

# Overview of Occupational Projections to 2014

---

**Dixie Sommers**

Office of Occupational  
Statistics and Employment Projections  
U.S. Bureau of Labor Statistics

[sommers.dixie@bls.gov](mailto:sommers.dixie@bls.gov)



# BLS Projections: What we do

---

---



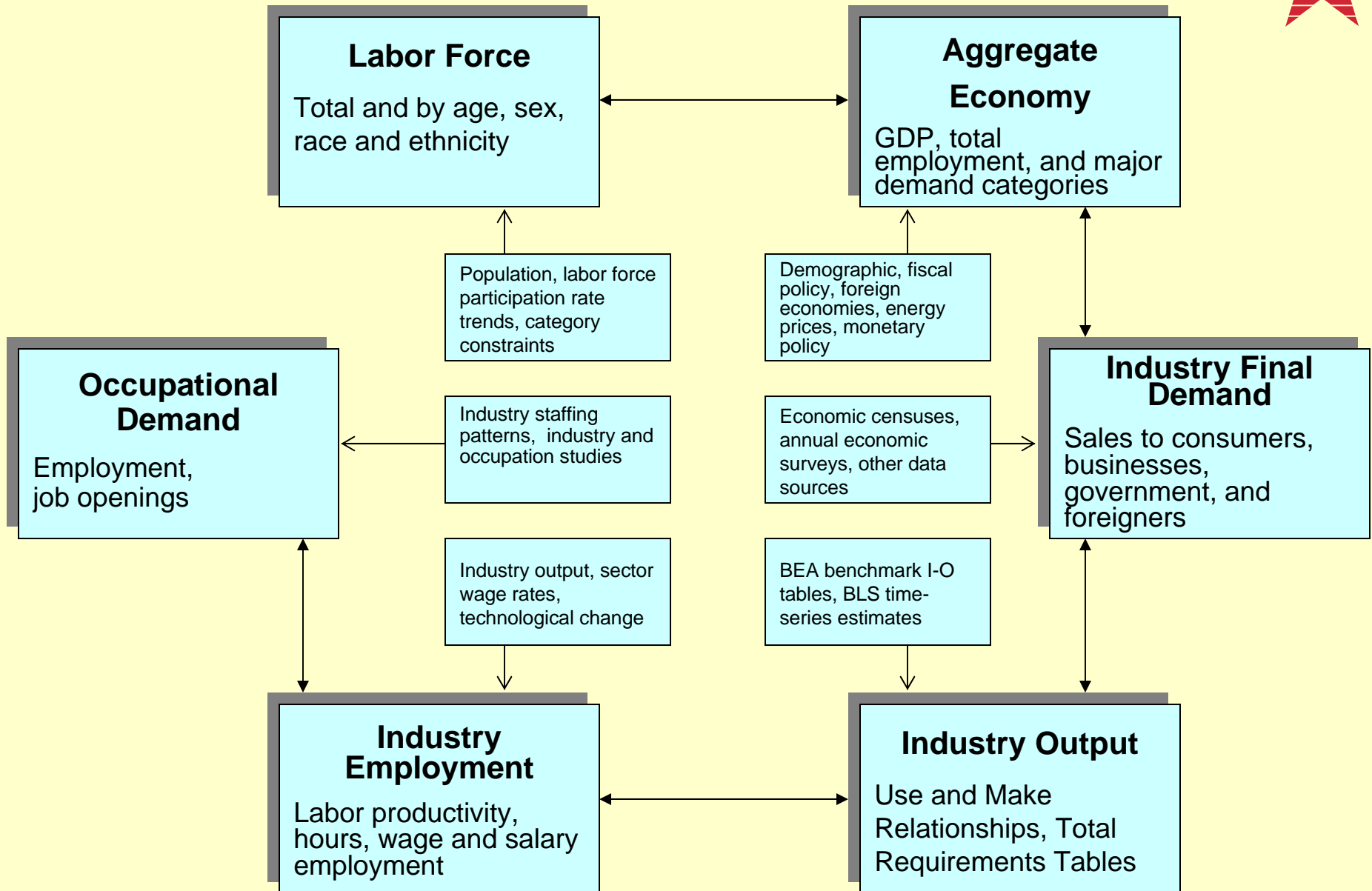
- **Projections of:**
  - Labor force
  - Aggregate economy
  - Industry final demand and output
  - Industry employment
  - Occupational employment and openings

# BLS Projections: What we do



- 
- **10-year projections: 2004 to 2014**
    - Updated every two years
  - **Model-based findings presented**
    - Underlying assumptions clearly stated
    - Long-run, full-employment economy assumed

# The BLS projections process



# Major trends to 2014

---

---



- **Slow labor force growth**
- **Aging population and labor force**
- **Continuing shift of demand and employment to service-providing industries**
- **Strong labor productivity growth**

# Employment, 2004 to 2014



## Totals for all occupations

Employment - 2004	145,612,332
Employment - 2014	164,539,901
Percent change	12.9%
New jobs (employment change)	18,927,568
Net replacement needs	34,319,061
Total Job openings	54,679,846

# Occupational projections

---

---



- **Employment, 2004 and 2014**
- **Job openings**
  - New jobs
  - Net replacements
- **Wages in 2004 (not projected)**
- **Analysis by education levels and requirements**

# Future skill demand

---

---



- **View projections by type of work**
  - Major occupation groups in the Standard Occupational Classification (SOC)
- **View projections by skill indicators**
  - Wage levels
  - Education and training requirements
  - Educational attainment of “prime age” workers in the occupation

