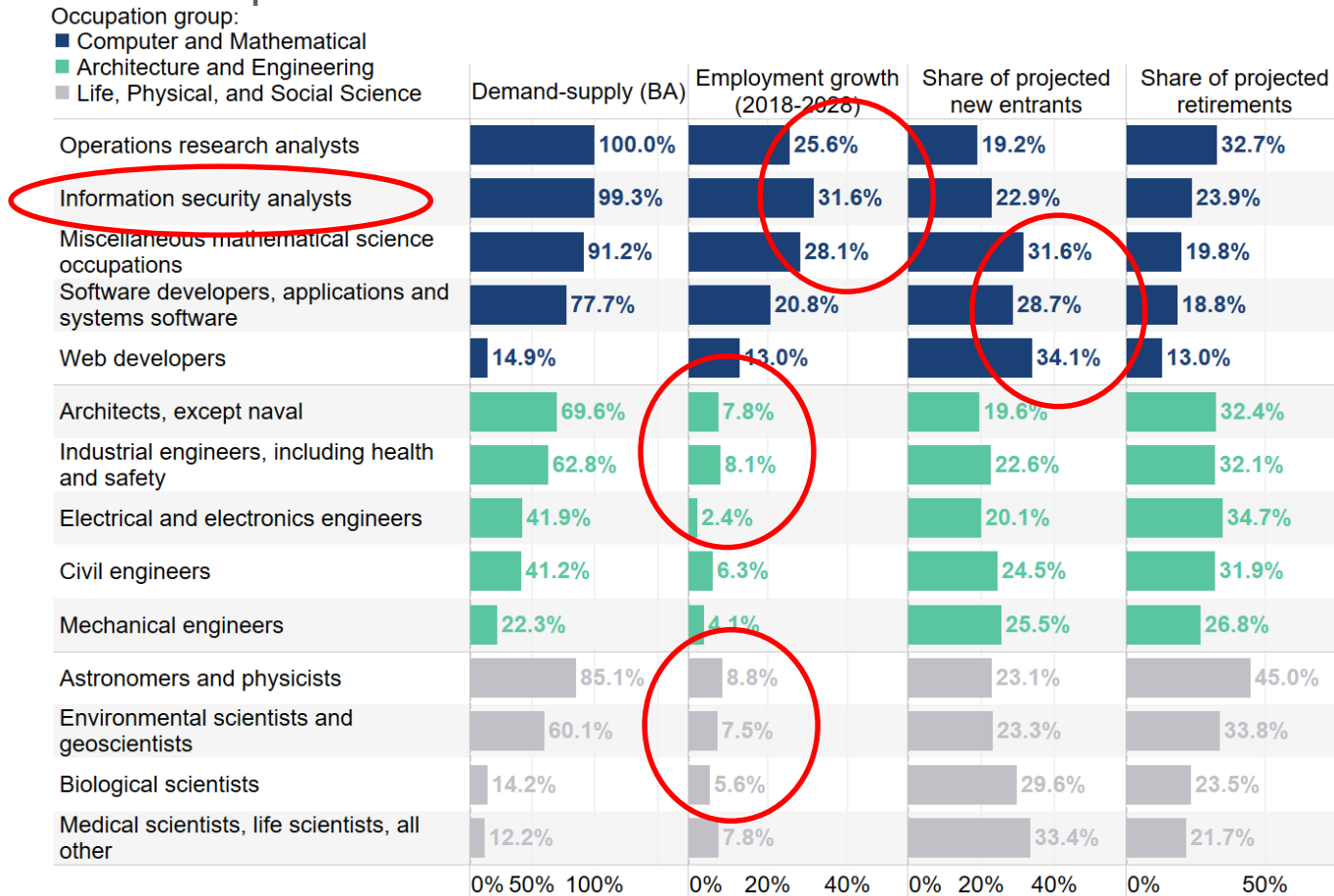
Most STEM occupations will have limited risks of labor shortages, but some have very high risk

The overall, demand-supply, education, and flexibility index across selected computer and STEM occupations



