

CAREER CLUSTERS is comprised of a full report, a state report and an executive summary.
All can be accessed at cew.georgetown.edu/clusters.

STATE DATA



CAREER CLUSTERS

FORECASTING DEMAND FOR
HIGH SCHOOL THROUGH
COLLEGE JOBS

2008-
2018

GEORGETOWN UNIVERSITY

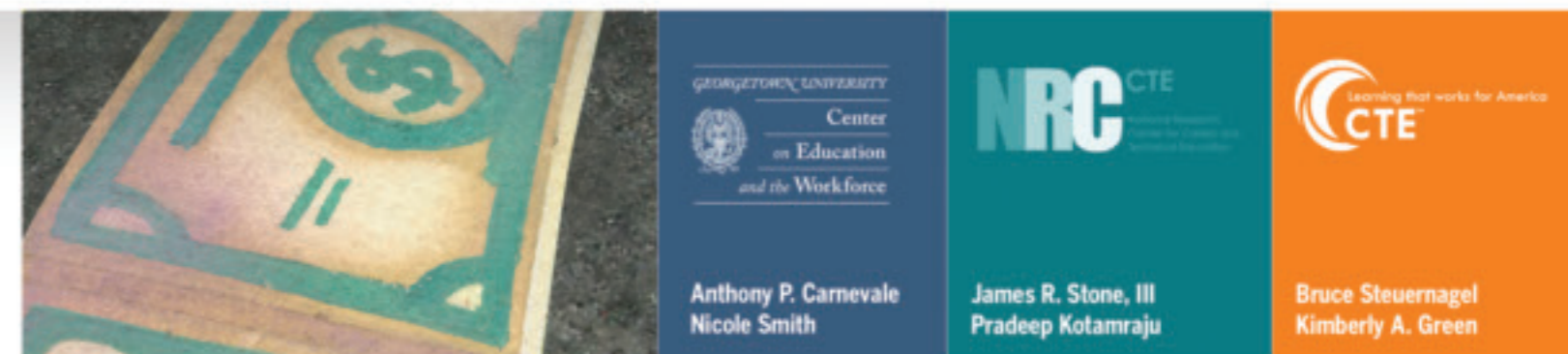


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CAREER CLUSTERS

FORECASTING DEMAND FOR
HIGH SCHOOL THROUGH
COLLEGE JOBS

**2008–
2018**

STATE DATA

NOVEMBER 2011

Introduction

This report presents data on job opportunities and skill requirements through 2018 arranged by the 16 career clusters in the Carl D. Perkins Act of 2006. The data are arranged state-by-state and the District of Columbia, from 2008 through 2018.^{2, 3}

Skill requirements are reflected in the length and extent of educational preparation and training required for the job. Nationally, the demand for high school jobs will decrease from 41 percent of all jobs in 2008 to 37 percent of all jobs in 2018. By the same token, the demand for postsecondary education will increase from 59 percent of all jobs to 63 percent of all jobs by 2018.⁴

What this report shows

This state report provides state by state:

- Job totals and job percentages by career cluster and education level in the base year (2008), and the forecast year (2018);
- Estimates of postsecondary vocational certificates by career cluster.
- Comparison of career clusters implemented in each state to total jobs by career cluster in each state. In so doing, we highlight high demand career clusters within states that are not tied to distinct career pathways.

Interesting Highlights

Fastest Job Growth:

- Information Technology (23%), Health Sciences (21%) and Human Services (20%) are the three fastest growing job clusters for the nation:
 - Nevada (41%), Virginia (38%), Utah (37%), Washington (32%) and Arkansas (31%) are the fastest growing states for Information Technology;
 - Nevada (46%), Utah (35%), Idaho (33%), Colorado (33%) and Texas (32%) are the fastest growing states for Health Sciences;
 - Nevada (40%), Utah (33%), Texas (31%), Colorado (29%) and Vermont (28%) are the fastest growing states for Human Services.

Employment Share of STEM:

- The highest proportion of STEM jobs as a fraction of all state employment are found in the District of Columbia, Massachusetts, Michigan, Washington and Maryland.

Employment Share of Healthcare:

- The highest proportion of health science jobs as a fraction of all state employment are found in the District of Columbia, Vermont, Idaho, South Dakota and New Jersey.

We collapse the 16 career clusters into the six shown below for ease of presentation in the state-by-state graphs starting on page 20

6 CAREER CLUSTERS (COMPRESSED)⁵	16 CAREER CLUSTERS
1 Arts and Communication	1 Arts, A/V Technology & Communications
2 Business, Management and Technology	2 Business, Management & Administration 3 Finance 4 Information Technology 5 Marketing, Sales & Service
3 Health Services	6 Health Science
4 Human Services	7 Education & Training 8 Government & Public Administration 9 Hospitality & Tourism 10 Human Services 11 Law, Public Safety & Security
5 Industrial and Engineering Technology	12 Architecture and Construction 13 Manufacturing 14 Science, Technology, Engineering, and Mathematics 15 Transportation, Distribution, and Logistics
6 Natural Resources/Agriculture	16 Agriculture, Food & Natural Resources

¹ Although 2008 is selected as the base year, the national projections are annual and detail the extensive loss of jobs in 2009 as well as the eventual slow recovery of opportunities through 2018. We also forecast that we will not return to 5% unemployment rates for the nation until 2017.

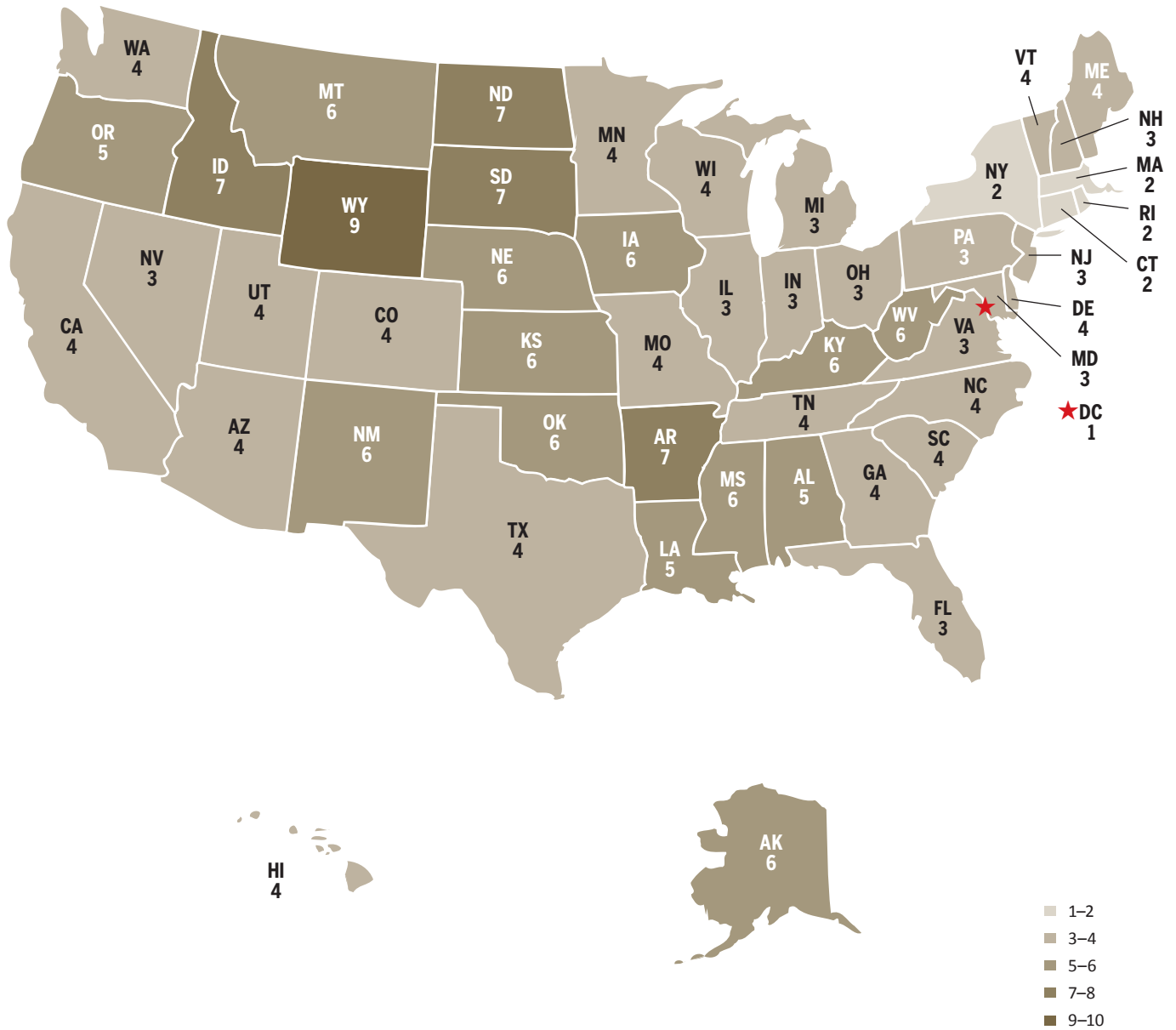
² Job growth differs significantly by state. These state-level forecasts integrate state disparities by incorporating information on industrial makeup as well as industrial growth and decline.

³ The location of the job determines number of jobs by state, not the state where employees reside.

⁴ The full report by the Center on Education and the Workforce provides comprehensive career occupational forecasts of where jobs will be, what kinds of preparation they will demand of their workers and wage information by career occupational cluster. The report is available online at <http://cew.georgetown.edu/clusters>.

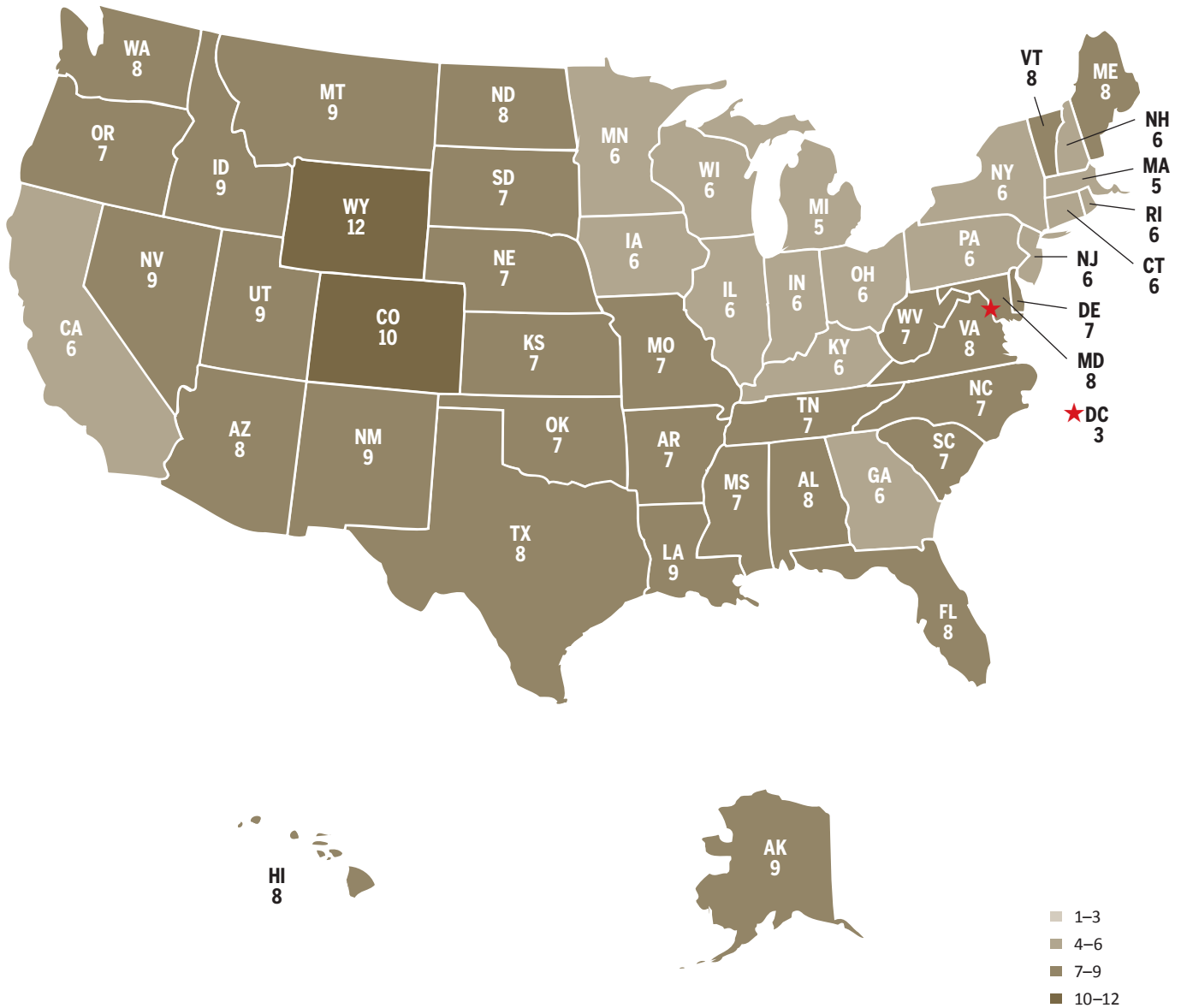
⁵ Configuration used by The American Careers Educational Programs. <http://www.carcom.com/downloads/IntegratingCareerModel.pdf>

WYOMING, IDAHO, NORTH DAKOTA, ARKANSAS AND SOUTH DAKOTA WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE AGRICULTURE, FOOD AND NATURAL RESOURCES CAREER CLUSTER BY 2018 (%)



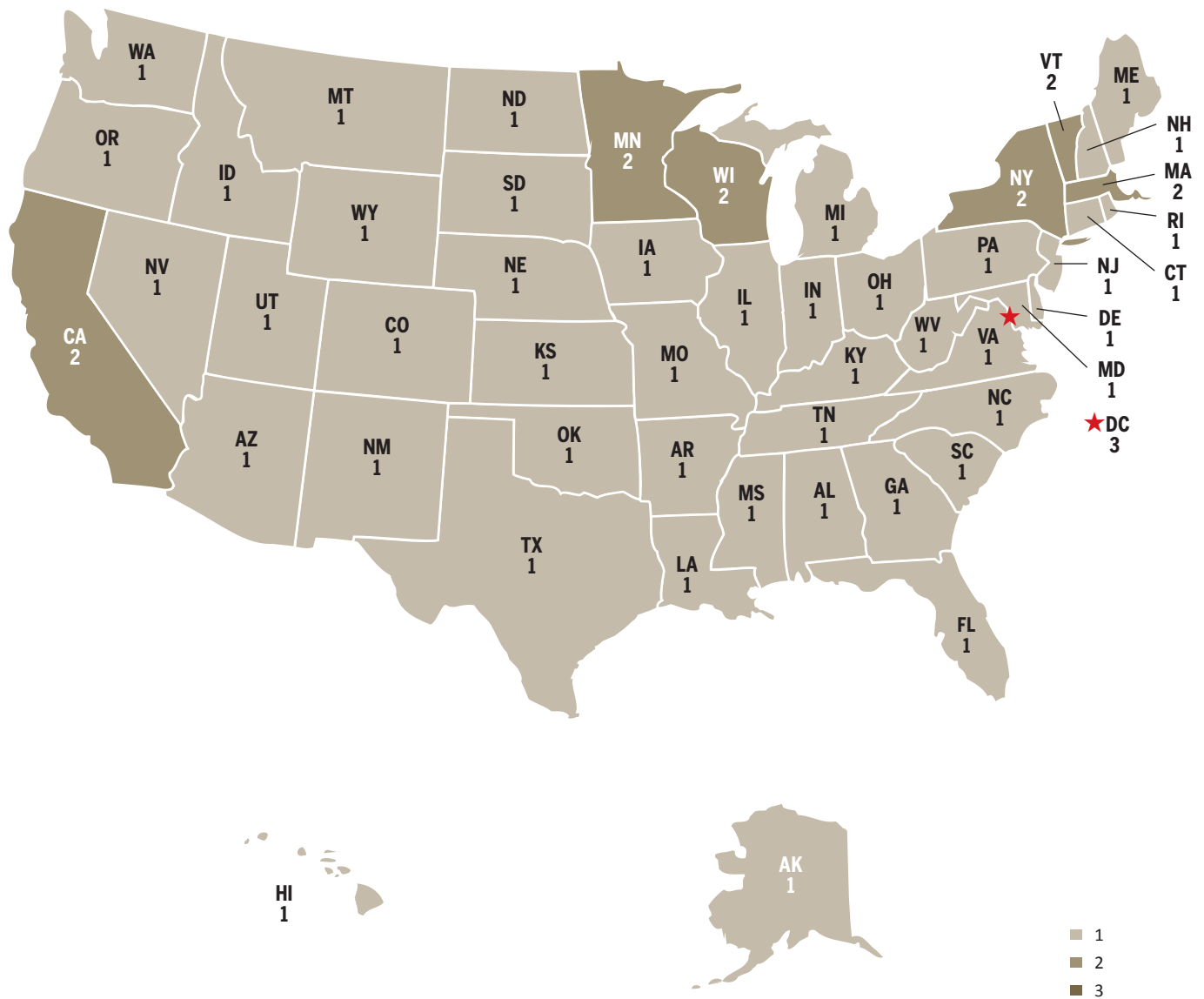
United States = 4%

**WYOMING, COLORADO, NEVADA, LOUISIANA AND ALASKA
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER BY 2018 (%)**



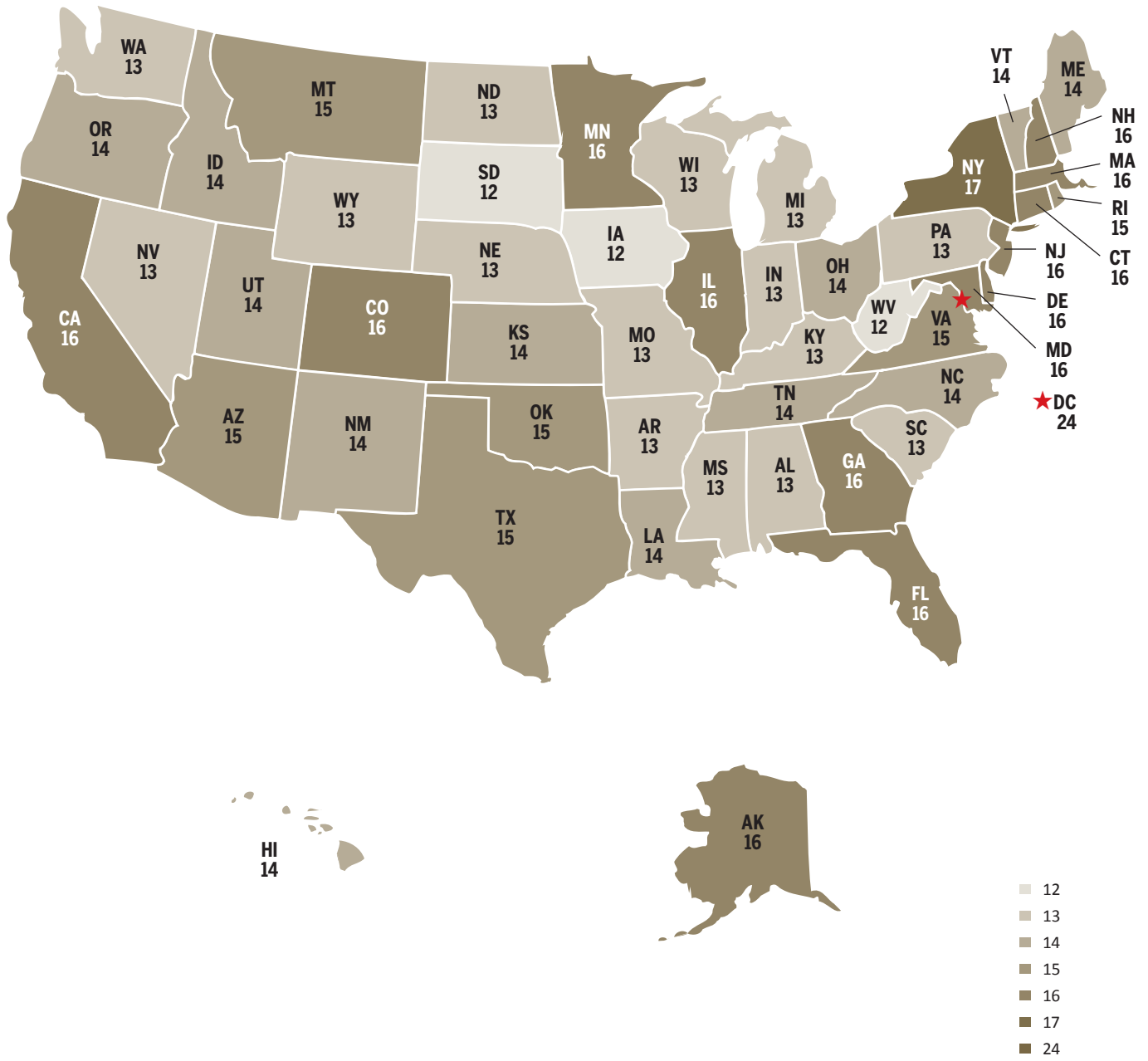
United States = 7%

**THE DISTRICT OF COLUMBIA, NEW YORK, CALIFORNIA, MASSACHUSETTS AND MINNESOTA
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
ARTS, A/V TECHNOLOGY AND COMMUNICATIONS CAREER CLUSTER BY 2018 (%)**



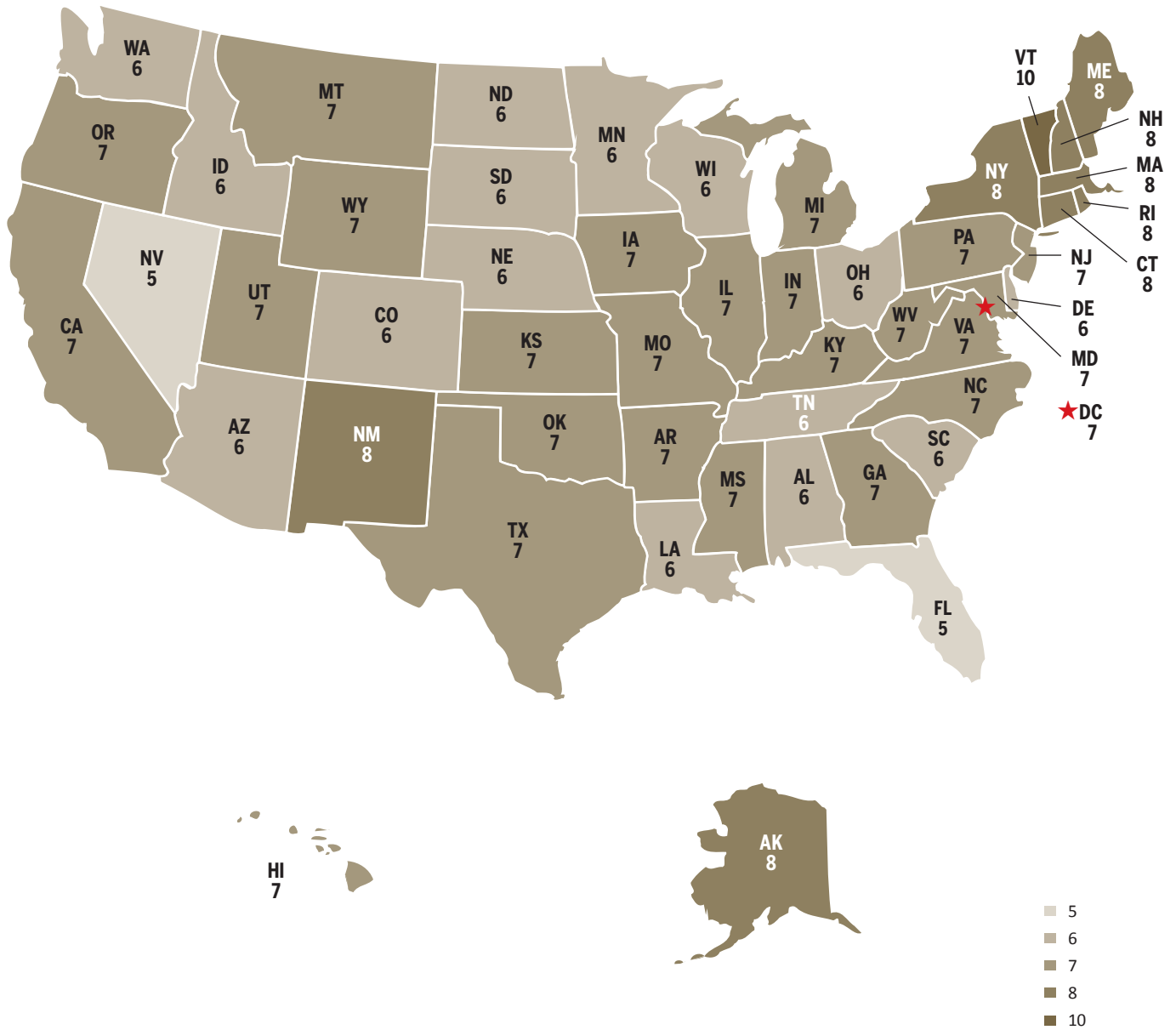
United States = 1%

**THE DISTRICT OF COLUMBIA, NEW YORK, NEW JERSEY, NEW HAMPSHIRE AND CONNECTICUT
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
BUSINESS, MANAGEMENT AND ADMINISTRATION CAREER CLUSTER BY 2018 (%)**



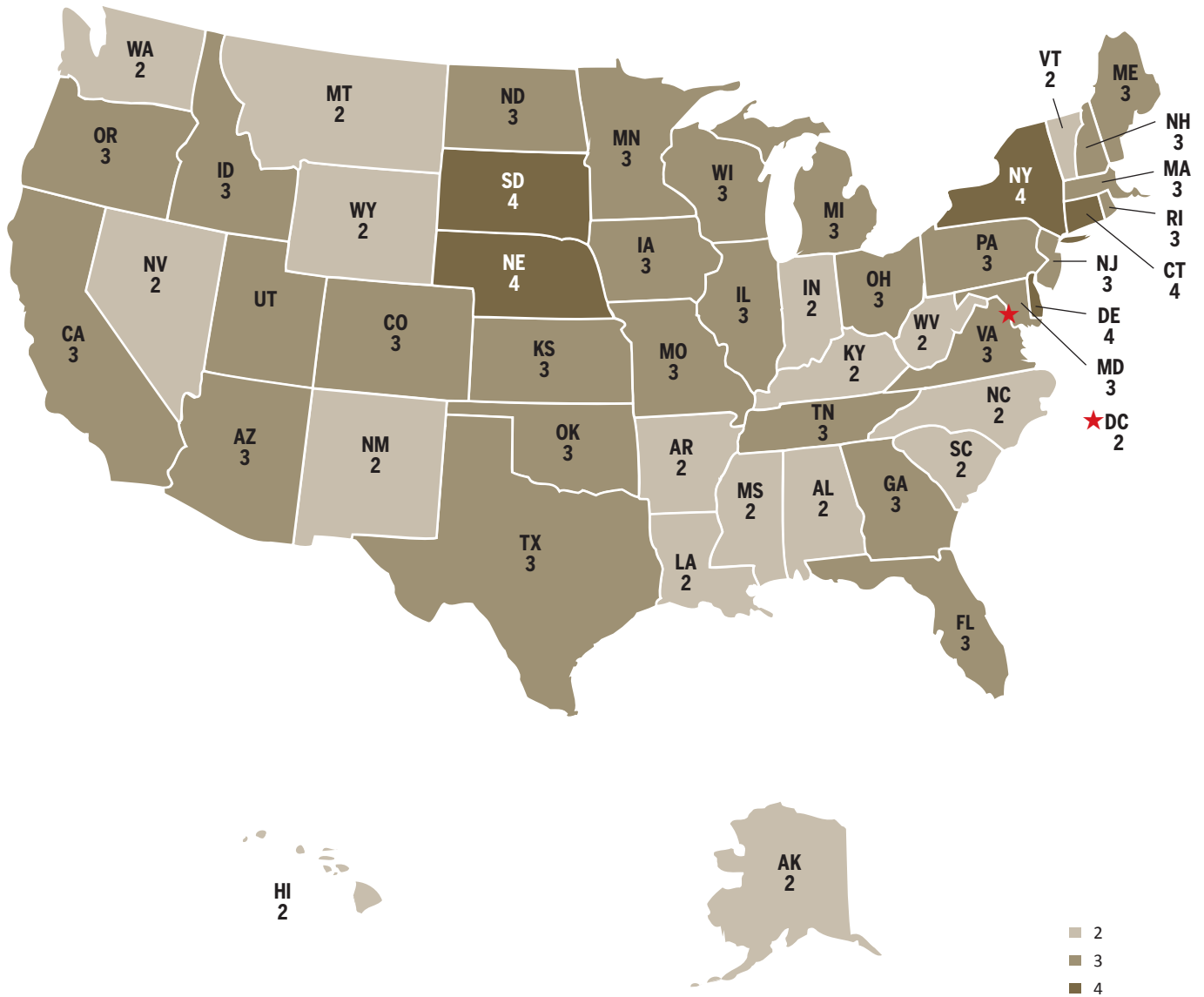
United States = 15%

**VERMONT, NEW YORK, NEW HAMPSHIRE, CONNECTICUT AND NEW MEXICO
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
EDUCATION AND TRAINING CAREER CLUSTER BY 2018 (%)**



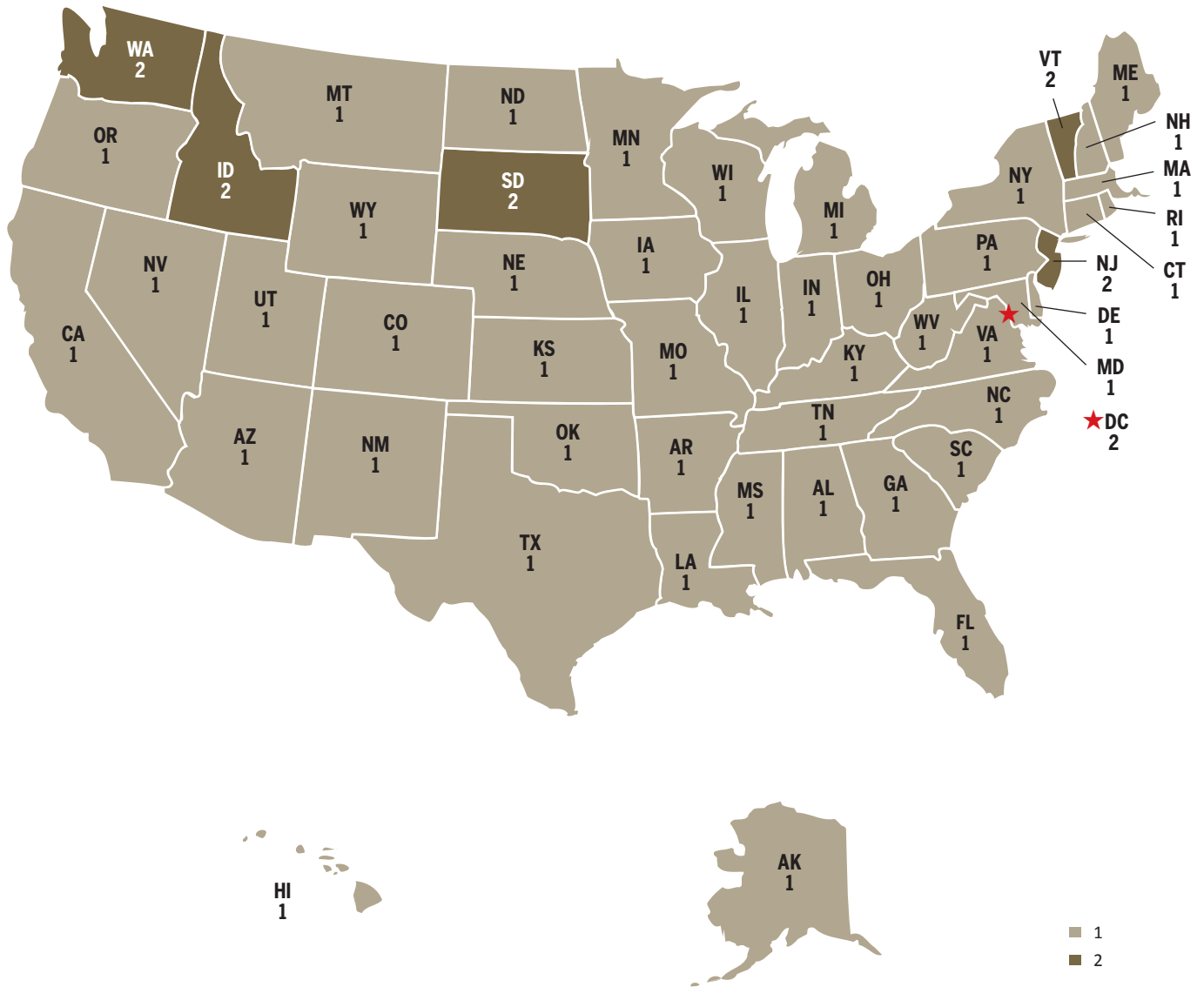
United States = 7%

**DELAWARE, SOUTH DAKOTA, CONNECTICUT, NEW YORK AND NEBRASKA
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
FINANCE CAREER CLUSTER BY 2018 (%)**



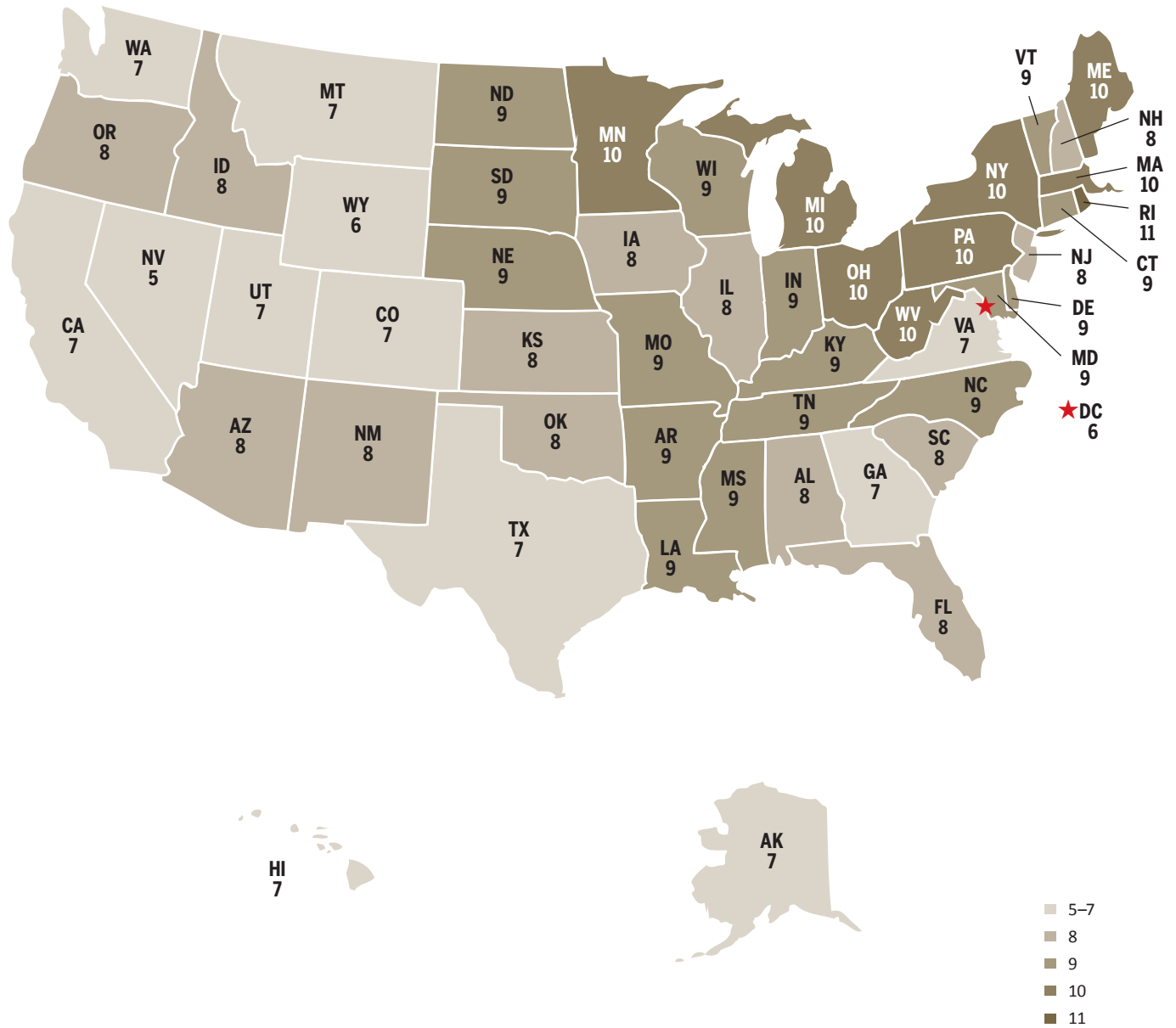
United States = 3%

**THE DISTRICT OF COLUMBIA, VERMONT, IDAHO, SOUTH DAKOTA AND NEW JERSEY
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
GOVERNMENT AND PUBLIC ADMINISTRATION CAREER CLUSTER BY 2018 (%)**