# Major occupation groups

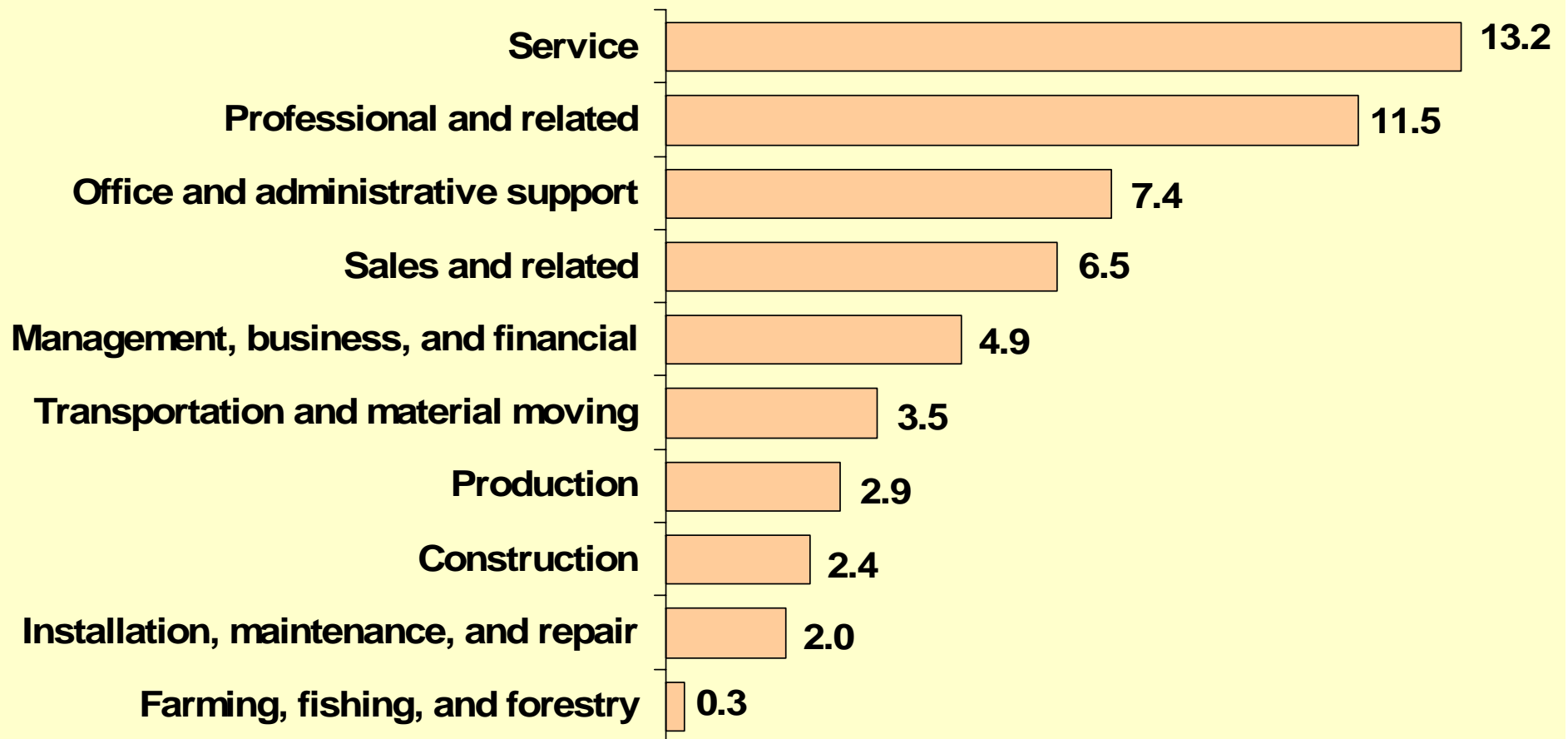


Major occupation group	2004 Employment	Employment change
Professional and related	28,543,961	6,046,272
Service	27,672,566	5,257,153
Management, business and financial	14,987,482	2,154,784
Sales and related	15,330,153	1,476,250
Office and administrative support	23,907,026	1,380,296
Transportation and material moving	10,097,577	1,116,479
Construction and extraction	7,738,480	930,878
Installation, maintenance and repair	5,747,490	657,009
Farming, fishing, and forestry	1,025,917	-12,879
Production	10,561,681	-78,613