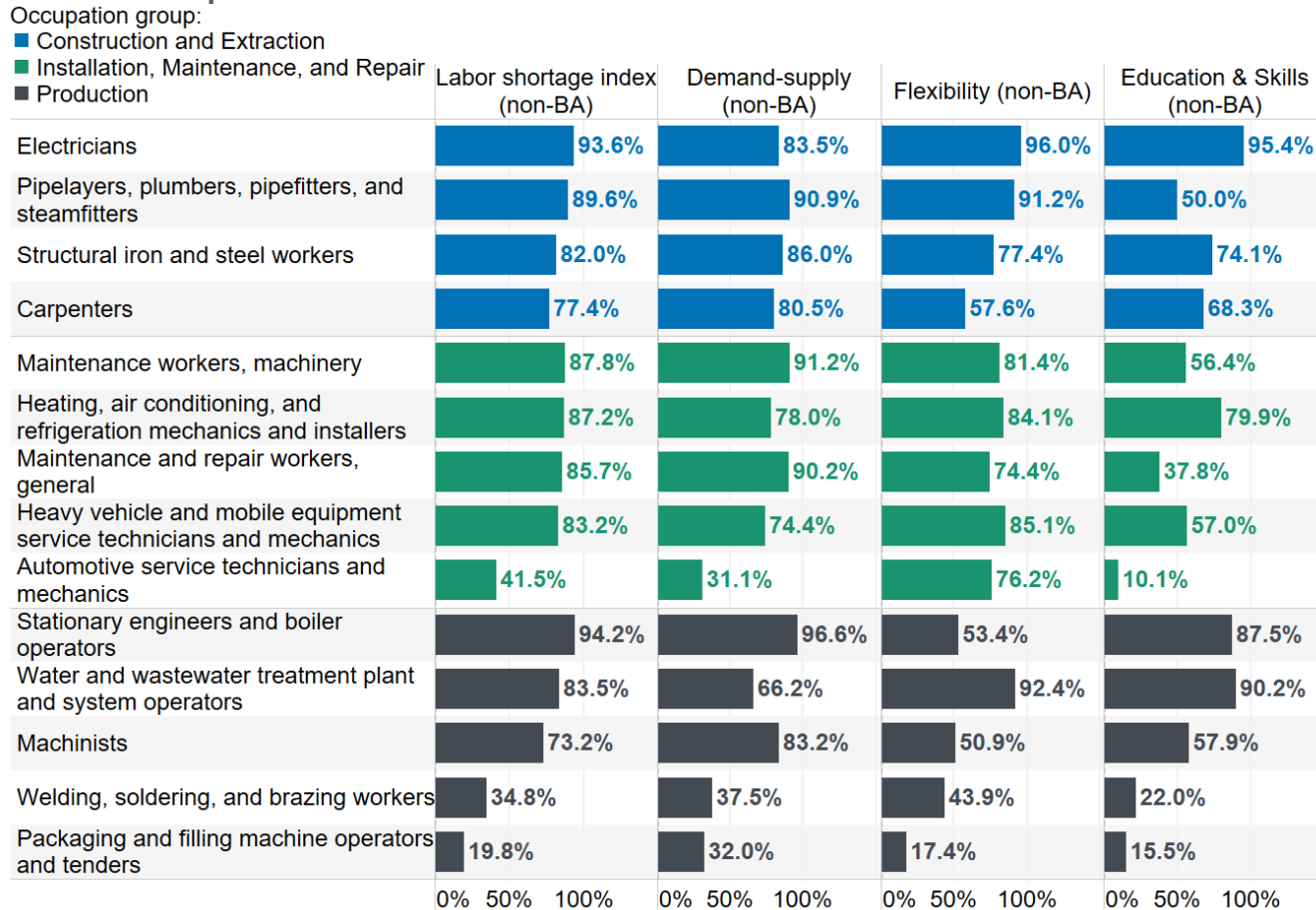
Very strong employment growth is expected in some computer occupations

The demand-supply index with its components, across selected computer and STEM occupations



Some blue-collar occupations have a high risk of shortages, while others may be fine

The overall, demand-supply, education, and flexibility index across selected blue-collar occupations



Related Resources from The Conference Board



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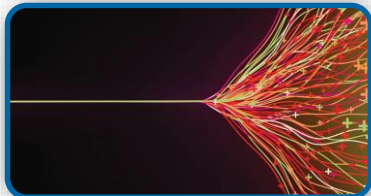


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