

Minnesota Construction Industry Assessment 2019-2020



Executive Summary

2019-2020 AGC of Minnesota Construction Industry Assessment Survey

AGC of Minnesota annually surveys the Minnesota construction industry and partners representing the architecture and engineering sectors to more fully understand the overall experiences, plans, and concerns impacting the state's construction market. The data presented represents a mixture of experience and perception providing a snapshot of the construction industry's current economic health and a forward-based outlook on issues that can be expected to generally shape tomorrow's market.

The survey reflects the balance of Minnesota partners in construction. Roughly half of the respondents work in the commercial building sector, and the other half is divided among highway, utility and heavy industrial work—mirroring the number of firms engaged in these markets. Similarly, most of the respondents work in the Twin Cities metro area. The survey shows greater diversity in the size and type of firm: general contractor, specialty contractor, material supplier, architect or engineer.

In sum, this report provides direction for overall industry improvement, portends possible market changes, provides justification to bolster or correct confidence in economic attitudes, and, most importantly, yields opportunity to learn what is working and what is not.

Data Points of Interest and Influence:

Technology: Advancements in technology ranks as the number one factor expected to influence the construction industry showing strong response rates among all sectors: contractors, suppliers and professionals. Keeping abreast of technology-related challenges, opportunities and needs will become increasingly imperative as the industry moves to onboard and apply new technology tools as an intentional response to market stressors like worker shortages and pressure to improve productivity and remain competitive.

Workforce: Another surprising but consistent result is how contractors view workforce and training. Historically, the union apprenticeship training model has provided a stable source of qualified workers. This year's responses confirm past survey indicators that the union apprenticeship programs have lost value for signatory contractors. Only seventeen percent (17%) of signatories hired more than fifty percent of their workforce through union affiliated training programs, and sixty three percent (63%) of signatories did not use unions for at least twenty five percent of their workforce. Further, only eight percent (8%) found the union trained worker to be a high performer.

Alternative training sources proved no better. Between union trained and other sources, union trained recorded a significantly higher level of moderately well-trained workers compared with technical colleges, community training or other sources. In sum, survey data confirms and further indicates continued challenges recruiting, training, and retaining a qualified workforce.

A related datapoint of note is the industry's on-going effort to increase workforce diversity. Workforce diversity is both intrinsically important and a critical component in helping respond to ongoing workforce shortages. The data indicates respondents are making a difference in increasing diversity by being more intentional in their efforts with word of mouth and referrals being the most common and effective approach to finding diverse candidates.

Leadership: Finding and developing new leaders remains a strong challenge across all industry sectors. While locating skilled and trained field craft workers is identified as the top overall business challenge, developing new leaders in professional capacities is clearly on the minds of employers too. Positions in the areas of project manager, estimating and engineering are becoming more difficult to fill while strategies to increase wages and providing career development opportunities are cited as the most common tactics used to attract and retain talent.

Economic Outlook: Finally, the survey shows continued confidence in the economy across the construction market overall and within each industry specific segment. Our data differs slightly from a recent national architects' survey that projected pessimism in 2020. Only ten percent (10%) of our respondents believed the Minnesota construction economy was declining or would decline, down from fourteen percent (14%) last year. Further, twenty nine percent (29%) believe the economy is improving, up from nineteen percent (19%) last year. The top areas of expected growth are senior housing, alternative energy, transportation and utility—reflecting growth in all sectors: (building, highway, heavy, utility)

Consistent with this optimism, respondents expect to purchase equipment in 2020. Forty two percent (42%) plan to buy new and twelve percent (12%) will buy used. Part of these purchase plans may derive from federally enacted tax reforms that will more fully begin impacting firms in 2020. The strength of the numbers, however, supports the view of overall economic confidence and commitment.

Comments: AGC's survey traditionally includes an opportunity for raw and unedited comments to remind ourselves of the passion, challenges, loves, and views of our respondents. While interesting in their own right, these comments provide good warning that the common experiences and perceptions sometimes do not project the future. As an important and relevant tool, the data presented here is only one flag marking the path into an unknowable future.

We hope this survey helps inform your thinking, suggests new ideas or topics to learn, and helps the industry pull together in commonality to make the technological changes smoother, the workforce challenges easier, and the economic and market realities less worrisome.