# Major occupation groups



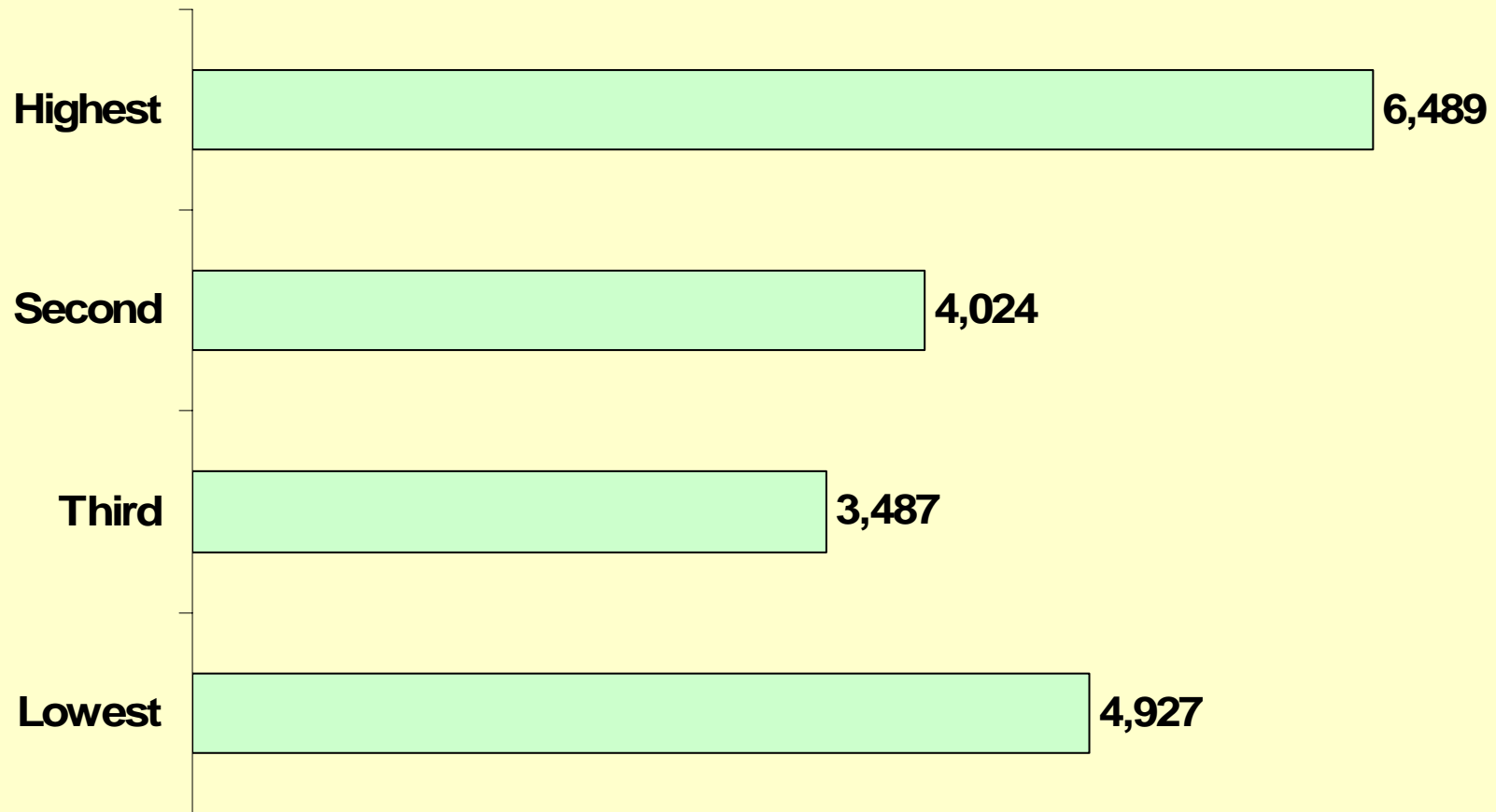
Millions of job openings, projected 2004-14



# Wage levels



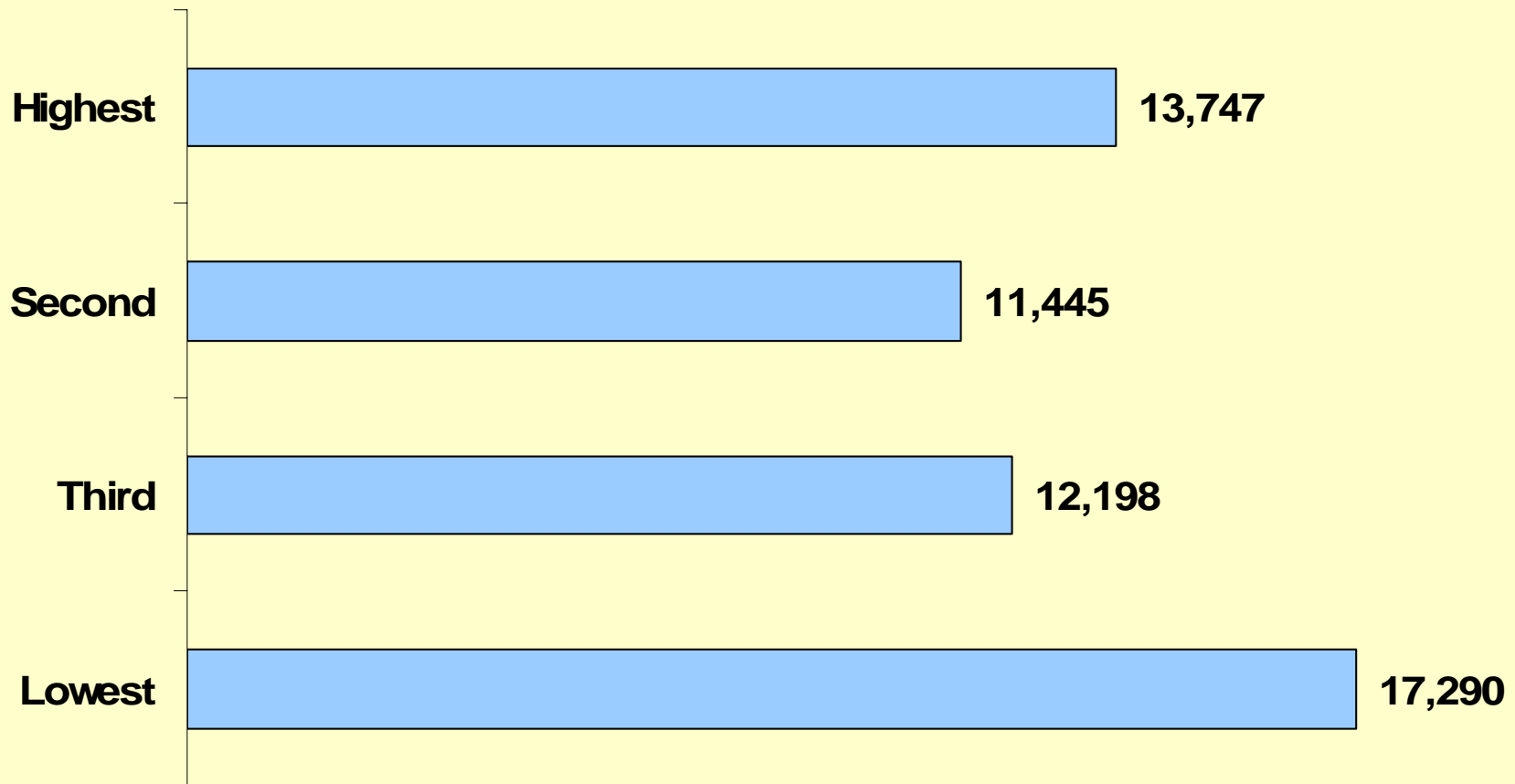
Employment change (in thousands) by 2004 median annual wage quartile, projected 2004-14



