

RECRUITING TRENDS

2017-18

47th Edition

BRIEF 2

Hiring Outlook by Industry Sector and Geographic Region

Key findings from 2017-18 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 3,370 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.

Survey respondents by organization size		
Very small	< 49 employees	27%
Small	50-499 employees	37%
Midsize	500-3,999 employees	20%
Large	4,000-24,999 employees	9%
Very large	> 25,000 employees	6%

Active Recruiting by Region	
International	8%
Entire U.S.	32%
Regional recruiting only	60%

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

Key States	
Michigan	16%
Utah	7%
Illinois	6%
Massachusetts	6%
New York	6%

Institutions Where Companies Recruit Talent	
Two-year public college	31%
Four-year public college	53%
Four-year private college	43%
Two- & four-year for-profit institution	24%
Institution with bachelor's & advanced degree programs	72%
Institution with advanced degrees only	11%
Historically black college & university	19%
Hispanic-serving institution	17%
Asian, Asian-Pacific serving institutions	16%

Key Economic Sectors	
Professional, business & scientific services	19%
Manufacturing	12%
Educational services	11%
Finance & insurance services	8%
Government	7%
Healthcare & social assistance	8%
Nonprofits	8%

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The data in this brief present two aspects of the new college labor market. By classifying each organization by its primary North American Industrial Classification (NAIC) code, organizations are aggregated in similar industrial sectors.

NAIC codes also allow comparison to employment figures from the Bureau of Labor Statistic (BLS).

We analyze the geographic data based on the scope of recruiting: international, throughout the U.S., and specific regions within the U.S. Regional employers usually confine their talent searches to smaller areas but may not expand recruitment into adjacent regions.

Challenges faced by industry sector

Recruiters from different economic sectors experience different challenges that affect the success of their recruiting efforts. The following table lists the challenges from seven key sectors, based on level of response. Most sectors agree about the most serious recruiting challenges: candidates lack soft skills, work experience, and interest in the job being offered. Competition from other employers also reduces the candidate pool. In agriculture, construction, manufacturing, mining and oil production, and utilities, a candidate's lack of technical skills is major challenge. Several sectors require credentials or certifications that cause problems for employers when candidates procrastinate or fail to obtain the certifications.

The response from the other sectors was lower, but we received enough information to identify the most serious challenges employers currently face in their recruiting activities.

- ◆ Accommodation and Hospitality: lack of soft skills, lack of interest in the job, small pools of candidates, and competition from other employers
- ◆ Administrative Services: lack of soft skills, competition from other employers, and lack of interest in the job
- ◆ Agriculture and Natural Resources: lack of technical skills and small pools of candidates
- ◆ Arts, Entertainment, and Recreation: lack of soft skills, lack of technical skills, and lack of work experience
- ◆ Information Services: lack of technical skills, lack of soft skills, lack of work experience, and competition from other employers

- ◆ Mining and Oil Production: lack of work experience, lack of technical skills, and lack of interest in the job
- ◆ Real Estate and Leasing: lack of soft skills and lack of interest in job
- ◆ Retail Trade: lack of soft skills, lack of interest in the job, and competition from other employers
- ◆ Transportation: competition from other employers, lack of interest in the job, and lack of soft skills
- ◆ Utilities: lack of technical skills, lack of work experience, and lack of soft skills
- ◆ Wholesale Trade: lack of soft skills, lack of interest in the job

In the service sectors, which include educational services, finance and insurance services, healthcare and social assistance, information services, and professional, business, and scientific services, the biggest challenge is finding candidates with solid soft skills.

Employers, regardless of sector, appear to encounter candidates who pursue positions in their organization but come to realize upon closer examination they are not interested in that type of position. (After the organization has expended time and resources, the candidate finally does some research.)

Hiring by industry sector

All 20 of the industry groups designated through NAIC codes reported hiring information. Unfortunately, the small number of responses in three groups — arts, entertainment, and recreation, mining and oil production, and utilities — did not permit us to include their information in this brief.

Information at the bachelor's level provides the strongest industry-based measure of the labor market. For several sectors, we provide hiring data in key subsectors for the bachelor's degree level only. For the sectors with higher number of respondents, we add degree levels with information sufficient to provide stable results.

