

RECRUITING TRENDS

2016-17

46th Edition



BRIEF 2

Hiring Outlook by Industry Sector and Geographic Region

Key findings from 2016-17 are presented in this research brief. We have broken the release of employer information into a series of short briefs that will be made available over the next six weeks. You can download the briefs from the [Collegiate Employment Research Institute](#).

Meet the Completers

We generated this convenience sample from employers currently seeking college talent through their interactions with college and university career services offices. Nearly 200 career service centers from around the country invited their employers to participate in this study. Approximately 4,350 employers provided information useful for understanding recruiting trends and practices. We will use information provided by those recruiting talent for full-time positions, internships, and co-ops for these research briefs. Readers can use the following key sample characteristics to determine how applicable our survey results are for their campus employer base.

Company Size		
Very small	> 9 employees	9%
Fast-growth	10-100 employees	30%
Small	101–500 employees	23%
Midsize	501–3,999 employees	20%
Large	4,000–25,000 employees	10%
Very large	> 25,000 employees	8%

Active Recruiting by Region	
International	5%
Entire U.S.	25%
Regional recruiting only	69%

Role in College Recruiting	
Full-time positions	71%
Internship or co-op positions only	12%
Short-term hiring	7%
Experienced hiring	10%

Key States	
Massachusetts	10%
Michigan	9%
Arizona, California, Florida, Ohio & Texas	6%

Institutions Where Companies Recruit Talent	
Two-year public college	28%
Four-year public college	53%
Four-year private college	40%
Two- & four-year for-profit institution	22%
Institution with bachelor's & advanced degree programs	69%
Institution with advanced degrees only	10%
Historically black college & university	17%
Hispanic-serving institution	15%
Asian, Asian-Pacific serving institutions	14%

Key Economic Sectors	
Professional, business & scientific services	22%
Manufacturing	13%
Educational services	10%
Finance & insurance	8%
Government	7%
Healthcare & social assistance	7%
Nonprofits	7%

ACKNOWLEDGEMENTS

Recruiting Trends 2016-17 is made possible by the efforts of many dedicated and generous colleagues, friends of the institute, and corporate sponsors. We thank all the colleges and universities who encouraged local, regional, and national organizations to participate in our survey and for their confidence in our contribution to research on college recruiting. Please visit our web page, [Consortium For Student Transition Studies](#), for a complete list of participants. We also thank our editor, Stephanie Schlick.

We extend special appreciation to several people whose special insights contribute to CERI's research activities: Jeff Beavers (CEO 3sevenPartners), Duncan Ferguson (Managing Director, Vantage Leadership Consulting), and James Spohrer (Director of University Programs Worldwide [and numerous other titles], IBM Almaden Research Center).



The data in this brief present two aspects of the new college labor market. We analyzed the geographic data based on all employers who indicated they recruited in a specific region.

Regional employers usually confine their talent searches to smaller areas but may expand recruitment into nearby regions.

By classifying each organization by its primary North American Industrial Classification (NAIC) code, we can compare the yearly employment figures reported from the Bureau of Labor Statistics (BLS) to the survey responses. In several sectors, we provide hiring data by academic degree in key subsectors where responses returned sufficient meaningful information.

Hiring by industry sector

Except for mining and oil, all other sectors believed the college labor market was performing very well. Some respondents in the arts and entertainment and the accommodations and food services sectors were less certain as to the strength of the market. Examining only the bachelor's level data across all sectors, employers are expecting to increase hiring, especially in administrative services; nonprofits; real estate and leasing; retail and wholesale trades; and transportation. Less than 40 percent of employers from agriculture and natural resources and mining and oil expect to increase hiring. How well hiring targets are set as the recruiting season begins vary widely from a high of 35 percent of employers in retail trade with definite plans to only 12 percent of employers in wholesale trade with definite plans.

Eighteen major industrial sectors returned hiring information that can be reported for at least the bachelor's level. Rarely does a situation arise where a sector provides insufficient data. This year we are not able to include data on hiring intentions for mining and oil. The leading sectors that typically drive college recruiting all report expanded employment opportunities at the bachelor's level:

- ◆ Professional, Business, and Scientific Services (18%)
- ◆ Manufacturing (17%)
- ◆ Educational Services (6%)
- ◆ Finance and Insurance (18%)
- ◆ Healthcare and Social Assistance (42%)
- ◆ Nonprofits (23%)
- ◆ Government (33%)

BLS employment figures corroborate the survey results, for the most part. BLS shows year over year weakness in manufacturing and mining and oil. Some sectors showed variability across subsectors, such as construction, information services, and transportation. In other key sectors, including educational services; government; healthcare and social services; nonprofits; and professional, business, and scientific services, all subsectors increased hiring over the year.