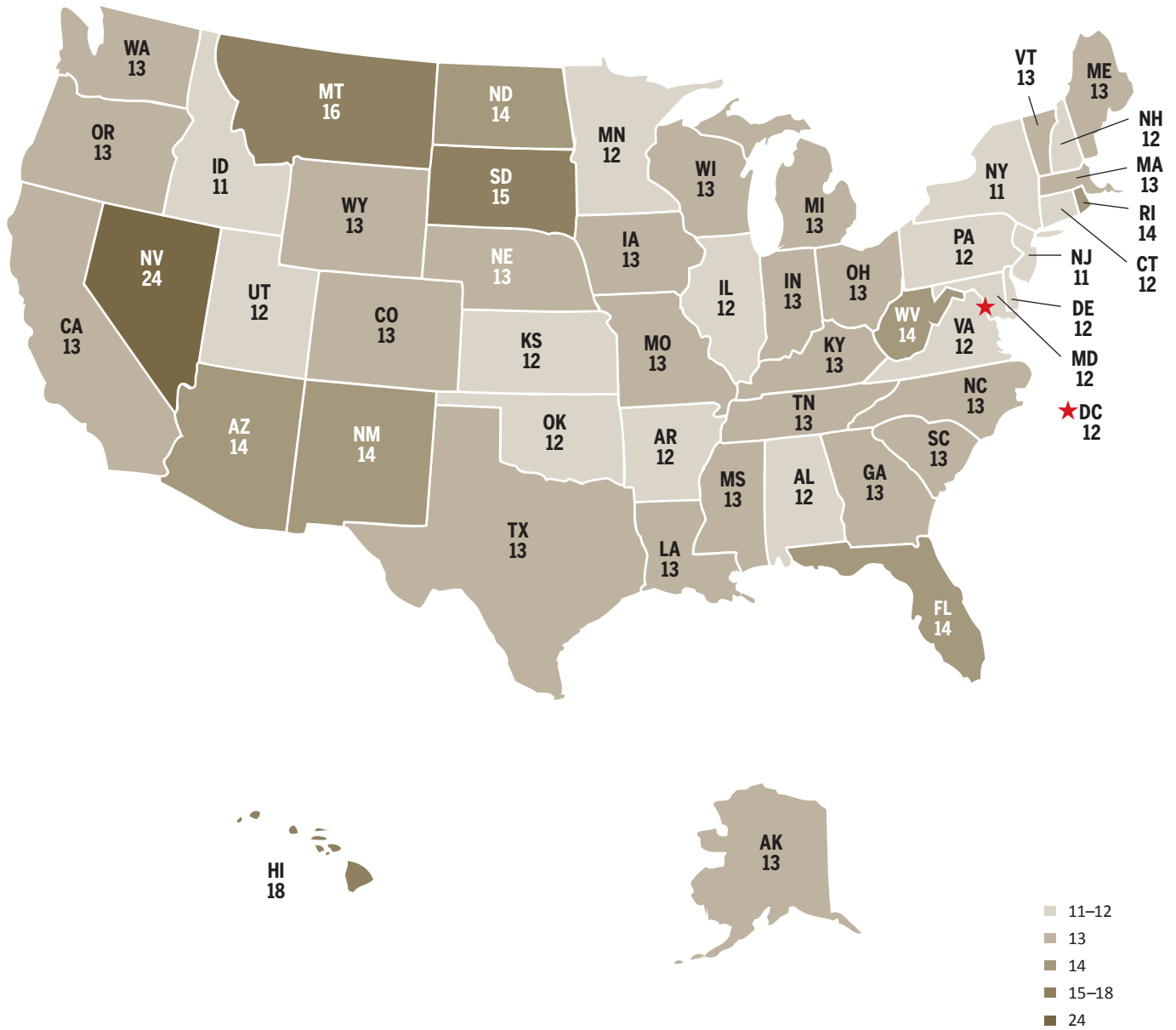
United States = 1%

**RHODE ISLAND, WEST VIRGINIA, PENNSYLVANIA, OHIO AND MASSACHUSETTS
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
HEALTH SCIENCE CAREER CLUSTER BY 2018 (%)**



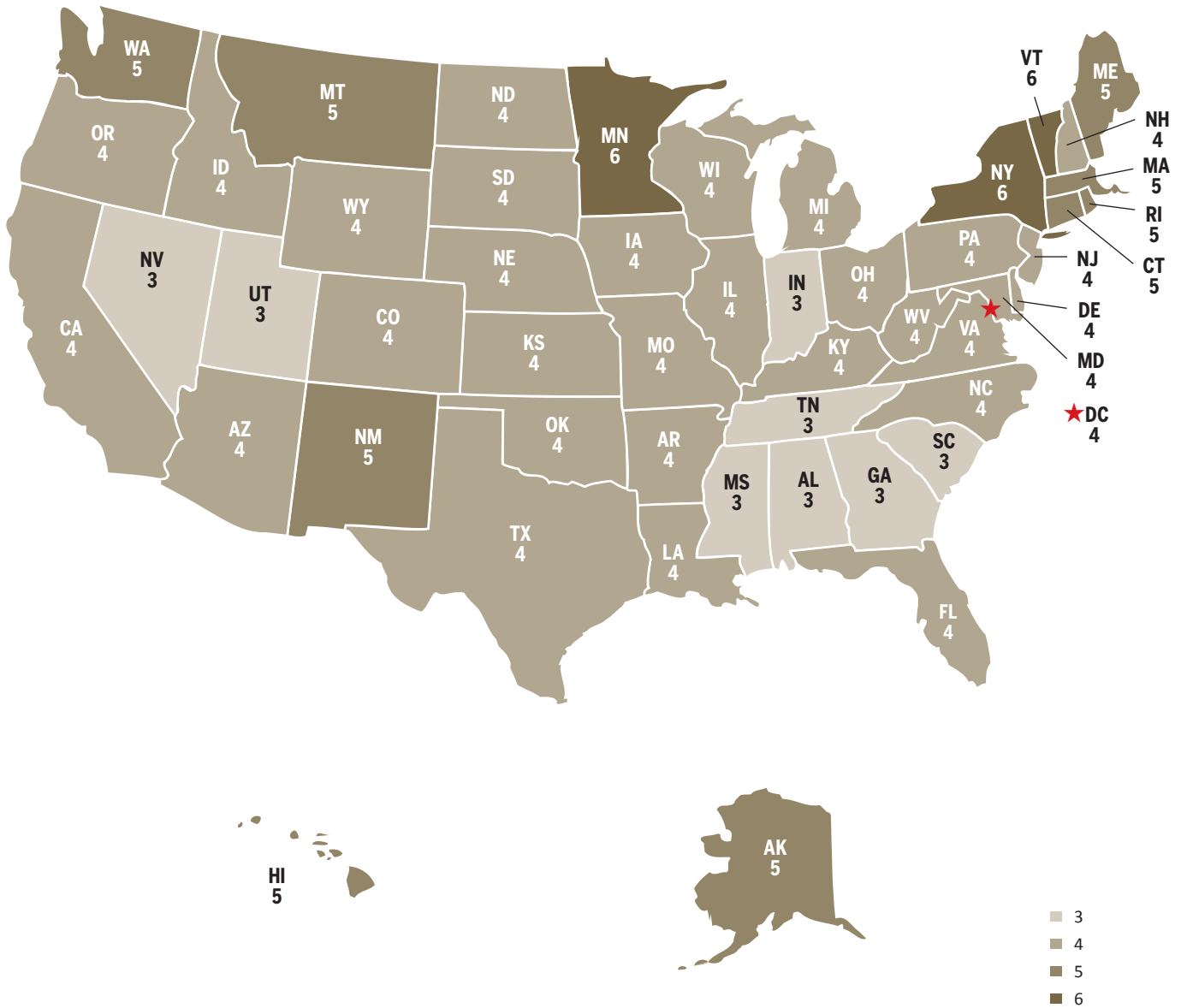
United States = 8%

**NEVADA, HAWAII, MONTANA, SOUTH DAKOTA AND NEW MEXICO
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
HOSPITALITY AND TOURISM CAREER CLUSTER BY 2018 (%)**



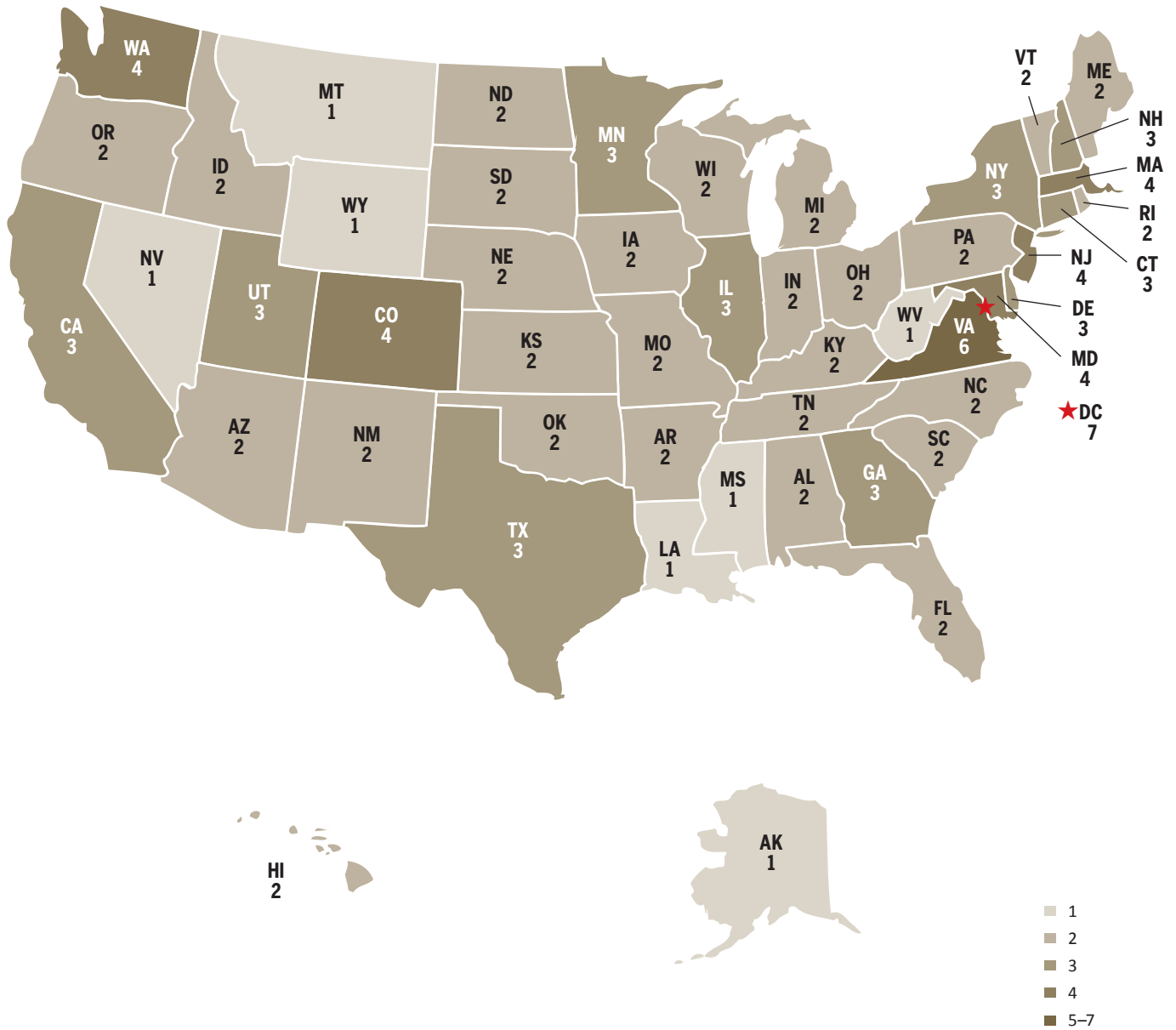
United States = 13%

**VERMONT, MINNESOTA, NEW YORK, RHODE ISLAND AND ALASKA
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
HUMAN SERVICES CAREER CLUSTER BY 2018 (%)**



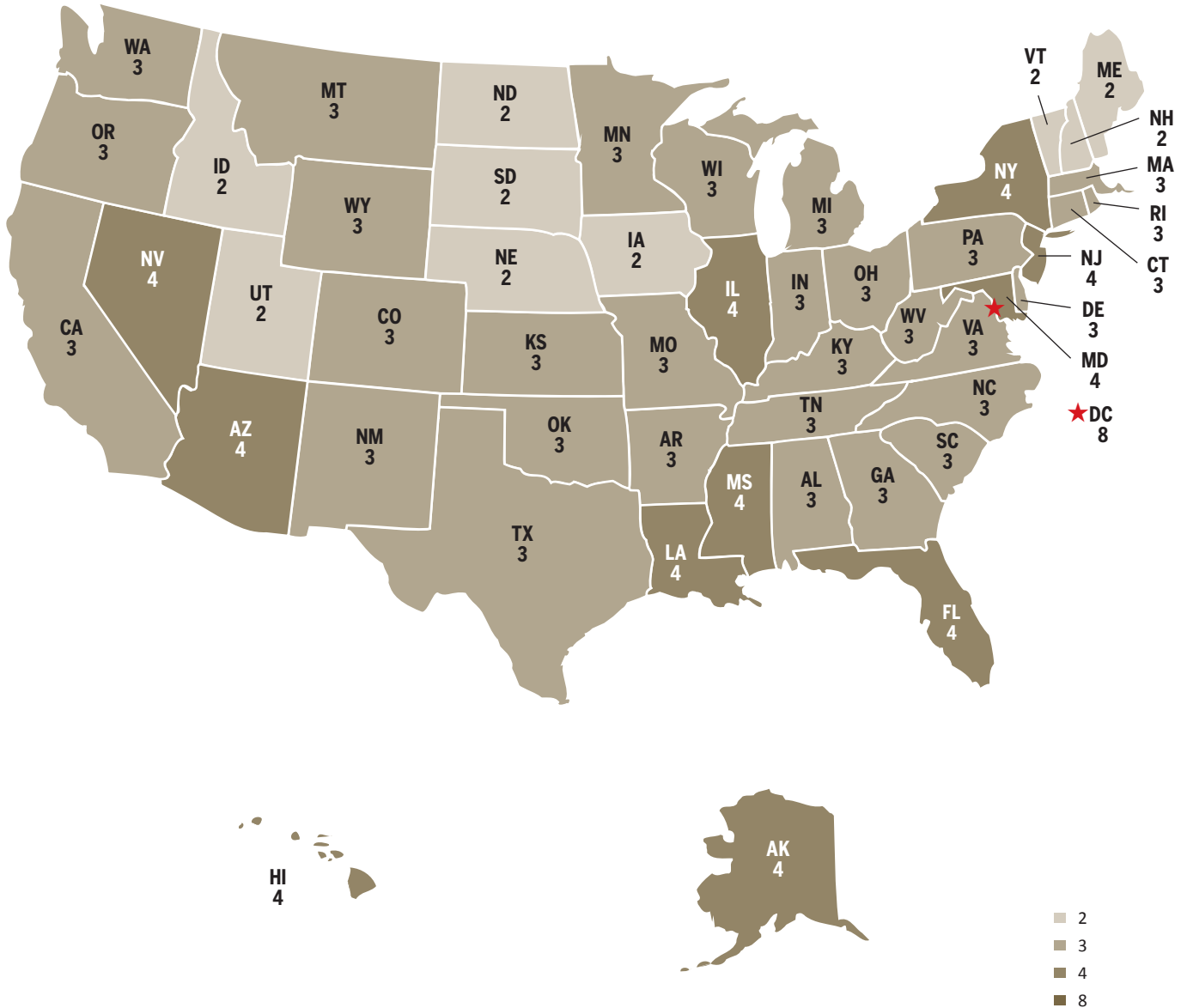
United States = 4%

**THE DISTRICT OF COLUMBIA, VIRGINIA, MASSACHUSETTS, WASHINGTON AND MARYLAND
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
INFORMATION TECHNOLOGY CAREER CLUSTER BY 2018 (%)**



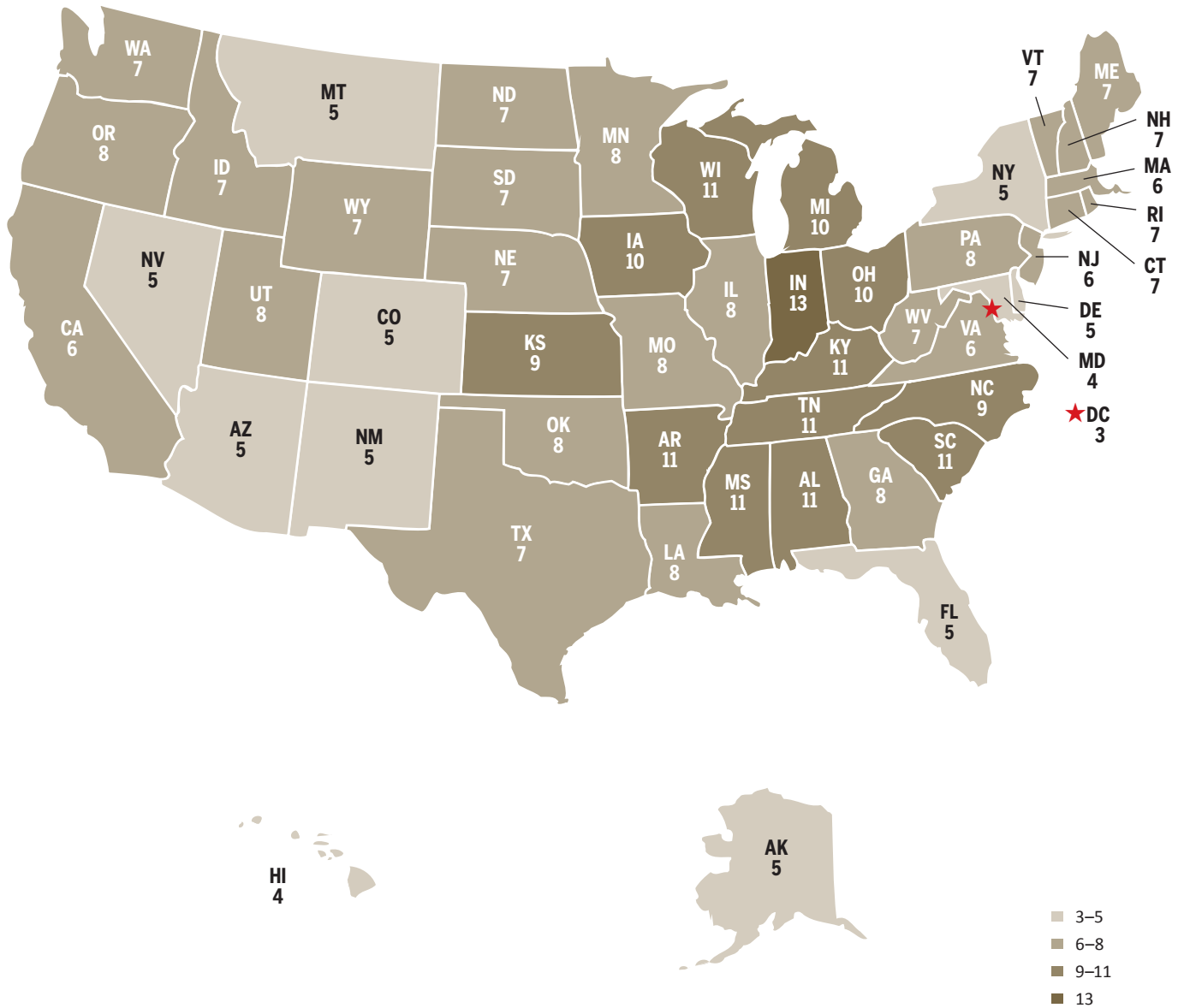
United States = 3%

**THE DISTRICT OF COLUMBIA, NEW YORK, FLORIDA, NEW JERSEY AND MARYLAND
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY CAREER CLUSTER BY 2018 (%)**



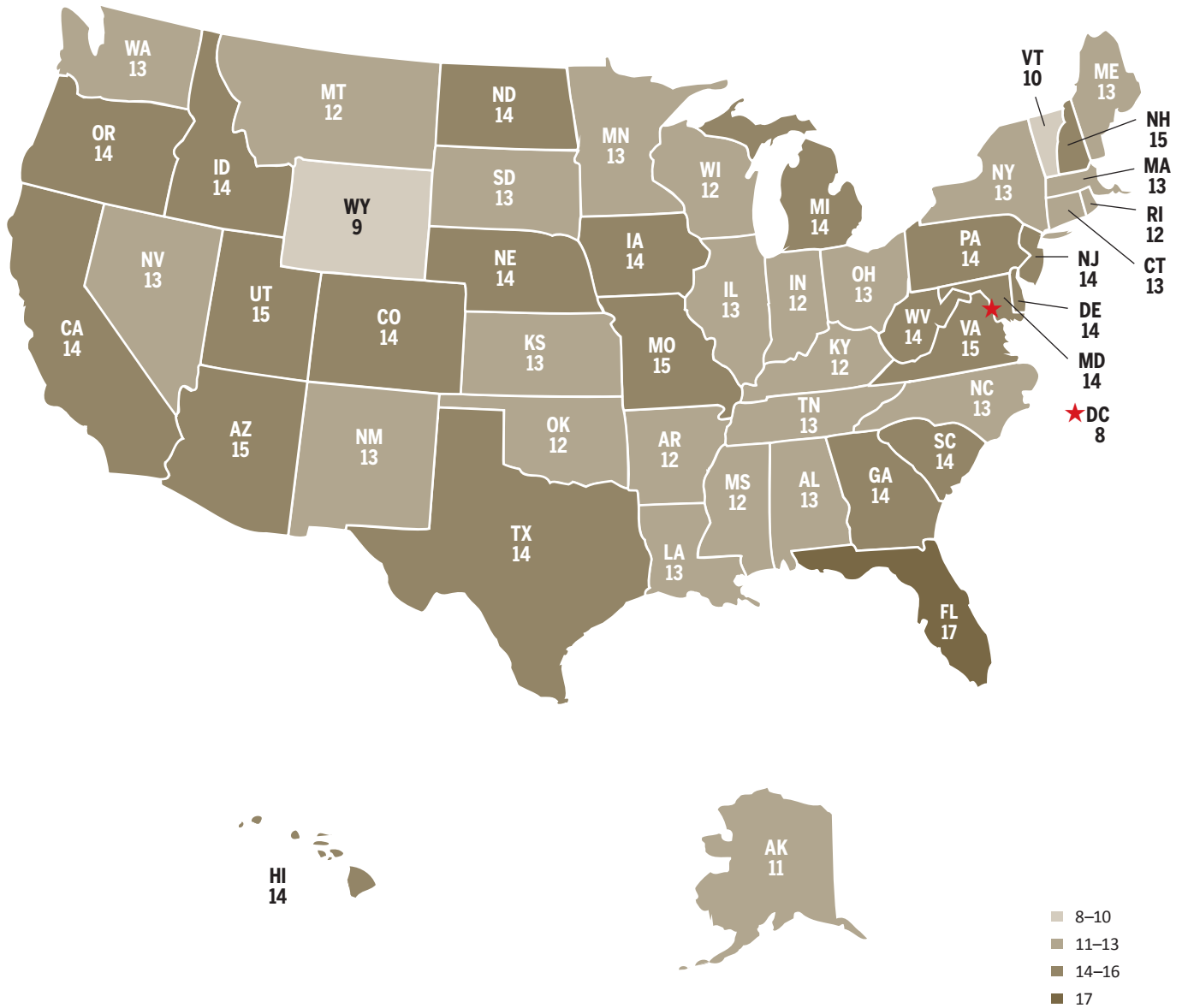
United States = 3%

**INDIANA, WISCONSIN, SOUTH CAROLINA, ARKANSAS AND KENTUCKY
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
MANUFACTURING CAREER CLUSTER BY 2018 (%)**



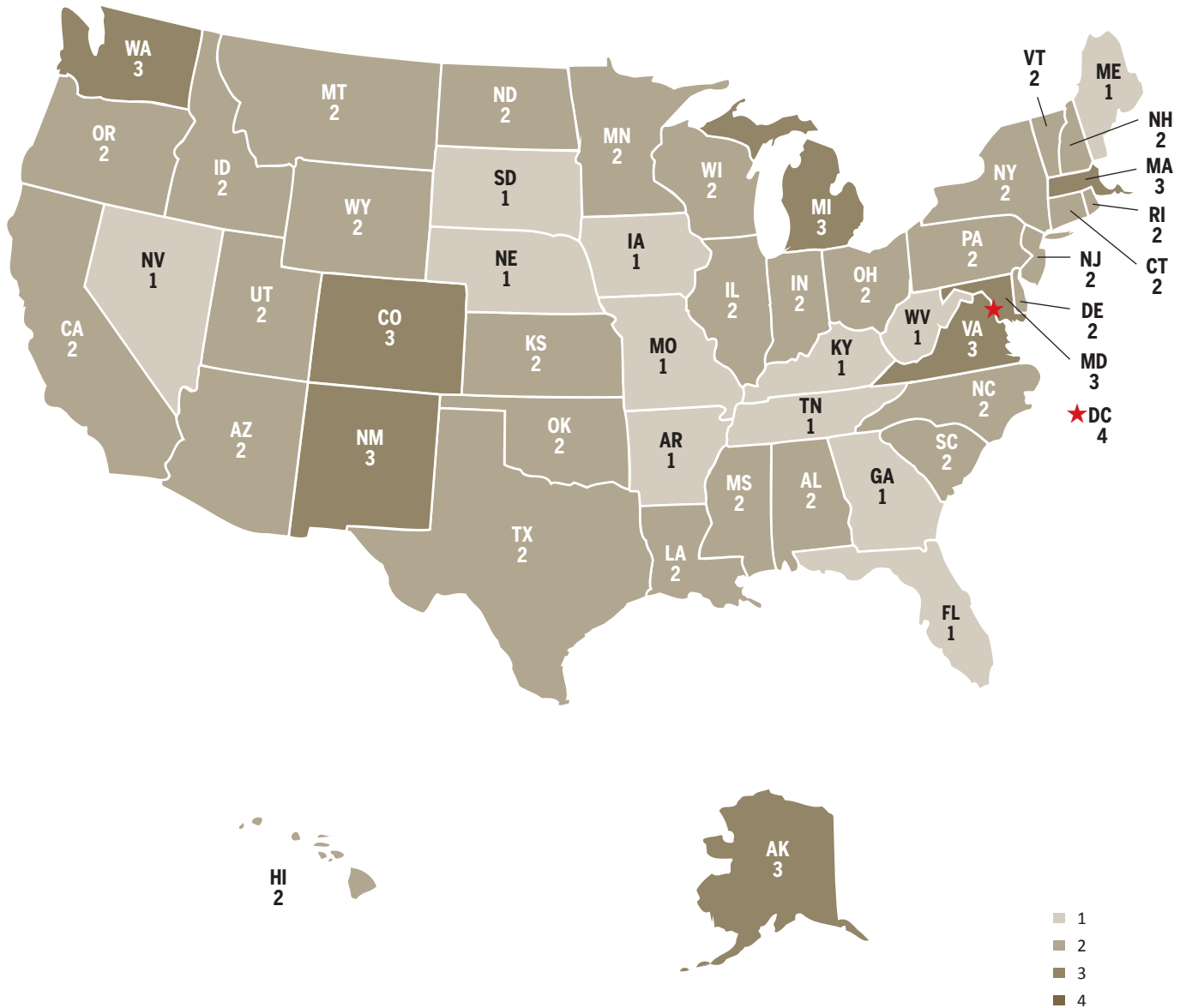
United States = 7%

**FLORIDA, UTAH, ARIZONA, VIRGINIA, AND NEW HAMPSHIRE
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
MARKETING, SALES AND SERVICE CAREER CLUSTER BY 2018 (%)**



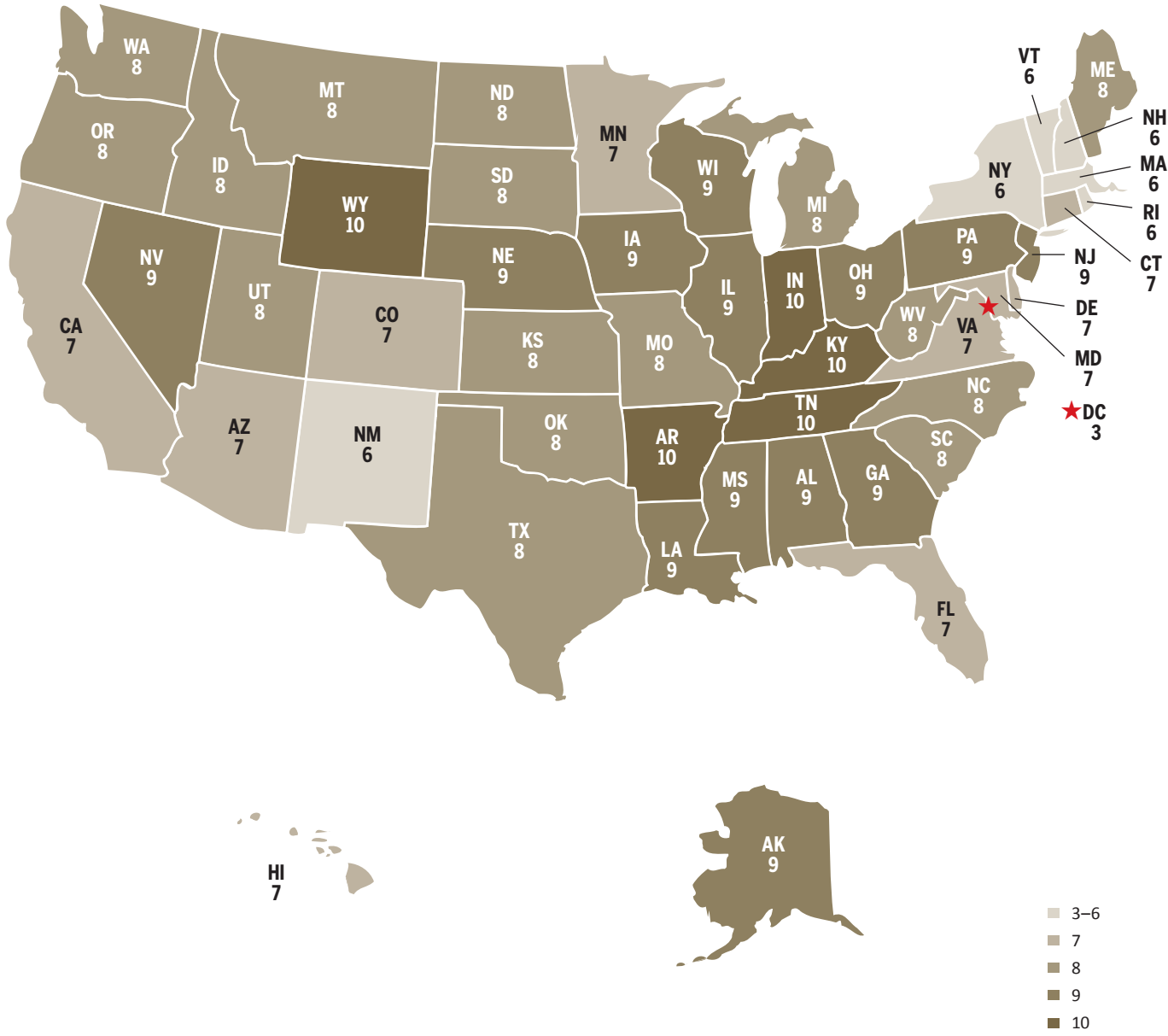
United States = 14%

**THE DISTRICT OF COLUMBIA, MASSACHUSETTS, MICHIGAN, WASHINGTON AND MARYLAND
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
STEM CAREER CLUSTER BY 2018 (%)**



United States = 2%

**TENNESSEE, ARKANSAS, WYOMING, KENTUCKY AND INDIANA
WILL LEAD THE NATION IN THE SHARE OF TOTAL JOBS WITHIN STATE IN THE
TRANSPORTATION, DISTRIBUTION AND LOGISTICS CAREER CLUSTER BY 2018 (%)**

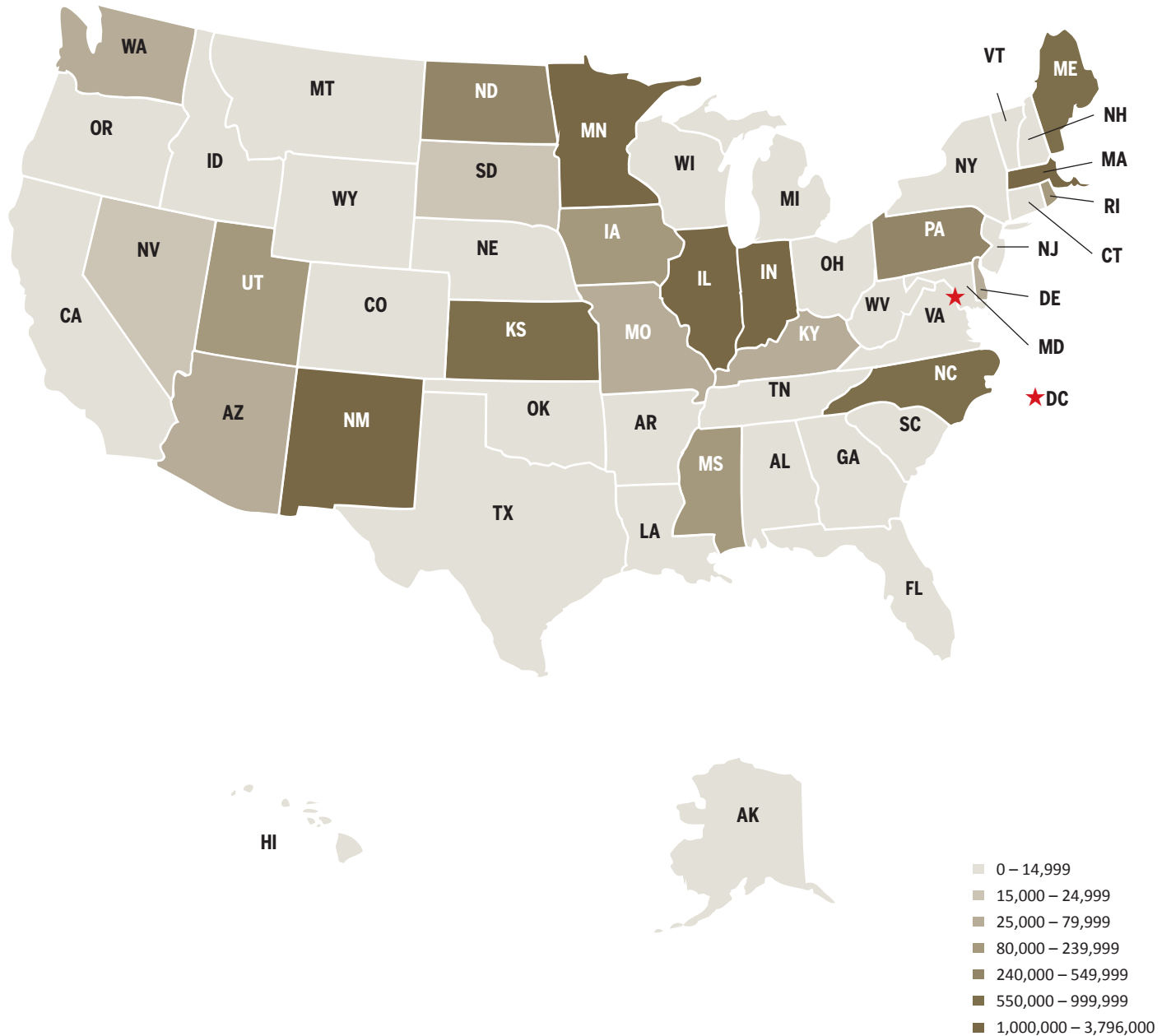


United States = 8%

TOTAL NUMBER OF 2018 JOBS IN CAREER CLUSTERS NOT CURRENTLY IMPLEMENTED IN STATE

By not implementing all career clusters, states are potentially failing to prepare their students for millions of jobs.