Except for manufacturing, all the sectors expect to expand hiring at the bachelor's level. Some sectors will hire only a small number of graduates. Small changes in numbers can produce larger percentage changes; readers should be careful when interpreting the data for sectors with low numbers of respondents.

Professional, business, and scientific services provides a good picture of the outlook for most degrees. In this sector growth across all degrees is very positive. Several key subsectors — computer design services, engineering services, and scientific research — all show strong growth. Finance and insurance services, on the other hand, is expecting much lower growth, especially in banking and investment services.

Challenges	Construction	Manufacturing	Finance & insurance services	Professional, business & scientific services	Educational services	Healthcare and social assistance	Nonprofits	Government
1	Lack of work experience	Technical skills	Soft skills	Soft skills	Low # of candidates	Competition from other employers	Soft skills	Competition from other employers
2	Technical skills	Lack work experience	Lack interest in type of job	Technical skills	Lack credentials/certification	Soft skills	Lack work experience	Lack interest in type of job
3	Soft skills	Soft skills	Lack of work experience	Competition other employers	Competition other employers	Lack of work experience	Lack credentials/certification	Salaries not competitive
4	Lack interest in type of job	Competition other employers	Lack credentials/certification	Lack of work experience	Lack interest in type of job	Low # of candidates	Lack interest in type of job	Low # of candidates
5	Competition other employers	Lack interest in type of job	Competition other employers	Lack credentials/certification	Soft skills	Lack credentials/certification	Salaries not competitive	Soft skills
6	Low # of candidates	Low # of candidates	Technical skills	Lack interest in type of job	Salaries not competitive	Lack interest in type of job	Competition other employers	Lack credentials/certification

Other sectors and subsectors contributed data suggesting strong job growth for 2017-18:

- ◆ Both agriculture and agricultural services plan to increase hiring for bachelor's degrees by 21 percent.
- ◆ Sectors with agriculture-related businesses include finance and insurance services, scientific research, transportation. All these areas are experiencing growth. In the manufacturing sector, food processing will grow by 5 percent.
- ◆ Construction shows strong growth, with the most companies reporting since 2007.
- ◆ Healthcare and social assistance employers responded in higher numbers than in recent years and offer a strong outlook across all degree levels.
- ◆ Retail trade will hire in bigger numbers despite the struggle of brick and mortar stores. Most retailers will focus on hiring bachelor's degrees (up 19 percent) and curtail hiring for other degrees, effectively wiping out the growth at the bachelor's degree level. The total overall number of new hires in this sector will be down 15 percent.

The following tables provide the best information we have on sector and subsector hiring for 2017-18. 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, architectural services, computer systems and services, engineering services, legal management, scientific research)			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Associate's	3.9	7.3	86
Bachelor's	11.2	14.6	30
MBA	2.1	6.0	>100
Master's	7.8	9.8	26
PhD	4.3	7.7	77
Professional	2.0	7.2	>100
Total	16.1	22.8	41

Professional, Business & Scientific Services — Subsectors (bachelor's degrees only)			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Accounting	12.3	11.3	-9
Advertising & Marketing	4.3	3.3	-23
Architectural Design	2.7	2.3	-15
Computer Services	12.5	16.7	34
Engineering Services	7.0	8.2	17
Management Services/ Consulting	10.2	17.1	74
Scientific Research	20.7	36.0	75

Manufacturing			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Associate's	4.5	4.5	NC
Bachelor's	38.5	37.3	-3
MBA	6.9	6.4	-7
Master's	22.3	21.7	-3
Total	47.2	45.8	-3

Manufacturing — Subsectors (bachelor's degrees only)			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Automotive	23.4	23.7	1
Chemicals	14.4	16.9	18
Pharmaceuticals	3.6	4.5	25
Electrical	30.2	32.7	8
Fabricated Metals	1.5	2.8	87
Food Processing	19.6	20.6	5
Machinery	6.3	8.0	26
Plastics	5.7	5.1	-10
Primary Metals	11.2	11.3	1

Educational Services (colleges and universities, educational support services, elementary and secondary education, sports and recreation instruction)			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Associate's	19.3	18.5	-4
Bachelor's	43.9	51.3	17
MBA	6.3	5.2	-18
Master's	31.3	35.8	14
PhD	3.7	2.8	-22
Total	86.2	106.2	23