# Wage levels



Net job openings (in thousands) by 2004 median annual wage quartile, projected 2004-14



# Classifying occupations by education and training

---

---



- **Education and training categories**
  - Postsecondary education or training usually needed by most workers to become fully qualified
- **Education attainment clusters**
  - Educational attainment clusters of workers aged 24-44

# Education and training categories



- 
- **Most significant source of education and training**
  - **Education or training needed by most workers to become fully qualified**
  - **Based on data, interviews, legal requirements, and other research**

# Education and training categories

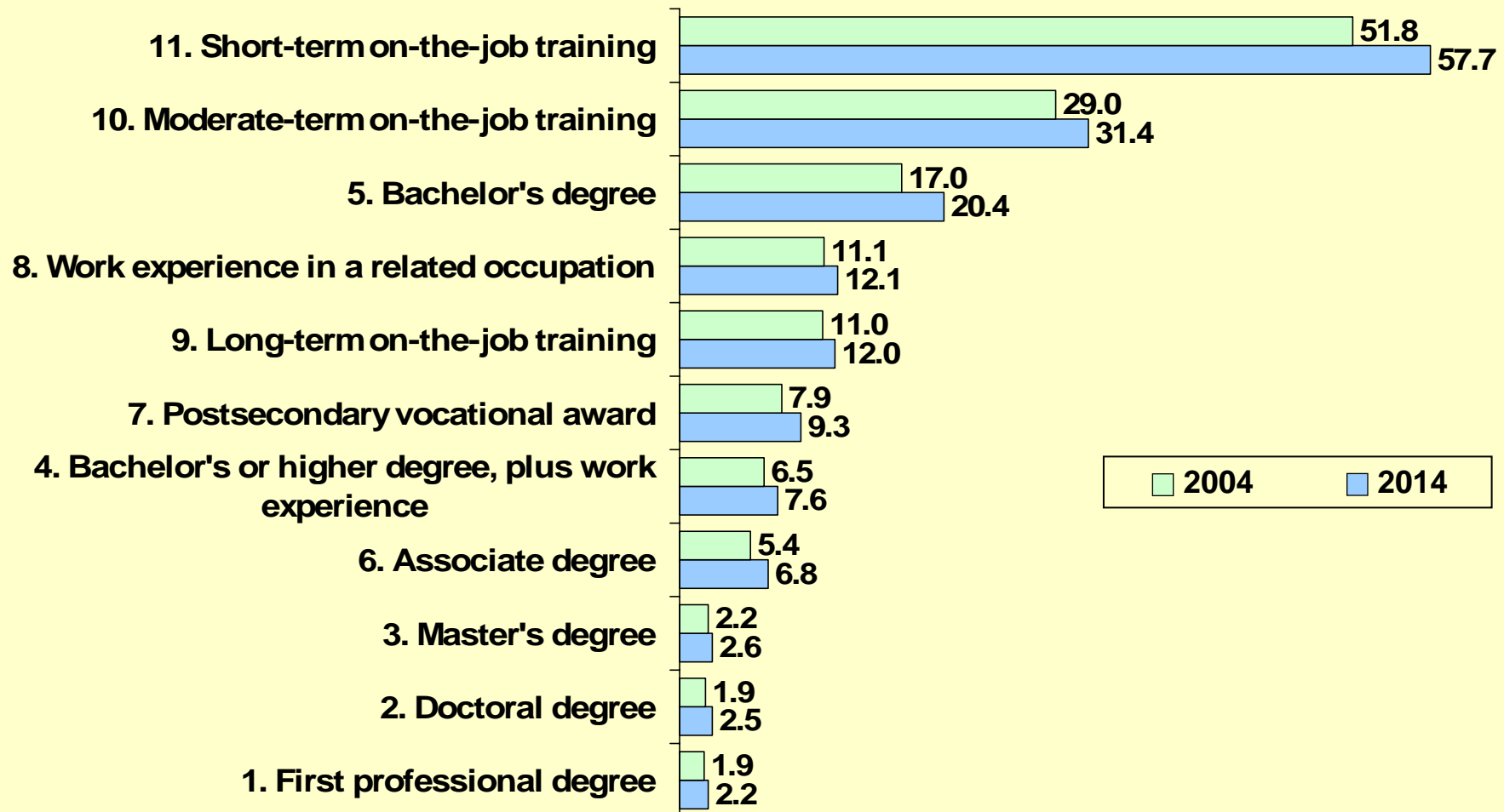


- 
- 
- 1. First professional degree**
  - 2. Doctoral degree**
  - 3. Master's degree**
  - 4. Bachelor's or higher degree, plus work experience**
  - 5. Bachelor's degree**
  - 6. Associate degree**
  - 7. Postsecondary vocational award**
  - 8. Work experience in a related occupation**
  - 9. Long-term on-the-job training**
  - 10. Moderate-term on-the-job training**
  - 11. Short-term on-the-job training**