Focusing on the reported change in hiring at the bachelor's level, our results appear consistent with the BLS, though we do identify some differences.

- ◆ Construction hiring is up in residential and specialty trades but down in heavy and civil construction. Survey employers expect to hire strongly at the bachelor's level. It is hard to determine at this point the reason for the drop for associate's degree graduates this year.

- ◆ Pre-K and K-12 education indicate another strong hiring season, the second year in a row. Educational services, which includes testing services and tutoring, is also signaling strong gains.
- ◆ Finance and insurance is marking a very strong recovery from the recession with another year of strong growth in jobs. There is one exception, commercial banking continues to shed jobs and our respondents in this sector will also be reducing their hiring quotas. However, insurance, investment advisors, investment banking, and securities are all seeking more talent this year.
- ◆ Information continues to move forward and backward. Publishing and broadcasting (contractions in the cable industry) continue to shed jobs. Motion pictures, while hiring more talent over the past year, failed to provide enough information to measure their change. Telecommunications continues its roller coaster pattern. After showing positive job growth last year, respondents from this subsector indicate a contraction this year. The strength in hiring in information services is found among data processing services, Internet content publishers, Internet providers, software publishers, storage services, and web hosting services.
- ◆ Hiring in manufacturing is up overall. We are seeing similar patterns as the national data in nondurable goods manufacturing subsectors (chemicals, food, and plastics). Durable goods manufacturing subsectors (computers and electronics, fabricated metals) are showing declines in hiring. Stronger hiring is reported for beverages, machinery, and primary metals (areas that the BLS data shows are losing jobs) and automotive and electrical components. Aerospace appears to be hiring at the same pace as last year.
- ◆ Nonprofits, which have been the mainstay of college hiring for much of the past 15 years, are still moving ahead but much more slowly this year. With all the other sectors shifting into higher gear, nonprofits are facing more competition for attracting talent.
- ◆ Every subsector in professional, business, and scientific services is increasing hiring this year, except for architectural services. This subsector showed positive growth over the past year in the BLS data. Our data, which show a downward trend in hiring, may simply be the result of too small a sample for this subsector. Accounting, management consulting activities (including logistic support) and advertising and marketing are strong drivers in this sector, based on our information. Computer science, engineering services, and scientific research are growing but not as fast this year.
- ◆ Transportation has been a strong hirer at the college level for much of the past decade. BLS figures indicate a weakening in this sector over the last year, especially in the rail subsector. However, our respondents, whether in air, water, rail, or truck transportation, are all seeking more talent. Support activities for transportation such as freight transfer, logistics, and warehousing are also beefing up on talent.

The following tables provide the best information we have on sector and subsector hiring for 2016-17. For the key subsectors, we are reporting only for bachelor's degrees. The number of responses in some categories failed to meet the minimum for our reporting purposes. This information should serve as a guide. Readers are encouraged to compare these numbers with organizations in their region to confirm hiring projections.

NOTE: Sectors are listed in order of survey response rate.

Professional, Business & Scientific Services
(accounting firms, legal management, computer systems and services, engineering services, architectural services, scientific research, environmental consulting, marketing, PR, media buying, and veterinary services)

Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	2.3	3.7	63
Bachelor's	17.2	20.4	19
MBA	2.4	2.9	21
Master's	6.1	6.5	6
PhD	2.7	3.0	13
Professional	1.6	2.7	52

Educational Services
(elementary and secondary education, colleges and universities, sports and recreation instruction, and educational support services)

Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	8.2	9.7	18
Bachelor's	58.9	62.6	6
MBA	15.4	23.8	54
Master's	15.4	23.8	9
PhD	2.9	3.3	13

Professional, Business & Scientific Services — Subsectors
(bachelor's degrees only)

Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Accounting	22.2	34.1	53
Advertising & Marketing	11.2	14.0	24
Architectural Design	6.5	4.6	-29
Computer Services	6.7	7.6	14
Engineering Services	8.2	9.2	12
Management Consulting	9.8	12.2	24

Educational Services — Subsectors
(bachelor's degrees only)

Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Educational Services	13.5	14.4	14
K-12	127.2	138.3	8

Manufacturing

Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	6.0	9.7	63
Bachelor's	16.4	19.1	17
MBA	13.0	14.7	12
Master's	12.9	17.6	36
PhD	6.6	7.8	-9

Finance and Insurance
(banks, credit intermediation, mortgage and loan brokers, securities and financial investments, insurance carriers, funds and trusts)

Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	6.1	9.2	51
Bachelor's	49.7	69.2	39
MBA	26.2	46.9	79
Master's	8.6	67.9	100
Professional	8.5	14.1	65

Manufacturing — Subsectors
(bachelor's degrees only)

Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Aerospace	9.7	9.7	NC
Automotive	5.1	5.5	7
Chemicals & Pharmaceuticals	24.7	15.6	-37
Computer & Electronics	24.8	22.8	-8
Electrical	4.6	8.1	75
Fabricated Metals	4.0	3.6	-9
Food Processing	6.4	5.1	-20
Machinery	12.3	18.3	48
Plastics	5.8	5.7	-2
Primary Metals	22.8	13.1	11

Finance and Insurance — Subsectors
(bachelor's degrees only)

Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Commercial Banks	6.1	5.6	-8
Insurance	21.6	23.6	9
Investment Advisors	58.6	119.6	100
Investment Banking & Securities	54.6	71.2	30
Mortgage	299.6	414.4	38

Healthcare and Social Assistance (ambulatory care, hospitals, outpatient, and social assistance)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	25.0	28.5	14
Bachelor's	17.9	25.7	38
MBA	8.8	8.8	NC
Master's	15.4	14.9	-3
PhD	17.9	17.6	-2
Professional	17.9	17.6	-2

Healthcare and Social Assistance — Subsectors (bachelor's degrees only)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Ambulatory Care	22.4	26.6	19
Hospitals	23.0	29.9	30
Outpatient	10.0	11.6	16
Social Assistance	9.7	30.5	100

Nonprofits (religious, grant making, voluntary health, human rights, environmental, civil and social organizations, and professional associations)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	8.7	17.4	100
Bachelor's	33.7	43.1	28
MBA	2.8	3.4	22
Master's	3.2	4.6	43

Government			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	33.8	63.3	99
Bachelor's	33.1	44.0	33
MBA	6.0	6.0	NC
Master's	8.3	9.6	15
PhD	6.0	9.0	43
Professional	4.6	6.8	46

Construction (residential, nonresidential, heavy, and specialty trade)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	10.3	3.2	-69
Bachelor's	20.9	32.3	54
Master's	2.4	1.1	-55

Retail Trade			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	106.8	110.7	4
Bachelor's	79.4	84	6
MBA	29.2	31.3	7
Master's	21.1	24.1	14

Information Services (publishing, motion pictures, broadcasting, telecommunications, internet service providers, and news syndicates)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	7.6	14.9	97
Bachelor's	54.3	62.1	14
MBA	16.8	13.9	-17
Master's	33.8	25.1	-26

Information Services — Subsectors (bachelor's degrees only)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Broadcasting	4.0	3.7	-8
Data Processing, Internet Provider, Storage & Web Hosting	302.2	402.4	33
Internet Publishing	6.0	7.4	23
Publishing	26.7	24.5	-8
Software Publishing	6.7	7.5	12
Telecommunications	33.1	18.8	-43

Transportation (air, rail, water, and truck transportation, pipeline transportation, support activities for transportation, postal and messenger services, and warehouse and storage)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	6.1	6.3	3
Bachelor's	29.8	34.2	15
MBA	2.7	3.5	27

Transportation — Subsectors			
Degree	Number of hires		Change year over year (%)
	2014-15 (avg.)	2015-16 (avg.)	
Air	5.4	9.4	75
Rail	25.5	25.5	NC
Support Services	19.6	34.4	75
Truck	43.4	46.1	6
Warehousing & Storage	30.5	33.7	10

Administrative Services (office administration, employment services, and business support services)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	6.4	12.1	90
Bachelor's	15.3	23.4	53
MBA	4.6	9.8	100

Wholesale Trade			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	4.1	7.9	95
Bachelor's	26.5	24.0	-9

Arts and Entertainment (performing arts, spectator sports, agents, museums, zoos, casinos, golf courses, and fitness centers)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Bachelor's	3.6	4.1	14

Accommodations & Food Services (hotels, full service food establishments, and limited service food providers)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	6.2	10.4	66
Bachelor's	19.6	27.1	38

Hiring by region

Many employers confine their recruiting activities to colleges and universities in the region near their headquarters or major offices. Regional hiring, which is comprised of many small employers, can differ from national and international organizations as well as other regions of the country. We have grouped states in contiguous clusters that can share a common identity.

We provide data at all degree levels for each region. The table and figures are derived from employers who indicated that they actively sought new hires in those states. The first table provides a general overview of broad groups of employers by how they generally focus their recruiting efforts. Immediately we can see a big difference across these three groups:

- ◆ International hiring is being bolstered by a modest growth in hiring for bachelor's degrees; the other degree levels will experience a contraction in opportunities. This contraction may reflect the continued slow economic growth in Europe and East Asia.
- ◆ National employers reported the strongest gains in employment, with hiring for bachelor's degrees increasing by 27 percent. In fact, these employers intend to make strong gains across all degree levels.