Tim Worke
CEO

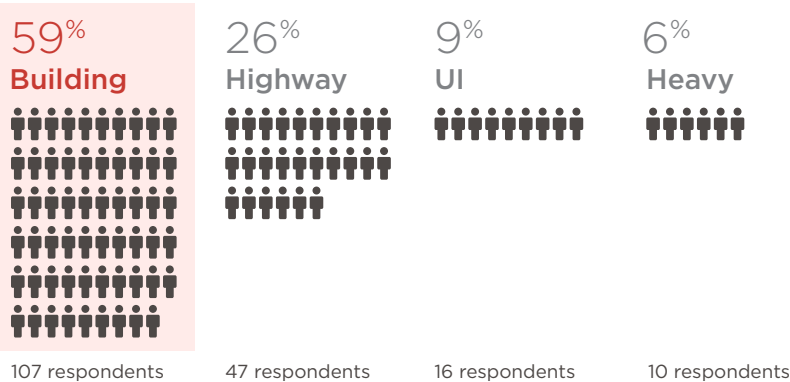


Respondent Snapshot

Industry sectors, volume sales, and geographic areas

Industry Sectors

Primary sector: **Building**



QUESTION

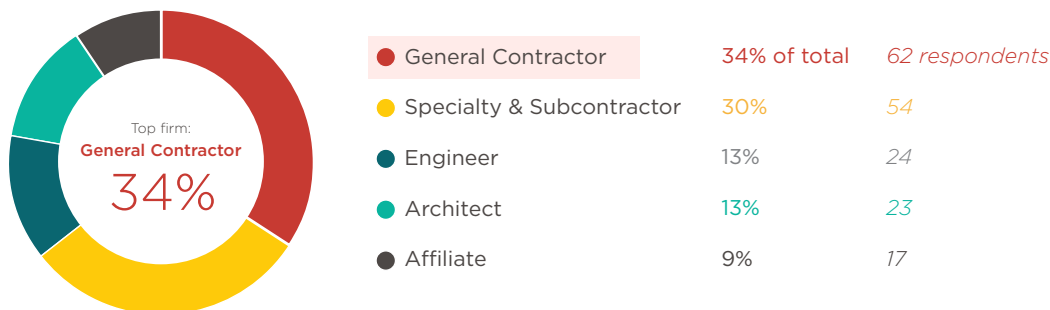
Please indicate your primary industry sector as defined below.

- Building
- Highway
- Utility Infrastructure
- Heavy Industrial
(i.e. refineries, pipelines)

1 icon = 1%

Types of Firms

Top firm: **General contractor**



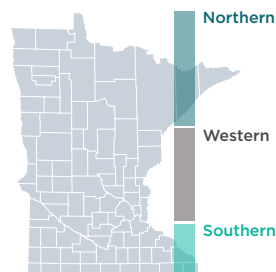
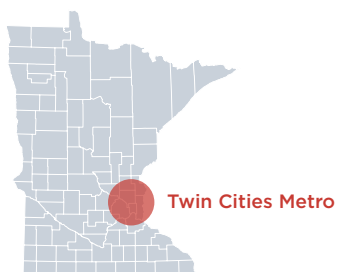
QUESTION

Which of the following best describes your firm?

- General Contractor
- Specialty/Subcontractor
- Engineer
- Architect
- Affiliate
(material supplier)

Geographic Area Where Work is Performed

Top area: **Twin Cities Metro**



QUESTION

Please indicate the primary geographic area where you perform work.

- Twin Cities Metro
- Northern Minnesota
- Southern Minnesota
- Western Minnesota
- States other than Minnesota