# Education and training categories



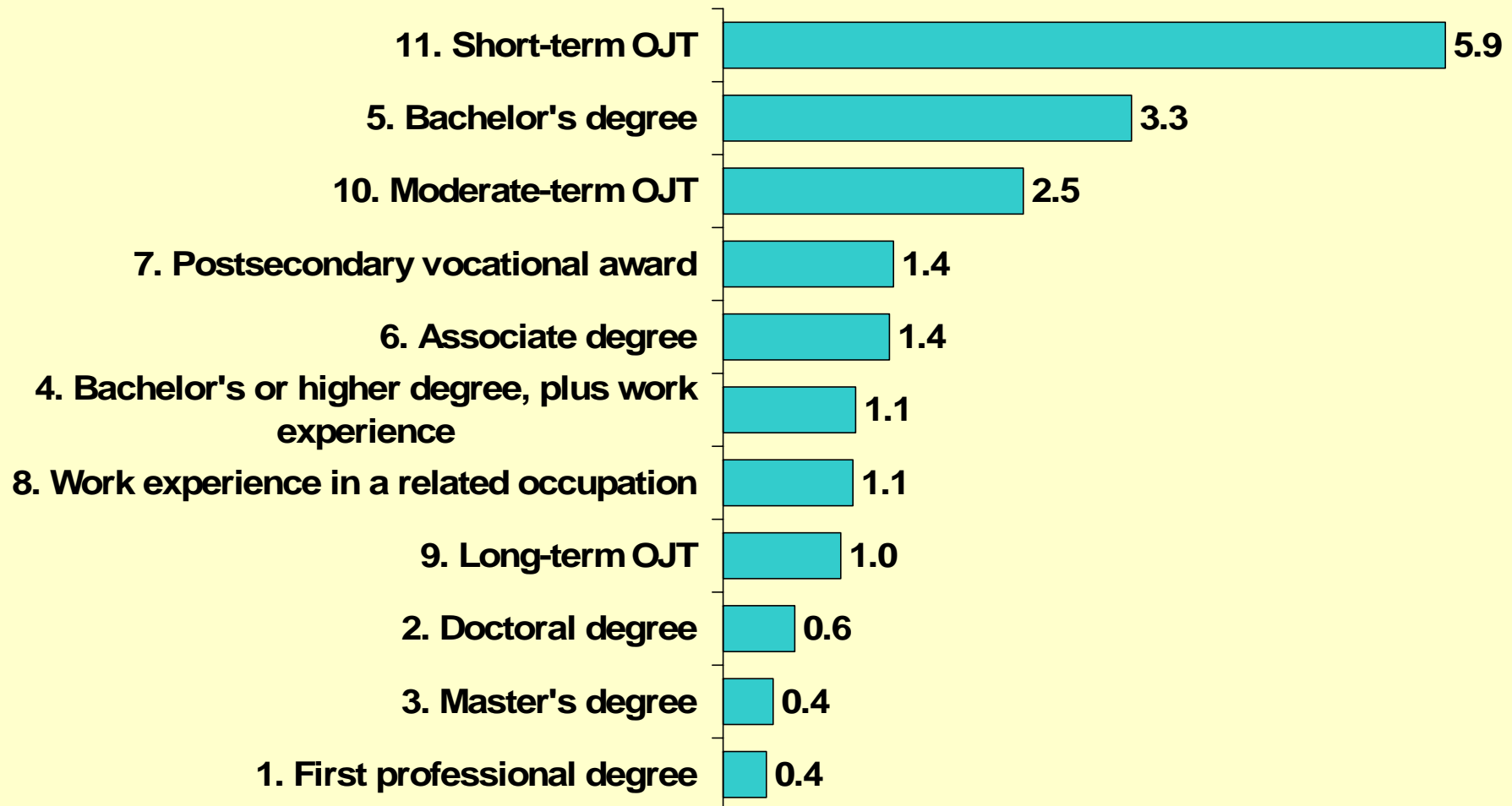
Millions of jobs by education and training categories,  
projected 2004-14



# Education and training categories



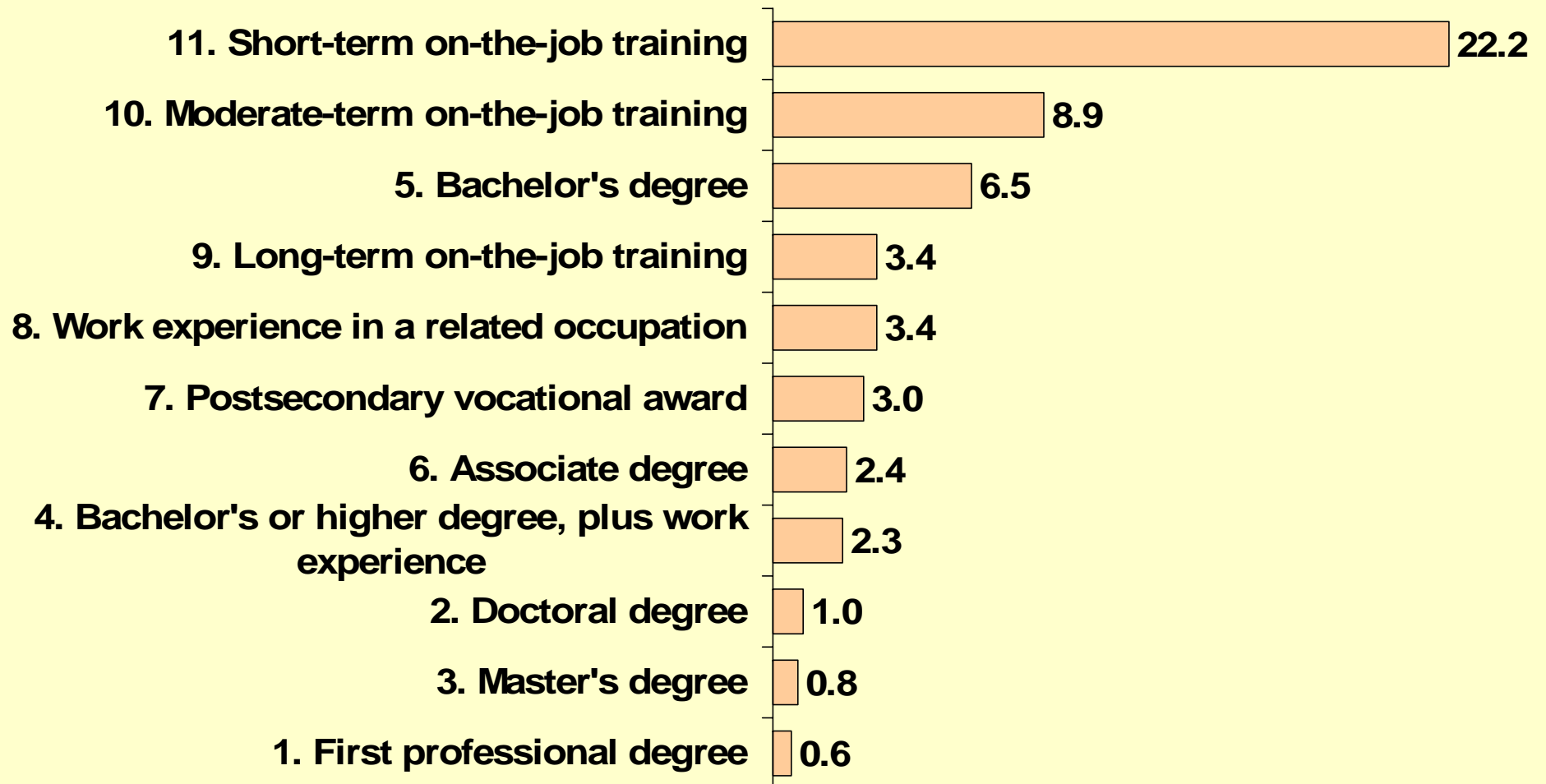
Change (in millions) in employment by education and training categories, projected 2004-14