See Appendix B for list of career clusters and job totals per cluster



SOURCE: NASDCTEc Survey of State Directors and the Georgetown University Center on Education and the Workforce forecast of educational demand through 2018

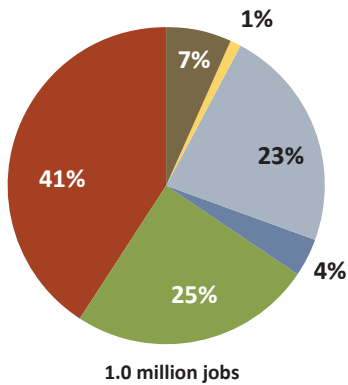
ALABAMA

IN ALABAMA, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 27 percent by 2018.

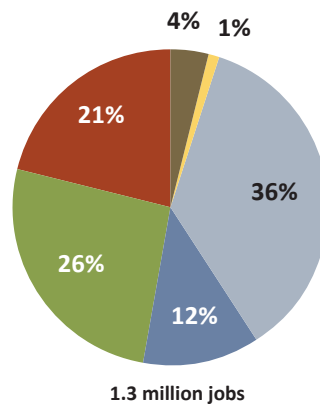
Health Science will add the most jobs in Alabama through 2018. In 2018, 38 percent of all jobs in Alabama will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	118,500	121,300	2,800	2
Architecture and Construction	171,700	190,700	19,000	11
Arts, A/V Technology, and Communications	21,800	22,400	600	3
Business, Management, and Administration	291,300	310,900	19,600	7
Education and Training	126,800	143,500	16,700	13
Finance	49,200	54,100	4,900	10
Government and Public Administration	25,500	27,100	1,600	6
Health Science	162,700	198,400	35,700	22
Hospitality and Tourism	241,800	277,400	35,600	15
Human Services	62,800	74,400	11,600	18
Information Technology	37,700	47,900	10,200	27
Law, Public Safety, Corrections and Security	61,300	70,500	9,200	15
Manufacturing	245,900	250,600	4,700	2
Marketing, Sales, and Service	269,200	303,000	34,000	13
Science, Technology, Engineering, and Mathematics	43,400	48,800	5,400	12
Transportation, Distribution, and Logistics	194,900	205,700	10,800	6
TOTAL	2,124,700	2,346,600	221,900	10

High School Jobs in Alabama, 2018



Postsecondary Jobs in Alabama, 2018



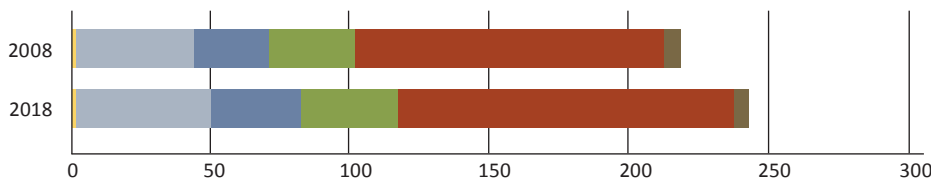
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster— Business, Management, and Administration— will require substantial postsecondary education in 2018. It will grow by 12% for those with postsecondary education and 9% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Alabama by 2018, there will be about 242,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	21,800	22,700	900	4
Architecture and Construction	29,900	32,300	2,500	8
Arts, A/V Technology, and Communications	3,900	3,600	-300	-9
Business, Management, and Administration	56,900	56,700	-200	0
Education and Training	25,600	27,600	2,000	8
Finance	5,400	5,600	200	3
Government and Public Administration	4,300	4,600	200	6
Health Science	20,700	23,700	3,000	15
Hospitality and Tourism	44,700	46,000	1,200	3
Human Services	15,900	17,800	1,900	12
Information Technology	4,600	5,200	600	13
Law, Public Safety, Corrections and Security	12,000	12,900	900	7
Manufacturing	15,900	16,400	500	3
Marketing, Sales, and Service	38,600	41,000	2,500	6
Science, Technology, Engineering, and Mathematics	8,300	9,100	700	9
Transportation, Distribution, and Logistics	32,600	33,700	1,100	3
TOTAL	341,200	359,000	17,800	5

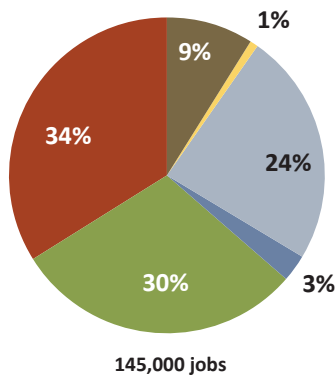
ALASKA

IN ALASKA, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 15% by 2018.

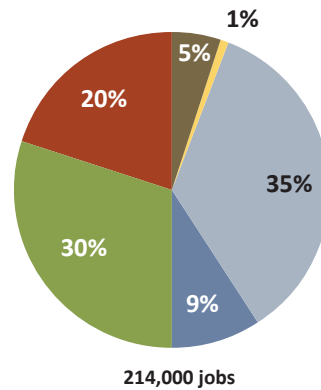
Health Science will add the most jobs in Alaska through 2018; Arts, A/V Technology, and Communications, and Business Management and Administration will lose jobs.

In 2018, 40% of all jobs in Alaska will be found in the Business, Management and Administration, Hospitality and Tourism, and Marketing, Sales and Services clusters.

High School Jobs in Alaska, 2018



Postsecondary Jobs in Alaska, 2018



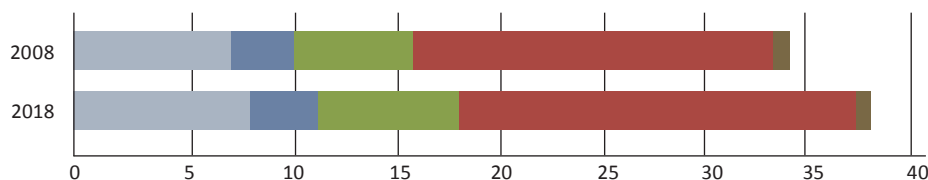
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 4% for those with postsecondary education and 2% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Alaska by 2018, there will be about 37,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



ARIZONA

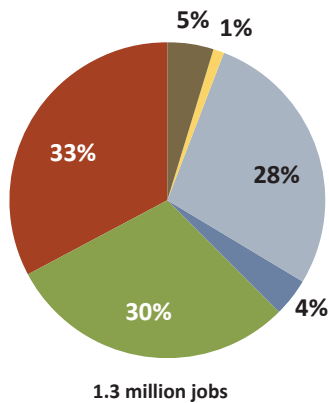
In ARIZONA, the Marketing, Sales, and Service cluster will be the largest employer by 2018, but Health Science will be the fastest growing at 29% over the next eight years.

Marketing, Sales, and Service will add the most jobs in Arizona through 2018, while Architecture and Construction and Manufacturing will lose jobs.

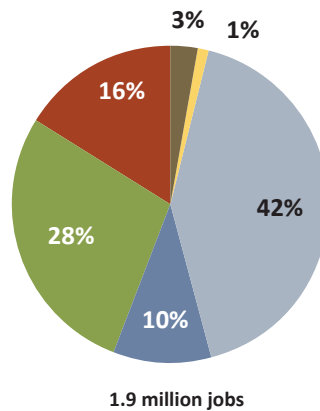
In 2018, 44% of all jobs in Arizona will be found in the Marketing, Sales and Services, Business, Management, and Administration, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	101,000	109,500	8,500	8
Architecture and Construction	257,200	248,200	-9,000	-3
Arts, A/V Technology, and Communications	33,500	35,100	1,600	5
Business, Management, and Administration	434,500	470,100	35,500	8
Education and Training	163,300	195,100	31,900	20
Finance	98,800	107,900	9,100	9
Government and Public Administration	39,400	45,100	5,700	14
Health Science	184,000	236,900	52,900	29
Hospitality and Tourism	384,100	424,700	40,600	11
Human Services	93,400	119,900	26,400	28
Information Technology	61,900	74,400	12,500	20
Law, Public Safety, Corrections and Security	95,200	114,400	19,300	20
Manufacturing	167,500	167,300	-200	0
Marketing, Sales, and Service	419,900	483,000	63,100	15
Science, Technology, Engineering, and Mathematics	62,400	69,200	6,800	11
Transportation, Distribution, and Logistics	217,100	228,800	11,800	5
TOTAL	2,813,300	3,129,800	316,600	11

High School Jobs in Arizona, 2018



Postsecondary Jobs in Arizona, 2018



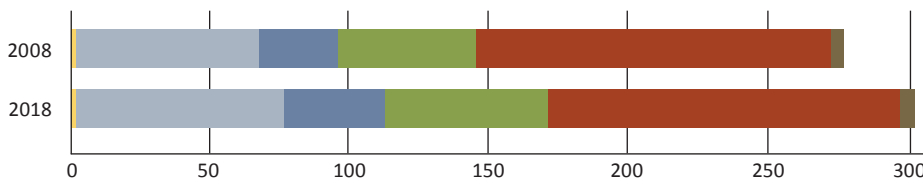
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 13% for those with postsecondary education and 10% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Arizona by 2018, there will be over 300,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	93,400	96,700	3,300	4
Architecture and Construction	86,700	94,100	7,400	9
Arts, A/V Technology, and Communications	13,400	14,400	900	7
Business, Management, and Administration	169,300	186,000	16,700	10
Education and Training	81,600	97,800	16,100	20
Finance	31,000	35,000	4,000	13
Government and Public Administration	17,900	19,800	1,900	11
Health Science	102,500	124,600	22,100	22
Hospitality and Tourism	147,500	171,000	23,400	16
Human Services	44,500	52,400	7,900	18
Information Technology	16,600	21,800	5,200	31
Law, Public Safety, Corrections and Security	34,300	40,300	6,000	18
Manufacturing	149,900	155,200	5,300	4
Marketing, Sales, and Service	153,300	170,600	17,300	11
Science, Technology, Engineering, and Mathematics	17,900	21,600	3,700	21
Transportation, Distribution, and Logistics	136,500	145,600	9,100	7
TOTAL	1,296,300	1,446,700	150,400	12

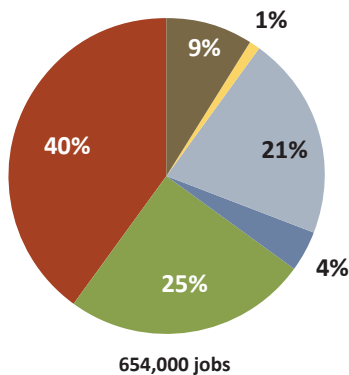
ARKANSAS

IN ARKANSAS, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 31% by 2018.

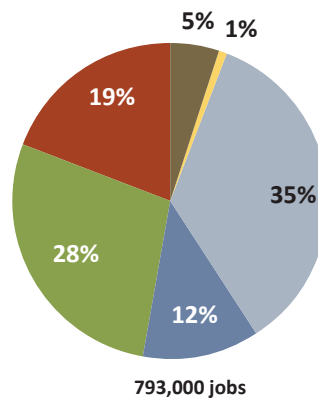
Hospitality and Tourism will add the most jobs in Arkansas through 2018.

In 2018, 37% of all jobs in Arkansas will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Arkansas, 2018



Postsecondary Jobs in Arkansas, 2018



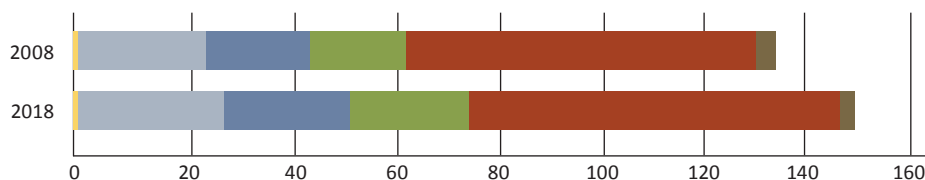
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 13% for those with postsecondary education and 8% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Arkansas by 2018, there will be about 150,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CALIFORNIA

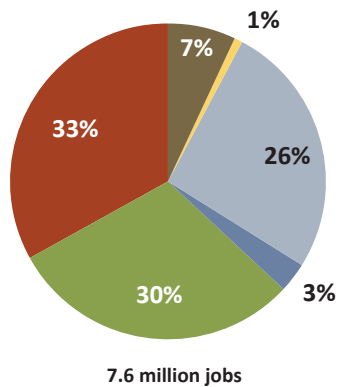
IN CALIFORNIA, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 27% by 2018.

Marketing, Sales, and Service will add the most jobs in California through 2018.

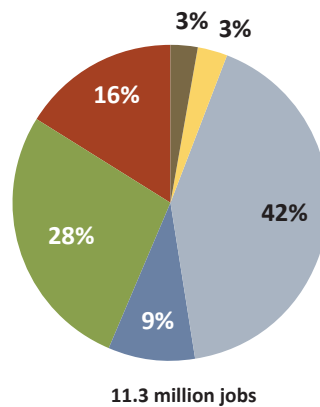
In 2018, 43% of all jobs in California will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	767,000	818,300	51,300	7
Architecture and Construction	1,156,500	1,220,300	63,800	6
Arts, A/V Technology, and Communications	339,800	369,500	29,700	9
Business, Management, and Administration	2,756,700	2,998,100	241,400	9
Education and Training	1,142,000	1,359,700	217,700	19
Finance	471,700	502,600	30,900	7
Government and Public Administration	214,600	231,000	16,400	8
Health Science	1,054,900	1,293,200	238,300	23
Hospitality and Tourism	2,179,300	2,475,500	296,200	14
Human Services	674,500	782,600	108,100	16
Information Technology	446,800	569,600	122,800	27
Law, Public Safety, Corrections and Security	512,900	600,400	87,500	17
Manufacturing	1,171,000	1,191,200	20,200	2
Marketing, Sales, and Service	2,303,000	2,619,800	316,800	14
Science, Technology, Engineering, and Mathematics	415,200	460,300	45,200	11
Transportation, Distribution, and Logistics	1,322,800	1,388,200	65,400	5
TOTAL	16,928,700	18,880,300	1,951,600	12

High School Jobs in California, 2018



Postsecondary Jobs in California, 2018



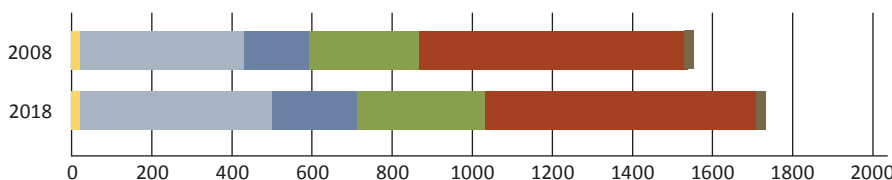
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 13% for those with postsecondary education and 9% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In California by 2018, there will be about 1.7 million jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	104,700	130,000	25,300	24
Architecture and Construction	226,400	311,100	84,700	37
Arts, A/V Technology, and Communications	39,100	44,500	5,400	14
Business, Management, and Administration	414,800	498,300	83,500	20
Education and Training	155,200	195,500	40,400	26
Finance	79,400	96,700	17,400	22
Government and Public Administration	33,500	41,100	7,600	23
Health Science	157,800	209,100	51,400	33
Hospitality and Tourism	335,000	422,900	88,000	26
Human Services	92,800	119,400	26,600	29
Information Technology	90,500	117,400	26,900	30
Law, Public Safety, Corrections and Security	76,700	100,000	23,300	30
Manufacturing	141,000	163,100	22,200	16
Marketing, Sales, and Service	362,700	442,200	79,400	22
Science, Technology, Engineering, and Mathematics	65,900	82,100	16,200	25
Transportation, Distribution, and Logistics	184,300	214,700	30,400	16
TOTAL	2,559,800	3,188,300	628,500	25

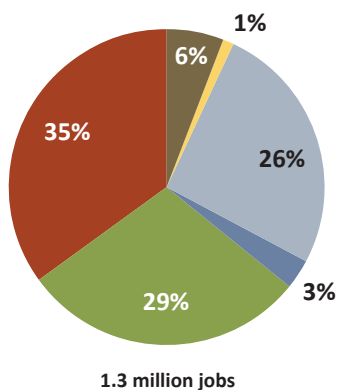
COLORADO

IN COLORADO, the Business, Management, and Administration cluster will be the largest cluster overall, but Architecture and Construction will be the fastest growing. Jobs in the Architecture and Construction sector will increase by 37% by 2018.

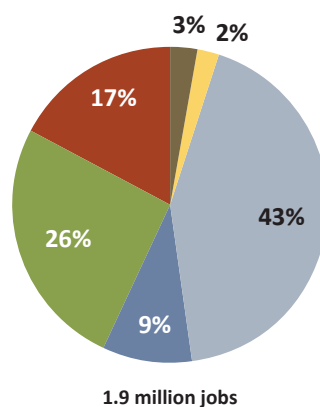
Hospitality and Tourism will add the most jobs in Colorado through 2018.

In 2018, 43% of all jobs in Colorado will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Colorado, 2018



Postsecondary Jobs in Colorado, 2018



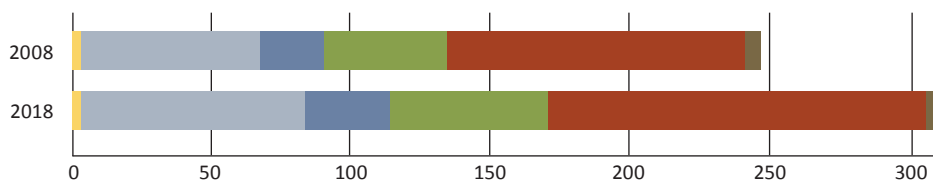
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 23% for those with postsecondary education and 20% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Colorado by 2018, there will be about 312,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CONNECTICUT

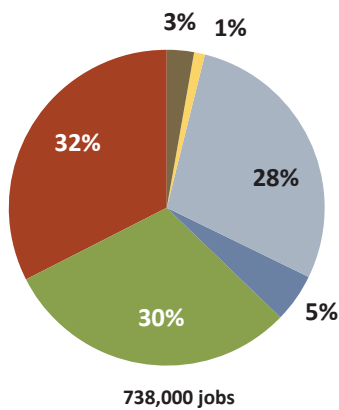
IN CONNECTICUT, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 18% by 2018.

Health Science will add the most jobs in Connecticut through 2018, while Manufacturing will lose jobs.

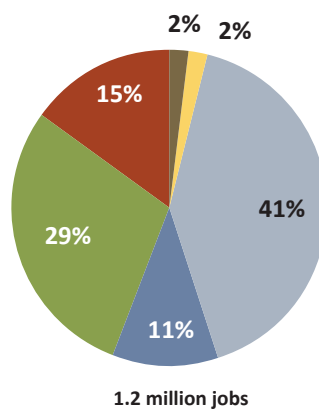
In 2018, 41% of all jobs in Connecticut will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	45,900	48,100	2,200	5
Architecture and Construction	109,900	113,900	4,000	4
Arts, A/V Technology, and Communications	27,400	28,200	800	3
Business, Management, and Administration	305,700	313,000	7,300	2
Education and Training	147,500	159,200	11,700	8
Finance	67,400	73,700	6,300	9
Government and Public Administration	23,600	24,300	600	3
Health Science	152,000	175,200	23,200	15
Hospitality and Tourism	214,100	233,800	19,700	9
Human Services	78,700	91,100	12,300	16
Information Technology	54,000	63,800	9,900	18
Law, Public Safety, Corrections and Security	57,400	60,700	3,300	6
Manufacturing	137,900	132,500	-5,300	-4
Marketing, Sales, and Service	238,600	256,000	17,400	7
Science, Technology, Engineering, and Mathematics	39,800	42,300	2,500	6
Transportation, Distribution, and Logistics	127,500	129,400	1,900	2
TOTAL	1,827,400	1,945,200	117,800	6

High School Jobs in Connecticut, 2018



Postsecondary Jobs in Connecticut, 2018



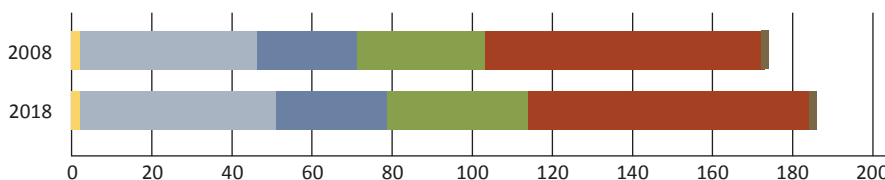
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 7% for those with postsecondary education and 3% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Connecticut by 2018, there will be about 186,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	19,500	20,200	700	4
Architecture and Construction	33,600	37,000	3,400	10
Arts, A/V Technology, and Communications	5,100	5,300	200	4
Business, Management, and Administration	72,500	77,300	4,900	7
Education and Training	27,500	31,500	4,000	15
Finance	19,800	22,100	2,300	12
Government and Public Administration	5,500	6,000	500	9
Health Science	35,400	42,500	7,100	20
Hospitality and Tourism	55,300	60,600	5,200	9
Human Services	16,100	18,200	2,200	14
Information Technology	13,700	16,200	2,500	18
Law, Public Safety, Corrections and Security	14,600	16,900	2,400	16
Manufacturing	27,100	25,400	-1,800	-7
Marketing, Sales, and Service	64,800	70,600	5,800	9
Science, Technology, Engineering, and Mathematics	11,900	11,200	-700	-6
Transportation, Distribution, and Logistics	33,100	34,400	1,300	4
TOTAL	455,300	495,500	40,200	9

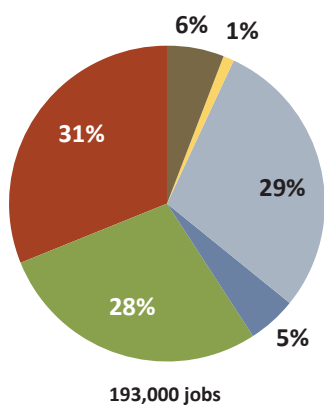
DELAWARE

IN DELAWARE, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 20% by 2018.

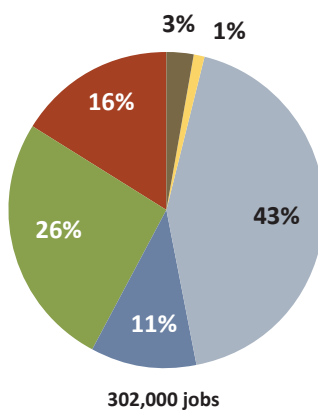
Health Science will add the most jobs in Delaware through 2018, while Manufacturing and Science, Technology, Engineering, and Mathematics will lose jobs.

In 2018, 42% of all jobs in Delaware will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Delaware, 2018



Postsecondary Jobs in Delaware, 2018



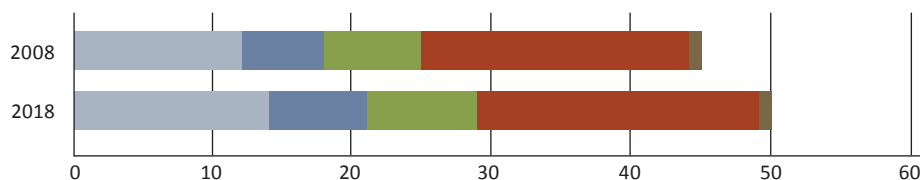
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 10% for those with postsecondary education and 7% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Delaware by 2018, there will be about 50,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



DISTRICT OF COLUMBIA

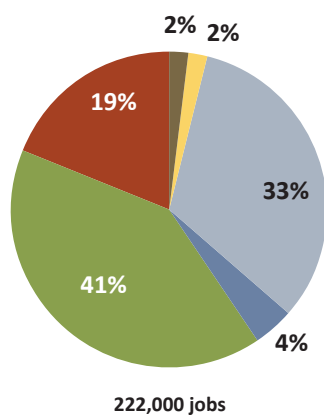
IN THE DISTRICT OF COLUMBIA, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 20% by 2018.

Hospitality and Tourism will add the most jobs in the District of Columbia through 2018.

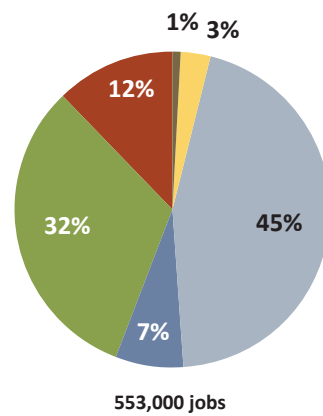
In 2018, 45% of all jobs in the District of Columbia will be found in the Business, Management and Administration, Hospitality and Tourism, and Law, Public Safety, Corrections and Security clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	9,600	10,300	700	8
Architecture and Construction	24,300	25,800	1,500	6
Arts, A/V Technology, and Communications	19,900	20,900	900	5
Business, Management, and Administration	180,400	188,600	8,200	5
Education and Training	51,800	57,100	5,200	10
Finance	18,200	18,900	700	4
Government and Public Administration	16,600	18,100	1,500	9
Health Science	41,500	46,300	4,800	12
Hospitality and Tourism	87,800	96,900	9,100	10
Human Services	26,100	30,800	4,700	18
Information Technology	42,500	51,100	8,700	20
Law, Public Safety, Corrections and Security	60,000	65,800	5,900	10
Manufacturing	22,600	22,900	300	1
Marketing, Sales, and Service	58,800	63,900	5,100	9
Science, Technology, Engineering, and Mathematics	31,700	33,500	1,800	6
Transportation, Distribution, and Logistics	24,100	25,000	900	4
TOTAL	715,800	775,800	60,000	8

High School Jobs in District of Columbia, 2018



Postsecondary Jobs in District of Columbia, 2018



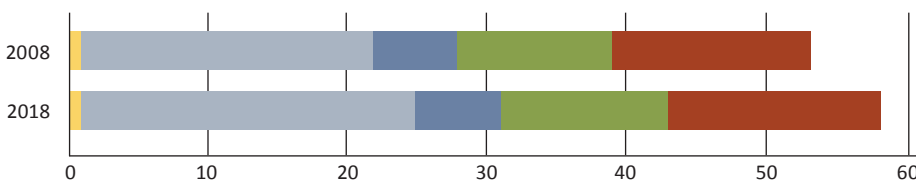
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 8% for those with postsecondary education and 5% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In the District of Columbia by 2018, there will be about 59,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	309,100	330,800	21,800	7
Architecture and Construction	706,400	731,900	25,500	4
Arts, A/V Technology, and Communications	115,200	124,700	9,500	8
Business, Management, and Administration	1,361,600	1,480,400	118,800	9
Education and Training	442,900	513,800	70,900	16
Finance	276,700	316,400	39,700	14
Government and Public Administration	118,600	132,000	13,400	11
Health Science	650,700	802,700	152,000	23
Hospitality and Tourism	1,181,500	1,356,800	175,300	15
Human Services	284,700	339,900	55,100	19
Information Technology	154,900	195,900	41,000	26
Law, Public Safety, Corrections and Security	305,200	367,900	62,600	21
Manufacturing	463,400	470,800	7,400	2
Marketing, Sales, and Service	1,362,400	1,574,400	212,100	16
Science, Technology, Engineering, and Mathematics	125,400	141,100	15,700	13
Transportation, Distribution, and Logistics	625,700	646,800	21,100	3
TOTAL	8,484,200	9,526,100	1,042,000	12

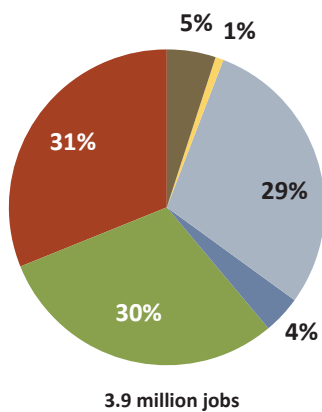
FLORIDA

IN FLORIDA, the Marketing, Sales, and Service cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 26% by 2018.

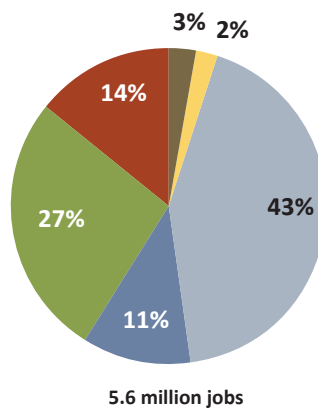
Marketing, Sales, and Service will add the most jobs in Florida through 2018.

In 2018, 46% of all jobs in Florida will be found in the Marketing, Sales and Services, Business, Management and Administration, and Hospitality and Tourism clusters.

High School Jobs in Florida, 2018



Postsecondary Jobs in Florida, 2018



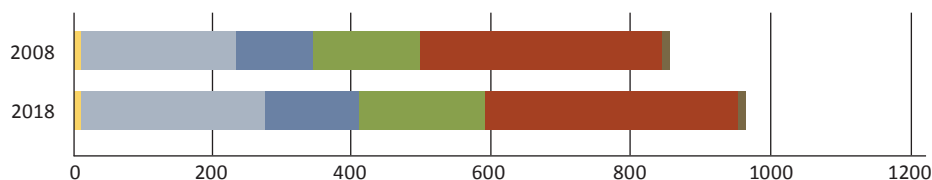
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 15% for those with postsecondary education and 10% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Florida by 2018, there will be about 970,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



GEORGIA

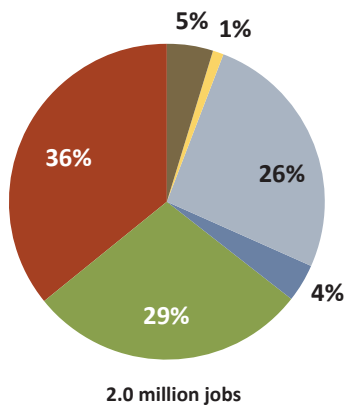
IN GEORGIA, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 26% by 2018.

Hospitality and Tourism will add the most jobs in Georgia through 2018, while Manufacturing will lose jobs.

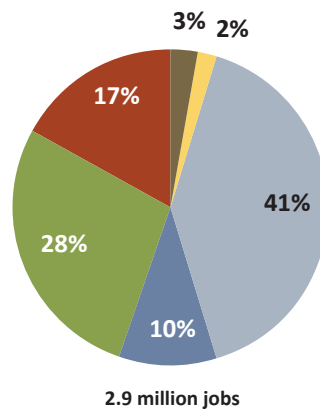
In 2018, 43% of all jobs in Georgia will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	167,800	172,600	4,800	3
Architecture and Construction	298,000	314,500	16,500	6
Arts, A/V Technology, and Communications	58,100	63,000	4,900	8
Business, Management, and Administration	713,800	759,600	45,800	6
Education and Training	306,900	364,100	57,200	19
Finance	120,300	128,400	8,000	7
Government and Public Administration	57,200	63,500	6,200	11
Health Science	280,100	352,400	72,300	26
Hospitality and Tourism	540,200	637,100	96,900	18
Human Services	131,000	163,000	31,900	24
Information Technology	101,100	124,600	23,500	23
Law, Public Safety, Corrections and Security	136,900	157,100	20,200	15
Manufacturing	407,100	394,200	-12,800	-3
Marketing, Sales, and Service	613,100	688,100	75,000	12
Science, Technology, Engineering, and Mathematics	62,100	67,700	5,600	9
Transportation, Distribution, and Logistics	418,800	431,800	13,000	3
TOTAL	4,412,700	4,881,700	469,100	11

High School Jobs in Georgia, 2018



Postsecondary Jobs in Georgia, 2018



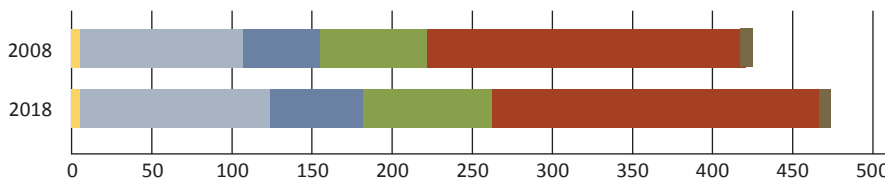
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 11% for those with postsecondary education and 8% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Georgia by 2018, there will be about 471,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	26,100	25,700	-400	-2
Architecture and Construction	53,800	58,100	4,200	8
Arts, A/V Technology, and Communications	10,700	10,400	-200	-2
Business, Management, and Administration	100,800	100,200	-600	-1
Education and Training	45,700	50,900	5,200	11
Finance	12,400	12,900	500	4
Government and Public Administration	9,000	9,300	300	3
Health Science	43,000	47,500	4,400	10
Hospitality and Tourism	125,800	130,300	4,500	4
Human Services	29,500	34,100	4,600	16
Information Technology	9,500	10,900	1,400	15
Law, Public Safety, Corrections and Security	25,800	26,700	1,000	4
Manufacturing	27,700	28,000	400	1
Marketing, Sales, and Service	94,900	101,400	6,500	7
Science, Technology, Engineering, and Mathematics	10,500	11,200	600	6
Transportation, Distribution, and Logistics	52,200	50,900	-1,300	-3
TOTAL	677,500	708,400	30,900	5

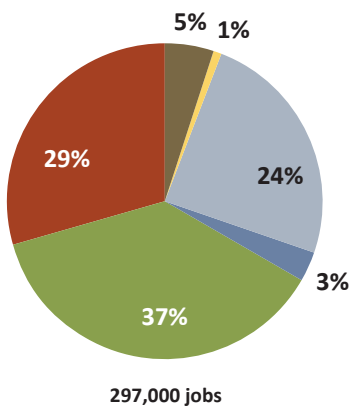
HAWAII

IN HAWAII, the Hospitality and Tourism cluster will be the largest cluster overall, but Human Services will be the fastest growing. Jobs in the Human Services sector will increase by 16% by 2018.