Agriculture (agricultural production, agricultural support services, and forestry)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Associate's	26.8	35.8	33
Bachelor's	30.6	37.1	21

Utilities (electric power, natural gas, water supply and sewage, and steam and air conditioning supply)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Bachelor's	6.6	8.1	23

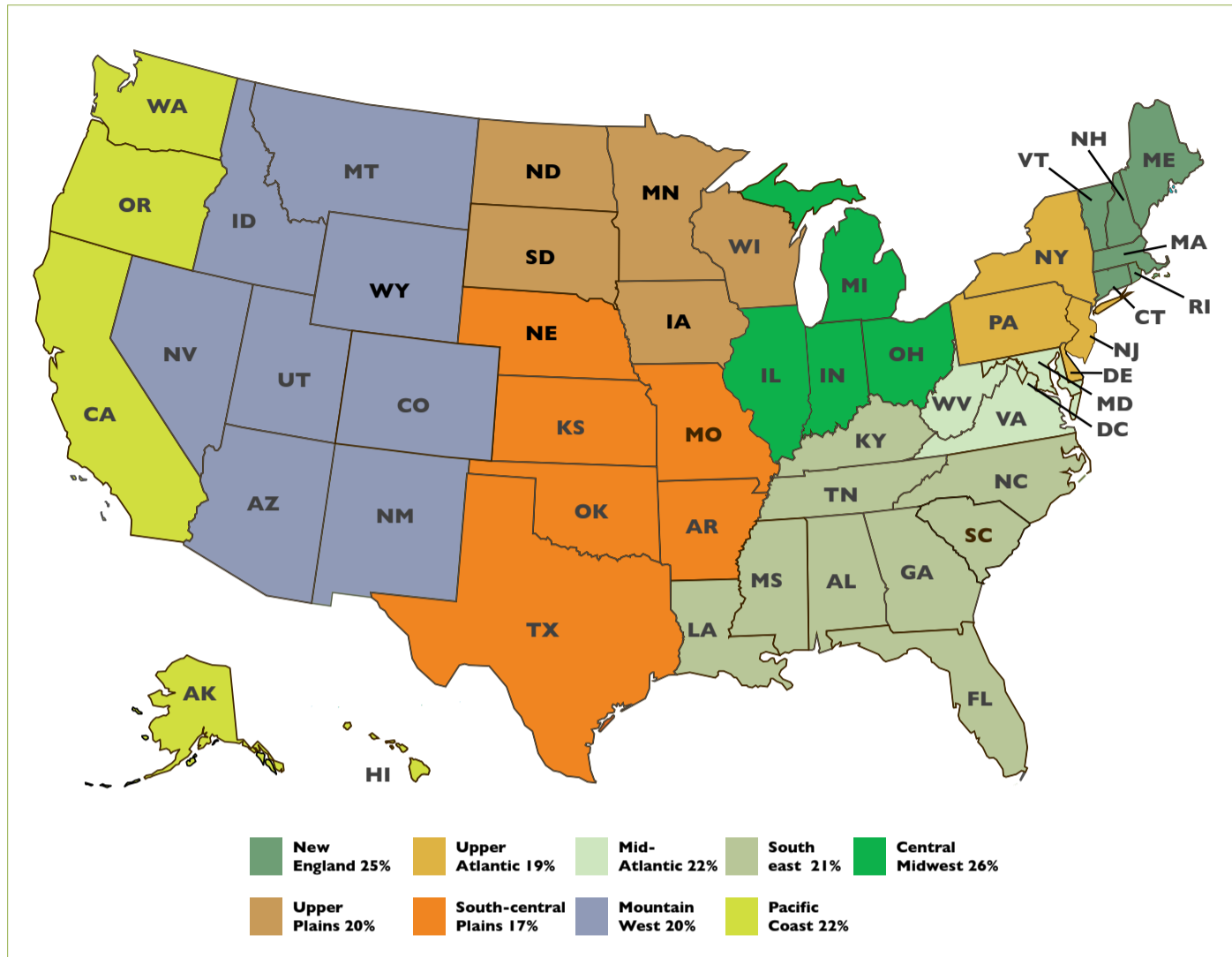
Real Estate & Leasing (real estate brokers, property managers, automotive and equipment leasing, and rental centers)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Bachelor's	--	--	9

-- Averages not reported because of possible identification of respondents.