# Education and training categories



Job openings (in millions) by education and training categories, projected 2004-14



# Educational attainment clusters



- 
- **Based on educational attainment of 25- to 44-year-olds working in the occupation (Current Population Survey)**
  - **Hierarchy of increasing levels of skill, education, and training**

# Educational attainment clusters

---

---

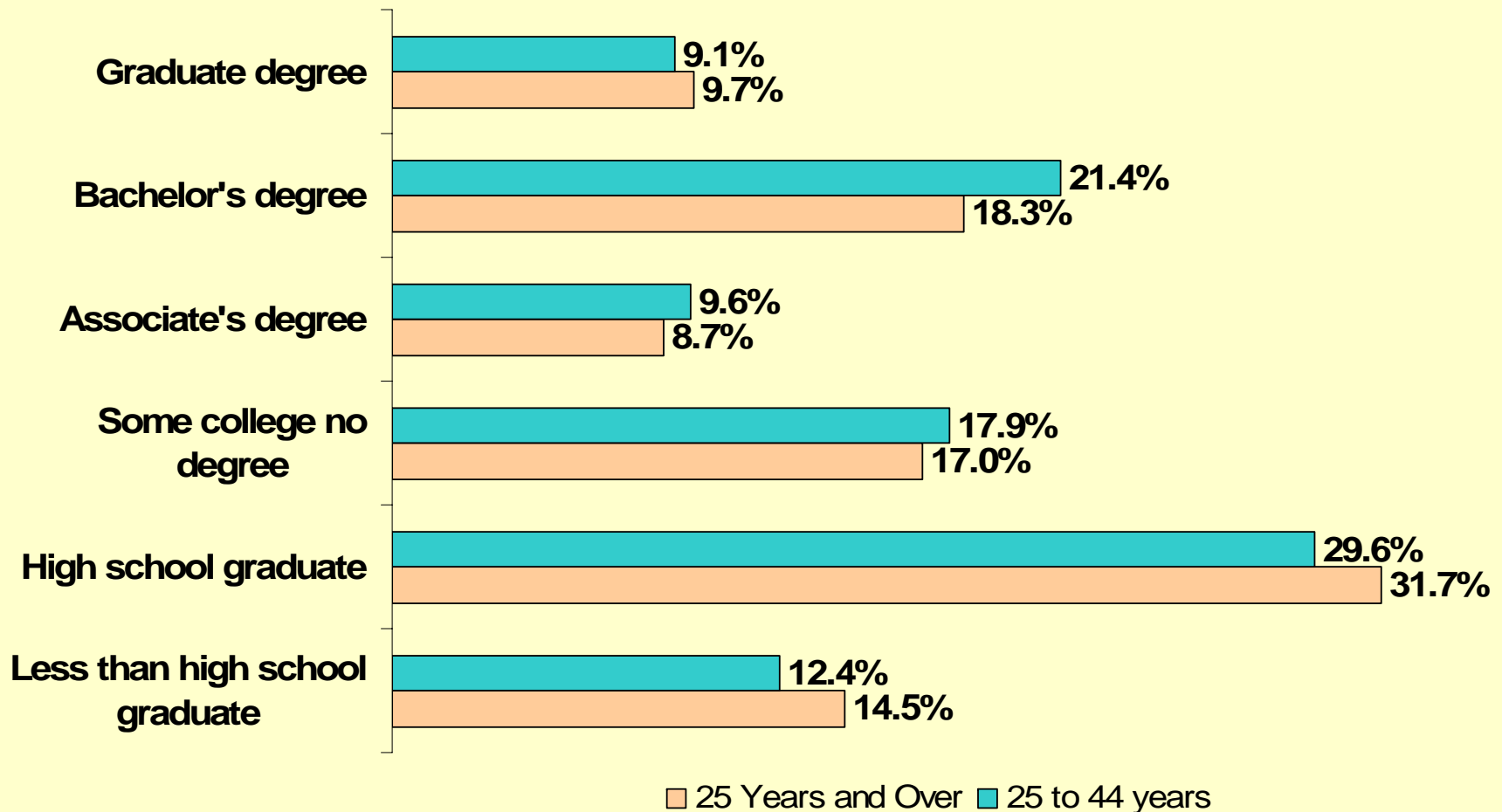


- **High school or less**
- **High school/some college**
- **Some college**
- **High school/some college/college**
- **Some college/college**
- **College**