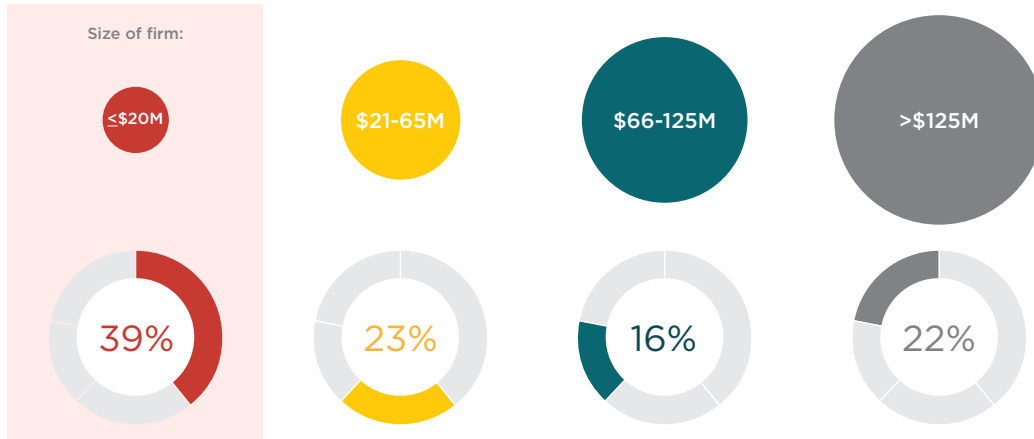
Respondent Snapshot

Size of firm in sales

ALL RESPONDENTS

Size of Firm in Annual Volume Sales

Top size: **≤\$20M**



QUESTION

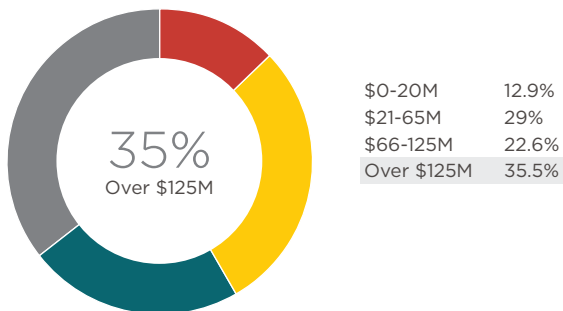
Please indicate the size of your firm in annual volume sales

- \$0-20M
- \$21-65M
- \$66-125M
- Over \$125M

Responses By Firm Type

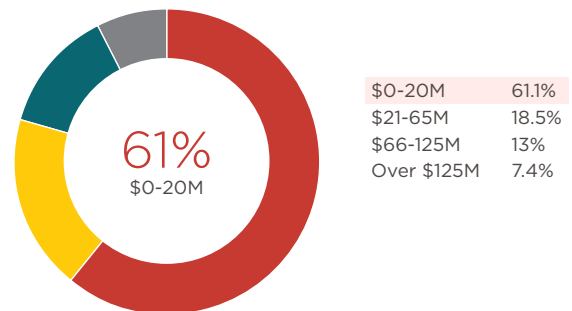
General contractors

Top size: **over \$125M**



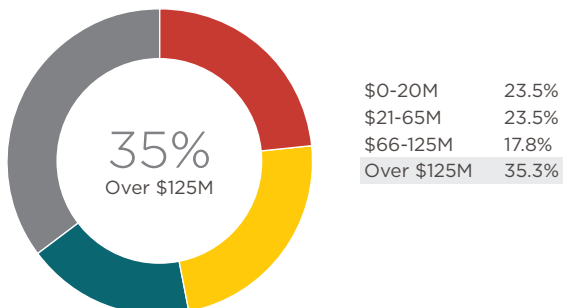
Specialty contractors

Top size: **\$0-20M**



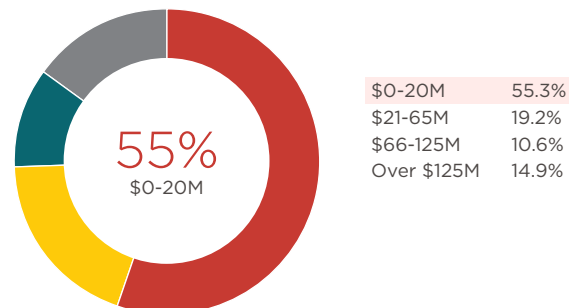
Affiliates (Material Suppliers)