Mining & Oil (support activities for mining and drilling)			
Degree	Number of hires		Change year over year (%)
	2015-16 (avg.)	2016-17 (avg.)	
Bachelor's	n.a.	n.a.	n.a.

- ◆ Regional employers will also be very active but not to the same degree as national employers. Increases in hiring for bachelor's degrees will range from 17-26 percent depending on the region; this aligns with the increases reported over the previous two years.
- ◆ In addition to the strong performance at the bachelor's level, these figures illustrate three key points: (1) hiring for associate's degrees is particularly strong among national employers, (2) hiring for MBAs continues its strong recovery, and (3) hiring for master's degrees is finally showing some oomph.

Regions show very similar hiring patterns for this year across all degree levels, with double-digit increases for associate's, bachelor's, and MBA degrees. Growth in positions for bachelor's degrees appear to be stronger in the eastern states. Conversely, growth in positions for associate's degrees and MBAs were stronger in the western states.



Hiring for all degree levels by employer's recruiting orientation

Employers	Associate's		Bachelor's		MBA		Master's		PhD		Professional		Total	
	Hires (avg.)	Change year over year (%)	Hires (avg.)	Change year over year (%)	Hires (avg.)	Change year over year (%)	Hires (avg.)	Change year over year (%)	Hires (avg.)	Change year over year (%)	Hires (avg.)	Change year over year (%)	Hires (avg.)	Change year over year (%)
International N = 89	7.9	-3	155.2	9	6.1	-16	19.4	NC	9.9	-2	16.6	25	162.1	8
National N = 446	23.2	46	72.4	27	30.0	56	28.6	65	11.4	16	8.4	-2	101.8	35
Regional N = 1,288	13.5	48	22.9	15	4.2	19	7.6	6	3.1	5	16.7	18	31.2	19

**Central Midwest (IL, IN, MI, OH)
N=636**

Degree	Hires (avg.)	Change year over year (%)
Associate's	22.8	42
Bachelor's	76.6	20
MBA	26.9	6
Master's	23.3	70
PhD	6.0	-7
Professional	17.2	3
Total	99.3	26

**Mid-Atlantic (DC, MD, VA, WV)
N=230**

Degree	Hires (avg.)	Change year over year (%)
Associate's	28.4	7
Bachelor's	149.2	22
MBA	12.7	32
Master's	21.9	38
PhD	6.8	33
Professional	22.1	18
Total	167.2	67

Pacific Coast (AK, CA, HI, OR, WA) N=376		
Degree	Hires (avg.)	Change year over year (%)
Associate's	27.5	55
Bachelor's	98.1	19
MBA	15.8	49
Master's	16.1	26
PhD	10.5	4
Professional	16.2	4
Total	117.3	22

Southeast (AL, FL, GA, KY, LA, MS, NC, SC, TN) N=565		
Degree	Hires (avg.)	Change year over year (%)
Associate's	27.1	39
Bachelor's	86.5	21
MBA	13.3	28
Master's	18.5	6
PhD	10.3	6
Professional	12.6	21
Total	105.2	21

Mountain West — AZ, CO, ID, MT, NM, NV, UT, WY N=202		
Degree	Hires (avg.)	Change year over year (%)
Associate's	26.9	32
Bachelor's	86.9	19
MBA	10.3	33
Master's	14.1	13
PhD	6.5	28
Professional	14.0	18
Total	104.2	20

Upper Atlantic — DE, NJ, NY, PA N=385		
Degree	Hires (avg.)	Change year over year (%)
Associate's	27.0	22
Bachelor's	110.8	20
MBA	16.7	21
Master's	21.3	12
PhD	7.6	13
Professional	16.7	20
Total	129.1	19

New England — CT, MA, ME, NH, RI, VT N=323		
Degree	Hires (avg.)	Change year over year (%)
Associate's	34.1	23
Bachelor's	90.4	25
MBA	17.1	37
Master's	13.4	18
PhD	4.6	1
Professional	18.3	10
Total	105.6	25

Upper Plains (IA, MN, ND, SD, WI) N=285		
Degree	Hires (avg.)	Change year over year (%)
Associate's	29.4	40
Bachelor's	101.85	18
MBA	13.4	51
Master's	15.5	18
PhD	15.8	2
Professional	16.2	13
Total	120.8	20

South-Central Plains (AR, KS, MO, NE, OK, TX) N=237		
Degree	Hires (avg.)	Change year over year (%)
Associate's	21.8	27
Bachelor's	81.6	18
MBA	12.0	16
Master's	13.2	10
PhD	8.8	1
Professional	16.1	60
Total	96.1	17