Educational Services — Subsectors (bachelor's degrees only)			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Educational Services	24.4	25.0	2
K-12	53.4	52.7	-1

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

Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Associate's	7.1	11.3	59
Bachelor's	26.7	27.0	1
MBA	3.8	4.0	4
Master's	4.6	3.9	-16
Total	31.8	33.5	5

Nonprofits
 (civil and social organizations, environmental, grant making, human rights, professional associations, religious, voluntary health)

Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Associate's	5.3	5.8	9
Bachelor's	8.4	10.3	23
Master's	3.7	3.7	2
Total	12.3	14.4	17

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

Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Commercial Banks	16.0	16.8	5
Insurance	26.7	32.0	20
Investment Advisors	20.5	12.1	-41
Investment Banking & Securities	40.7	45.4	11

Government

Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Associate's	10.2	13.0	27
Bachelor's	51.6	55.2	7
Master's	22.8	24.4	7
Total	65.2	71.1	9

Healthcare and Social Assistance
 (ambulatory care, hospitals, outpatient, and social assistance)

Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Associate's	13.6	18.1	33
Bachelor's	18.9	24.9	32
MBA	2.3	4.5	100
Master's	3.5	6.3	79
Professional	5.8	10.9	87
Total	29.9	42.1	45

Construction
 (heavy, nonresidential, residential, specialty trade)

Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Associate's	2.4	3.6	48
Bachelor's	11.5	14.8	29
Total	12.3	15.6	27

Healthcare and Social Assistance — Subsectors
 (bachelor's degrees only)

Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Ambulatory Care & Outpatient	3.4	7.0	>100
Hospitals	44.1	68.4	55
Home Care Services	17.4	24.4	40
Skilled Nursing & Residential Nursing	5.9	7.8	33

Retail Trade

Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Bachelor's	27.1	32.3	19
Total	58.4	49.3	-15

Information Services
 (broadcasting, internet service providers, motion pictures, news syndicates, publishing, telecommunications)

Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2016-17 (avg.)	
Bachelor's	43.5	69.9	60
Total	90.0	103.5	15

Transportation (air, rail, water, and truck transportation, pipeline transportation, postal and messenger services, support activities for transportation, warehouse and storage)			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Bachelor's	36.8	48.6	32
Total	50.4	66.3	32

Accommodations & Food Services (full service food establishments, hotels, limited service food providers)			
Degree	Number of hires		Change year over year (%)
	2017-16 (avg.)	2017-18 (avg.)	
Bachelor's	19.1	22.4	17
Total	21.1	26.8	27

Administrative Services (business support services, employment services, office administration)			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Bachelor's	42.0	62.8	49
Total	59.4	96.9	64

Agriculture (agricultural production, agricultural support services, forestry)			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Bachelor's	16.4	19.8	21
Total	18.0	23.8	32

Wholesale Trade			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Bachelor's	4.3	6.3	46
Total	6.0	7.8	30

Real Estate & Leasing (automotive and equipment leasing, property managers, real estate brokers, rental centers)			
Degree	Number of hires		Change year over year (%)
	2016-17 (avg.)	2017-18 (avg.)	
Bachelor's	40.5	43.1	6
Total	43.8	46.4	6

Hiring by region

Employers target specific schools and specific regions in pursuit of the talent they need. About 8 percent of our respondents take a global perspective, seeking candidates all over the world. About 32 percent recruit across the U.S., visiting campuses in many locations. The majority of employers (about 60 percent) confine their recruiting activities to the colleges and universities close to their facilities, major offices, or headquarters.

Regional hiring, which comprises many small employers, can differ from national and international organizations as well as other regions within the U.S. 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 aggregated from employers who indicated that they actively sought new hires in those states. The first table provides an overview of the three broad groups of employers by how they generally focus their recruiting efforts. We can immediately see across all degree levels that organizations that recruit throughout the U.S. are setting the pace in hiring this year. At the bachelor's level, these employers are expanding opportunities nearly double that of international and regional employers.