Top size: **over \$125M**



Architects and Engineers

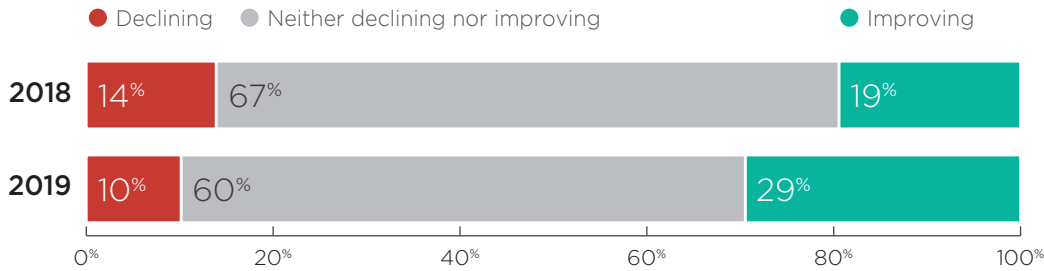
Top size: **\$0-20M**



Looking ahead to 2020

How respondents perceive market conditions affecting their firm

All Respondents



QUESTION

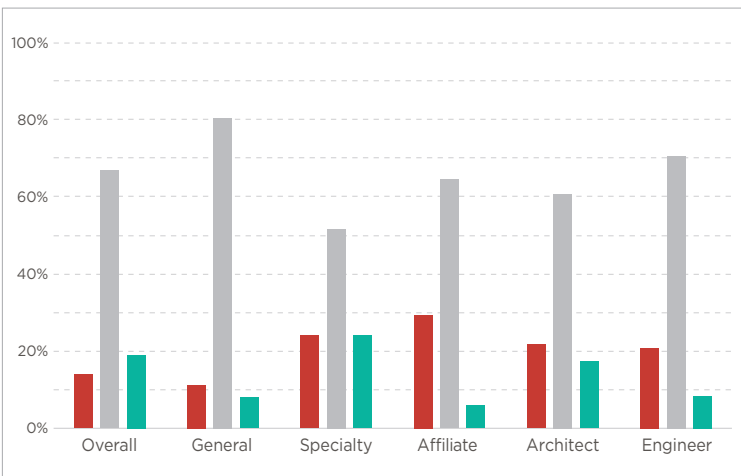
Looking ahead to 2020 in Minnesota, you see market conditions affecting your firm to be:

Improving
Neither improving nor declining
Declining

Responses By Firm Type and Sector

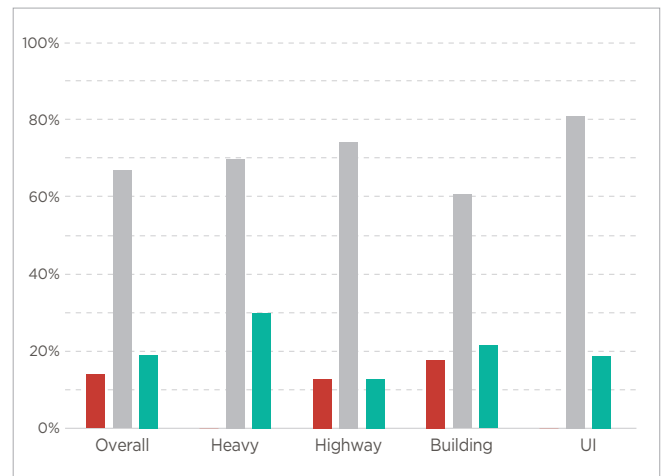
Firm Type

Top by 'improving': Specialty

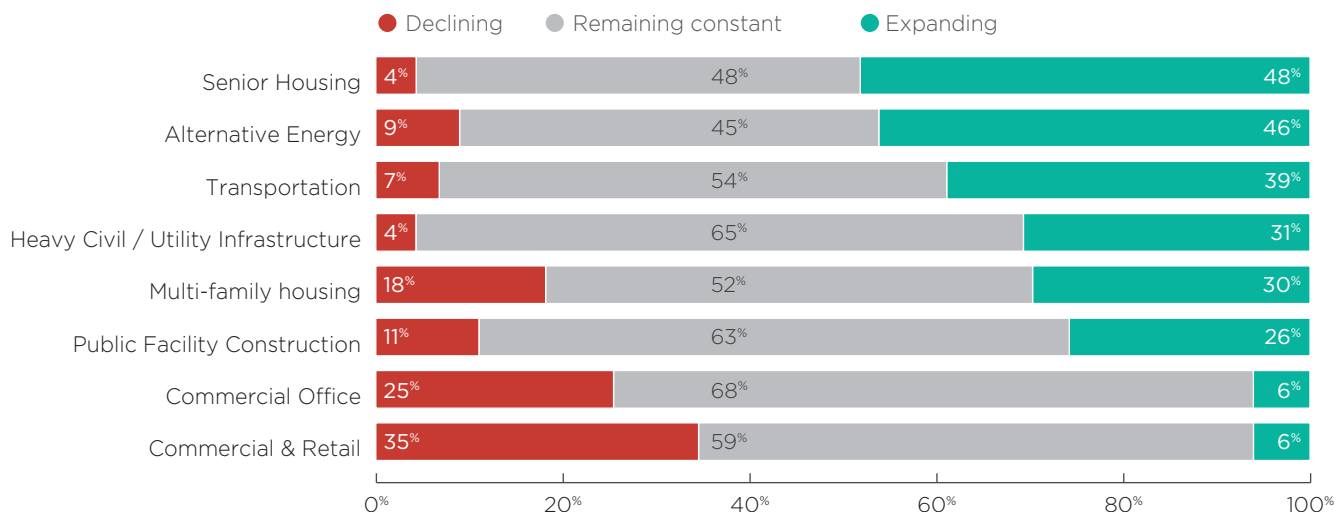


Sector

Top by 'improving': Heavy



How do you anticipate the following construction market segments performing?