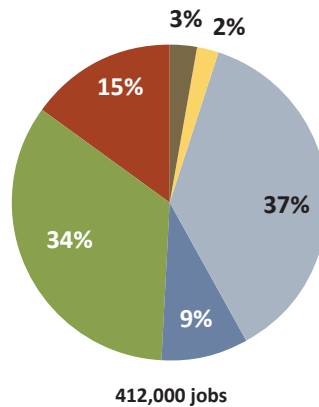
Marketing, Sales, and Service will add the most jobs in Hawaii through 2018, while Agriculture, Food, and Natural Resources, Arts, A/V Technology, and Communications, Business, Management, and Administration, and Transportation, Distribution, and Logistics will lose jobs.

In 2018, 47% of all jobs in Hawaii will be found in the Hospitality and Tourism, Marketing, Sales and Services, and Business, Management and Administration clusters.

High School Jobs in Hawaii, 2018



Postsecondary Jobs in Hawaii, 2018



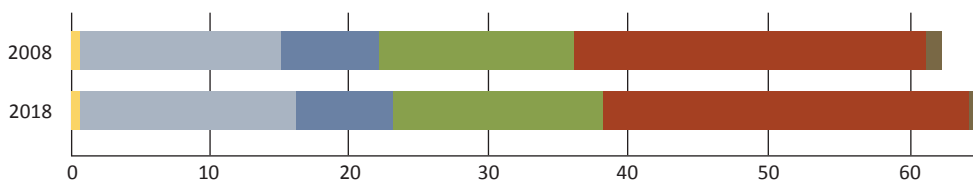
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 4% for those with postsecondary education and 2% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Hawaii by 2018, there will be about 66,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



IDAHO

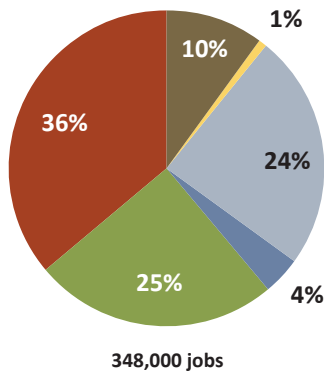
IN IDAHO, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 33% by 2018.

Marketing, Sales, and Service will add the most jobs in Idaho through 2018.

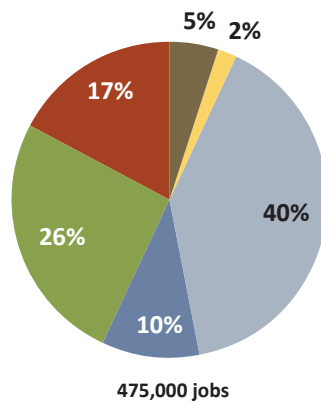
In 2018, 40% of all jobs in Idaho will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	56,200	58,900	2,700	5
Architecture and Construction	64,300	70,500	6,200	10
Arts, A/V Technology, and Communications	8,400	9,600	1,200	15
Business, Management, and Administration	106,300	118,100	11,800	11
Education and Training	42,700	51,000	8,200	19
Finance	17,600	21,500	3,900	22
Government and Public Administration	10,800	12,900	2,100	19
Health Science	48,100	64,100	16,000	33
Hospitality and Tourism	85,700	94,200	8,500	10
Human Services	26,000	32,700	6,600	26
Information Technology	12,400	15,100	2,700	22
Law, Public Safety, Corrections and Security	16,800	19,500	2,700	16
Manufacturing	51,700	53,900	2,200	4
Marketing, Sales, and Service	99,700	117,200	17,500	18
Science, Technology, Engineering, and Mathematics	16,800	17,600	800	5
Transportation, Distribution, and Logistics	61,600	66,200	4,600	7
TOTAL	725,100	822,900	97,800	13

High School Jobs in Idaho, 2018



Postsecondary Jobs in Idaho, 2018



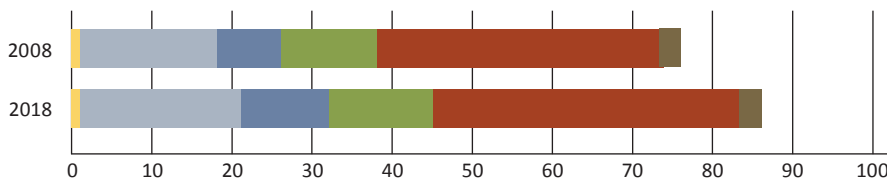
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 16% for those with postsecondary education and 13% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

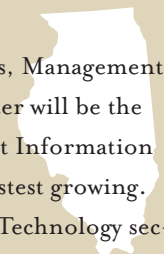
In Idaho by 2018, there will be about 86,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	209,000	210,100	1,100	1
Architecture and Construction	376,200	381,900	5,700	2
Arts, A/V Technology, and Communications	92,600	93,500	900	1
Business, Management, and Administration	1,018,700	1,088,900	70,200	7
Education and Training	432,100	487,700	55,600	13
Finance	210,100	232,400	22,400	11
Government and Public Administration	74,700	79,800	5,100	7
Health Science	455,400	569,700	114,400	25
Hospitality and Tourism	746,400	842,300	95,900	13
Human Services	209,400	254,600	45,200	22
Information Technology	155,900	199,700	43,800	28
Law, Public Safety, Corrections and Security	215,200	246,400	31,200	14
Manufacturing	602,100	571,900	-30,300	-5
Marketing, Sales, and Service	831,700	906,900	75,200	9
Science, Technology, Engineering, and Mathematics	106,400	116,900	10,400	10
Transportation, Distribution, and Logistics	594,400	617,500	23,100	4
TOTAL	6,330,300	6,900,200	569,900	9

ILLINOIS

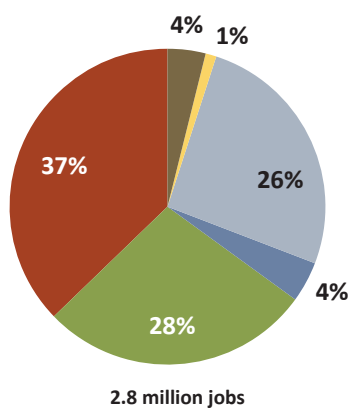


IN ILLINOIS, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 28% by 2018.

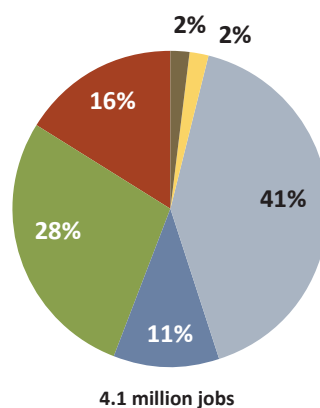
Health Science will add the most jobs in Illinois through 2018, while Manufacturing will lose jobs.

In 2018, 41% of all jobs in Illinois will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Illinois, 2018



Postsecondary Jobs in Illinois, 2018



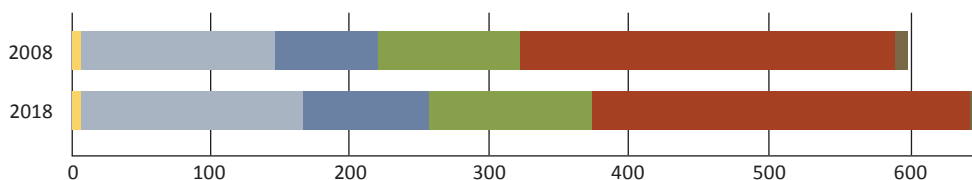
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 11% for those with postsecondary education and 6% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Illinois by 2018, there will be about 650,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



INDIANA

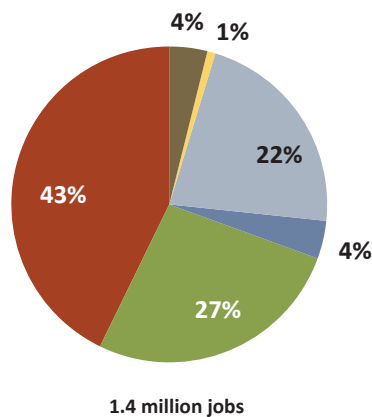
IN INDIANA, the Hospitality and Tourism cluster will be the largest cluster overall, but Information Technology and Health Science will be the fastest growing. Jobs in the Information Technology and Health Science sectors will each increase by 18% by 2018.

Health Science will add the most jobs in Indiana through 2018, while Agriculture, Food, and Natural Resources, Architecture and Construction, Arts, A/V technology, and Communications, and Manufacturing will lose jobs.

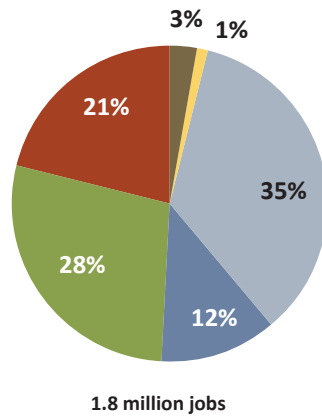
In 2018, 39% of all jobs in Indiana will be found in the Hospitality and Tourism, Business, Management and Administration, and Manufacturing clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	113,700	108,900	-4,700	-4
Architecture and Construction	210,800	205,900	-4,900	-2
Arts, A/V Technology, and Communications	38,300	37,300	-1,000	-3
Business, Management, and Administration	409,000	413,000	4,000	1
Education and Training	196,000	212,000	16,100	8
Finance	71,300	73,500	2,200	3
Government and Public Administration	35,400	36,700	1,300	4
Health Science	235,500	276,900	41,400	18
Hospitality and Tourism	394,600	426,800	32,200	8
Human Services	93,500	106,500	13,000	14
Information Technology	46,600	55,000	8,500	18
Law, Public Safety, Corrections and Security	80,700	87,800	7,100	9
Manufacturing	447,600	408,600	-38,900	-9
Marketing, Sales, and Service	380,200	398,500	18,300	5
Science, Technology, Engineering, and Mathematics	49,700	51,200	1,500	3
Transportation, Distribution, and Logistics	307,600	309,600	2,000	1
TOTAL	3,110,400	3,208,300	98,000	3

High School Jobs in Indiana, 2018



Postsecondary Jobs in Indiana, 2018



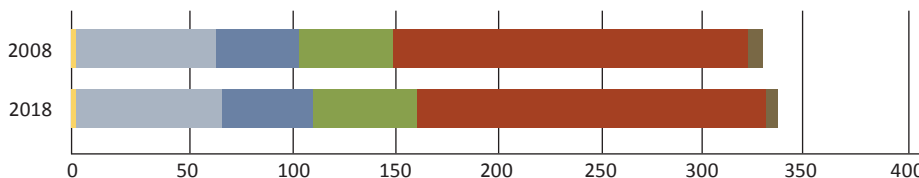
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 5% for those with postsecondary education and 1% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Indiana by 2018, there will be about 337,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	118,900	115,600	-3,400	-3
Architecture and Construction	105,600	112,300	6,700	6
Arts, A/V Technology, and Communications	22,700	23,600	900	4
Business, Management, and Administration	213,000	226,700	13,700	6
Education and Training	113,100	125,400	12,300	11
Finance	48,300	53,900	5,600	12
Government and Public Administration	19,200	19,700	500	3
Health Science	122,000	146,400	24,400	20
Hospitality and Tourism	206,600	238,700	32,000	16
Human Services	60,000	71,200	11,200	19
Information Technology	31,100	37,800	6,700	22
Law, Public Safety, Corrections and Security	32,400	36,500	4,100	13
Manufacturing	175,100	180,000	4,900	3
Marketing, Sales, and Service	220,400	247,700	27,400	12
Science, Technology, Engineering, and Mathematics	22,200	24,700	2,500	11
Transportation, Distribution, and Logistics	148,200	158,200	10,000	7
TOTAL	1,658,800	1,818,300	159,500	10

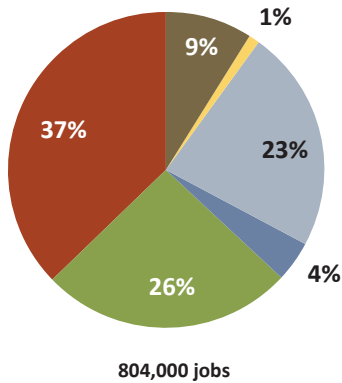
IOWA

IN IOWA, the Marketing, Sales, and Service cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 22% by 2018.

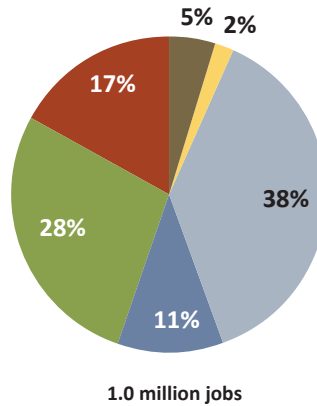
Hospitality and Tourism will add the most jobs in Iowa through 2018.

In 2018, 39% of all jobs in Iowa will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Iowa, 2018



Postsecondary Jobs in Iowa, 2018



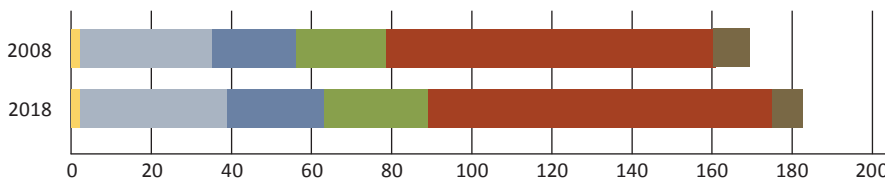
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 11% for those with postsecondary education and 9% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Iowa by 2018, there will be about 183,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



KANSAS

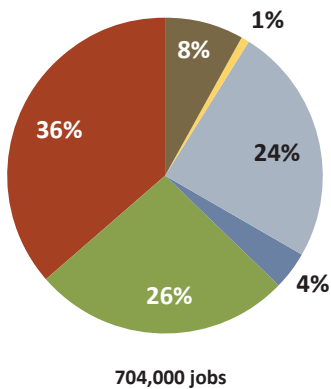
IN KANSAS, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 21% by 2018.

Marketing, Sales, and Service will add the most jobs in Kansas through 2018.

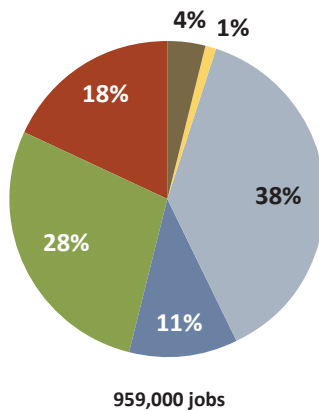
In 2018, 39% of all jobs in Kansas will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	100,000	101,300	1,300	1
Architecture and Construction	102,000	112,500	10,400	10
Arts, A/V Technology, and Communications	19,900	18,900	-1,000	-5
Business, Management, and Administration	221,900	235,300	13,500	6
Education and Training	105,500	120,800	15,300	14
Finance	43,400	47,000	3,600	8
Government and Public Administration	17,900	19,200	1,300	7
Health Science	114,900	134,700	19,800	17
Hospitality and Tourism	179,600	200,900	21,200	12
Human Services	53,900	64,100	10,200	19
Information Technology	31,200	37,800	6,600	21
Law, Public Safety, Corrections and Security	40,400	46,300	5,900	15
Manufacturing	141,600	144,700	3,000	2
Marketing, Sales, and Service	191,600	216,100	24,500	13
Science, Technology, Engineering, and Mathematics	28,600	32,700	4,100	14
Transportation, Distribution, and Logistics	120,100	131,400	11,200	9
TOTAL	1,512,600	1,663,500	150,900	10

High School Jobs in Kansas, 2018



Postsecondary Jobs in Kansas, 2018



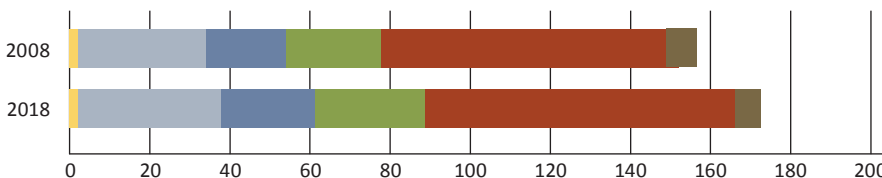
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 11% for those with postsecondary education and 8% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Kansas by 2018, there will be about 172,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	124,000	117,700	-6,300	-5
Architecture and Construction	130,200	130,900	700	1
Arts, A/V Technology, and Communications	23,700	23,700	-100	0
Business, Management, and Administration	272,800	282,500	9,700	4
Education and Training	127,600	148,200	20,600	16
Finance	46,700	49,800	3,100	7
Government and Public Administration	25,200	26,500	1,300	5
Health Science	158,100	190,600	32,500	21
Hospitality and Tourism	240,600	267,900	27,400	11
Human Services	65,200	75,500	10,300	16
Information Technology	31,600	36,900	5,300	17
Law, Public Safety, Corrections and Security	53,300	59,900	6,500	12
Manufacturing	233,500	227,300	-6,200	-3
Marketing, Sales, and Service	233,600	257,000	23,500	10
Science, Technology, Engineering, and Mathematics	25,500	26,700	1,200	5
Transportation, Distribution, and Logistics	197,000	205,900	8,900	5
TOTAL	1,988,700	2,126,900	138,200	7

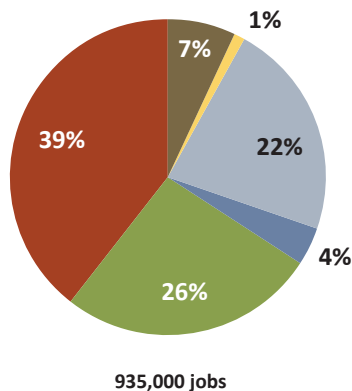
KENTUCKY

IN KENTUCKY, the Business, Management, and Administration cluster will be the largest cluster overall, Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 21% by 2018.

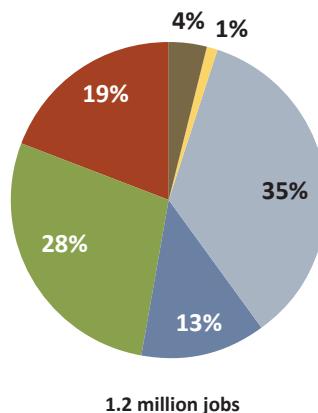
Health Science will add the most jobs in Kentucky through 2018, while Agriculture, Food, and Natural Resources, Manufacturing, and Arts, A/V Technology, and Communications will lose jobs.

In 2018, 38% of all jobs in Kentucky will be found in the Business, Management and Administration, Hospitality and Tourism, and Marketing, Sales and Services clusters.

High School Jobs in Kentucky, 2018



Postsecondary Jobs in Kentucky, 2018



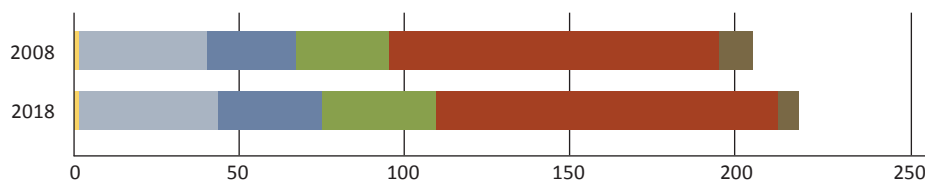
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 8% for those with postsecondary education and 6% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Kentucky by 2018, there will be about 218,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



LOUISIANA

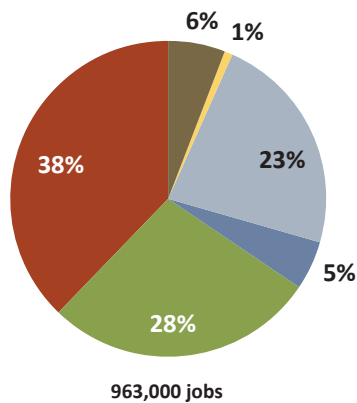
IN LOUISIANA, the Business, Management, and Administration cluster will be the largest cluster overall, but Human Services will be the fastest growing. Jobs in the Human Services sector will increase by 16% by 2018.

Hospitality and Tourism will add the most jobs in Louisiana through 2018, while Manufacturing will lose jobs.

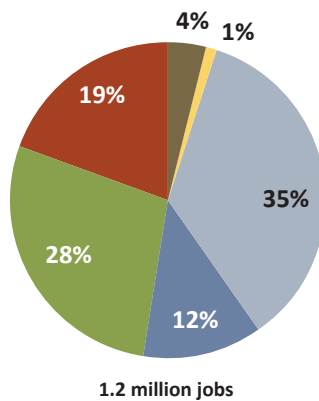
In 2018, 40% of all jobs in Louisiana will be found in the Business, Management and Administration, Hospitality and Tourism and Marketing, Sales and Services clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	104,400	104,400	100	0
Architecture and Construction	180,600	197,400	16,900	9
Arts, A/V Technology, and Communications	21,000	21,200	200	1
Business, Management, and Administration	295,900	301,800	6,000	2
Education and Training	123,100	133,600	10,500	8
Finance	49,300	49,400	100	0
Government and Public Administration	26,200	26,200	0	0
Health Science	168,700	191,900	23,200	14
Hospitality and Tourism	261,500	287,500	26,000	10
Human Services	73,700	85,800	12,100	16
Information Technology	18,600	20,700	2,000	11
Law, Public Safety, Corrections and Security	76,000	83,000	7,000	9
Manufacturing	166,400	165,200	-1,200	-1
Marketing, Sales, and Service	262,000	278,500	16,500	6
Science, Technology, Engineering, and Mathematics	32,000	34,200	2,200	7
Transportation, Distribution, and Logistics	200,400	205,700	5,300	3
TOTAL	2,059,700	2,186,400	126,700	6

High School Jobs in Louisiana, 2018



Postsecondary Jobs in Louisiana, 2018



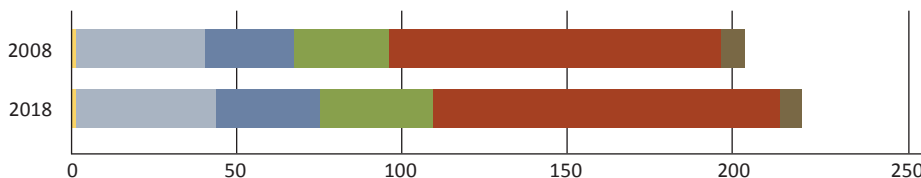
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 5% for those with postsecondary education and 3% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Louisiana by 2018, there will be about 236,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	31,000	29,600	-1,400	-5
Architecture and Construction	52,700	52,500	-200	0
Arts, A/V Technology, and Communications	8,800	8,500	-300	-3
Business, Management, and Administration	91,900	91,500	-400	0
Education and Training	49,700	51,900	2,100	4
Finance	16,800	17,200	400	2
Government and Public Administration	10,100	10,100	0	0
Health Science	58,900	68,300	9,500	16
Hospitality and Tourism	83,600	88,600	5,000	6
Human Services	29,300	33,000	3,800	13
Information Technology	9,100	10,500	1,400	15
Law, Public Safety, Corrections and Security	16,000	16,800	800	5
Manufacturing	51,900	48,200	-3,700	-7
Marketing, Sales, and Service	85,000	87,200	2,200	3
Science, Technology, Engineering, and Mathematics	9,200	9,300	100	1
Transportation, Distribution, and Logistics	53,700	52,200	-1,500	-3
TOTAL	657,700	675,500	17,800	3

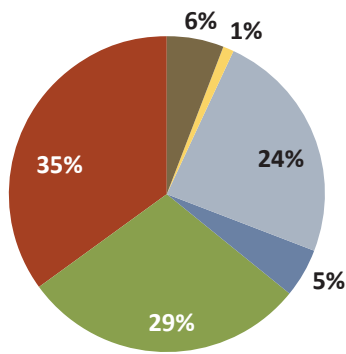
MAINE

IN MAINE, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 16% by 2018.

Health Science will add the most jobs in Maine through 2018, while Agriculture, Food, and Natural Resources, Arts, A/V Technology, and Communications, Business, Management, and Administration, Manufacturing, and Transportation, Distribution, and Logistics will lose jobs.

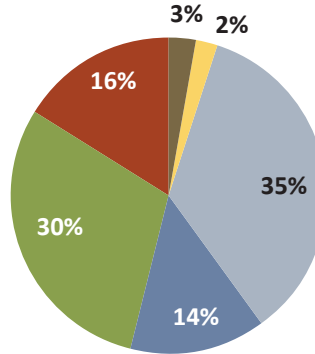
In 2018, 40% of all jobs in Maine will be found in the Business, Management and Administration, Hospitality and Tourism, and Marketing, Sales and Services clusters.

High School Jobs in Maine, 2018



283,000 jobs

Postsecondary Jobs in Maine, 2018



393,000 jobs

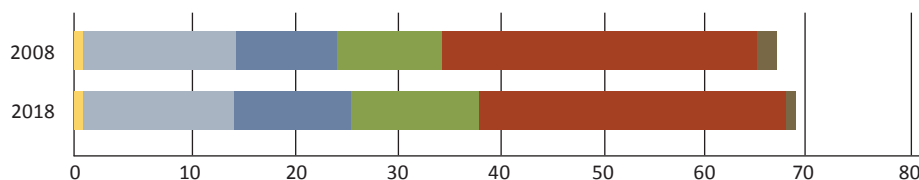
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 3% for those with postsecondary education and will not grow for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Maine by 2018, there will be about 68,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



MARYLAND

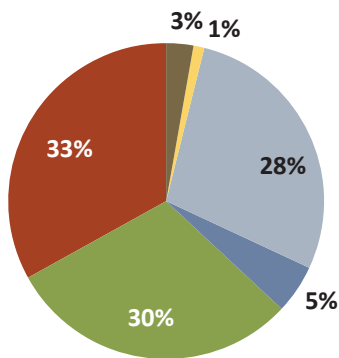
IN MARYLAND, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 23% by 2018.

Health Science will add the most jobs in Maryland through 2018, while Manufacturing will lose jobs.

In 2018, 42% of all jobs in Maryland will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

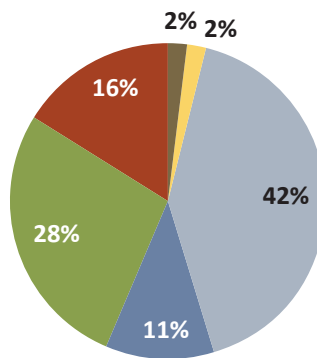
CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	82,900	85,400	2,600	3
Architecture and Construction	222,900	260,100	37,200	17
Arts, A/V Technology, and Communications	44,900	46,100	1,300	3
Business, Management, and Administration	464,000	495,800	31,800	7
Education and Training	197,900	227,700	29,800	15
Finance	83,500	92,000	8,500	10
Government and Public Administration	34,500	37,600	3,100	9
Health Science	218,300	266,700	48,400	22
Hospitality and Tourism	337,600	382,900	45,300	13
Human Services	105,900	128,800	22,900	22
Information Technology	103,700	127,900	24,200	23
Law, Public Safety, Corrections and Security	104,700	119,900	15,200	15
Manufacturing	140,100	137,200	-2,900	-2
Marketing, Sales, and Service	390,900	428,300	37,400	10
Science, Technology, Engineering, and Mathematics	81,800	90,900	9,200	11
Transportation, Distribution, and Logistics	196,400	204,300	7,900	4
TOTAL	2,809,800	3,131,600	321,800	11

High School Jobs in Maryland, 2018



1.2 million jobs

Postsecondary Jobs in Maryland, 2018



1.9 million jobs

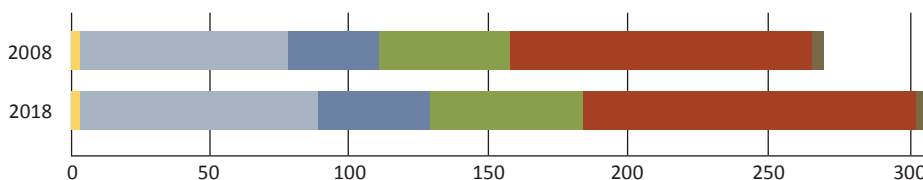
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 11% for those with postsecondary education and 6% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

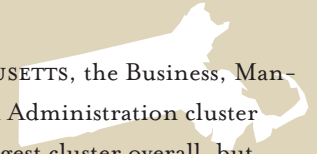
In Maryland by 2018, there will be about 305,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	83,200	86,200	3,100	4
Architecture and Construction	201,900	190,500	-11,300	-6
Arts, A/V Technology, and Communications	59,200	61,300	2,100	4
Business, Management, and Administration	571,300	582,300	11,000	2
Education and Training	259,000	278,000	18,900	7
Finance	112,600	117,200	4,600	4
Government and Public Administration	46,600	47,200	600	1
Health Science	327,200	372,100	44,900	14
Hospitality and Tourism	437,600	460,900	23,300	5
Human Services	149,500	166,800	17,300	12
Information Technology	130,000	159,400	29,400	23
Law, Public Safety, Corrections and Security	111,900	120,000	8,100	7
Manufacturing	221,500	210,000	-11,500	-5
Marketing, Sales, and Service	458,200	483,700	25,500	6
Science, Technology, Engineering, and Mathematics	101,400	110,900	9,600	9
Transportation, Distribution, and Logistics	221,700	221,300	-400	0
TOTAL	3,492,700	3,668,000	175,300	5

MASSACHUSETTS

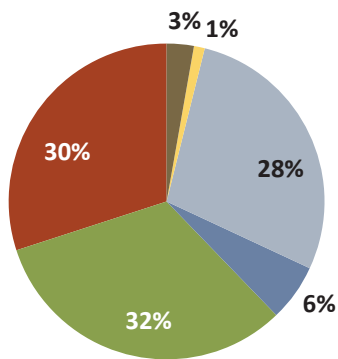


IN MASSACHUSETTS, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 23% by 2018.

Health Science will add the most jobs in Massachusetts through 2018, while Architecture and Construction and Manufacturing will lose jobs.

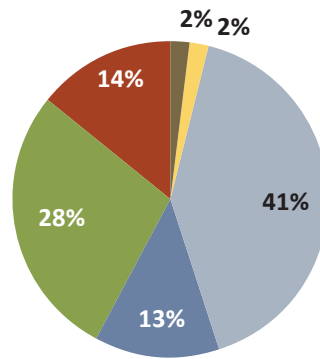
In 2018, 42% of all jobs in Massachusetts will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Massachusetts, 2018



1.3 million jobs

Postsecondary Jobs in Massachusetts, 2018



2.3 million jobs

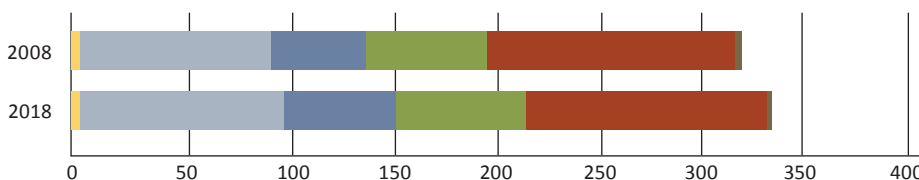
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 7% for those with postsecondary education and 2% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Massachusetts by 2018, there will be about 333,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



MICHIGAN



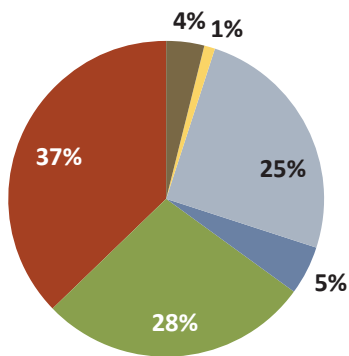
IN MICHIGAN, the Marketing, Sales, and Service cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 17% by 2018.

Health Science will add the most jobs in Michigan through 2018, while Agriculture, Food and Natural Resources, Architecture and Construction, Manufacturing, and Transportation, Distribution, and Logistics will lose jobs.

In 2018, 40% of all jobs in Michigan will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

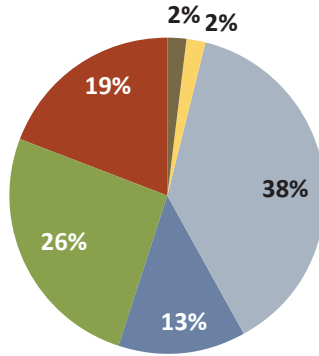
CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	142,800	140,800	-2,000	-1
Architecture and Construction	250,600	242,600	-8,000	-3
Arts, A/V Technology, and Communications	59,100	59,500	400	1
Business, Management, and Administration	606,500	607,200	700	0
Education and Training	284,200	300,900	16,800	6
Finance	113,600	119,900	6,400	6
Government and Public Administration	53,600	54,600	1,100	2
Health Science	382,600	446,600	64,000	17
Hospitality and Tourism	553,400	585,000	31,600	6
Human Services	155,600	177,400	21,800	14
Information Technology	97,400	111,000	13,600	14
Law, Public Safety, Corrections and Security	113,500	120,000	6,500	6
Manufacturing	510,000	473,100	-36,900	-7
Marketing, Sales, and Service	608,400	641,200	32,800	5
Science, Technology, Engineering, and Mathematics	137,200	137,300	100	0
Transportation, Distribution, and Logistics	364,900	357,500	-7,300	-2
TOTAL	4,433,200	4,574,600	141,400	3

High School Jobs in Michigan, 2018



1.9 million jobs

Postsecondary Jobs in Michigan, 2018



2.7 million jobs

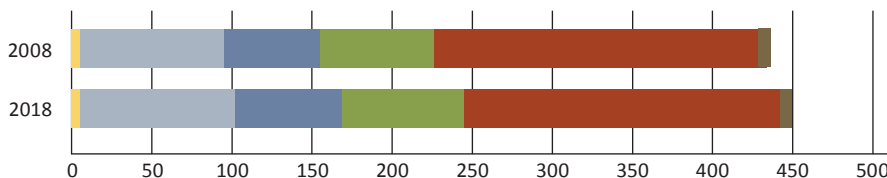
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 5% for those with postsecondary education and 2% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Michigan by 2018, there will be about 451,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	124,600	115,300	-9,300	-7
Architecture and Construction	171,700	171,400	-300	0
Arts, A/V Technology, and Communications	50,900	51,400	500	1
Business, Management, and Administration	463,300	484,600	21,300	5
Education and Training	175,200	190,900	15,600	9
Finance	86,300	95,300	9,000	10
Government and Public Administration	37,100	39,000	1,800	5
Health Science	242,600	302,400	59,800	25
Hospitality and Tourism	352,900	377,500	24,600	7
Human Services	137,400	173,800	36,400	26
Information Technology	85,900	101,700	15,800	18
Law, Public Safety, Corrections and Security	74,300	79,900	5,500	7
Manufacturing	258,300	240,400	-18,000	-7
Marketing, Sales, and Service	388,200	411,000	22,700	6
Science, Technology, Engineering, and Mathematics	60,100	64,100	3,900	7
Transportation, Distribution, and Logistics	219,800	212,100	-7,700	-3
TOTAL	2,928,800	3,110,500	181,700	6

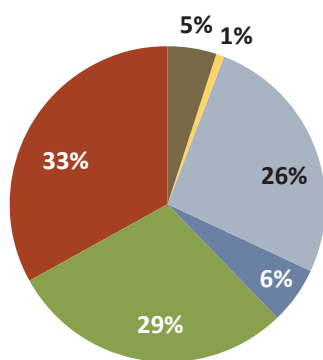
MINNESOTA

IN MINNESOTA, the Business, Management, and Administration cluster will be the largest cluster overall, but Human Services will be the fastest growing. Jobs in the Human Services sector will increase by 26% by 2018.

Health Science will add the most jobs in Minnesota through 2018, while Agriculture, Food, and Natural Resources, Architecture and Construction, Manufacturing, and Transportation, Distribution, and Logistics will lose jobs.