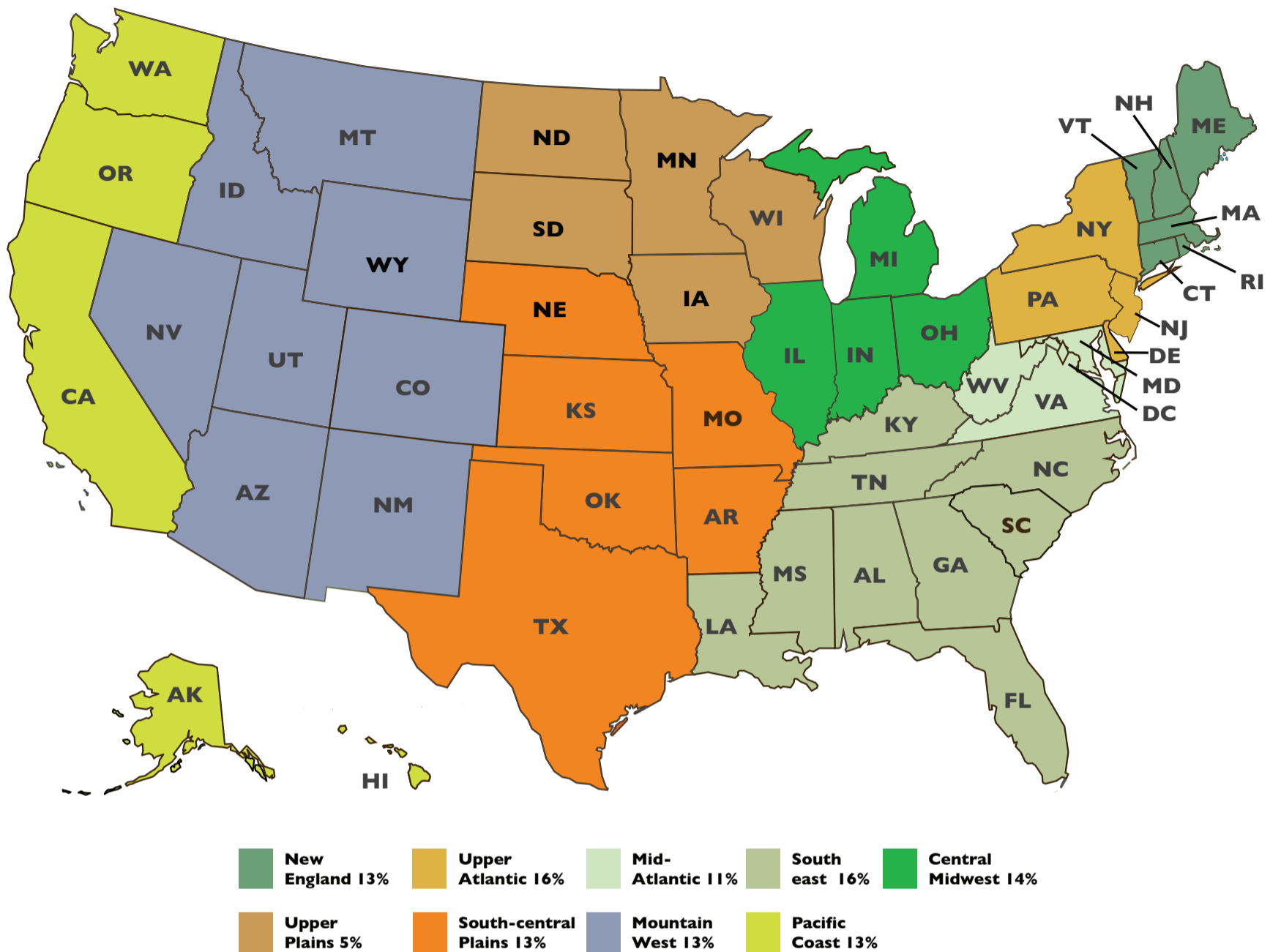
International hiring is being bolstered by a modest growth in hiring for bachelor's degrees (9 percent increase) and master's degrees (5 percent). They appear to be decreasing opportunities slightly for MBAs, compared to last year.

Regional employers are also sending mixed signals. Growth for associate's degrees (up 36 percent), bachelor's degrees (7 percent) and MBAs (up 23 percent) is expanding while opportunities for Master's and PhDs are contracting.

National employers reported the strong gains in employment across all degree levels. Bachelor's degree opportunities will increase by 15 percent with associate's and MBA degrees experiencing even more impressive growth.