Equipment plans for 2020

The majority of respondents will purchase new equipment

All Responses

- Will purchase **new** equipment
42% | 75 respondents
- Will purchase **used** equipment
12% | 21
- Will depend on tax laws
7% | 13
- Will lease equipment
6% | 11
- Not applicable
33% | 60



QUESTION

Your plans for equipment additions or reductions for 2020 can best be described as:

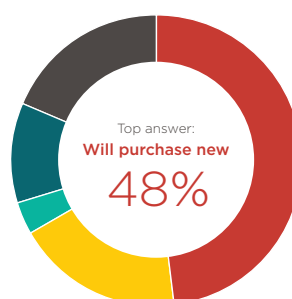
- Will purchase new equipment
- Will purchase used equipment
- Will lease equipment
- Will depend on tax laws
- Not applicable

General Contractors



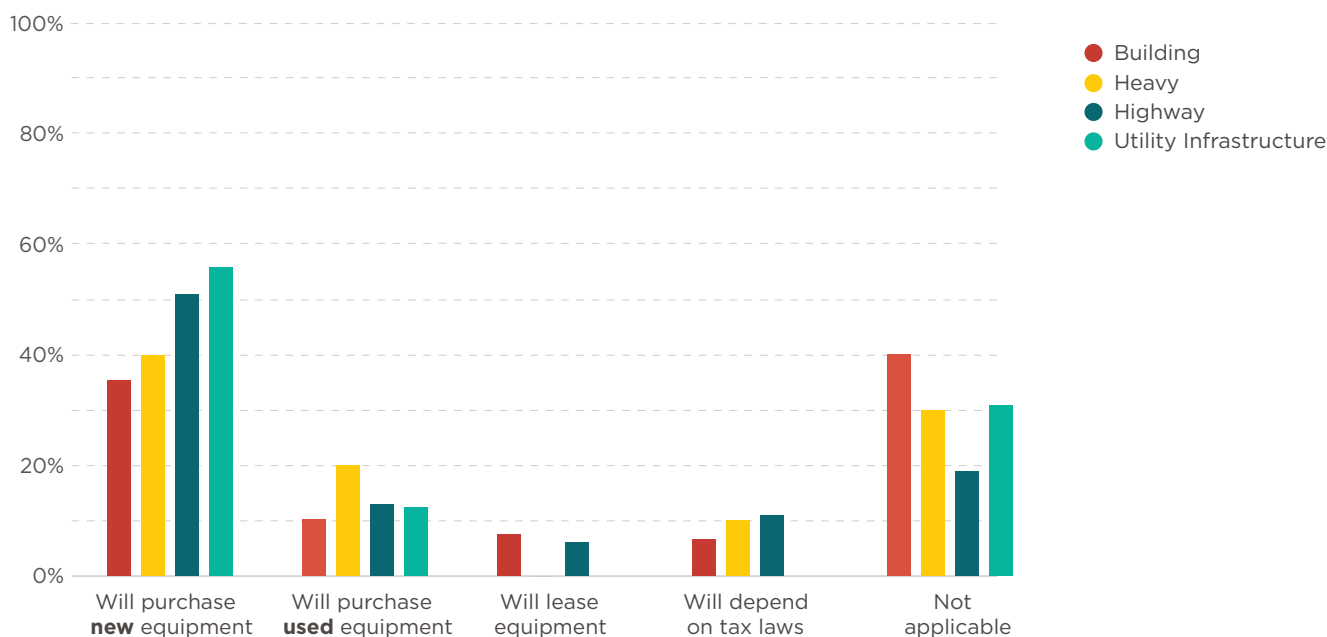
- Will purchase **new** equipment
55% | 34 respondents
- Will purchase **used** equipment
11% | 7
- Will lease equipment
11% | 7
- Will depend on tax laws
6% | 4
- Not applicable
16% | 10