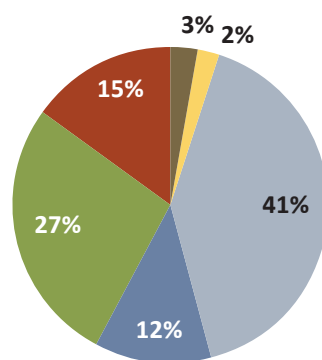
In 2018, 41% of all jobs in Minnesota will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Minnesota, 2018



1.2 million jobs

Postsecondary Jobs in Minnesota, 2018



1.9 million jobs

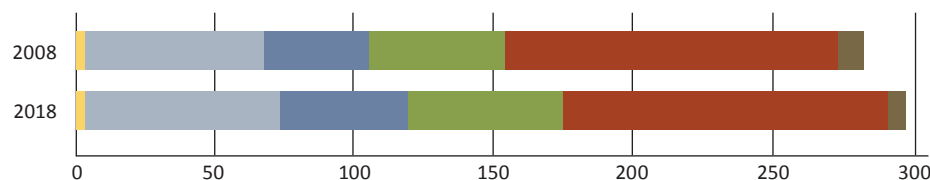
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 8% for those with postsecondary education and 3% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Minnesota by 2018, there will be about 298,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



MISSISSIPPI

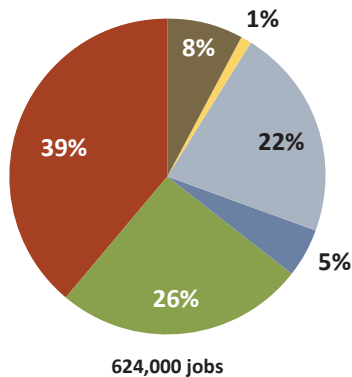
In Mississippi, the Hospitality and Tourism cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 26% by 2018.

Marketing, Sales, and Service will add the most jobs in Mississippi through 2018.

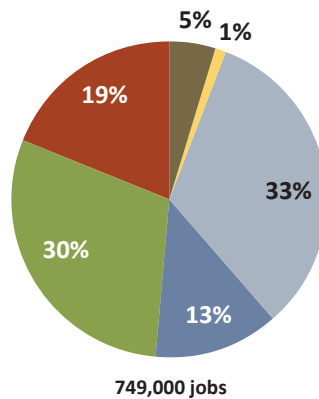
In 2018, 38% of all jobs in Mississippi will be found in the Business, Management and Administration, Hospitality and Tourism, and Marketing, Sales and Services clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	82,900	84,800	1,900	2
Architecture and Construction	89,800	100,600	10,800	12
Arts, A/V Technology, and Communications	10,600	11,800	1,200	11
Business, Management, and Administration	164,800	175,600	10,800	7
Education and Training	86,900	95,500	8,700	10
Finance	25,900	29,500	3,600	14
Government and Public Administration	17,500	19,000	1,500	8
Health Science	102,900	122,100	19,200	19
Hospitality and Tourism	162,300	177,000	14,700	9
Human Services	36,200	42,800	6,600	18
Information Technology	11,200	14,100	2,900	26
Law, Public Safety, Corrections and Security	44,500	49,500	5,100	11
Manufacturing	135,100	145,500	10,400	8
Marketing, Sales, and Service	141,900	163,100	21,200	15
Science, Technology, Engineering, and Mathematics	17,900	21,000	3,100	17
Transportation, Distribution, and Logistics	113,700	121,100	7,400	6
TOTAL	1,244,000	1,373,100	129,000	10

High School Jobs in Mississippi, 2018



Postsecondary Jobs in Mississippi, 2018



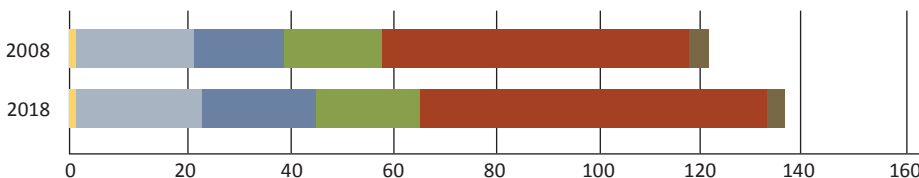
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 12% for those with postsecondary education and 10% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Mississippi by 2018, there will be about 136,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	131,600	120,400	-11,200	-9
Architecture and Construction	209,500	219,500	10,100	5
Arts, A/V Technology, and Communications	44,200	43,400	-900	-2
Business, Management, and Administration	401,400	405,700	4,300	1
Education and Training	188,800	204,900	16,100	9
Finance	90,600	98,700	8,100	9
Government and Public Administration	39,400	40,400	1,000	3
Health Science	238,700	268,000	29,300	12
Hospitality and Tourism	388,900	406,200	17,400	4
Human Services	106,700	120,400	13,700	13
Information Technology	66,200	77,000	10,700	16
Law, Public Safety, Corrections and Security	84,200	90,900	6,700	8
Manufacturing	265,200	256,500	-8,600	-3
Marketing, Sales, and Service	430,100	454,300	24,200	6
Science, Technology, Engineering, and Mathematics	43,800	46,400	2,500	6
Transportation, Distribution, and Logistics	247,200	246,300	-800	0
TOTAL	2,976,400	3,099,000	122,500	4

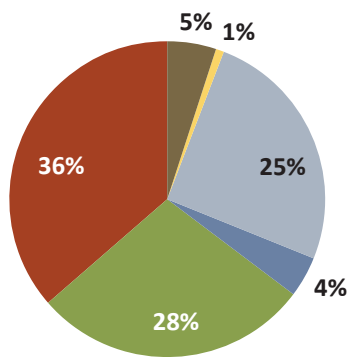
MISSOURI

IN MISSOURI, the Marketing, Sales, and Service cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 16% by 2018.

Health Science will add the most jobs in Missouri through 2018, while Agriculture, Food, and Natural Resources, Arts, A/V Technology, and Communications, and Manufacturing will lose jobs.

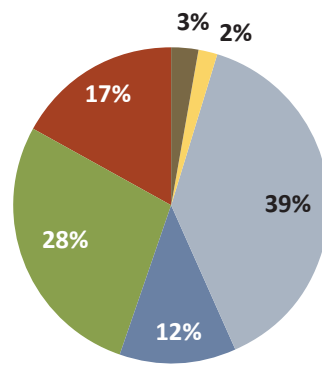
In 2018, 41% of all jobs in Missouri will be found in the Marketing, Sales and Services, Hospitality and Tourism, and Business, Management and Administration clusters.

High School Jobs in Missouri, 2018



1.3 million jobs

Postsecondary Jobs in Missouri, 2018



1.8 million jobs

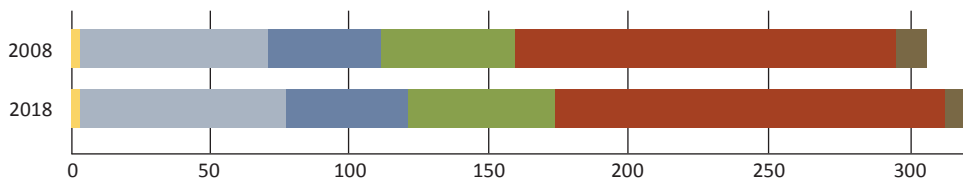
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 6% for those with postsecondary education and 3% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Missouri by 2018, there will be about 321,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



MONTANA

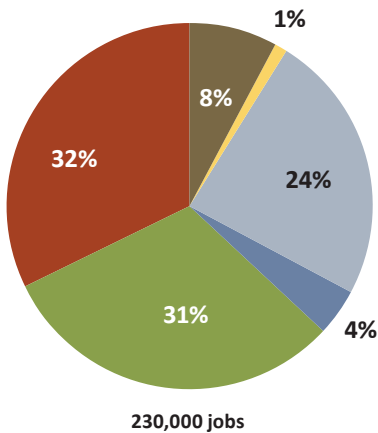
IN MONTANA, the Hospitality and Tourism cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 22% by 2018.

Hospitality and Tourism will add the most jobs in Montana through 2018, while Agriculture, Food, and Natural Resources and Architecture and Construction will lose jobs.

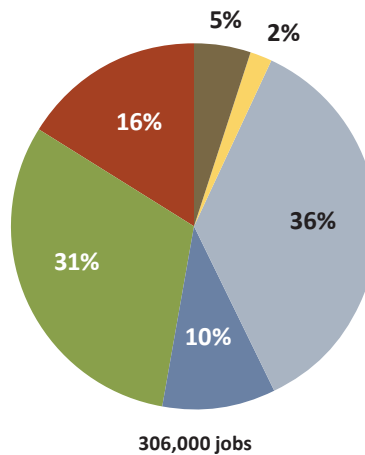
In 2018, 43% of all jobs in Montana will be found in the Hospitality and Tourism, Business, Management and Administration, and Marketing, Sales and Services clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	35,800	34,600	-1,100	-3
Architecture and Construction	47,300	45,800	-1,500	-3
Arts, A/V Technology, and Communications	7,000	7,500	500	7
Business, Management, and Administration	76,200	78,900	2,700	4
Education and Training	33,000	36,100	3,100	9
Finance	12,100	13,200	1,100	9
Government and Public Administration	6,900	7,600	700	10
Health Science	34,800	39,800	5,000	15
Hospitality and Tourism	75,200	83,900	8,700	12
Human Services	20,600	24,300	3,700	18
Information Technology	6,000	7,400	1,300	22
Law, Public Safety, Corrections and Security	13,200	14,500	1,300	10
Manufacturing	24,800	25,400	600	3
Marketing, Sales, and Service	60,400	66,500	6,100	10
Science, Technology, Engineering, and Mathematics	8,800	10,100	1,300	15
Transportation, Distribution, and Logistics	39,500	40,300	800	2
TOTAL	501,700	536,000	34,300	7

High School Jobs in Montana, 2018



Postsecondary Jobs in Montana, 2018



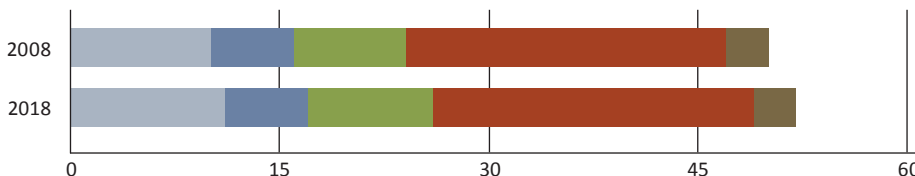
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 8% for those with postsecondary education and 6% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Montana by 2018, there will be about 53,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOB IN 2008	JOB IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	68,700	64,700	-4,000	-6
Architecture and Construction	68,700	73,700	5,000	7
Arts, A/V Technology, and Communications	14,300	15,100	800	5
Business, Management, and Administration	139,500	145,800	6,300	4
Education and Training	63,900	71,300	7,300	11
Finance	35,700	39,200	3,600	10
Government and Public Administration	14,800	15,500	700	5
Health Science	83,200	99,100	15,900	19
Hospitality and Tourism	126,800	143,200	16,400	13
Human Services	33,900	39,300	5,300	16
Information Technology	23,100	27,300	4,200	18
Law, Public Safety, Corrections and Security	21,100	23,000	1,900	9
Manufacturing	84,800	82,700	-2,000	-2
Marketing, Sales, and Service	139,900	153,200	13,300	9
Science, Technology, Engineering, and Mathematics	12,500	13,600	1,000	8
Transportation, Distribution, and Logistics	95,100	102,000	6,900	7
TOTAL	1,026,000	1,108,600	82,500	8

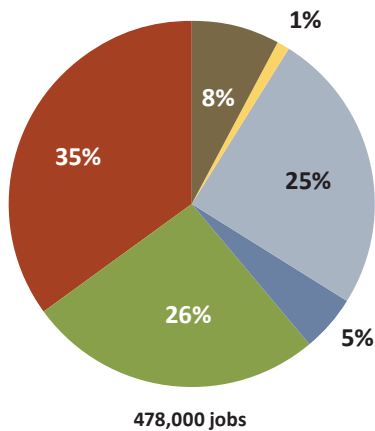
NEBRASKA

IN NEBRASKA, the Marketing, Sales, and Service cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 19% by 2018.

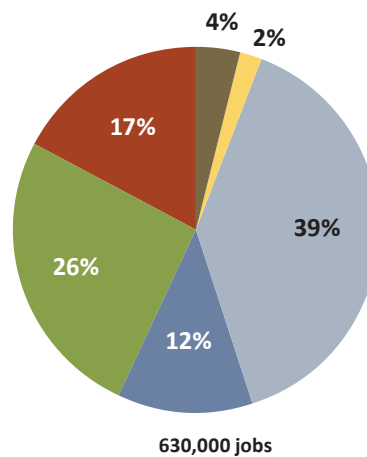
Hospitality and Tourism will add the most jobs in Nebraska through 2018, while Agriculture, Food, and Natural Resources and Manufacturing will lose jobs.

In 2018, 40% of all jobs in Nebraska will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Nebraska, 2018



Postsecondary Jobs in Nebraska, 2018



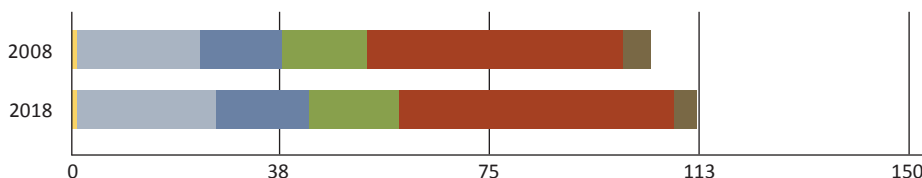
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 9% for those with postsecondary education and 7% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Nebraska by 2018, there will be about 112,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



NEVADA

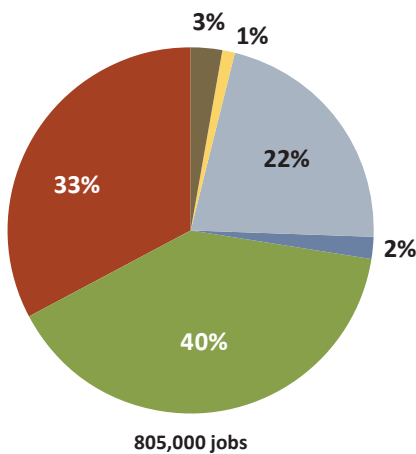
In NEVADA, the Hospitality and Tourism cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 46% by 2018.

Hospitality and Tourism will add the most jobs in Nevada through 2018.

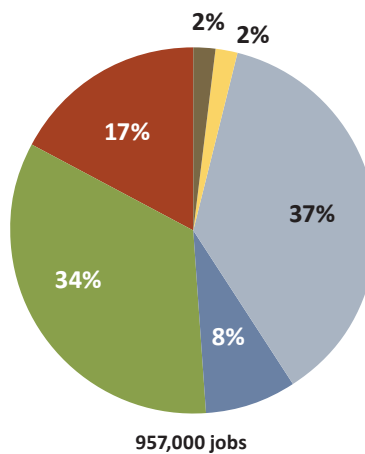
In 2018, 51% of all jobs in Nevada will be found in the Hospitality and Tourism, Marketing, Sales and Services, and Business, Management and Administration clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	37,400	46,900	9,500	25
Architecture and Construction	142,900	166,900	24,000	17
Arts, A/V Technology, and Communications	20,500	25,100	4,600	22
Business, Management, and Administration	187,500	231,900	44,400	24
Education and Training	59,000	81,300	22,300	38
Finance	31,900	40,700	8,800	28
Government and Public Administration	15,500	20,200	4,700	30
Health Science	63,400	92,200	28,800	462
Hospitality and Tourism	316,800	425,500	108,700	34
Human Services	37,500	52,400	14,900	40
Information Technology	15,700	22,100	6,400	41
Law, Public Safety, Corrections and Security	48,300	64,400	16,100	33
Manufacturing	66,900	83,400	16,400	25
Marketing, Sales, and Service	180,100	233,700	53,600	30
Science, Technology, Engineering, and Mathematics	15,800	20,300	4,500	29
Transportation, Distribution, and Logistics	121,700	155,500	33,900	28
TOTAL	1,360,900	1,762,500	401,700	30

High School Jobs in Nevada, 2018



Postsecondary Jobs in Nevada, 2018



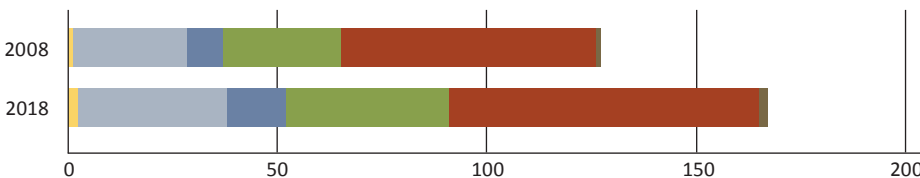
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 28% for those with postsecondary education and 25% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Nevada by 2018, there will be about 166,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	23,500	25,100	1,500	7
Architecture and Construction	46,500	49,900	3,500	7
Arts, A/V Technology, and Communications	8,900	9,200	200	3
Business, Management, and Administration	116,800	124,700	7,900	7
Education and Training	53,700	63,700	10,000	19
Finance	18,600	21,300	2,700	14
Government and Public Administration	8,200	8,800	600	8
Health Science	50,400	64,800	14,500	29
Hospitality and Tourism	82,800	94,200	11,400	14
Human Services	23,900	29,300	5,400	23
Information Technology	20,100	24,800	4,700	23
Law, Public Safety, Corrections and Security	16,500	19,000	2,500	15
Manufacturing	59,700	56,800	-2,900	-5
Marketing, Sales, and Service	103,400	113,600	10,100	10
Science, Technology, Engineering, and Mathematics	14,300	15,500	1,100	8
Transportation, Distribution, and Logistics	46,600	48,400	1,800	4
TOTAL	694,100	769,100	75,000	11

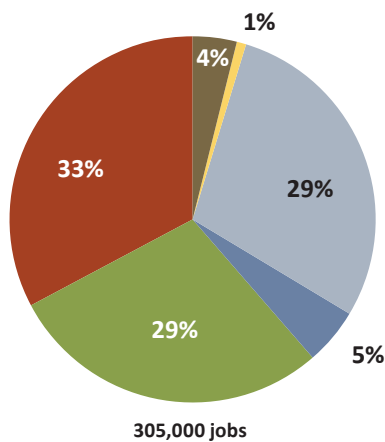
NEW HAMPSHIRE

IN NEW HAMPSHIRE, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 29% by 2018.

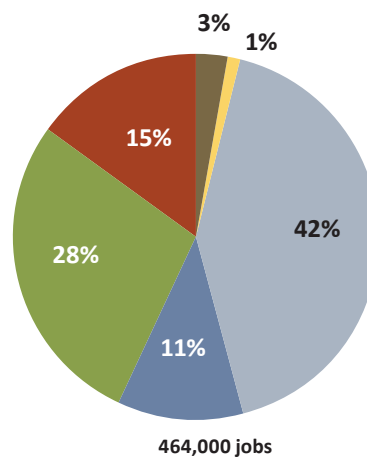
Health Science will add the most jobs in New Hampshire through 2018, while Manufacturing will lose jobs.

In 2018, 43% of all jobs in New Hampshire will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in New Hampshire, 2018



Postsecondary Jobs in New Hampshire, 2018



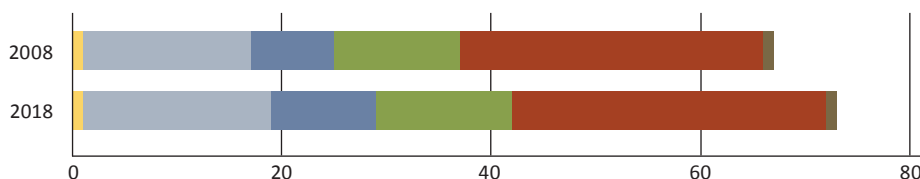
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 11% for those with postsecondary education and 7% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In New Hampshire by 2018, there will be about 74,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



NEW JERSEY

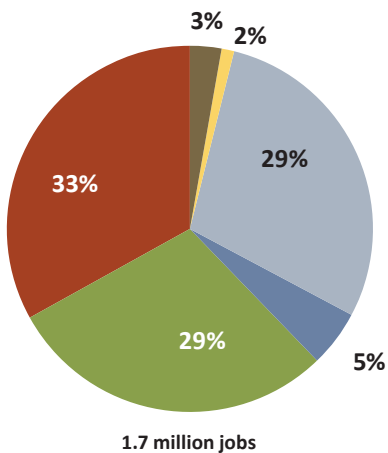
IN NEW JERSEY, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 17% by 2018.

Health Science will add the most jobs in New Jersey through 2018, while Manufacturing and Transportation, Distribution, and Logistics will lose jobs.

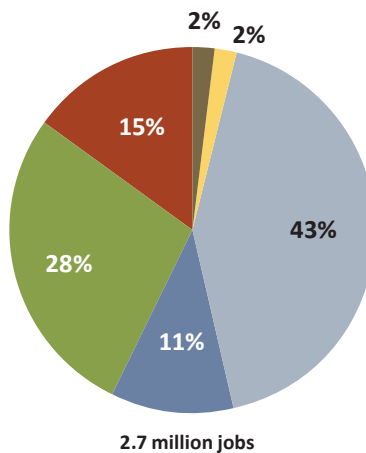
In 2018, 42% of all jobs in New Jersey will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	109,700	112,900	3,200	3
Architecture and Construction	245,200	252,600	7,400	3
Arts, A/V Technology, and Communications	61,300	61,300	0	0
Business, Management, and Administration	722,800	727,300	4,600	1
Education and Training	303,800	327,900	24,100	8
Finance	135,200	147,300	12,100	9
Government and Public Administration	65,400	66,800	1,400	2
Health Science	327,500	371,900	44,500	14
Hospitality and Tourism	463,200	494,300	31,100	7
Human Services	169,500	196,800	27,300	16
Information Technology	138,000	160,900	22,900	17
Law, Public Safety, Corrections and Security	158,000	171,500	13,500	9
Manufacturing	282,800	255,900	-26,900	-10
Marketing, Sales, and Service	598,600	629,900	31,300	5
Science, Technology, Engineering, and Mathematics	82,700	84,900	2,200	3
Transportation, Distribution, and Logistics	385,900	381,300	-4,600	-1
TOTAL	4,249,600	4,443,800	194,200	5

High School Jobs in New Jersey, 2018



Postsecondary Jobs in New Jersey, 2018



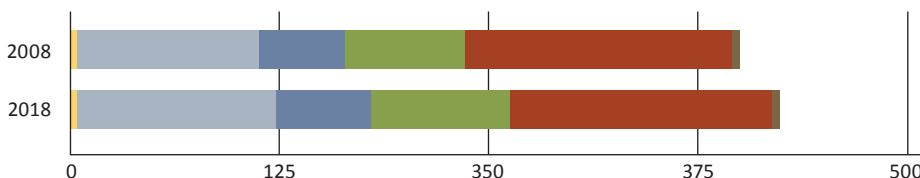
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 6% for those with postsecondary education and 1% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In New Jersey by 2018, there will be about 425,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	52,700	55,500	2,800	5
Architecture and Construction	83,800	87,600	3,800	4
Arts, A/V Technology, and Communications	11,500	11,900	400	3
Business, Management, and Administration	137,800	145,000	7,100	5
Education and Training	67,000	77,800	10,800	16
Finance	19,100	21,300	2,200	11
Government and Public Administration	10,900	11,800	900	8
Health Science	68,700	80,600	11,900	17
Hospitality and Tourism	126,700	145,400	18,700	15
Human Services	38,400	48,400	10,000	26
Information Technology	13,500	16,100	2,600	19
Law, Public Safety, Corrections and Security	29,300	33,900	4,600	16
Manufacturing	48,600	51,000	2,500	5
Marketing, Sales, and Service	111,600	130,400	18,800	17
Science, Technology, Engineering, and Mathematics	25,400	26,100	700	3
Transportation, Distribution, and Logistics	59,500	64,000	4,500	8
TOTAL	904,600	1,006,700	102,200	11

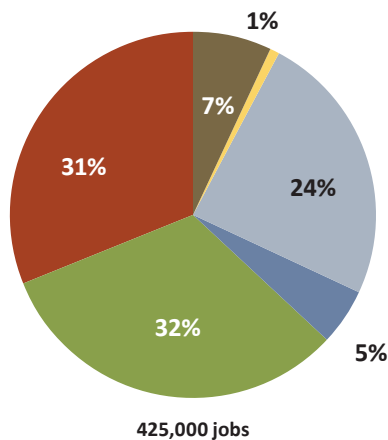
NEW MEXICO

IN NEW MEXICO, the Hospitality and Tourism cluster will be the largest cluster overall, but Human Services will be the fastest growing. Jobs in the Human Services sector will increase by 26% by 2018.

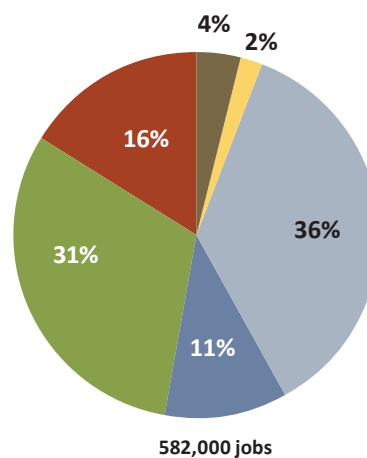
Marketing, Sales, and Service will add the most jobs in New Mexico through 2018.

In 2018, 42% of all jobs in New Mexico will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in New Mexico, 2018



Postsecondary Jobs in New Mexico, 2018



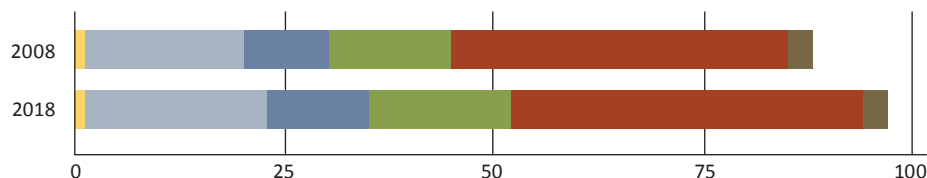
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 12% for those with postsecondary education and 10% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In New Mexico by 2018, there will be about 98,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



NEW YORK

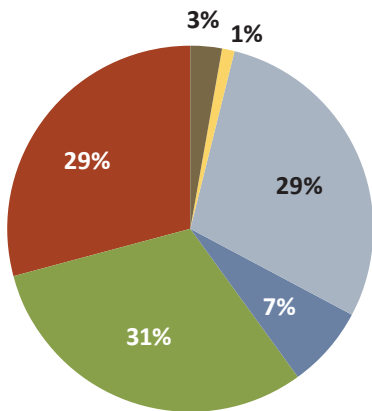
IN NEW YORK, the Business, Management, and Administration cluster will be the largest cluster overall, but Human Services will be the fastest growing. Jobs in the Human Services sector will increase by 18% by 2018.

Health Science will add the most jobs in New York through 2018, while Manufacturing and Transportation, Distribution, and Logistics will lose jobs.

In 2018, 41% of all jobs in New York will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

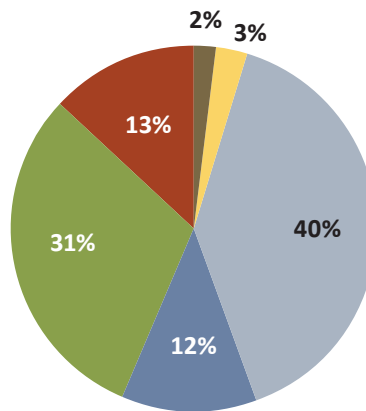
CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	215,200	214,800	-400	0
Architecture and Construction	513,300	560,800	47,400	9
Arts, A/V Technology, and Communications	199,300	206,200	6,900	3
Business, Management, and Administration	1,603,700	1,629,700	26,000	2
Education and Training	763,900	816,300	52,400	7
Finance	322,100	344,500	22,400	7
Government and Public Administration	138,800	140,800	2,000	1
Health Science	819,900	955,400	135,500	17
Hospitality and Tourism	1,044,700	1,101,500	56,900	5
Human Services	454,200	536,900	82,700	18
Information Technology	234,000	265,800	31,800	14
Law, Public Safety, Corrections and Security	399,600	430,300	30,600	8
Manufacturing	541,600	489,500	-52,000	-10
Marketing, Sales, and Service	1,193,100	1,259,100	65,900	6
Science, Technology, Engineering, and Mathematics	149,800	154,900	5,000	3
Transportation, Distribution, and Logistics	614,800	604,400	-10,400	-2
TOTAL	9,208,100	9,710,800	502,700	5

High School Jobs in New York, 2018



3.6 million jobs

Postsecondary Jobs in New York, 2018



6.1 million jobs

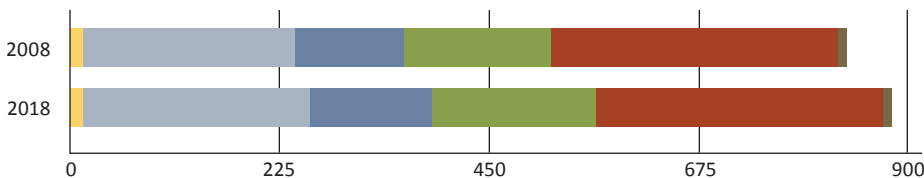
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 2% for those with postsecondary education and 6% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In New York by 2018, there will be about 880,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



NORTH CAROLINA

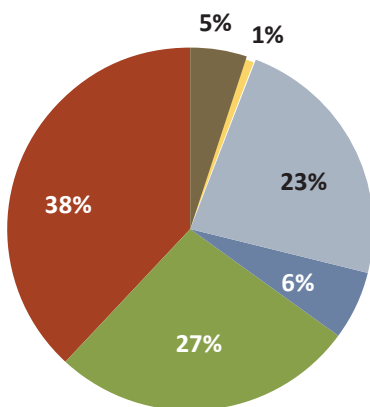
CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	186,400	189,300	2,900	2
Architecture and Construction	332,800	359,400	26,600	8
Arts, A/V Technology, and Communications	53,000	55,600	2,700	5
Business, Management, and Administration	620,900	663,200	42,300	7
Education and Training	302,400	357,100	54,600	18
Finance	110,000	121,600	11,600	11
Government and Public Administration	52,300	58,600	6,200	12
Health Science	362,500	460,300	97,800	27
Hospitality and Tourism	542,900	620,100	77,200	14
Human Services	143,500	176,700	33,200	23
Information Technology	96,500	116,500	19,900	21
Law, Public Safety, Corrections and Security	126,500	149,000	22,500	18
Manufacturing	465,700	453,600	-12,100	-3
Marketing, Sales, and Service	559,300	632,000	72,700	13
Science, Technology, Engineering, and Mathematics	74,300	83,400	9,100	12
Transportation, Distribution, and Logistics	379,600	395,500	15,900	4
TOTAL	4,408,900	4,891,800	483,000	11

IN NORTH CAROLINA, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 27% by 2018.

Health Science will add the most jobs in North Carolina through 2018, while Manufacturing will lose jobs.

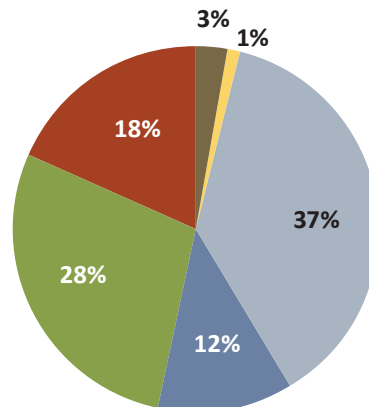
In 2018, 39% of all jobs in North Carolina will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in North Carolina, 2018



2.1 million jobs

Postsecondary Jobs in North Carolina, 2018



2.8 million jobs

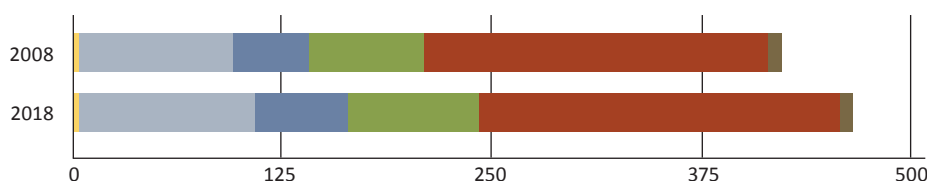
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 11% for those with postsecondary education and 9% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In North Carolina by 2018, there will be about 466,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



NORTH DAKOTA

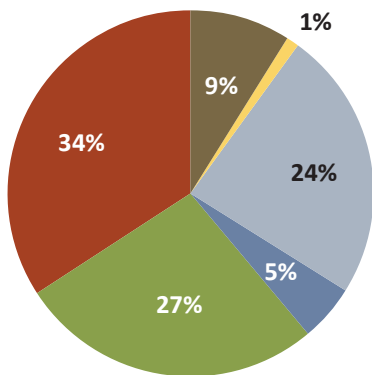
IN NORTH DAKOTA, the Hospitality and Tourism cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 27% by 2018.

Marketing, Sales, and Service will add the most jobs in North Dakota through 2018, while Agriculture, Food, and Natural Resources will lose jobs.

In 2018, 41% of all jobs in North Dakota will be found in the Hospitality and Tourism, Marketing, Sales and Services, and Business, Management and Administration clusters.

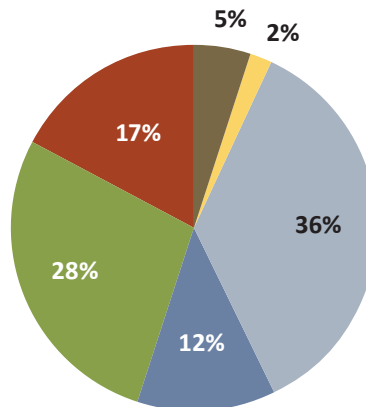
CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	32,400	29,500	-2,900	-9
Architecture and Construction	30,100	32,400	2,300	8
Arts, A/V Technology, and Communications	5,500	5,600	100	2
Business, Management, and Administration	50,900	52,100	1,200	2
Education and Training	25,200	26,600	1,400	6
Finance	10,900	11,200	300	2
Government and Public Administration	4,800	4,800	0	1
Health Science	32,200	35,500	3,300	10
Hospitality and Tourism	55,100	59,600	4,500	8
Human Services	15,100	16,100	1,000	6
Information Technology	4,900	6,300	1,300	27
Law, Public Safety, Corrections and Security	7,100	7,400	300	4
Manufacturing	26,200	27,600	1,400	5
Marketing, Sales, and Service	52,900	58,400	5,500	10
Science, Technology, Engineering, and Mathematics	5,700	6,500	900	15
Transportation, Distribution, and Logistics	33,000	33,500	500	2
TOTAL	391,900	413,000	21,100	5

High School Jobs in North Dakota, 2018



182,000 jobs

Postsecondary Jobs in North Dakota, 2018



231,000 jobs

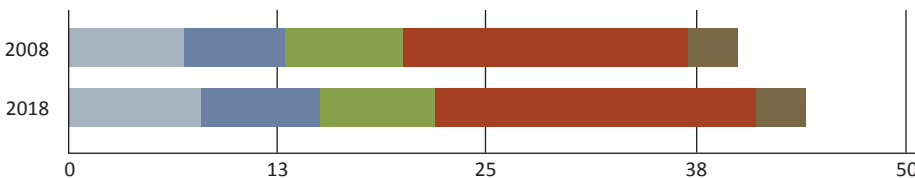
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 7% for those with postsecondary education and 6% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In North Dakota by 2018, there will be about 43,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOB IN 2008	JOB IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	185,100	178,000	-7,000	-4
Architecture and Construction	334,600	338,700	4,200	1
Arts, A/V Technology, and Communications	74,800	72,100	-2,800	-4
Business, Management, and Administration	808,800	815,700	6,900	1
Education and Training	359,400	375,500	16,100	4
Finance	155,900	168,600	12,700	8
Government and Public Administration	70,400	72,200	1,800	3
Health Science	505,000	600,900	95,900	19
Hospitality and Tourism	708,700	764,000	55,300	8
Human Services	176,000	207,500	31,500	18
Information Technology	123,600	145,100	21,500	17
Law, Public Safety, Corrections and Security	169,300	179,100	9,800	6
Manufacturing	675,600	591,200	-84,300	-12
Marketing, Sales, and Service	731,400	765,600	34,200	5
Science, Technology, Engineering, and Mathematics	100,300	101,600	1,300	1
Transportation, Distribution, and Logistics	530,500	518,900	-11,700	-2
TOTAL	5,709,400	5,894,700	185,300	3

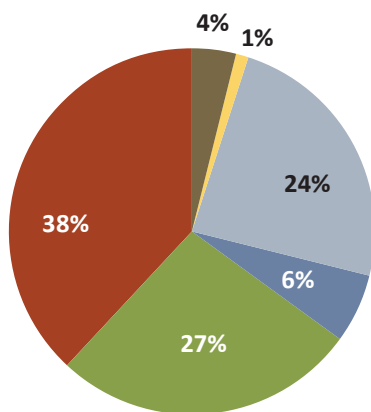
OHIO

IN OHIO, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 19% by 2018.