# Context: U.S. Educational attainment



Percent of U.S. population, 2006

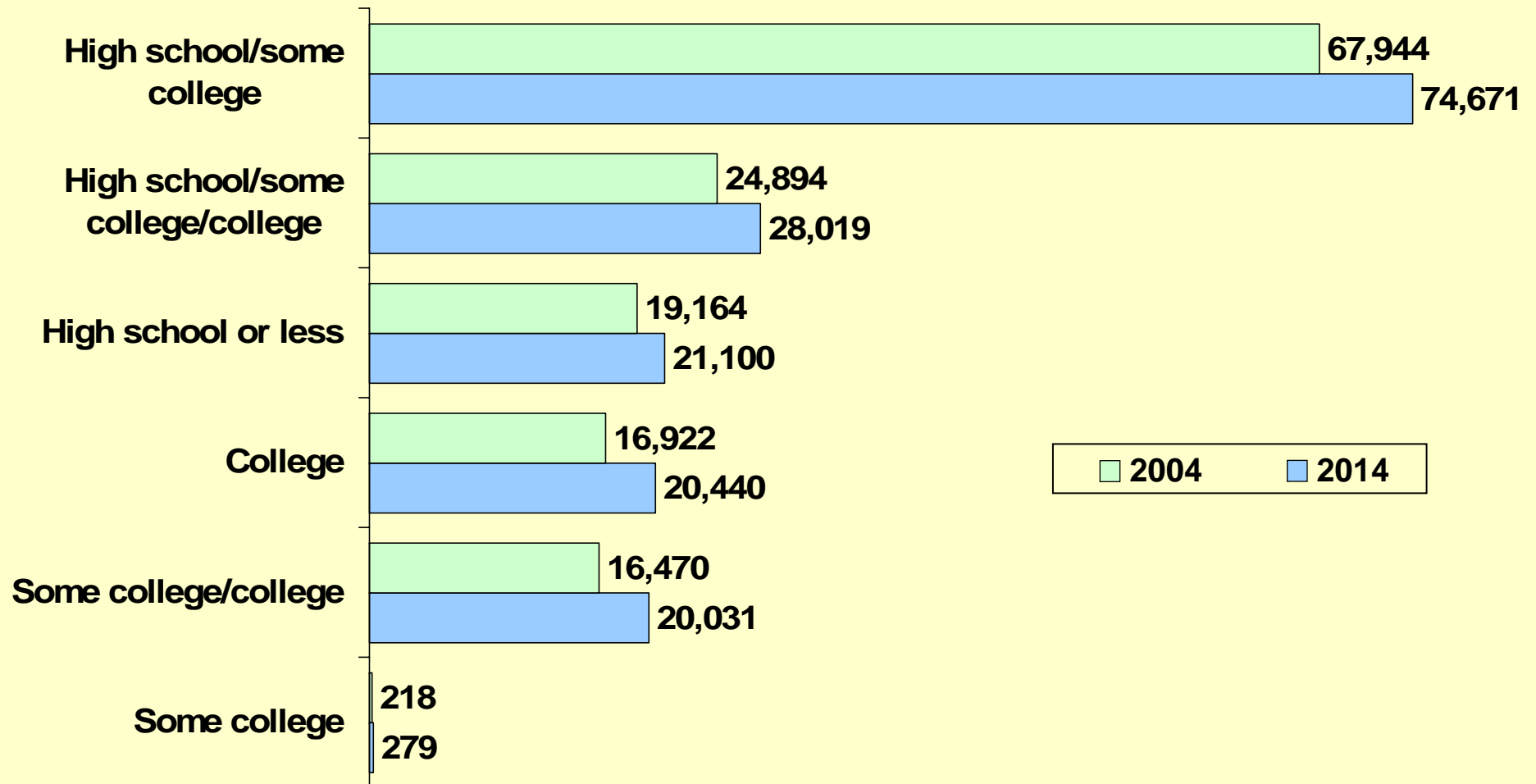


Source: Current Population Survey

# Educational attainment clusters



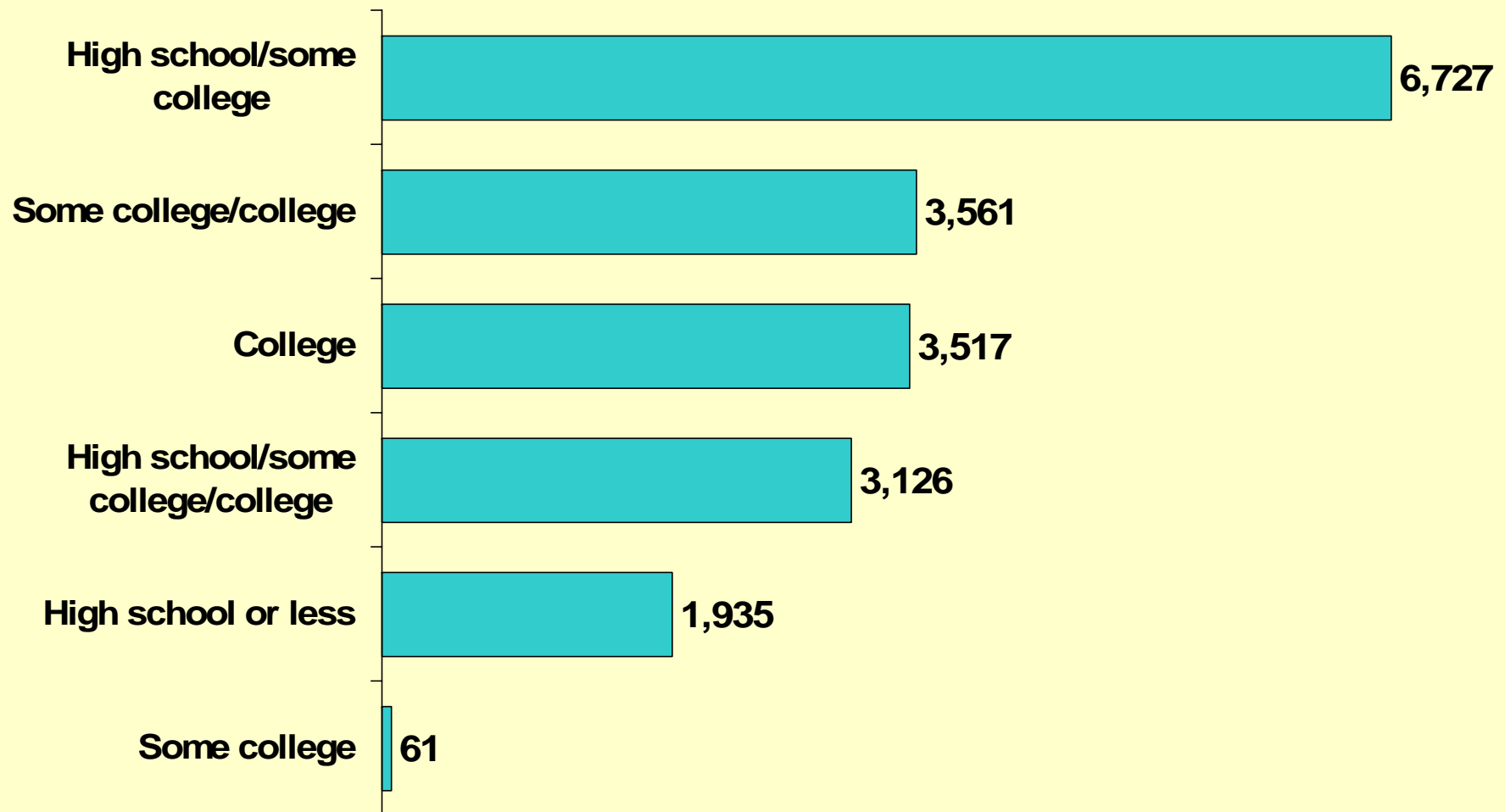
Employment (in thousands) by educational attainment clusters, projected 2004-14