Specialty Contractors



- Will purchase **new** equipment
48% | 26 respondents
- Will purchase **used** equipment
19% | 10
- Will lease equipment
4% | 2
- Will depend on tax laws
11% | 6
- Not applicable
19% | 10

By Sector



Factors expected to impact respondent business

Impacts positively, negatively, or neutrally

Top factors

TOP POSITIVE IMPACT

58% of respondents said this factor:

Technology changes

impacts business **positively**

TOP NEUTRAL IMPACT

76% of respondents said this factor:

Integrated Project Delivery

does not really impact business

TOP NEGATIVE IMPACT

85% of respondents said this factor:

Availability of workforce

impacts business **negatively**

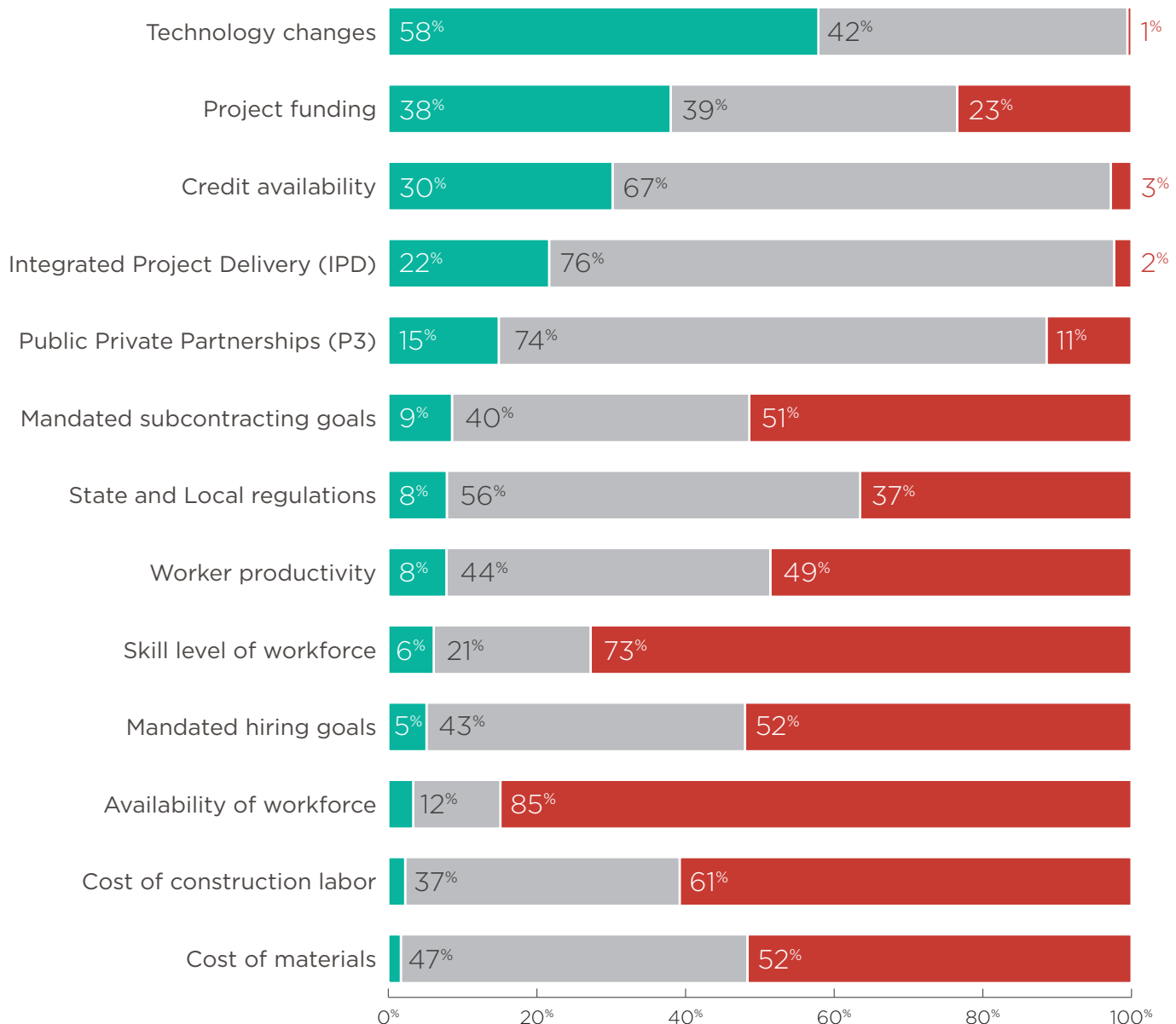
QUESTION

How do you expect the following factors to impact your business through 2020?