Health Science will add the most jobs in Ohio through 2018, while Agriculture, Food, and Natural Resources, Arts, A/V Technology, and Communications, Manufacturing, and Transportation, Distribution, and Logistics will lose jobs.

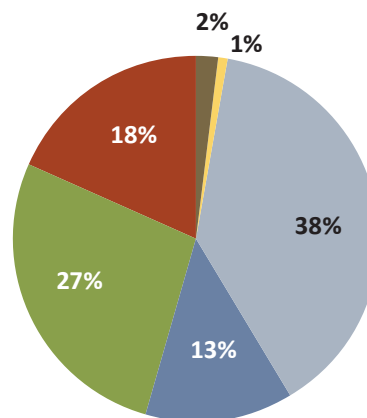
In 2018, 40% of all jobs in Ohio will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Ohio, 2018



2.5 million jobs

Postsecondary Jobs in Ohio, 2018



3.4 million jobs

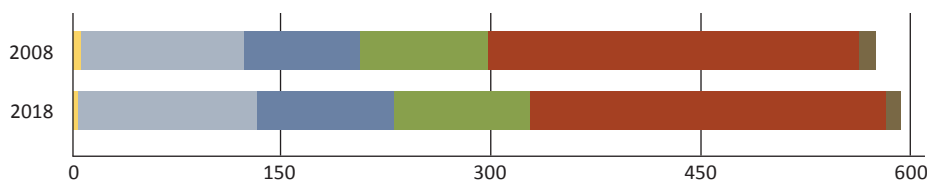
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 5% for those with postsecondary education and 1% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Ohio by 2018, there will be about 593,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



OKLAHOMA

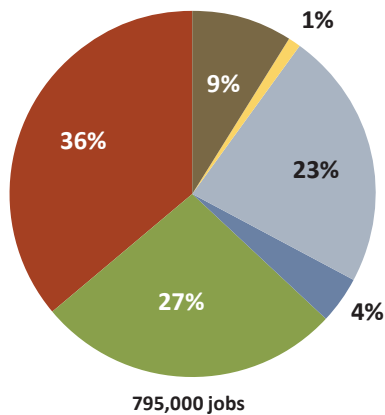
In OKLAHOMA, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology and Human Services will be the fastest growing. Jobs in the Information Technology and Human Services sector will increase by 17% each by 2018.

Hospitality and Tourism will add the most jobs in Oklahoma through 2018.

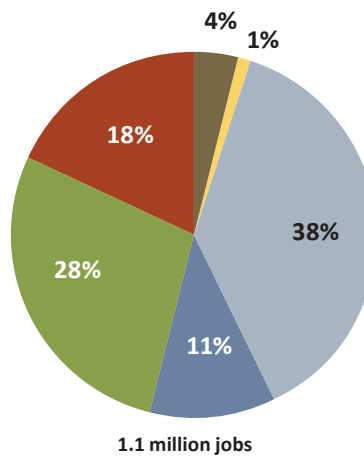
In 2018, 39% of all jobs in Oklahoma will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	119,400	117,100	-2,300	-2
Architecture and Construction	123,200	137,900	14,700	12
Arts, A/V Technology, and Communications	18,000	18,100	100	0
Business, Management, and Administration	259,600	273,300	13,700	5
Education and Training	115,900	130,500	14,600	13
Finance	45,500	49,200	3,700	8
Government and Public Administration	20,900	22,200	1,200	6
Health Science	133,300	153,700	20,400	15
Hospitality and Tourism	204,800	229,400	24,600	12
Human Services	61,400	71,500	10,200	17
Information Technology	31,400	36,800	5,400	17
Law, Public Safety, Corrections and Security	52,500	60,600	8,100	15
Manufacturing	152,600	155,900	3,300	2
Marketing, Sales, and Service	211,700	230,500	18,800	9
Science, Technology, Engineering, and Mathematics	28,200	31,900	3,800	13
Transportation, Distribution, and Logistics	142,200	148,200	6,000	4
TOTAL	1,720,500	1,866,700	146,200	8

High School Jobs in Oklahoma, 2018



Postsecondary Jobs in Oklahoma, 2018



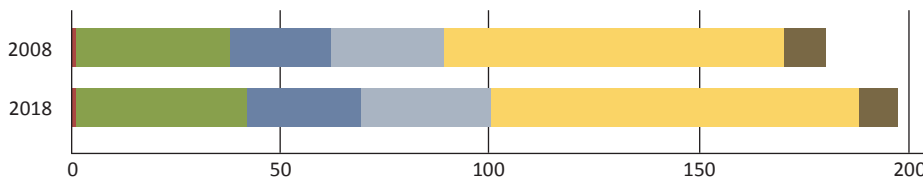
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 9% for those with postsecondary education and 6% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Oklahoma by 2018, there will be about 196,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	105,600	108,800	3,100	3
Architecture and Construction	135,300	139,800	4,500	3
Arts, A/V Technology, and Communications	29,700	30,300	600	2
Business, Management, and Administration	268,700	286,800	18,100	7
Education and Training	127,600	144,900	17,300	14
Finance	49,700	54,400	4,700	9
Government and Public Administration	22,600	24,100	1,500	7
Health Science	127,700	162,100	34,400	27
Hospitality and Tourism	240,200	268,300	28,100	12
Human Services	72,700	86,200	13,500	19
Information Technology	39,900	48,500	8,600	21
Law, Public Safety, Corrections and Security	45,100	51,500	6,400	14
Manufacturing	165,900	161,400	-4,500	-3
Marketing, Sales, and Service	254,100	281,200	27,100	11
Science, Technology, Engineering, and Mathematics	35,000	37,500	2,500	7
Transportation, Distribution, and Logistics	148,600	154,200	5,600	4
TOTAL	1,868,300	2,039,900	171,600	9

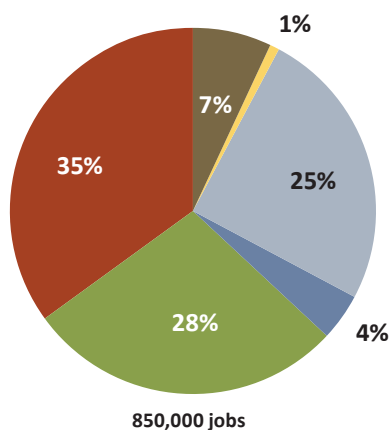
OREGON

IN OREGON, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 27% by 2018.

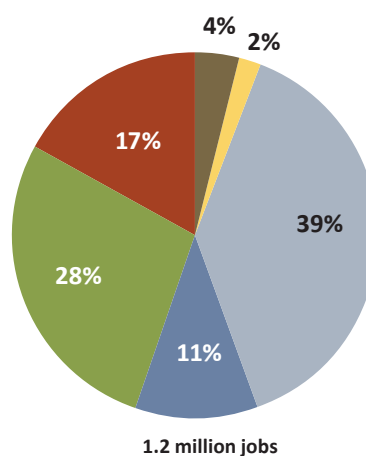
Health Science will add the most jobs in Oregon through 2018, while Manufacturing will lose jobs..

In 2018, 41% of all jobs in Oregon will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Oregon, 2018



Postsecondary Jobs in Oregon, 2018



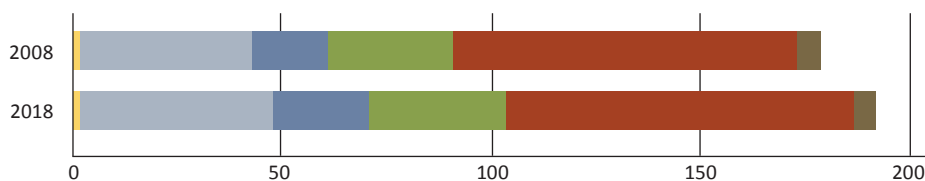
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 10% for those with postsecondary education and 8% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Oregon by 2018, there will be about 192,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



PENNSYLVANIA

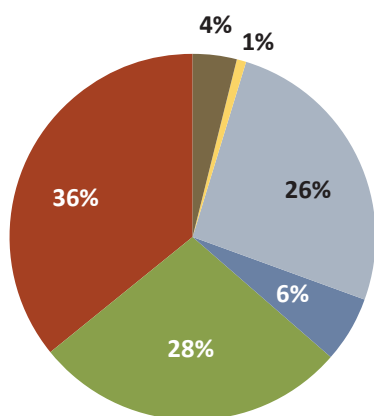
IN PENNSYLVANIA, the Marketing, Sales, and Services cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 17% by 2018.

Health Science will add the most jobs in Pennsylvania through 2018, while Agriculture, Food, and Natural Resources, Architecture and Construction, Government and Public Administration, Manufacturing, and Transportation, Distribution, and Logistics will lose jobs.

In 2018, 40% of all jobs in Pennsylvania will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

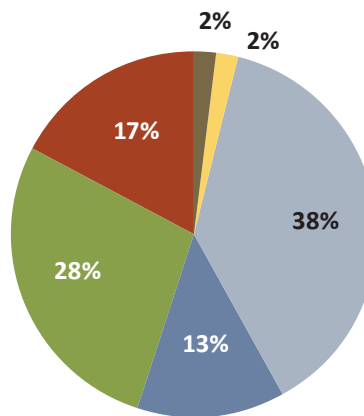
CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	196,200	193,200	-3,000	-2
Architecture and Construction	386,500	382,400	-4,100	-1
Arts, A/V Technology, and Communications	88,800	93,900	5,200	6
Business, Management, and Administration	832,200	833,900	1,800	0
Education and Training	402,700	433,500	30,800	8
Finance	188,000	198,500	10,500	6
Government and Public Administration	78,600	77,600	-1,000	-1
Health Science	558,900	652,200	93,300	17
Hospitality and Tourism	741,200	785,800	44,600	6
Human Services	241,700	276,800	35,100	15
Information Technology	129,700	149,700	20,000	15
Law, Public Safety, Corrections and Security	174,500	185,400	10,900	6
Manufacturing	547,400	520,800	-26,600	-5
Marketing, Sales, and Service	880,800	914,500	33,700	4
Science, Technology, Engineering, and Mathematics	111,000	115,000	4,000	4
Transportation, Distribution, and Logistics	546,900	540,700	-6,200	-1
TOTAL	6,105,100	6,354,000	248,900	4

High School Jobs in Pennsylvania, 2018



2.6 million jobs

Postsecondary Jobs in Pennsylvania, 2018



3.7 million jobs

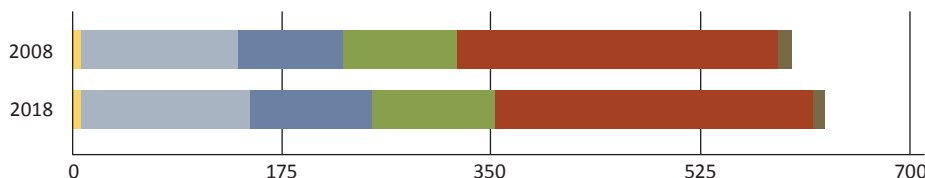
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 4% for those with postsecondary education and Y% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Pennsylvania by 2018, there will be about 630,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	11,700	11,800	100	1
Architecture and Construction	32,100	32,200	100	1
Arts, A/V Technology, and Communications	7,600	7,600	0	0
Business, Management, and Administration	77,800	78,200	400	1
Education and Training	37,500	40,500	2,900	8
Finance	15,200	16,500	1,300	9
Government and Public Administration	6,200	6,300	100	1
Health Science	51,200	59,600	8,400	16
Hospitality and Tourism	68,200	76,000	7,800	11
Human Services	23,300	27,600	4,300	19
Information Technology	11,000	13,100	2,100	19
Law, Public Safety, Corrections and Security	15,500	16,400	900	6
Manufacturing	39,600	35,800	-3,800	-10
Marketing, Sales, and Service	62,900	64,900	2,000	3
Science, Technology, Engineering, and Mathematics	8,800	9,300	500	6
Transportation, Distribution, and Logistics	34,200	33,100	-1,100	-3
TOTAL	503,000	528,800	25,800	5

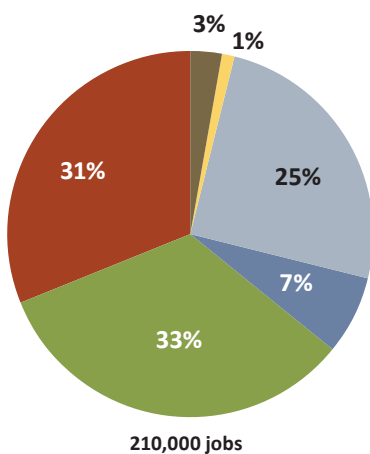
RHODE ISLAND

IN RHODE ISLAND, the Business, Management, and Administration cluster will be the largest cluster overall, but Human Services and Information Technology will be the fastest growing. Jobs in the Human Services and Information Technology sector will increase by 19% each by 2018.

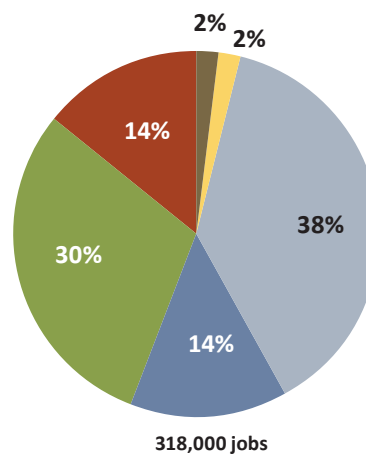
Health Science will add the most jobs in Rhode Island through 2018, while Arts, A/V Technology, and Communications, Manufacturing, and Transportation, Distribution, and Logistics will lose jobs.

In 2018, 41% of all jobs in Rhode Island will be found in the Business, Management and Administration, Hospitality and Tourism, and Marketing, Sales and Services clusters.

High School Jobs in Rhode Island, 2018



Postsecondary Jobs in Rhode Island, 2018



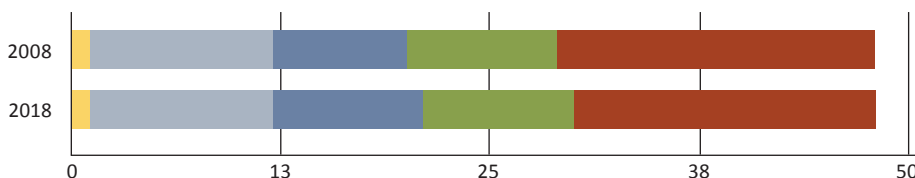
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 5% for those with postsecondary education and 1% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Rhode Island by 2018, there will be about 50,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



SOUTH CAROLINA

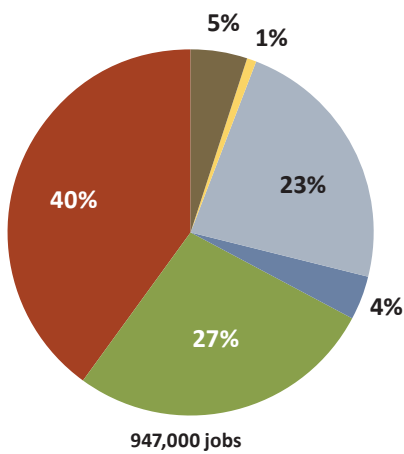
IN SOUTH CAROLINA, the Marketing, Sales, and Service cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 21% by 2018.

Health Science will add the most jobs in South Carolina through 2018, while Manufacturing will lose jobs.

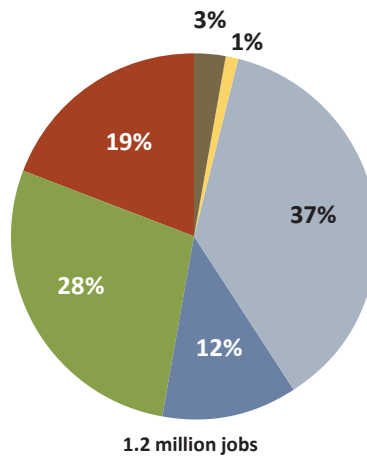
In 2018, 40% of all jobs in South Carolina will be found in the Marketing, Sales and Services, Hospitality and Tourism, and Business, Management and Administration, clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	81,100	84,600	3,500	4
Architecture and Construction	154,700	161,700	7,000	5
Arts, A/V Technology, and Communications	21,100	22,800	1,700	8
Business, Management, and Administration	275,100	286,200	11,100	4
Education and Training	125,600	140,900	15,300	12
Finance	48,100	51,200	3,000	6
Government and Public Administration	21,400	23,200	1,800	9
Health Science	151,600	183,200	31,600	21
Hospitality and Tourism	275,600	286,400	10,800	4
Human Services	64,900	73,800	8,900	14
Information Technology	28,300	33,100	4,800	17
Law, Public Safety, Corrections and Security	61,300	70,900	9,600	16
Manufacturing	245,900	234,100	-11,800	-5
Marketing, Sales, and Service	275,200	304,500	29,400	11
Science, Technology, Engineering, and Mathematics	34,600	38,000	3,400	10
Transportation, Distribution, and Logistics	171,900	177,600	5,600	3
TOTAL	2,036,300	2,172,100	135,800	7

High School Jobs in South Carolina, 2018



Postsecondary Jobs in South Carolina, 2018



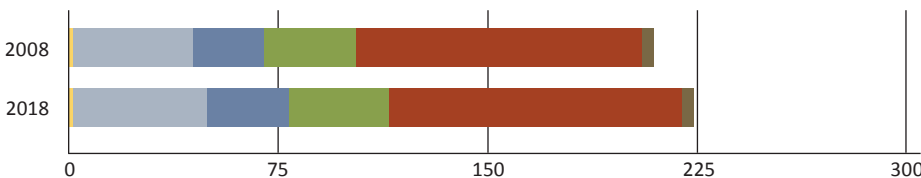
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 9% for those with postsecondary education and 6% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In South Carolina by 2018, there will be about 225,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	34,200	31,700	-2,500	-7
Architecture and Construction	31,300	33,800	2,400	8
Arts, A/V Technology, and Communications	6,400	6,700	300	5
Business, Management, and Administration	56,700	59,700	3,000	5
Education and Training	27,000	29,500	2,500	9
Finance	19,300	20,400	1,200	6
Government and Public Administration	7,100	7,600	500	7
Health Science	35,500	43,300	7,700	22
Hospitality and Tourism	64,500	72,300	7,800	12
Human Services	18,000	21,700	3,800	21
Information Technology	6,500	7,700	1,100	17
Law, Public Safety, Corrections and Security	8,700	9,800	1,100	12
Manufacturing	35,100	36,000	900	3
Marketing, Sales, and Service	57,200	63,500	6,200	11
Science, Technology, Engineering, and Mathematics	4,800	5,200	400	9
Transportation, Distribution, and Logistics	36,200	37,900	1,700	5
TOTAL	448,600	486,800	38,200	9

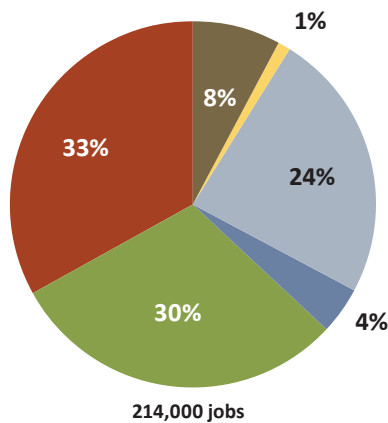
SOUTH DAKOTA

IN SOUTH DAKOTA, the Hospitality and Tourism cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 22% by 2018.

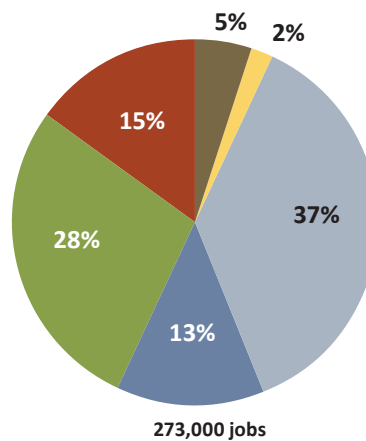
Hospitality and Tourism will add the most jobs in South Dakota through 2018, while Agriculture, Food, and Natural Resources will lose jobs.

In 2018, 40% of all jobs in South Dakota will be found in the Hospitality and Tourism, Marketing, Sales and Services, and Business, Management and Administration, clusters.

High School Jobs in South Dakota, 2018



Postsecondary Jobs in South Dakota, 2018



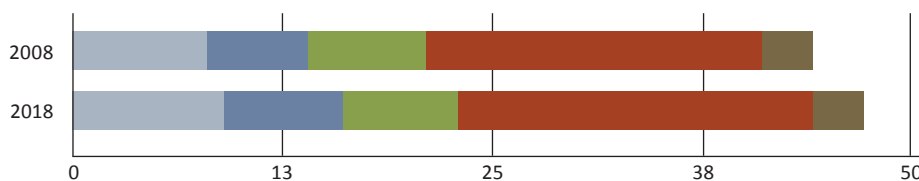
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 9% for those with postsecondary education and 8% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In South Dakota by 2018, there will be about 49,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



TENNESSEE

IN TENNESSEE, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing.

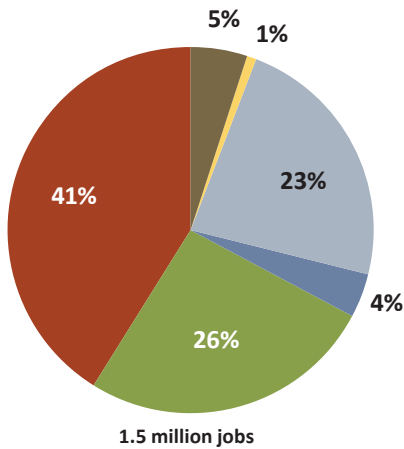
Jobs in the Health Science sector will increase by 23% by 2018.

Marketing, Sales, and Service will add the most jobs in Tennessee through 2018, while Agriculture, Food, and Natural Resources will lose jobs.

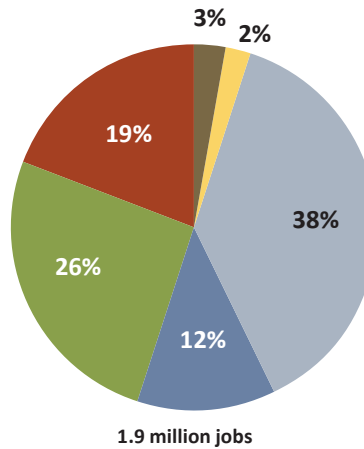
In 2018, 40% of all jobs in Tennessee will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	134,500	134,200	-300	0
Architecture and Construction	188,800	221,500	32,700	17
Arts, A/V Technology, and Communications	46,800	48,500	1,700	4
Business, Management, and Administration	431,600	466,900	35,300	8
Education and Training	166,000	187,600	21,600	13
Finance	72,400	83,800	11,400	16
Government and Public Administration	39,200	42,700	3,400	9
Health Science	237,900	293,300	55,400	23
Hospitality and Tourism	372,800	422,000	49,200	13
Human Services	89,900	102,900	13,000	15
Information Technology	44,500	53,500	9,000	20
Law, Public Safety, Corrections and Security	87,400	104,600	17,300	20
Manufacturing	343,400	352,000	8,600	2
Marketing, Sales, and Service	384,700	441,400	56,700	15
Science, Technology, Engineering, and Mathematics	37,000	41,300	4,300	12
Transportation, Distribution, and Logistics	318,300	339,700	21,400	7
TOTAL	2,995,200	3,336,000	340,800	11

High School Jobs in Tennessee, 2018



Postsecondary Jobs in Tennessee, 2018



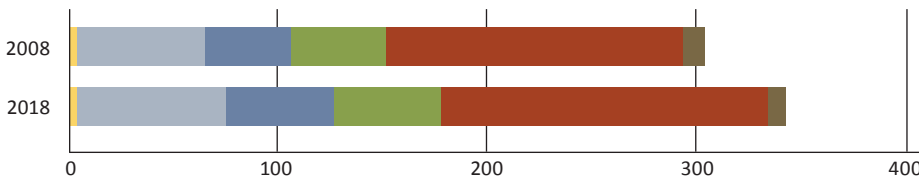
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 13% for those with postsecondary education and 10% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Tennessee by 2018, there will be about 340,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	553,300	609,700	56,400	10
Architecture and Construction	883,900	1,050,200	166,400	19
Arts, A/V Technology, and Communications	131,500	145,700	14,200	11
Business, Management, and Administration	1,756,400	2,010,900	254,500	14
Education and Training	768,800	980,900	212,100	28
Finance	320,500	377,200	56,800	18
Government and Public Administration	128,800	151,400	22,700	18
Health Science	760,600	1,005,100	244,400	32
Hospitality and Tourism	1,393,600	1,722,100	328,600	24
Human Services	423,900	553,700	129,800	31
Information Technology	279,000	353,700	74,700	27
Law, Public Safety, Corrections and Security	346,300	441,900	95,600	28
Manufacturing	926,900	1,017,800	90,900	10
Marketing, Sales, and Service	1,569,500	1,877,100	307,600	20
Science, Technology, Engineering, and Mathematics	241,900	285,800	43,900	18
Transportation, Distribution, and Logistics	956,800	1,066,000	109,200	11
TOTAL	11,441,500	13,649,300	2,207,800	19

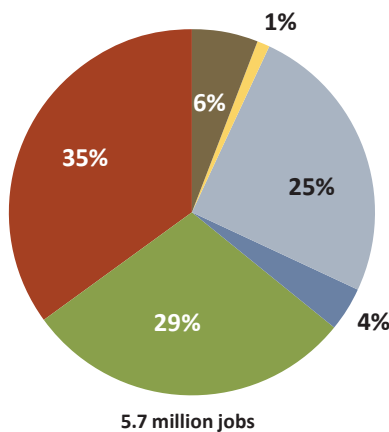
TEXAS

IN TEXAS, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 32% by 2018.

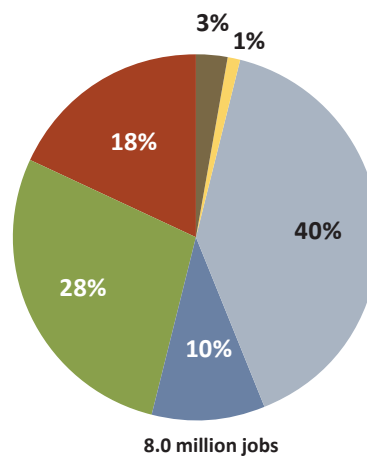
Hospitality and Tourism will add the most jobs in Texas through 2018.

In 2018, 41% of all jobs in Texas will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Texas, 2018



Postsecondary Jobs in Texas, 2018



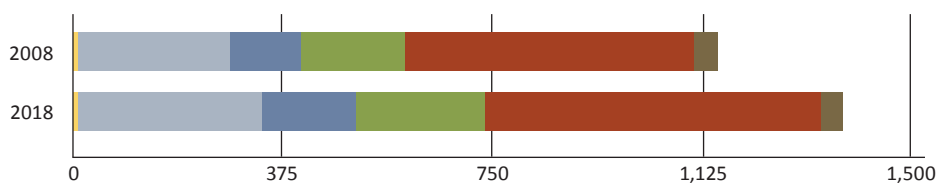
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 19% for those with postsecondary education and 16% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Texas by 2018, there will be about 1.4 million jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



UTAH

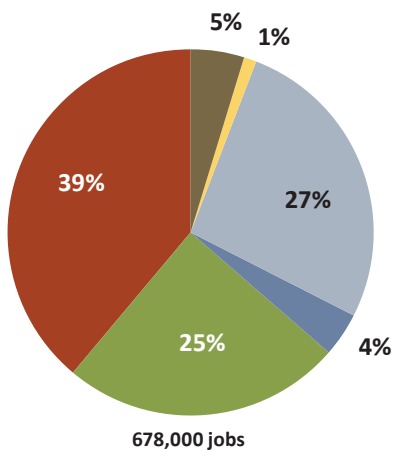
In UTAH, the Marketing, Sales, and Service cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 37% by 2018.

Marketing, Sales, and Service will add the most jobs in Utah through 2018.

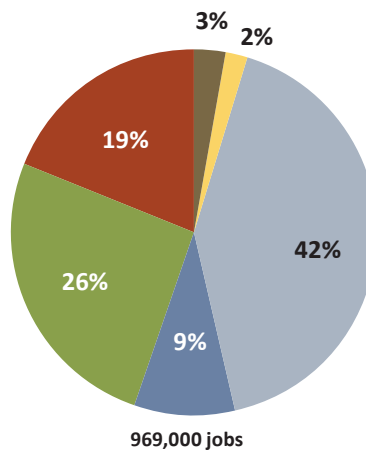
In 2018, 41% of all jobs in Utah will be found in the Marketing, Sales and Services, Business, Management and Administration, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	51,200	58,600	7,300	14
Architecture and Construction	120,900	141,100	20,200	17
Arts, A/V Technology, and Communications	20,200	22,600	2,500	12
Business, Management, and Administration	197,100	233,700	36,600	19
Education and Training	83,600	110,700	27,000	32
Finance	43,100	51,100	8,000	19
Government and Public Administration	19,700	24,400	4,700	24
Health Science	84,200	113,500	29,300	35
Hospitality and Tourism	153,500	189,800	36,300	24
Human Services	42,200	56,000	13,700	33
Information Technology	36,100	49,600	13,500	37
Law, Public Safety, Corrections and Security	30,900	39,400	8,500	27
Manufacturing	115,300	133,100	17,700	15
Marketing, Sales, and Service	209,700	254,300	44,600	21
Science, Technology, Engineering, and Mathematics	28,700	37,000	8,300	29
Transportation, Distribution, and Logistics	110,700	131,900	21,100	19
TOTAL	1,347,200	1,646,500	299,300	22

High School Jobs in Utah, 2018



Postsecondary Jobs in Utah, 2018



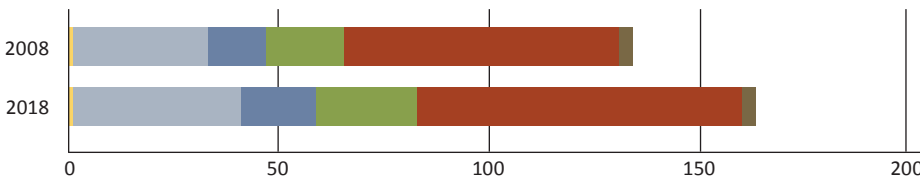
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 23% for those with postsecondary education and 18% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Utah by 2018, there will be about 164,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	15,000	14,500	-500	-4
Architecture and Construction	26,900	26,800	-100	0
Arts, A/V Technology, and Communications	5,700	5,400	-300	-6
Business, Management, and Administration	46,800	46,800	0	0
Education and Training	32,100	34,200	2,200	7
Finance	6,600	6,500	-100	-1
Government and Public Administration	6,200	6,400	100	2
Health Science	25,400	30,900	5,500	22
Hospitality and Tourism	41,700	44,200	2,400	6
Human Services	16,800	21,600	4,800	28
Information Technology	6,400	7,800	1,400	22
Law, Public Safety, Corrections and Security	7,400	7,900	500	7
Manufacturing	28,200	25,400	-2,900	-10
Marketing, Sales, and Service	38,800	35,900	-2,900	-7
Science, Technology, Engineering, and Mathematics	6,700	6,900	200	3
Transportation, Distribution, and Logistics	22,300	22,200	-200	-1
TOTAL	333,100	343,300	10,200	3

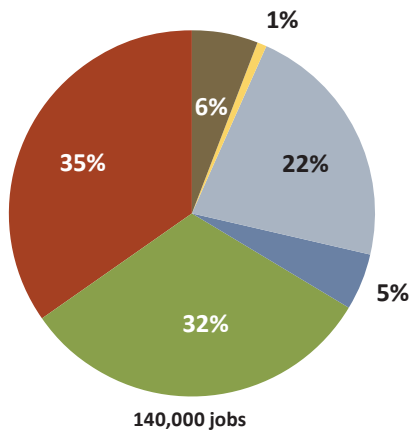
VERMONT

IN VERMONT, the Business, Management, and Administration cluster will be the largest cluster overall, but Human Services will be the fastest growing. Jobs in the Human Services sector will increase by 28% by 2018.

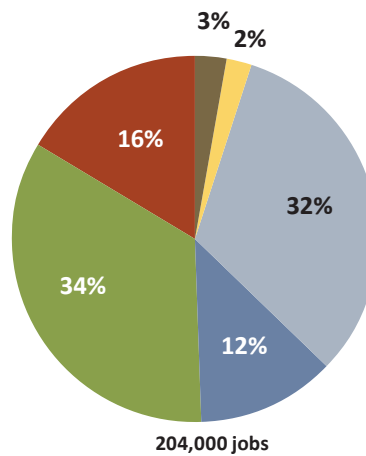
Health Science will add the most jobs in Vermont through 2018, while Agriculture, Food, and Natural Resources, Architecture and Construction, Arts, A/V Technology, and Communications, Finance, Manufacturing, Marketing, Sales, and Service, and Transportation, Distribution, and Logistics will lose jobs.

In 2018, 37% of all jobs in Vermont will be found in the Business, Management and Administration, Hospitality and Tourism, and Marketing, Sales and Services clusters.

High School Jobs in Vermont, 2018



Postsecondary Jobs in Vermont, 2018



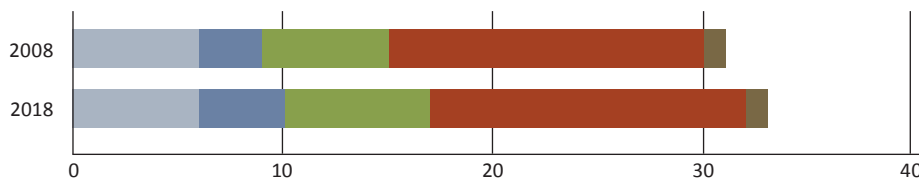
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 1% for those with postsecondary education and shrink by 6% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Vermont by 2018, there will be about 33,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



VIRGINIA

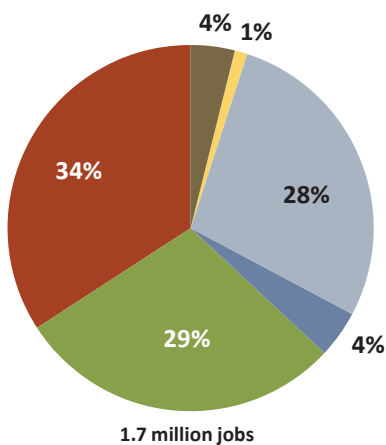
In VIRGINIA, the Marketing, Sales, and Service cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 38% by 2018.

Business, Management, and Administration will add the most jobs in Virginia through 2018, while Manufacturing will lose jobs.