# Educational attainment clusters



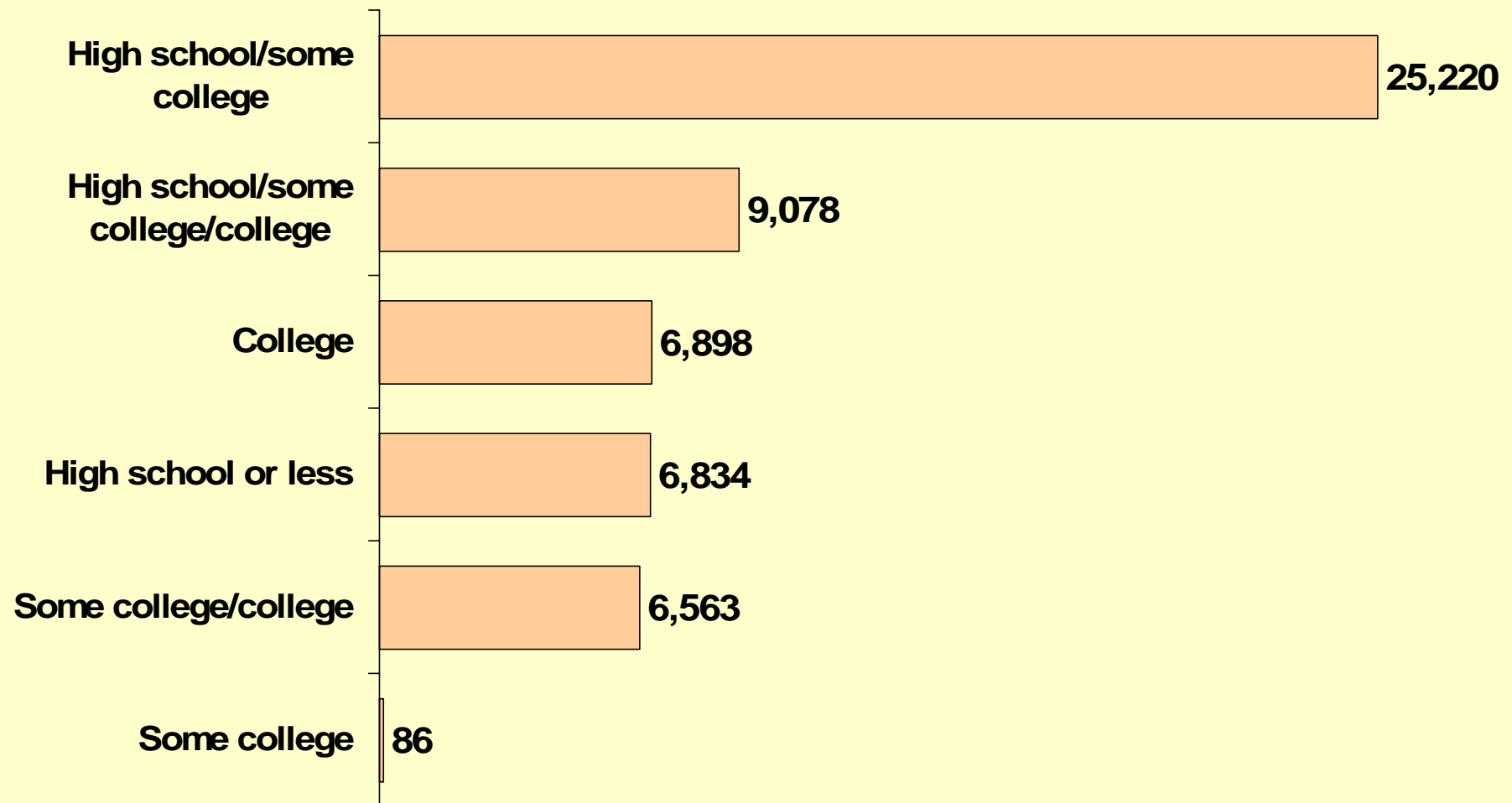
Change (in thousands) in employment by education cluster,  
projected 2004-14



# Educational attainment clusters



Job openings (in thousands) by education cluster,  
projected 2004-14



# Projections Publications

---

---



- ***Monthly Labor Review: 2014 Projections, November 2005***
  - <http://www.bls.gov/opub/mlr/2005/11/contents.htm>
- **Occupational Projections and Training Data, 2006-07 Edition**
  - <http://www.bls.gov/emp/optd/home.htm>