Positively
Neither
Negative

All factors

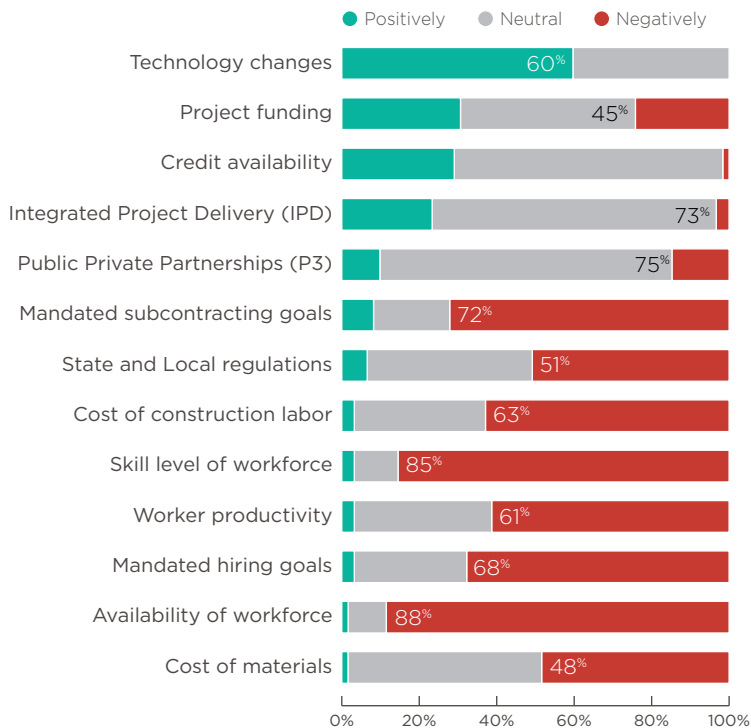
● Positively ● Neutral ● Negatively



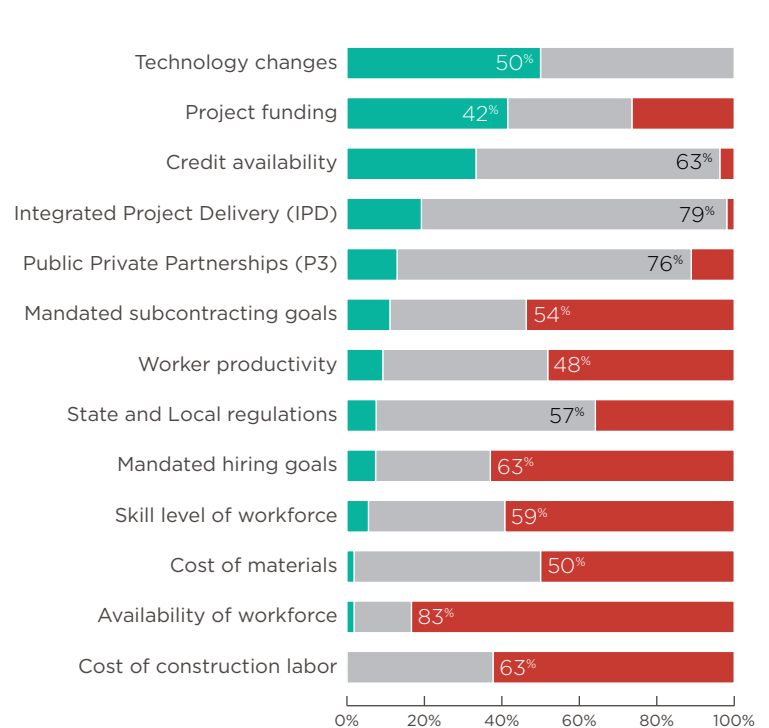
Factors expected to impact business in 2020