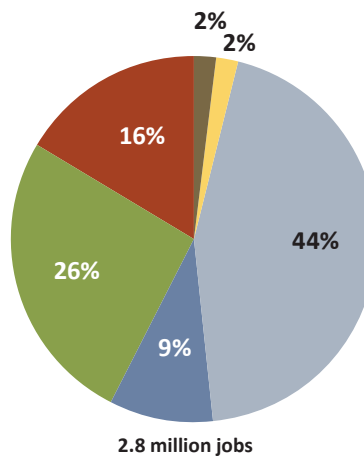
In 2018, 42% of all jobs in Virginia will be found in the Marketing, Sales and Services, Business, Management and Administration, and Hospitality and Tourism clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	134,900	139,200	4,200	3
Architecture and Construction	328,300	355,200	26,900	8
Arts, A/V Technology, and Communications	62,400	67,400	5,000	8
Business, Management, and Administration	580,800	660,400	79,600	14
Education and Training	261,300	307,100	45,800	18
Finance	108,900	127,900	19,000	17
Government and Public Administration	46,700	52,000	5,300	11
Health Science	252,700	317,700	65,000	26
Hospitality and Tourism	490,700	545,100	54,400	11
Human Services	132,500	168,600	36,100	27
Information Technology	183,900	253,100	69,200	38
Law, Public Safety, Corrections and Security	133,400	158,300	24,900	19
Manufacturing	272,000	267,900	-4,100	-2
Marketing, Sales, and Service	601,300	676,000	74,600	12
Science, Technology, Engineering, and Mathematics	97,700	116,000	18,300	19
Transportation, Distribution, and Logistics	303,400	321,500	18,100	6
TOTAL	3,991,000	4,533,200	542,200	14

High School Jobs in Virginia, 2018



Postsecondary Jobs in Virginia, 2018



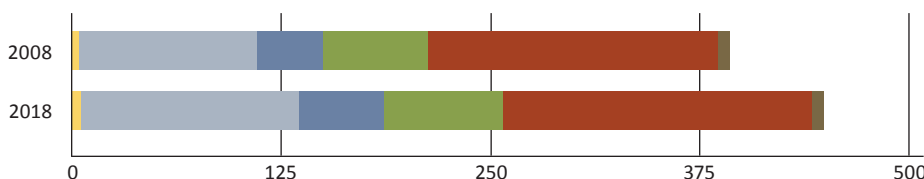
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 19% for those with postsecondary education and 10% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Virginia by 2018, there will be about 450,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	141,800	143,900	2,000	1
Architecture and Construction	261,400	290,400	29,000	11
Arts, A/V Technology, and Communications	44,800	46,100	1,300	3
Business, Management, and Administration	442,300	475,300	33,100	7
Education and Training	193,000	218,300	25,300	13
Finance	80,000	84,900	4,900	6
Government and Public Administration	48,700	53,300	4,600	9
Health Science	215,900	258,200	42,300	20
Hospitality and Tourism	407,300	459,200	51,800	13
Human Services	136,800	163,700	26,900	20
Information Technology	115,800	152,900	37,100	32
Law, Public Safety, Corrections and Security	86,400	96,900	10,500	12
Manufacturing	225,200	239,700	14,500	6
Marketing, Sales, and Service	417,500	469,700	52,200	12
Science, Technology, Engineering, and Mathematics	90,600	106,200	15,600	17
Transportation, Distribution, and Logistics	271,000	287,600	16,600	6
TOTAL	3,178,700	3,546,400	367,600	12

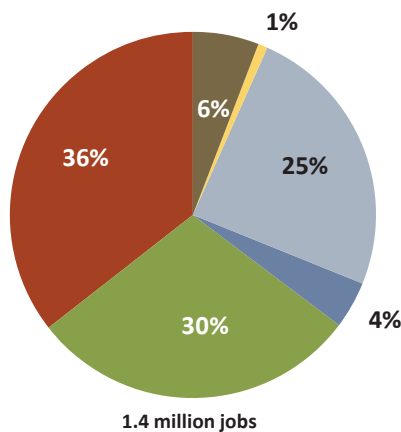
WASHINGTON

IN WASHINGTON, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 32% by 2018.

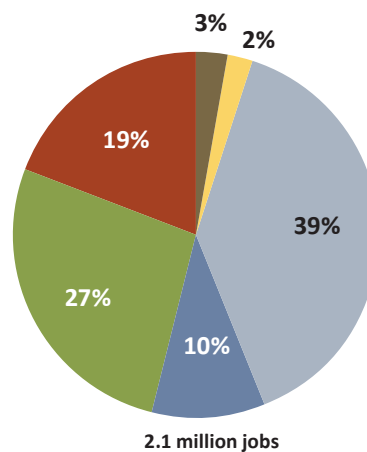
Marketing, Sales, and Service will add the most jobs in Washington through 2018.

In 2018, 40% of all jobs in Washington will be found in the Business, Management and Administration, Marketing, Sales and Services, and Hospitality and Tourism clusters.

High School Jobs in Washington, 2018



Postsecondary Jobs in Washington, 2018



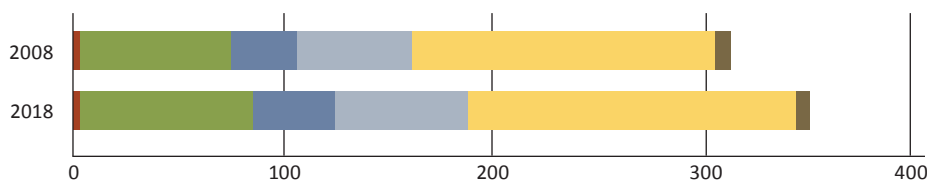
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 14% for those with postsecondary education and 8% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Washington by 2018, there will be about 350,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



WEST VIRGINIA

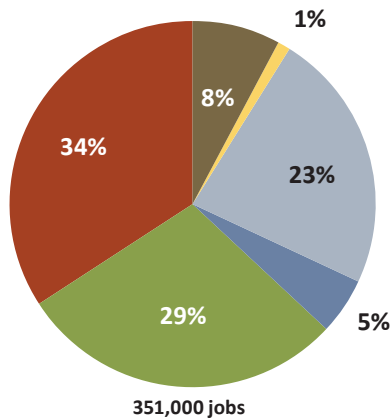
IN WEST VIRGINIA, the Hospitality and Tourism cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 19% by 2018.

Hospitality and Tourism will add the most jobs in West Virginia through 2018, while Agriculture, Food, and Natural Resources, Architecture and Construction, Business, Management and Administration, and Manufacturing will lose jobs.

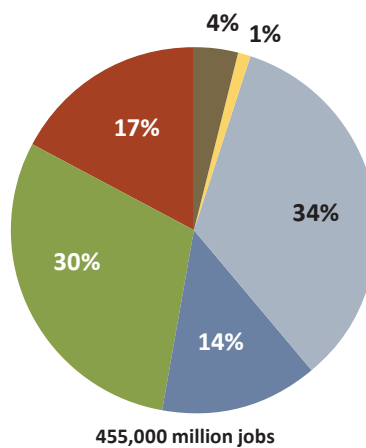
In 2018, 40% of all jobs in West Virginia will be found in the Hospitality and Tourism, Marketing, Sales and Services, Business, Management and Administration and clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	47,000	46,300	-700	-2
Architecture and Construction	60,900	59,100	-1,900	-3
Arts, A/V Technology, and Communications	8,000	8,200	200	3
Business, Management, and Administration	98,300	97,900	-500	0
Education and Training	48,800	52,400	3,600	7
Finance	15,900	16,300	400	2
Government and Public Administration	11,200	11,700	500	4
Health Science	73,800	84,200	10,400	14
Hospitality and Tourism	100,500	112,600	12,100	12
Human Services	28,700	32,500	3,700	13
Information Technology	7,500	8,900	1,400	19
Law, Public Safety, Corrections and Security	24,200	25,700	1,500	6
Manufacturing	59,400	59,200	-300	0
Marketing, Sales, and Service	109,400	111,900	2,500	2
Science, Technology, Engineering, and Mathematics	10,600	11,600	1,000	9
Transportation, Distribution, and Logistics	67,100	67,400	300	0
TOTAL	771,400	805,600	34,200	4

High School Jobs in West Virginia, 2018



Postsecondary Jobs in West Virginia, 2018



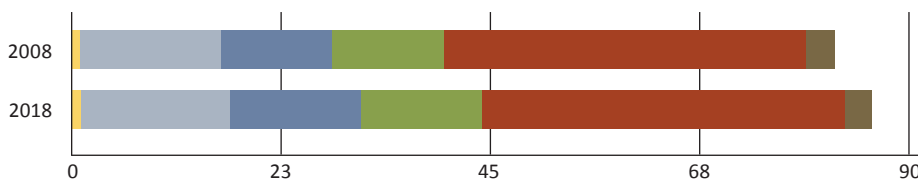
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 3% for those with postsecondary education and shrink by 1% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In West Virginia by 2018, there will be about 85,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	136,200	129,100	-7,100	-5
Architecture and Construction	186,700	197,300	10,500	6
Arts, A/V Technology, and Communications	48,300	48,900	600	1
Business, Management, and Administration	407,500	424,600	17,100	4
Education and Training	176,200	192,600	16,400	9
Finance	79,100	83,700	4,600	6
Government and Public Administration	33,500	34,600	1,100	3
Health Science	235,500	292,100	56,600	24
Hospitality and Tourism	376,800	410,700	33,800	9
Human Services	113,100	131,300	18,200	16
Information Technology	56,200	68,700	12,400	22
Law, Public Safety, Corrections and Security	75,200	80,700	5,500	7
Manufacturing	375,300	366,200	-9,100	-2
Marketing, Sales, and Service	371,000	397,900	26,900	7
Science, Technology, Engineering, and Mathematics	58,000	61,100	3,100	5
Transportation, Distribution, and Logistics	270,600	273,000	2,500	1
TOTAL	2,999,400	3,192,400	193,100	6

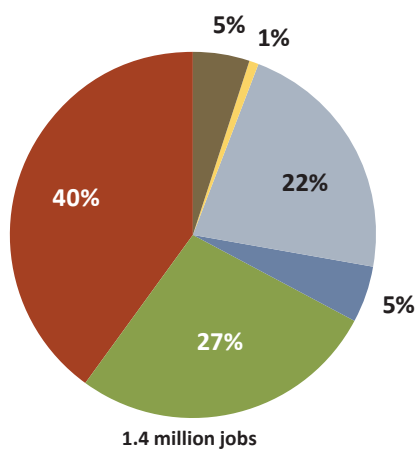
WISCONSIN

IN WISCONSIN, the Business, Management, and Administration cluster will be the largest cluster overall, but Health Science will be the fastest growing. Jobs in the Health Science sector will increase by 24% by 2018.

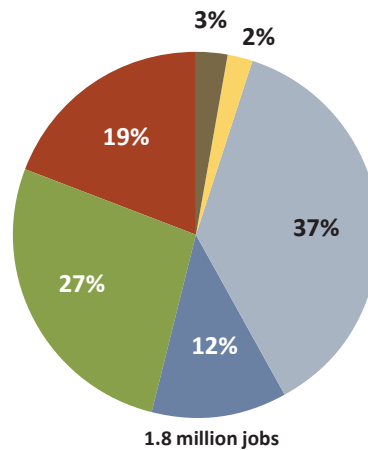
Health Science will add the most jobs in Wisconsin through 2018, while Agriculture, Food, and Natural Resources and Manufacturing will lose jobs.

In 2018, 39% of all jobs in Wisconsin will be found in the Business, Management and Administration, Hospitality and Tourism, and Marketing, Sales and Services clusters.

High School Jobs in Wisconsin, 2018



Postsecondary Jobs in Wisconsin, 2018



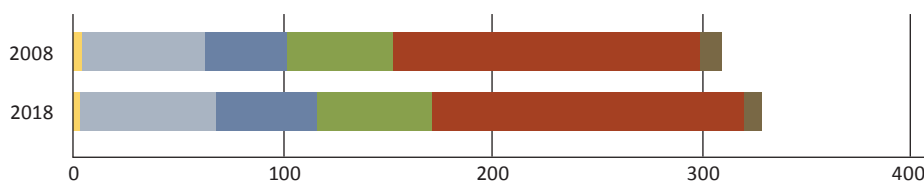
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 8% for those with postsecondary education and 4% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Wisconsin by 2018, there will be about 150,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



WYOMING

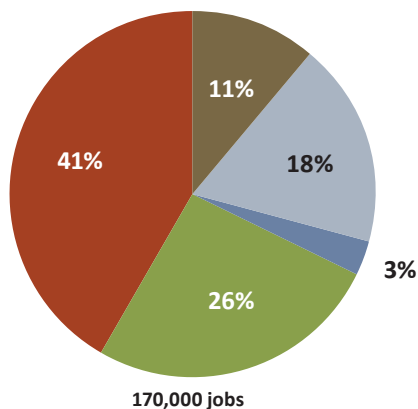
In WYOMING, the Business, Management, and Administration cluster will be the largest cluster overall, but Information Technology will be the fastest growing. Jobs in the Information Technology sector will increase by 28% by 2018.

Architecture and Construction will add the most jobs in Wyoming through 2018.

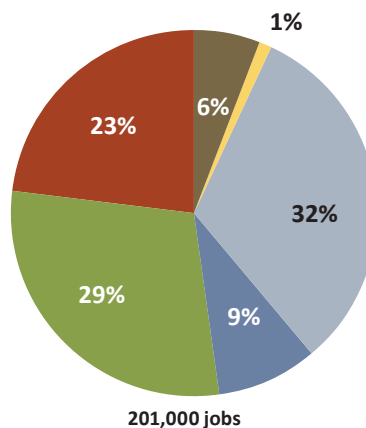
In 2018, 39% of all jobs in Wyoming will be found in the Business, Management and Administration, Hospitality and Tourism, and Architecture and Construction clusters.

CLUSTER	JOBS IN 2008	JOBS IN 2018	DIFFERENCE	PERCENT CHANGE
Agriculture, Food, and Natural Resources	28,700	32,000	3,300	11
Architecture and Construction	37,500	45,700	8,100	22
Arts, A/V Technology, and Communications	3,300	3,400	100	3
Business, Management, and Administration	45,000	50,100	5,100	11
Education and Training	21,300	24,500	3,200	15
Finance	6,400	7,100	700	11
Government and Public Administration	4,200	4,600	400	10
Health Science	18,700	22,300	3,700	20
Hospitality and Tourism	43,300	49,700	6,400	15
Human Services	11,700	14,300	2,600	22
Information Technology	2,500	3,200	700	28
Law, Public Safety, Corrections and Security	8,600	10,200	1,600	19
Manufacturing	22,300	26,700	4,400	20
Marketing, Sales, and Service	29,100	33,700	4,600	16
Science, Technology, Engineering, and Mathematics	6,300	7,600	1,400	22
Transportation, Distribution, and Logistics	30,700	36,000	5,300	17
TOTAL	319,500	371,100	51,600	16

High School Jobs in Wyoming, 2018



Postsecondary Jobs in Wyoming, 2018



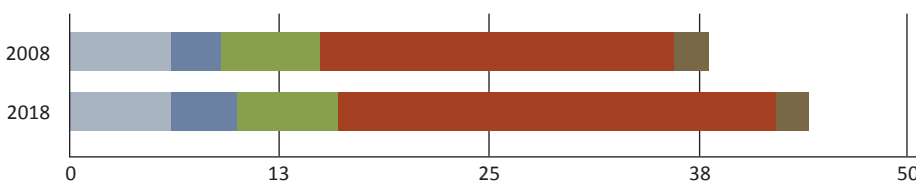
- Arts, A/V Technology and Communications
- Business, Management and Administration
- Health Science
- Human Services
- Industrial and Engineering Technology
- Agriculture, Food and Natural Resources

The largest cluster—Business, Management, and Administration—will require substantial postsecondary education in 2018. It will grow by 15% for those with postsecondary education and 11% for those without.

Jobs for high school graduates and high school dropouts will grow more slowly than jobs for those with postsecondary education.

In Wyoming by 2018, there will be about 44,000 jobs for those with certificates.

Certificates Required by Occupational Cluster in 2008 and 2018 (in thousands)



List of Occupations and Career Clusters

SOC	Occupation name	Cluster number	Cluster name
11-9011	Farm, ranch, and other agricultural managers	1	Agriculture food and natural resources
11-9012	Farmers and ranchers	1	Agriculture food and natural resources
11-9121	Natural sciences managers	1	Agriculture food and natural resources
13-1021	Purchasing agents and buyers, farm products	1	Agriculture food and natural resources
17-1021	Cartographers and photogrammetrists	1	Agriculture food and natural resources
17-2081	Environmental engineers	1	Agriculture food and natural resources
17-3025	Environmental engineering technicians	1	Agriculture food and natural resources
19-1011	Animal scientists	1	Agriculture food and natural resources
19-1012	Food scientists and technologists	1	Agriculture food and natural resources
19-1013	Soil and plant Scientists	1	Agriculture food and natural resources
19-1023	Zoologists and wildlife biologists	1	Agriculture food and natural resources
19-1032	Foresters	1	Agriculture food and natural resources
19-4041	Geological and petroleum technicians	1	Agriculture food and natural resources
19-4091	Environmental science and protection technicians, including health	1	Agriculture food and natural resources
19-4093	Forest and conservation technicians	1	Agriculture food and natural resources
25-9021	Farm and home management advisors	1	Agriculture food and natural resources
29-1131	Veterinarians	1	Agriculture food and natural resources
29-2056	Veterinary technologists and technicians	1	Agriculture food and natural resources
29-9011	Occupational health and safety specialists	1	Agriculture food and natural resources
29-9012	Occupational health and safety technicians	1	Agriculture food and natural resources
31-9096	Veterinary assistants and laboratory animal caretakers	1	Agriculture food and natural resources
33-3031	Fish and game wardens	1	Agriculture food and natural resources
37-1012	First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	1	Agriculture food and natural resources
37-2021	Pest control workers	1	Agriculture food and natural resources
37-3012	Pesticide handlers, sprayers, and applicators, vegetation	1	Agriculture food and natural resources
37-3013	Tree trimmers and pruners	1	Agriculture food and natural resources
37-3019	Grounds maintenance workers, all other	1	Agriculture food and natural resources
39-2021	Nonfarm animal caretakers	1	Agriculture food and natural resources
41-1011	First-line supervisors/managers of retail sales workers	1	Agriculture food and natural resources
41-2022	Parts salespersons	1	Agriculture food and natural resources
45-1099	Supervisors, farming, fishing, and forestry workers	1	Agriculture food and natural resources
45-2011	Agricultural inspectors	1	Agriculture food and natural resources
45-2021	Animal breeders	1	Agriculture food and natural resources
45-2041	Graders and sorters, agricultural products	1	Agriculture food and natural resources
45-2091	Agricultural equipment operators	1	Agriculture food and natural resources
45-2092	Farmworkers and laborers, crop, nursery, and greenhouse	1	Agriculture food and natural resources
45-2093	Farmworkers, farm and ranch animals	1	Agriculture food and natural resources
45-2099	Agricultural workers, all other	1	Agriculture food and natural resources
45-3011	Fishers and related fishing workers	1	Agriculture food and natural resources
45-4011	Forest and conservation workers	1	Agriculture food and natural resources
45-4021	Fallers	1	Agriculture food and natural resources
45-4022	Logging equipment operators	1	Agriculture food and natural resources
45-4023	Log graders and scalers	1	Agriculture food and natural resources
45-4029	Logging workers, all other	1	Agriculture food and natural resources
47-5011	Derrick operators, oil and gas	1	Agriculture food and natural resources
47-5012	Rotary drill operators, oil and gas	1	Agriculture food and natural resources
47-5013	Service unit operators, oil, gas, and mining	1	Agriculture food and natural resources
47-5031	Explosives workers, ordnance handling experts, and blasters	1	Agriculture food and natural resources
47-5041	Continuous mining machine operators	1	Agriculture food and natural resources

APPENDIX A: List of Occupations and Career Clusters (continued)

47-5042	Mine cutting and channeling machine operators	1	Agriculture food and natural resources
47-5049	Mining machine operators, all other	1	Agriculture food and natural resources
47-5051	Rock splitters, quarry	1	Agriculture food and natural resources
47-5061	Roof bolters, mining	1	Agriculture food and natural resources
47-5071	Roustabouts, oil and gas	1	Agriculture food and natural resources
47-5081	Helpers, extraction workers	1	Agriculture food and natural resources
47-5099	Extraction workers, all other	1	Agriculture food and natural resources
49-3041	Farm equipment mechanics	1	Agriculture food and natural resources
49-9092	Commercial divers	1	Agriculture food and natural resources
51-3021	Butchers and meat cutters	1	Agriculture food and natural resources
51-3022	Meat, poultry, and fish cutters and trimmers	1	Agriculture food and natural resources
51-3023	Slaughterers and meat packers	1	Agriculture food and natural resources
51-3091	Food and tobacco roasting, baking, and drying machine operators and tenders	1	Agriculture food and natural resources
51-3092	Food batchmakers	1	Agriculture food and natural resources
51-3093	Food cooking machine operators and tenders	1	Agriculture food and natural resources
51-7032	Patternmakers, wood	1	Agriculture food and natural resources
51-7041	Sawing machine setters, operators, and tenders, wood	1	Agriculture food and natural resources
51-8031	Water and liquid waste treatment plant and system operators	1	Agriculture food and natural resources
51-8092	Gas plant operators	1	Agriculture food and natural resources
51-8093	Petroleum pump system operators, refinery operators, and gaugers	1	Agriculture food and natural resources
53-7033	Loading machine operators, underground mining	1	Agriculture food and natural resources
53-7071	Gas compressor and gas pumping station operators	1	Agriculture food and natural resources
53-7072	Pump operators, except wellhead pumpers	1	Agriculture food and natural resources
53-7073	Wellhead pumpers	1	Agriculture food and natural resources
53-7081	Refuse and recyclable material collectors	1	Agriculture food and natural resources
53-7111	Shuttle car operators	1	Agriculture food and natural resources
11-9021	Construction managers	2	Architecture and Construction
13-1051	Cost estimators	2	Architecture and Construction
17-1011	Architects, except landscape and naval	2	Architecture and Construction
17-1012	Landscape architects	2	Architecture and Construction
17-1022	Surveyors	2	Architecture and Construction
17-2051	Civil engineers	2	Architecture and Construction
17-3013	Mechanical drafters	2	Architecture and Construction
17-3019	Drafters, all other	2	Architecture and Construction
17-3022	Civil engineering technicians	2	Architecture and Construction
27-1025	Interior designers	2	Architecture and Construction
37-3011	Landscaping and groundskeeping workers	2	Architecture and Construction
47-1011	First-line supervisors/managers of construction trades and extraction workers	2	Architecture and Construction
47-2021	Brickmasons and blockmasons	2	Architecture and Construction
47-2022	Stonemasons	2	Architecture and Construction
47-2031	Carpenters	2	Architecture and Construction
47-2041	Carpet installers	2	Architecture and Construction
47-2042	Floor layers, except carpet, wood, and hard tiles	2	Architecture and Construction
47-2043	Floor sanders and finishers	2	Architecture and Construction
47-2044	Tile and marble setters	2	Architecture and Construction
47-2051	Cement masons and concrete finishers	2	Architecture and Construction
47-2053	Terrazzo workers and finishers	2	Architecture and Construction
47-2061	Construction laborers	2	Architecture and Construction
47-2071	Paving, surfacing, and tamping equipment operators	2	Architecture and Construction
47-2072	Pile-driver operators	2	Architecture and Construction
47-2073	Operating engineers and other construction equipment operators	2	Architecture and Construction
47-2081	Drywall and ceiling tile installers	2	Architecture and Construction
47-2082	Tapers	2	Architecture and Construction
47-2111	Electricians	2	Architecture and Construction
47-2121	Glaziers	2	Architecture and Construction
47-2131	Insulation workers, floor, ceiling, and wall	2	Architecture and Construction
47-2132	Insulation workers, mechanical	2	Architecture and Construction
47-2141	Painters, construction and maintenance	2	Architecture and Construction
47-2142	Paperhangers	2	Architecture and Construction
47-2151	Pipelayers	2	Architecture and Construction

APPENDIX A: List of Occupations and Career Clusters (continued)

47-2152	Plumbers, pipefitters, and steamfitters	2	Architecture and Construction
47-2161	Plasterers and stucco masons	2	Architecture and Construction
47-2171	Reinforcing iron and rebar workers	2	Architecture and Construction
47-2181	Roofers	2	Architecture and Construction
47-2211	Sheet metal workers	2	Architecture and Construction
47-2221	Structural iron and steel workers	2	Architecture and Construction
47-3011	Helpers, brickmasons, blockmasons, stonemasons, and tile and marble setters	2	Architecture and Construction
47-3012	Helpers, carpenters	2	Architecture and Construction
47-3013	Helpers, electricians	2	Architecture and Construction
47-3014	Helpers, painters, paperhangers, plasterers, and stucco masons	2	Architecture and Construction
47-3015	Helpers, pipelayers, plumbers, pipefitters, and steamfitters	2	Architecture and Construction
47-3016	Helpers, roofers	2	Architecture and Construction
47-3019	Helpers, construction trades, all other	2	Architecture and Construction
47-4011	Construction and building inspectors	2	Architecture and Construction
47-4021	Elevator installers and repairers	2	Architecture and Construction
47-4031	Fence erectors	2	Architecture and Construction
47-4041	Hazardous materials removal workers	2	Architecture and Construction
47-4051	Highway maintenance workers	2	Architecture and Construction
47-4071	Septic tank servicers and sewer pipe cleaners	2	Architecture and Construction
47-4091	Segmental pavers	2	Architecture and Construction
47-4099	Construction and related workers, all other	2	Architecture and Construction
47-5021	Earth drillers, except oil and gas	2	Architecture and Construction
49-2095	Electrical and electronics repairers, powerhouse, substation, and relay	2	Architecture and Construction
49-9011	Mechanical door repairers	2	Architecture and Construction
49-9012	Control and valve installers and repairers, except mechanical door	2	Architecture and Construction
49-9021	Heating, air conditioning, and refrigeration mechanics and installers	2	Architecture and Construction
49-9031	Home appliance repairers	2	Architecture and Construction
49-9045	Refractory materials repairers, except brickmasons	2	Architecture and Construction
49-9051	Electrical power-line installers and repairers	2	Architecture and Construction
49-9095	Manufactured building and mobile home installers	2	Architecture and Construction
49-9096	Riggers	2	Architecture and Construction
49-9098	Helpers--Installation, maintenance, and repair workers	2	Architecture and Construction
49-9099	Installation, maintenance, and repair workers, all other	2	Architecture and Construction
51-2041	Structural metal fabricators and fitters	2	Architecture and Construction
51-8021	Stationary engineers and boiler operators	2	Architecture and Construction
53-7011	Conveyor operators and tenders	2	Architecture and Construction
53-7021	Crane and tower operators	2	Architecture and Construction
53-7031	Dredge operators	2	Architecture and Construction
53-7032	Excavating and loading machine and dragline operators	2	Architecture and Construction
53-7041	Hoist and winch operators	2	Architecture and Construction
27-1012	Craft artists	3	Arts, A/V Technology and Communications
27-1013	Fine artists, including painters, sculptors, and illustrators	3	Arts, A/V Technology and Communications
27-1014	Multi-media artists and animators	3	Arts, A/V Technology and Communications
27-1019	Artists and related workers, all other	3	Arts, A/V Technology and Communications
27-1021	Commercial and industrial designers	3	Arts, A/V Technology and Communications
27-1024	Graphic designers	3	Arts, A/V Technology and Communications
27-2011	Actors	3	Arts, A/V Technology and Communications
27-2012	Producers and directors	3	Arts, A/V Technology and Communications
27-2031	Dancers	3	Arts, A/V Technology and Communications
27-2032	Choreographers	3	Arts, A/V Technology and Communications
27-2041	Music directors and composers	3	Arts, A/V Technology and Communications
27-2042	Musicians and singers	3	Arts, A/V Technology and Communications
27-2099	Entertainers and performers, sports and related workers, all other	3	Arts, A/V Technology and Communications
27-3011	Radio and television announcers	3	Arts, A/V Technology and Communications
27-3012	Public address system and other announcers	3	Arts, A/V Technology and Communications
27-3021	Broadcast news analysts	3	Arts, A/V Technology and Communications
27-3022	Reporters and correspondents	3	Arts, A/V Technology and Communications
27-3041	Editors	3	Arts, A/V Technology and Communications
27-3043	Writers and authors	3	Arts, A/V Technology and Communications
27-3099	Media and communication workers, all other	3	Arts, A/V Technology and Communications

APPENDIX A: List of Occupations and Career Clusters (continued)

27-4011	Audio and video equipment technicians	3	Arts, A/V Technology and Communications
27-4012	Broadcast technicians	3	Arts, A/V Technology and Communications
27-4013	Radio operators	3	Arts, A/V Technology and Communications
27-4014	Sound engineering technicians	3	Arts, A/V Technology and Communications
27-4021	Photographers	3	Arts, A/V Technology and Communications
27-4031	Camera operators, television, video, and motion picture	3	Arts, A/V Technology and Communications
27-4032	Film and video editors	3	Arts, A/V Technology and Communications
27-4099	Media and communication equipment workers, all other	3	Arts, A/V Technology and Communications
39-5091	Makeup artists, theatrical and performance	3	Arts, A/V Technology and Communications
43-9031	Desktop publishers	3	Arts, A/V Technology and Communications
49-9052	Telecommunications line installers and repairers	3	Arts, A/V Technology and Communications
49-9061	Camera and photographic equipment repairers	3	Arts, A/V Technology and Communications
51-5011	Bindery workers	3	Arts, A/V Technology and Communications
51-5012	Bookbinders	3	Arts, A/V Technology and Communications
51-5021	Job printers	3	Arts, A/V Technology and Communications
51-5022	Prepress technicians and workers	3	Arts, A/V Technology and Communications
51-5023	Printing machine operators	3	Arts, A/V Technology and Communications
11-1011	Chief executives	4	Business, Management and Administration
11-1021	General and operations managers	4	Business, Management and Administration
11-2011	Advertising and promotions managers	4	Business, Management and Administration
11-2021	Marketing managers	4	Business, Management and Administration
11-2022	Sales managers	4	Business, Management and Administration
11-2031	Public relations managers	4	Business, Management and Administration
11-3011	Administrative services managers	4	Business, Management and Administration
11-3031	Financial managers	4	Business, Management and Administration
11-3041	Compensation and benefits managers	4	Business, Management and Administration
11-3042	Training and development managers	4	Business, Management and Administration
11-3049	Human resources managers, all other	4	Business, Management and Administration
11-3061	Purchasing managers	4	Business, Management and Administration
11-9111	Medical and health services managers	4	Business, Management and Administration
11-9199	Managers, all other	4	Business, Management and Administration
13-1011	Agents and business managers of artists, performers, and athletes	4	Business, Management and Administration
13-1071	Employment, recruitment, and placement specialists	4	Business, Management and Administration
13-1072	Compensation, benefits, and job analysis specialists	4	Business, Management and Administration
13-1073	Training and development specialists	4	Business, Management and Administration
13-1079	Human resources, training, and labor relations specialists, all other	4	Business, Management and Administration
13-1111	Management analysts	4	Business, Management and Administration
13-1199	Business operation specialists, all other	4	Business, Management and Administration
13-2011	Accountants and auditors	4	Business, Management and Administration
13-2031	Budget analysts	4	Business, Management and Administration
15-2031	Operations research analysts	4	Business, Management and Administration
23-2091	Court reporters	4	Business, Management and Administration
27-1011	Art directors	4	Business, Management and Administration
27-3031	Public relations specialists	4	Business, Management and Administration
41-3011	Advertising sales agents	4	Business, Management and Administration
43-1011	First-line supervisors/managers of office and administrative support workers	4	Business, Management and Administration
43-2021	Telephone operators	4	Business, Management and Administration
43-2099	Communications equipment operators, all other	4	Business, Management and Administration
43-3031	Bookkeeping, accounting, and auditing clerks	4	Business, Management and Administration
43-3051	Payroll and timekeeping clerks	4	Business, Management and Administration
43-4021	Correspondence clerks	4	Business, Management and Administration
43-4071	File clerks	4	Business, Management and Administration
43-4121	Library assistants, clerical	4	Business, Management and Administration
43-4141	New accounts clerks	4	Business, Management and Administration
43-4161	Human resources assistants, except payroll and timekeeping	4	Business, Management and Administration
43-4171	Receptionists and information clerks	4	Business, Management and Administration
43-4199	Information and record clerks, all other	4	Business, Management and Administration
43-5021	Couriers and messengers	4	Business, Management and Administration
43-5081	Stock clerks and order fillers	4	Business, Management and Administration
43-6011	Executive secretaries and administrative assistants	4	Business, Management and Administration

APPENDIX A: List of Occupations and Career Clusters (continued)

43-6012	Legal secretaries	4	Business, Management and Administration
43-6013	Medical secretaries	4	Business, Management and Administration
43-6014	Secretaries, except legal, medical, and executive	4	Business, Management and Administration
43-9011	Computer operators	4	Business, Management and Administration
43-9021	Data entry keyers	4	Business, Management and Administration
43-9022	Word processors and typists	4	Business, Management and Administration
43-9051	Mail clerks and mail machine operators, except postal service	4	Business, Management and Administration
43-9199	Office and administrative support workers, all other	4	Business, Management and Administration
53-3031	Driver/sales workers	4	Business, Management and Administration
11-9031	Education administrators, preschool and child care center/program	5	Education and Training
11-9032	Education administrators, elementary and secondary school	5	Education and Training
11-9033	Education administrators, postsecondary	5	Education and Training
11-9039	Education administrators, all other	5	Education and Training
19-3031	Clinical, counseling, and school psychologists	5	Education and Training
21-1012	Educational, vocational, and school counselors	5	Education and Training
25-1099	Postsecondary teachers	5	Education and Training
25-2011	Preschool teachers, except special education	5	Education and Training
25-2012	Kindergarten teachers, except special education	5	Education and Training
25-2021	Elementary school teachers, except special education	5	Education and Training
25-2022	Middle school teachers, except special and vocational education	5	Education and Training
25-2023	Vocational education teachers, middle school	5	Education and Training
25-2031	Secondary school teachers, except special and vocational education	5	Education and Training
25-2032	Vocational education teachers, secondary school	5	Education and Training
25-2041	Special education teachers, preschool, kindergarten, and elementary school	5	Education and Training
25-2042	Special education teachers, middle school	5	Education and Training
25-2043	Special education teachers, secondary school	5	Education and Training
25-3011	Adult literacy, remedial education, and GED teachers and instructors	5	Education and Training
25-3099	Teachers and instructors, all other	5	Education and Training
25-4011	Archivists	5	Education and Training
25-4012	Curators	5	Education and Training
25-4021	Librarians	5	Education and Training
25-4031	Library technicians	5	Education and Training
25-9011	Audio-visual collections specialists	5	Education and Training
25-9031	Instructional coordinators	5	Education and Training
25-9041	Teacher assistants	5	Education and Training
25-9099	Education, training, and library workers, all other	5	Education and Training
27-2022	Coaches and scouts	5	Education and Training
13-1031	Claims adjusters, examiners, and investigators	6	Finance
13-1032	Insurance appraisers, auto damage	6	Finance
13-2041	Credit analysts	6	Finance
13-2051	Financial analysts	6	Finance
13-2052	Personal financial advisors	6	Finance
13-2053	Insurance underwriters	6	Finance
13-2072	Loan officers	6	Finance
13-2082	Tax preparers	6	Finance
13-2099	Financial specialists, all other	6	Finance
15-2011	Actuaries	6	Finance
23-2093	Title examiners, abstractors, and searchers	6	Finance
41-3021	Insurance sales agents	6	Finance
41-3031	Securities, commodities, and financial services sales agents	6	Finance
43-3011	Bill and account collectors	6	Finance
43-3071	Tellers	6	Finance
43-4011	Brokerage clerks	6	Finance
43-4041	Credit authorizers, checkers, and clerks	6	Finance
43-4131	Loan interviewers and clerks	6	Finance
43-9041	Insurance claims and policy processing clerks	6	Finance
43-9071	Office machine operators, except computer	6	Finance
43-9081	Proofreaders and copy markers	6	Finance
11-1031	Legislators	7	Government and Public Administration
11-9131	Postmasters and mail superintendents	7	Government and Public Administration