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 all employers, (2) hiring for MBAs continues to strengthen despite data from international employers, and (3) hiring for master's degrees is finally showing some oomph, except among regional employers.

Regions show very similar hiring for this year at the bachelor's level with growth expected to be between 8 and 10 percent, except for southeast where bachelor's opportunities are up 19 percent and in the upper plains where growth will only be about 5 percent. Associate's degree hiring looks very positive across all regions though the upper plains lags compared to other regions. The regional hiring outlook for MBAs is mixed with several regions not expecting to experience any difference from hiring levels of 2016-17 (Pacific coast, upper plains, and Northeast). Mid-Atlantic employers expect to see some reduction in opportunities compared to last year. All other regions will see MBA hiring improve. Master's degree hiring growth remains modest with anticipated increases of 6 to 11 percent, except for the mid-Atlantic (up 2 percent, the south central region (up 1 percent) and the upper plains (down 6 percent).



Hiring for all degree levels by employer's recruiting orientation														
	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 = 100	24.4	39	199.4	9	8.2	-6	28.5	5	10.3	-3	8.5	>100	206.7	10
National N = 430	16.6	40	43.5	15	7.9	>100	23.7	17	4.4	80	27.9	8	72.7	23
Regional N = 814	11.9	36	17.5	7	3.9	13	8.2	-18	3.0	-19	2.8	11	25.0	8

Central Midwest (IL, IN, MI, OH) N=570		
Degree	Hires (avg.)	Change year over year (%)
Associate's	12.5	34
Bachelor's	65.9	10
MBA	7.9	36
Master's	28.6	11
PhD	9.1	33
Professional	12.8	>100
Total	82.8	14

Mountain West — AZ, CO, ID, MT, NM, NV, UT, WY N=335		
Degree	Hires (avg.)	Change year over year (%)
Associate's	27.0	58
Bachelor's	91.6	10
MBA	8.7	16
Master's	34.3	6
PhD	5.8	8
Professional	8.0	56
Total	115.2	13

Mid-Atlantic (DC, MD, VA, WV) N=191		
Degree	Hires (avg.)	Change year over year (%)
Associate's	42.6	61
Bachelor's	139.7	8
MBA	8.0	-9
Master's	50.4	2
PhD	7.0	12
Professional	27.7	>100
Total	171.0	11

New England —CT, MA, ME, NH, RI, VT N=214		
Degree	Hires (avg.)	Change year over year (%)
Associate's	23.5	55
Bachelor's	117.4	9
MBA	8.4	NC
Master's	42.5	6
PhD	8.0	15
Professional	26.5	-28
Total	162.3	13

Pacific Coast (AK, CA, HI, OR, WA) N=275		
Degree	Hires (avg.)	Change year over year (%)
Associate's	32.3	54
Bachelor's	119.2	9
MBA	10.5	NC
Master's	38.2	8
PhD	7.8	7
Professional	15.2	>100
Total	149.0	13

Upper Plains (IA, MN, ND, SD, WI) N=256		
Degree	Hires (avg.)	Change year over year (%)
Associate's	21.7	6
Bachelor's	100.3	5
MBA	7.5	NC
Master's	34.7	-6
PhD	6.6	-1
Professional	14.4	>100
Total	123.1	5

Southeast (AL, FL, GA, KY, LA, MS, NC, SC, TN) N=356		
Degree	Hires (avg.)	Change year over year (%)
Associate's	18.4	39
Bachelor's	95.5	10
MBA	7.85	35
Master's	32.8	8
PhD	7.7	46
Professional	17.9	>100
Total	130.3	16

South-central Plains (AR, KS, MO, NE, OK, TX) N=332		
Degree	Hires (avg.)	Change year over year (%)
Associate's	26.9	32
Bachelor's	100.3	19
MBA	8.3	10
Master's	31.8	1
PhD	7.9	13
Professional	13.6	>100
Total	122.9	13

Upper Atlantic — DE, NJ, NY, PA N=314		
Degree	Hires (avg.)	Change year over year (%)
Associate's	28.7	42
Bachelor's	97.5	10
MBA	11.1	28
Master's	37.6	11
PhD	9.4	45
Professional	12.1	>100
Total	137.4	16