APPENDIX A: List of Occupations and Career Clusters (continued)

13-1041	Compliance officers, except agriculture, construction, health and safety, and transportation	7	Government and Public Administration
13-2021	Appraisers and assessors of real estate	7	Government and Public Administration
13-2061	Financial examiners	7	Government and Public Administration
13-2081	Tax examiners, collectors, and revenue agents	7	Government and Public Administration
19-3011	Economists	7	Government and Public Administration
19-3051	Urban and regional planners	7	Government and Public Administration
33-3021	Detectives and criminal investigators	7	Government and Public Administration
43-4031	Court, municipal, and license clerks	7	Government and Public Administration
43-4061	Eligibility interviewers, government programs	7	Government and Public Administration
43-4111	Interviewers, except eligibility and loan	7	Government and Public Administration
43-5041	Meter readers, utilities	7	Government and Public Administration
43-5051	Postal service clerks	7	Government and Public Administration
43-5052	Postal service mail carriers	7	Government and Public Administration
43-5053	Postal service mail sorters, processors, and processing machine operators	7	Government and Public Administration
43-9111	Statistical assistants	7	Government and Public Administration
53-6051	Transportation inspectors	7	Government and Public Administration
17-2031	Biomedical engineers	8	Health Science
19-1041	Epidemiologists	8	Health Science
19-1042	Medical scientists, except epidemiologists	8	Health Science
21-1023	Mental health and substance abuse social workers	8	Health Science
21-1091	Health educators	8	Health Science
29-1011	Chiropractors	8	Health Science
29-1021	Dentists, general	8	Health Science
29-1022	Oral and maxillofacial surgeons	8	Health Science
29-1023	Orthodontists	8	Health Science
29-1024	Prosthodontists	8	Health Science
29-1029	Dentists, all other specialists	8	Health Science
29-1031	Dietitians and nutritionists	8	Health Science
29-1041	Optometrists	8	Health Science
29-1051	Pharmacists	8	Health Science
29-1069	Physicians and surgeons	8	Health Science
29-1071	Physician assistants	8	Health Science
29-1081	Podiatrists	8	Health Science
29-1111	Registered nurses	8	Health Science
29-1121	Audiologists	8	Health Science
29-1122	Occupational therapists	8	Health Science
29-1123	Physical therapists	8	Health Science
29-1124	Radiation therapists	8	Health Science
29-1125	Recreational therapists	8	Health Science
29-1126	Respiratory therapists	8	Health Science
29-1127	Speech-language pathologists	8	Health Science
29-1129	Therapists, all other	8	Health Science
29-1199	Health diagnosing and treating practitioners, all other	8	Health Science
29-2011	Medical and clinical laboratory technologists	8	Health Science
29-2012	Medical and clinical laboratory technicians	8	Health Science
29-2021	Dental hygienists	8	Health Science
29-2031	Cardiovascular technologists and technicians	8	Health Science
29-2032	Diagnostic medical sonographers	8	Health Science
29-2033	Nuclear medicine technologists	8	Health Science
29-2034	Radiologic technologists and technicians	8	Health Science
29-2051	Dietetic technicians	8	Health Science
29-2052	Pharmacy technicians	8	Health Science
29-2053	Psychiatric technicians	8	Health Science
29-2054	Respiratory therapy technicians	8	Health Science
29-2055	Surgical technologists	8	Health Science
29-2061	Licensed practical and licensed vocational nurses	8	Health Science
29-2071	Medical records and health information technicians	8	Health Science
29-2081	Opticians, dispensing	8	Health Science
29-2091	Orthotists and prosthetists	8	Health Science
29-2099	Healthcare technologists and technicians, all other	8	Health Science

APPENDIX A: List of Occupations and Career Clusters (continued)

29-9091	Athletic trainers	8	Health Science
29-9099	Healthcare practitioners and technical workers, all other	8	Health Science
31-1011	Home health aides	8	Health Science
31-1012	Nursing aides, orderlies, and attendants	8	Health Science
31-1013	Psychiatric aides	8	Health Science
31-2011	Occupational therapist assistants	8	Health Science
31-2012	Occupational therapist aides	8	Health Science
31-2021	Physical therapist assistants	8	Health Science
31-2022	Physical therapist aides	8	Health Science
31-9091	Dental assistants	8	Health Science
31-9092	Medical assistants	8	Health Science
31-9093	Medical equipment preparers	8	Health Science
31-9094	Medical transcriptionists	8	Health Science
31-9095	Pharmacy aides	8	Health Science
31-9099	Healthcare support workers, all other	8	Health Science
51-9081	Dental laboratory technicians	8	Health Science
51-9083	Ophthalmic laboratory technicians	8	Health Science
11-9051	Food service managers	9	Hospitality and Tourism
11-9071	Gaming managers	9	Hospitality and Tourism
11-9081	Lodging managers	9	Hospitality and Tourism
13-1121	Meeting and convention planners	9	Hospitality and Tourism
25-3021	Self-enrichment education teachers	9	Hospitality and Tourism
25-4013	Museum Technicians and Conservators	9	Hospitality and Tourism
27-1027	Set and exhibit designers	9	Hospitality and Tourism
27-1029	Designers, all other	9	Hospitality and Tourism
27-2021	Athletes and sports competitors	9	Hospitality and Tourism
27-2023	Umpires, referees, and other sports officials	9	Hospitality and Tourism
27-3091	Interpreters and translators	9	Hospitality and Tourism
35-1011	Chefs and head cooks	9	Hospitality and Tourism
35-1012	First-line supervisors/managers of food preparation and serving workers	9	Hospitality and Tourism
35-2011	Cooks, fast food	9	Hospitality and Tourism
35-2012	Cooks, institution and cafeteria	9	Hospitality and Tourism
35-2013	Cooks, private household	9	Hospitality and Tourism
35-2014	Cooks, restaurant	9	Hospitality and Tourism
35-2015	Cooks, short order	9	Hospitality and Tourism
35-2019	Cooks, all other	9	Hospitality and Tourism
35-2021	Food preparation workers	9	Hospitality and Tourism
35-3011	Bartenders	9	Hospitality and Tourism
35-3021	Combined food preparation and serving workers, including fast food	9	Hospitality and Tourism
35-3022	Counter attendants, cafeteria, food concession, and coffee shop	9	Hospitality and Tourism
35-3031	Waiters and waitresses	9	Hospitality and Tourism
35-3041	Food servers, nonrestaurant	9	Hospitality and Tourism
35-9011	Dining room and cafeteria attendants and bartender helpers	9	Hospitality and Tourism
35-9021	Dishwashers	9	Hospitality and Tourism
35-9031	Hosts and hostesses, restaurant, lounge, and coffee shop	9	Hospitality and Tourism
35-9099	Food preparation and serving related workers, all other	9	Hospitality and Tourism
37-1011	First-line supervisors/managers of housekeeping and janitorial workers	9	Hospitality and Tourism
37-2011	Janitors and cleaners, except maids and housekeeping cleaners	9	Hospitality and Tourism
37-2012	Maids and housekeeping cleaners	9	Hospitality and Tourism
37-2019	Building cleaning workers, all other	9	Hospitality and Tourism
39-1011	Gaming supervisors	9	Hospitality and Tourism
39-1012	Slot key persons	9	Hospitality and Tourism
39-2011	Animal trainers	9	Hospitality and Tourism
39-3011	Gaming dealers	9	Hospitality and Tourism
39-3012	Gaming and sports book writers and runners	9	Hospitality and Tourism
39-3019	Gaming service workers, all other	9	Hospitality and Tourism
39-3021	Motion picture projectionists	9	Hospitality and Tourism
39-3031	Ushers, lobby attendants, and ticket takers	9	Hospitality and Tourism
39-3091	Amusement and recreation attendants	9	Hospitality and Tourism
39-3092	Costume attendants	9	Hospitality and Tourism

APPENDIX A: List of Occupations and Career Clusters (continued)

39-3093	Locker room, coatroom, and dressing room attendants	9	Hospitality and Tourism
39-3099	Entertainment attendants and related workers, all other	9	Hospitality and Tourism
39-6011	Baggage porters and bellhops	9	Hospitality and Tourism
39-6012	Concierges	9	Hospitality and Tourism
39-6021	Tour guides and escorts	9	Hospitality and Tourism
39-6022	Travel guides	9	Hospitality and Tourism
39-6032	Transportation attendants, except flight attendants and baggage porters	9	Hospitality and Tourism
39-9032	Recreation workers	9	Hospitality and Tourism
41-2012	Gaming change persons and booth cashiers	9	Hospitality and Tourism
41-3041	Travel agents	9	Hospitality and Tourism
43-2011	Switchboard operators, including answering service	9	Hospitality and Tourism
43-3041	Gaming cage workers	9	Hospitality and Tourism
43-4081	Hotel, motel, and resort desk clerks	9	Hospitality and Tourism
43-4181	Reservation and transportation ticket agents and travel clerks	9	Hospitality and Tourism
51-3011	Bakers	9	Hospitality and Tourism
51-9012	Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	9	Hospitality and Tourism
11-9061	Funeral directors	10	Human Services
11-9141	Property, real estate, and community association managers	10	Human Services
11-9151	Social and community service managers	10	Human Services
13-2071	Loan counselors	10	Human Services
19-3032	Industrial-organizational psychologists	10	Human Services
19-3039	Psychologists, all other	10	Human Services
19-3041	Sociologists	10	Human Services
19-3099	Social scientists and related workers, all other	10	Human Services
21-1011	Substance abuse and behavioral disorder counselors	10	Human Services
21-1013	Marriage and family therapists	10	Human Services
21-1014	Mental health counselors	10	Human Services
21-1015	Rehabilitation counselors	10	Human Services
21-1019	Counselors, all other	10	Human Services
21-1021	Child, family, and school social workers	10	Human Services
21-1022	Medical and public health social workers	10	Human Services
21-1093	Social and human service assistants	10	Human Services
21-1099	Community and social service specialists, all other	10	Human Services
21-2011	Clergy	10	Human Services
21-2021	Directors, religious activities and education	10	Human Services
21-2099	Religious workers, all other	10	Human Services
31-9011	Massage therapists	10	Human Services
39-1021	First-line supervisors/managers of personal service workers	10	Human Services
39-4011	Embalmers	10	Human Services
39-4021	Funeral attendants	10	Human Services
39-5011	Barbers	10	Human Services
39-5012	Hairdressers, hairstylists, and cosmetologists	10	Human Services
39-5092	Manicurists and pedicurists	10	Human Services
39-5093	Shampooers	10	Human Services
39-5094	Skin care specialists	10	Human Services
39-9011	Child care workers	10	Human Services
39-9021	Personal and home care aides	10	Human Services
39-9031	Fitness trainers and aerobics instructors	10	Human Services
39-9041	Residential advisors	10	Human Services
39-9099	Personal care and service workers, all other	10	Human Services
51-6011	Laundry and dry-cleaning workers	10	Human Services
51-6021	Pressers, textile, garment, and related materials	10	Human Services
51-6052	Tailors, dressmakers, and custom sewers	10	Human Services
11-3021	Computer and information systems managers	11	Information Technology
15-1021	Computer programmers	11	Information Technology
15-1031	Computer software engineers, applications	11	Information Technology
15-1032	Computer software engineers, systems software	11	Information Technology
15-1041	Computer support specialists	11	Information Technology
15-1051	Computer systems analysts	11	Information Technology

APPENDIX A: List of Occupations and Career Clusters (continued)

15-1061	Database administrators	11	Information Technology
15-1071	Network and computer systems administrators	11	Information Technology
15-1081	Network systems and data communications analysts	11	Information Technology
15-1099	Computer specialists, all other	11	Information Technology
13-1061	Emergency management specialists	12	Law, Public safety, corrections and security
19-4092	Forensic science technicians	12	Law, Public safety, corrections and security
21-1029	Social workers, all other	12	Law, Public safety, corrections and security
21-1092	Probation officers and correctional treatment specialists	12	Law, Public safety, corrections and security
23-1011	Lawyers	12	Law, Public safety, corrections and security
23-1021	Administrative law judges, adjudicators, and hearing officers	12	Law, Public safety, corrections and security
23-1022	Arbitrators, mediators, and conciliators	12	Law, Public safety, corrections and security
23-1023	Judges, magistrate judges, and magistrates	12	Law, Public safety, corrections and security
23-2011	Paralegals and legal assistants	12	Law, Public safety, corrections and security
23-2092	Law clerks	12	Law, Public safety, corrections and security
23-2099	Legal support workers, all other	12	Law, Public safety, corrections and security
29-2041	Emergency medical technicians and paramedics	12	Law, Public safety, corrections and security
33-1011	First-line supervisors/managers of correctional officers	12	Law, Public safety, corrections and security
33-1012	First-line supervisors/managers of police and detectives	12	Law, Public safety, corrections and security
33-1021	First-line supervisors/managers of fire fighting and prevention workers	12	Law, Public safety, corrections and security
33-1099	First-line supervisors/managers, protective service workers, all other	12	Law, Public safety, corrections and security
33-2011	Fire fighters	12	Law, Public safety, corrections and security
33-2021	Fire inspectors and investigators	12	Law, Public safety, corrections and security
33-2022	Forest fire inspectors and prevention specialists	12	Law, Public safety, corrections and security
33-3011	Bailiffs	12	Law, Public safety, corrections and security
33-3012	Correctional officers and jailers	12	Law, Public safety, corrections and security
33-3041	Parking enforcement workers	12	Law, Public safety, corrections and security
33-3051	Police and sheriff's patrol officers	12	Law, Public safety, corrections and security
33-3052	Transit and railroad police	12	Law, Public safety, corrections and security
33-9011	Animal control workers	12	Law, Public safety, corrections and security
33-9021	Private detectives and investigators	12	Law, Public safety, corrections and security
33-9031	Gaming surveillance officers and gaming investigators	12	Law, Public safety, corrections and security
33-9032	Security guards	12	Law, Public safety, corrections and security
33-9091	Crossing guards	12	Law, Public safety, corrections and security
33-9092	Lifeguards, ski patrol, and other recreational protective service workers	12	Law, Public safety, corrections and security
33-9099	Protective service workers, all other	12	Law, Public safety, corrections and security
43-5031	Police, fire, and ambulance dispatchers	12	Law, Public safety, corrections and security
11-3051	Industrial production managers	13	Manufacturing
13-1023	Purchasing agents, except wholesale, retail, and farm products	13	Manufacturing
17-3026	Industrial engineering technicians	13	Manufacturing
17-3027	Mechanical engineering technicians	13	Manufacturing
43-5061	Production, planning, and expediting clerks	13	Manufacturing
43-5111	Weighers, measurers, checkers, and samplers, recordkeeping	13	Manufacturing
47-2011	Boilermakers	13	Manufacturing
49-1011	First-line supervisors/managers of mechanics, installers, and repairers	13	Manufacturing
49-2011	Computer, automated teller, and office machine repairers	13	Manufacturing
49-2021	Radio mechanics	13	Manufacturing
49-2022	Telecommunications equipment installers and repairers, except line installers	13	Manufacturing
49-2092	Electric motor, power tool, and related repairers	13	Manufacturing
49-2094	Electrical and electronics repairers, commercial and industrial equipment	13	Manufacturing
49-2097	Electronic home entertainment equipment installers and repairers	13	Manufacturing
49-2098	Security and fire alarm systems installers	13	Manufacturing
49-3053	Outdoor power equipment and other small engine mechanics	13	Manufacturing
49-9041	Industrial machinery mechanics	13	Manufacturing
49-9042	Maintenance and repair workers, general	13	Manufacturing
49-9043	Maintenance workers, machinery	13	Manufacturing
49-9044	Millwrights	13	Manufacturing
49-9062	Medical equipment repairers	13	Manufacturing
49-9063	Musical instrument repairers and tuners	13	Manufacturing
49-9064	Watch repairers	13	Manufacturing
49-9069	Precision instrument and equipment repairers, all other	13	Manufacturing

APPENDIX A: List of Occupations and Career Clusters (continued)

49-9091	Coin, vending, and amusement machine servicers and repairers	13	Manufacturing
49-9093	Fabric menders, except garment	13	Manufacturing
49-9094	Locksmiths and safe repairers	13	Manufacturing
51-1011	First-line supervisors/managers of production and operating workers	13	Manufacturing
51-2011	Aircraft structure, surfaces, rigging, and systems assemblers	13	Manufacturing
51-2021	Coil winders, tapers, and finishers	13	Manufacturing
51-2022	Electrical and electronic equipment assemblers	13	Manufacturing
51-2023	Electromechanical equipment assemblers	13	Manufacturing
51-2031	Engine and other machine assemblers	13	Manufacturing
51-2091	Fiberglass laminators and fabricators	13	Manufacturing
51-2092	Team assemblers	13	Manufacturing
51-2093	Timing device assemblers, adjusters, and calibrators	13	Manufacturing
51-2099	Assemblers and fabricators, all other	13	Manufacturing
51-4011	Computer-controlled machine tool operators, metal and plastic	13	Manufacturing
51-4012	Numerical tool and process control programmers	13	Manufacturing
51-4021	Extruding and drawing machine setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4022	Forging machine setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4023	Rolling machine setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4031	Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4032	Drilling and boring machine tool setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4033	Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4034	Lathe and turning machine tool setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4035	Milling and planing machine setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4041	Machinists	13	Manufacturing
51-4051	Metal-refining furnace operators and tenders	13	Manufacturing
51-4052	Pourers and casters, metal	13	Manufacturing
51-4061	Model makers, metal and plastic	13	Manufacturing
51-4062	Patternmakers, metal and plastic	13	Manufacturing
51-4071	Foundry mold and coremakers	13	Manufacturing
51-4072	Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4081	Multiple machine tool setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4111	Tool and die makers	13	Manufacturing
51-4121	Welders, cutters, solderers, and brazers	13	Manufacturing
51-4122	Welding, soldering, and brazing machine setters, operators, and tenders	13	Manufacturing
51-4191	Heat treating equipment setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4192	Lay-out workers, metal and plastic	13	Manufacturing
51-4193	Plating and coating machine setters, operators, and tenders, metal and plastic	13	Manufacturing
51-4194	Tool grinders, filers, and sharpeners	13	Manufacturing
51-4199	Metal workers and plastic workers, all other	13	Manufacturing
51-6031	Sewing machine operators	13	Manufacturing
51-6041	Shoe and leather workers and repairers	13	Manufacturing
51-6042	Shoe machine operators and tenders	13	Manufacturing
51-6051	Sewers, hand	13	Manufacturing
51-6061	Textile bleaching and dyeing machine operators and tenders	13	Manufacturing
51-6062	Textile cutting machine setters, operators, and tenders	13	Manufacturing
51-6063	Textile knitting and weaving machine setters, operators, and tenders	13	Manufacturing
51-6064	Textile winding, twisting, and drawing out machine setters, operators, and tenders	13	Manufacturing
51-6091	Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers	13	Manufacturing
51-6092	Fabric and apparel patternmakers	13	Manufacturing
51-6093	Upholsterers	13	Manufacturing
51-6099	Textile, apparel, and furnishings workers, all other	13	Manufacturing
51-7011	Cabinetmakers and bench carpenters	13	Manufacturing
51-7021	Furniture finishers	13	Manufacturing
51-7031	Model makers, wood	13	Manufacturing
51-7042	Woodworking machine setters, operators, and tenders, except sawing	13	Manufacturing
51-7099	Woodworkers, all other	13	Manufacturing
51-8011	Nuclear power reactor operators	13	Manufacturing
51-8012	Power distributors and dispatchers	13	Manufacturing

APPENDIX A: List of Occupations and Career Clusters (continued)

51-8013	Power plant operators	13	Manufacturing
51-8091	Chemical plant and system operators	13	Manufacturing
51-8099	Plant and system operators, all other	13	Manufacturing
51-9011	Chemical equipment operators and tenders	13	Manufacturing
51-9021	Crushing, grinding, and polishing machine setters, operators, and tenders	13	Manufacturing
51-9022	Grinding and polishing workers, hand	13	Manufacturing
51-9023	Mixing and blending machine setters, operators, and tenders	13	Manufacturing
51-9031	Cutters and trimmers, hand	13	Manufacturing
51-9032	Cutting and slicing machine setters, operators, and tenders	13	Manufacturing
51-9041	Extruding, forming, pressing, and compacting machine setters, operators, and tenders	13	Manufacturing
51-9051	Furnace, kiln, oven, drier, and kettle operators and tenders	13	Manufacturing
51-9061	Inspectors, testers, sorters, samplers, and weighers	13	Manufacturing
51-9071	Jewelers and precious stone and metal workers	13	Manufacturing
51-9082	Medical appliance technicians	13	Manufacturing
51-9111	Packaging and filling machine operators and tenders	13	Manufacturing
51-9121	Coating, painting, and spraying machine setters, operators, and tenders	13	Manufacturing
51-9122	Painters, transportation equipment	13	Manufacturing
51-9123	Painting, coating, and decorating workers	13	Manufacturing
51-9131	Photographic process workers	13	Manufacturing
51-9132	Photographic processing machine operators	13	Manufacturing
51-9141	Semiconductor processors	13	Manufacturing
51-9191	Cementing and gluing machine operators and tenders	13	Manufacturing
51-9192	Cleaning, washing, and metal pickling equipment operators and tenders	13	Manufacturing
51-9193	Cooling and freezing equipment operators and tenders	13	Manufacturing
51-9194	Etchers and engravers	13	Manufacturing
51-9195	Molders, shapers, and casters, except metal and plastic	13	Manufacturing
51-9196	Paper goods machine setters, operators, and tenders	13	Manufacturing
51-9197	Tire builders	13	Manufacturing
51-9198	Helpers--Production workers	13	Manufacturing
51-9199	Production workers, all other	13	Manufacturing
53-7063	Machine feeders and offbearers	13	Manufacturing
13-1022	Wholesale and retail buyers, except farm products	14	Marketing, sales and Service
27-1022	Fashion designers	14	Marketing, sales and Service
27-1023	Floral designers	14	Marketing, sales and Service
27-1026	Merchandise displayers and window trimmers	14	Marketing, sales and Service
41-1012	First-line supervisors/managers of non-retail sales workers	14	Marketing, sales and Service
41-2011	Cashiers, except gaming	14	Marketing, sales and Service
41-2021	Counter and rental clerks	14	Marketing, sales and Service
41-2031	Retail salespersons	14	Marketing, sales and Service
41-3099	Sales representatives, services, all other	14	Marketing, sales and Service
41-4011	Sales representatives, wholesale and manufacturing, technical and scientific products	14	Marketing, sales and Service
41-4012	Sales representatives, wholesale and manufacturing, except technical and scientific products	14	Marketing, sales and Service
41-9011	Demonstrators and product promoters	14	Marketing, sales and Service
41-9012	Models	14	Marketing, sales and Service
41-9021	Real estate brokers	14	Marketing, sales and Service
41-9022	Real estate sales agents	14	Marketing, sales and Service
41-9031	Sales engineers	14	Marketing, sales and Service
41-9041	Telemarketers	14	Marketing, sales and Service
41-9091	Door-to-door sales workers, news and street vendors, and related workers	14	Marketing, sales and Service
41-9099	Sales and related workers, all other	14	Marketing, sales and Service
43-3061	Procurement clerks	14	Marketing, sales and Service
43-4051	Customer service representatives	14	Marketing, sales and Service
43-4151	Order clerks	14	Marketing, sales and Service
43-9061	Office clerks, general	14	Marketing, sales and Service
53-6021	Parking lot attendants	14	Marketing, sales and Service
53-6031	Service station attendants	14	Marketing, sales and Service
11-9041	Engineering managers	15	Science, Technology, Engineering and Mathematics
15-1011	Computer and information scientists, research	15	Science, Technology, Engineering and Mathematics

APPENDIX A: List of Occupations and Career Clusters (continued)

15-2021	Mathematicians	15	Science, Technology, Engineering and Mathematics
15-2041	Statisticians	15	Science, Technology, Engineering and Mathematics
15-2091	Mathematical technicians	15	Science, Technology, Engineering and Mathematics
15-2099	Mathematical scientists, all other	15	Science, Technology, Engineering and Mathematics
17-2011	Aerospace engineers	15	Science, Technology, Engineering and Mathematics
17-2021	Agricultural engineers	15	Science, Technology, Engineering and Mathematics
17-2041	Chemical engineers	15	Science, Technology, Engineering and Mathematics
17-2061	Computer hardware engineers	15	Science, Technology, Engineering and Mathematics
17-2071	Electrical engineers	15	Science, Technology, Engineering and Mathematics
17-2072	Electronics engineers, except computer	15	Science, Technology, Engineering and Mathematics
17-2111	Health and safety engineers, except mining safety engineers and inspectors	15	Science, Technology, Engineering and Mathematics
17-2112	Industrial engineers	15	Science, Technology, Engineering and Mathematics
17-2121	Marine engineers and naval architects	15	Science, Technology, Engineering and Mathematics
17-2131	Materials engineers	15	Science, Technology, Engineering and Mathematics
17-2141	Mechanical engineers	15	Science, Technology, Engineering and Mathematics
17-2151	Mining and geological engineers, including mining safety engineers	15	Science, Technology, Engineering and Mathematics
17-2161	Nuclear engineers	15	Science, Technology, Engineering and Mathematics
17-2171	Petroleum engineers	15	Science, Technology, Engineering and Mathematics
17-2199	Engineers, all other	15	Science, Technology, Engineering and Mathematics
17-3011	Architectural and civil drafters	15	Science, Technology, Engineering and Mathematics
17-3012	Electrical and electronics drafters	15	Science, Technology, Engineering and Mathematics
17-3023	Electrical and electronic engineering technicians	15	Science, Technology, Engineering and Mathematics
17-3024	Electro-mechanical technicians	15	Science, Technology, Engineering and Mathematics
17-3029	Engineering technicians, except drafters, all other	15	Science, Technology, Engineering and Mathematics
17-3031	Surveying and mapping technicians	15	Science, Technology, Engineering and Mathematics
19-1021	Biochemists and biophysicists	15	Science, Technology, Engineering and Mathematics
19-1022	Microbiologists	15	Science, Technology, Engineering and Mathematics
19-1029	Biological scientists, all other	15	Science, Technology, Engineering and Mathematics
19-1031	Conservation scientists	15	Science, Technology, Engineering and Mathematics
19-1099	Life scientists, all other	15	Science, Technology, Engineering and Mathematics

APPENDIX A: List of Occupations and Career Clusters (continued)

19-2011	Astronomers	15	Science, Technology, Engineering and Mathematics
19-2012	Physicists	15	Science, Technology, Engineering and Mathematics
19-2021	Atmospheric and space scientists	15	Science, Technology, Engineering and Mathematics
19-2031	Chemists	15	Science, Technology, Engineering and Mathematics
19-2032	Materials scientists	15	Science, Technology, Engineering and Mathematics
19-2041	Environmental scientists and specialists, including health	15	Science, Technology, Engineering and Mathematics
19-2042	Geoscientists, except hydrologists and geographers	15	Science, Technology, Engineering and Mathematics
19-2043	Hydrologists	15	Science, Technology, Engineering and Mathematics
19-2099	Physical scientists, all other	15	Science, Technology, Engineering and Mathematics
19-3021	Market research analysts	15	Science, Technology, Engineering and Mathematics
19-3022	Survey researchers	15	Science, Technology, Engineering and Mathematics
19-3091	Anthropologists and archeologists	15	Science, Technology, Engineering and Mathematics
19-3092	Geographers	15	Science, Technology, Engineering and Mathematics
19-3093	Historians	15	Science, Technology, Engineering and Mathematics
19-3094	Political scientists	15	Science, Technology, Engineering and Mathematics
19-4011	Agricultural and food science technicians	15	Science, Technology, Engineering and Mathematics
19-4021	Biological technicians	15	Science, Technology, Engineering and Mathematics
19-4031	Chemical technicians	15	Science, Technology, Engineering and Mathematics
19-4051	Nuclear technicians	15	Science, Technology, Engineering and Mathematics
19-4061	Social science research assistants	15	Science, Technology, Engineering and Mathematics
19-4099	Life, physical, and social science technicians, all other	15	Science, Technology, Engineering and Mathematics
27-3042	Technical writers	15	Science, Technology, Engineering and Mathematics
11-3071	Transportation, storage, and distribution managers	16	Transportation, Distribution and Logistics
13-1081	Logisticians	16	Transportation, Distribution and Logistics
17-3021	Aerospace engineering and operations technicians	16	Transportation, Distribution and Logistics
39-6031	Flight attendants	16	Transportation, Distribution and Logistics
43-3021	Billing and posting clerks and machine operators	16	Transportation, Distribution and Logistics
43-5011	Cargo and freight agents	16	Transportation, Distribution and Logistics
43-5032	Dispatchers, except police, fire, and ambulance	16	Transportation, Distribution and Logistics
43-5071	Shipping, receiving, and traffic clerks	16	Transportation, Distribution and Logistics
47-4061	Rail-track laying and maintenance equipment operators	16	Transportation, Distribution and Logistics
49-2091	Avionics technicians	16	Transportation, Distribution and Logistics
49-2093	Electrical and electronics installers and repairers, transportation equipment	16	Transportation, Distribution and Logistics
49-2096	Electronic equipment installers and repairers, motor vehicles	16	Transportation, Distribution and Logistics
49-3011	Aircraft mechanics and service technicians	16	Transportation, Distribution and Logistics
49-3021	Automotive body and related repairers	16	Transportation, Distribution and Logistics
49-3022	Automotive glass installers and repairers	16	Transportation, Distribution and Logistics
49-3023	Automotive service technicians and mechanics	16	Transportation, Distribution and Logistics

APPENDIX A: List of Occupations and Career Clusters (continued)

49-3031	Bus and truck mechanics and diesel engine specialists	16	Transportation, Distribution and Logistics
49-3042	Mobile heavy equipment mechanics, except engines	16	Transportation, Distribution and Logistics
49-3043	Rail car repairers	16	Transportation, Distribution and Logistics
49-3051	Motorboat mechanics	16	Transportation, Distribution and Logistics
49-3052	Motorcycle mechanics	16	Transportation, Distribution and Logistics
49-3091	Bicycle repairers	16	Transportation, Distribution and Logistics
49-3092	Recreational vehicle service technicians	16	Transportation, Distribution and Logistics
49-3093	Tire repairers and changers	16	Transportation, Distribution and Logistics
49-9097	Signal and track switch repairers	16	Transportation, Distribution and Logistics
53-1011	Aircraft cargo handling supervisors	16	Transportation, Distribution and Logistics
53-1021	First-line supervisors/managers of helpers, laborers, and material movers, hand	16	Transportation, Distribution and Logistics
53-1031	First-line supervisors/managers of transportation and material-moving machine and vehicle operators	16	Transportation, Distribution and Logistics
53-2011	Airline pilots, copilots, and flight engineers	16	Transportation, Distribution and Logistics
53-2012	Commercial pilots	16	Transportation, Distribution and Logistics
53-2021	Air traffic controllers	16	Transportation, Distribution and Logistics
53-2022	Airfield operations specialists	16	Transportation, Distribution and Logistics
53-3011	Ambulance drivers and attendants, except emergency medical technicians	16	Transportation, Distribution and Logistics
53-3021	Bus drivers, transit and intercity	16	Transportation, Distribution and Logistics
53-3022	Bus drivers, school	16	Transportation, Distribution and Logistics
53-3032	Truck drivers, heavy and tractor-trailer	16	Transportation, Distribution and Logistics
53-3033	Truck drivers, light or delivery services	16	Transportation, Distribution and Logistics
53-3041	Taxi drivers and chauffeurs	16	Transportation, Distribution and Logistics
53-3099	Motor vehicle operators, all other	16	Transportation, Distribution and Logistics
53-4019	Locomotive engineers and operators	16	Transportation, Distribution and Logistics
53-4021	Railroad brake, signal, and switch operators	16	Transportation, Distribution and Logistics
53-4031	Railroad conductors and yardmasters	16	Transportation, Distribution and Logistics
53-4041	Subway and streetcar operators	16	Transportation, Distribution and Logistics
53-4099	Rail transportation workers, all other	16	Transportation, Distribution and Logistics
53-5011	Sailors and marine oilers	16	Transportation, Distribution and Logistics
53-5021	Captains, mates, and pilots of water vessels	16	Transportation, Distribution and Logistics
53-5022	Motorboat operators	16	Transportation, Distribution and Logistics
53-5031	Ship engineers	16	Transportation, Distribution and Logistics
53-6011	Bridge and lock tenders	16	Transportation, Distribution and Logistics
53-6041	Traffic technicians	16	Transportation, Distribution and Logistics
53-6099	Transportation workers, all other	16	Transportation, Distribution and Logistics
53-7051	Industrial truck and tractor operators	16	Transportation, Distribution and Logistics
53-7061	Cleaners of vehicles and equipment	16	Transportation, Distribution and Logistics
53-7062	Laborers and freight, stock, and material movers, hand	16	Transportation, Distribution and Logistics
53-7064	Packers and packagers, hand	16	Transportation, Distribution and Logistics
53-7121	Tank car, truck, and ship loaders	16	Transportation, Distribution and Logistics
53-7199	Material moving workers, all other	16	Transportation, Distribution and Logistics

Source: DTI Associates, Inc. under contract no. ED-04-CO-0121/0001 with U.S. Department of Education, OVAE
 Compiled by Don Hilber, based on other tables authored by Richard Dempsey

APPENDIX B: List of career clusters and job totals per cluster

STATE	TOTAL	AGRICULTURE, FOOD & NATURAL RESOURCES	ARCHITECTURE & CONSTRUCTION	ARTS, A/V TECHNOLOGY & COMMUNICATIONS	BUSINESS MANAGEMENT & ADMINISTRATION	EDUCATION & TRAINING	FINANCE	GOVERNMENT & PUBLIC ADMINISTRATION	HEALTH SCIENCE
AL	-								
AK	5,600						5600		
AZ	45,100							45100	
AR	-								
CA	-								
CO	-								
CT	-								
DE	54,400					31500		6000	
DC	18,100							18100	
FL	-								
GA	-								
HI	-								
ID	12,900							12900	
IL	3,795,500		381900		1088900	487700	232400	79800	
IN	1,706,700	108900		37300	413000	212000	73500	36700	
IA	239,900			23600		125400		19700	
KS	684,700			18900	235300			19200	
KY	26,500							26500	
LA	-								
ME	675,400	29600	52500	8500	91500	51900	17200	10100	68300
MD	-								
MA	1,033,500				582300		117200	47200	
MI	-								
MN	2,416,200		171400	51400	484600	190900		39000	
MS	80,300			11800				19000	
MO	40,400							40400	
MT	-								
NE	-								
NV	20,200							20200	
NH	8,800							8800	
NJ	-								
NY	-								
NC	564,700					357100		58600	
ND	319,600	29500		5600	52100	26600	11200	4800	35500
OH	-								
OK	-								
OR	-								
PA	540,700								
RI	111,900								
SC	-								
SD	17,400							7600	
TN	-								
TX	-								
UT	135,100					110700		24400	
VT	12,900						6500	6400	
VA	-								
WA	53,300							53300	
WV	-								
WI	-								
WY	-								