By firm type

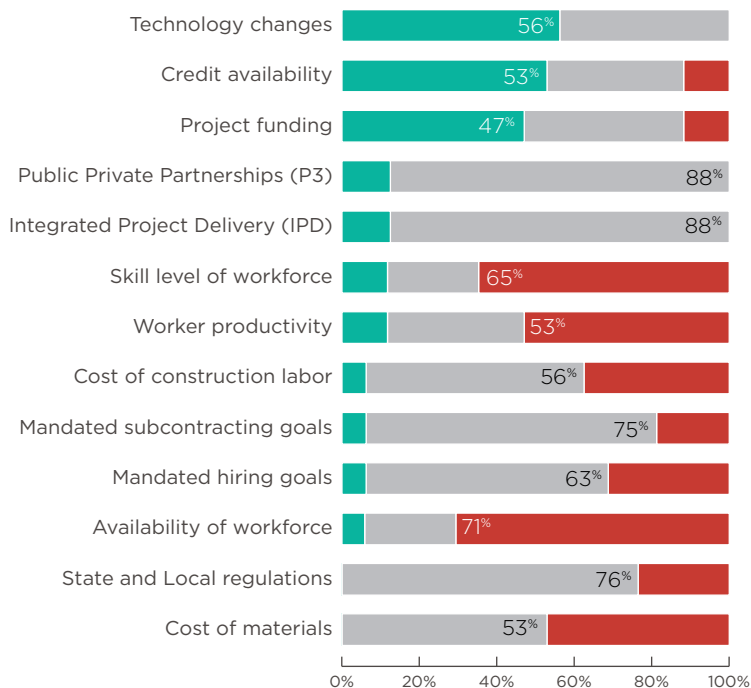
General Contractors



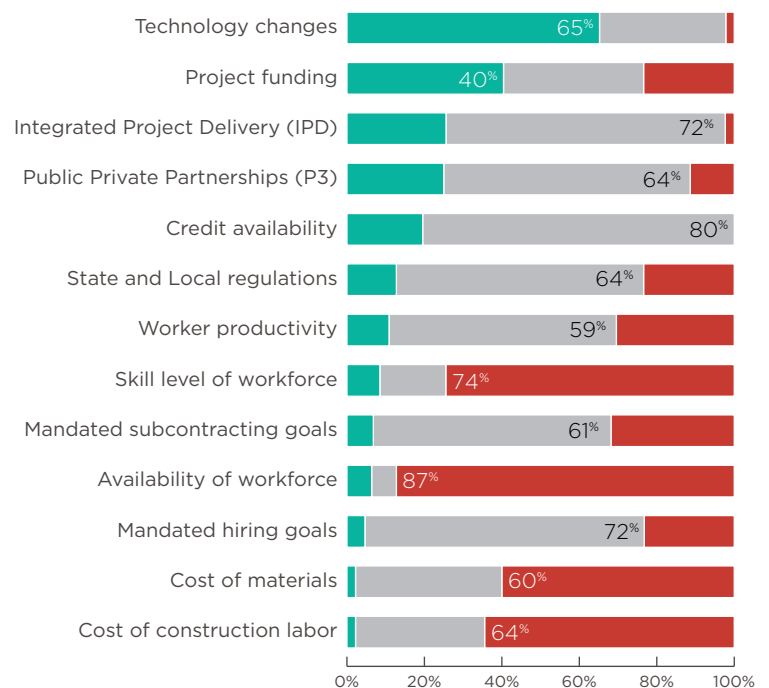
Specialty/Subcontractors



Affiliates

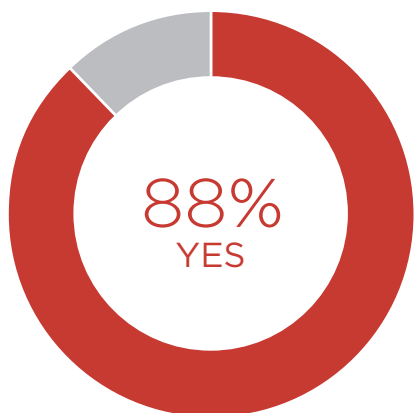


Architects/Engineers



Contractor Signatory Status

Overall, by firm, and by sector



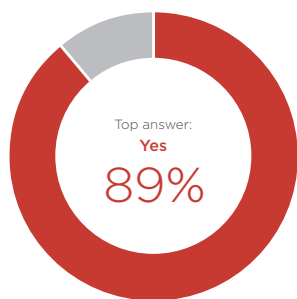
Are you signatory with any union?

Yes: 88%

No: 12%

By Firm Type

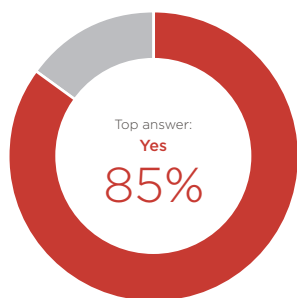
General Contractors



● Yes
89% | 55 respondents

● No
11% | 7

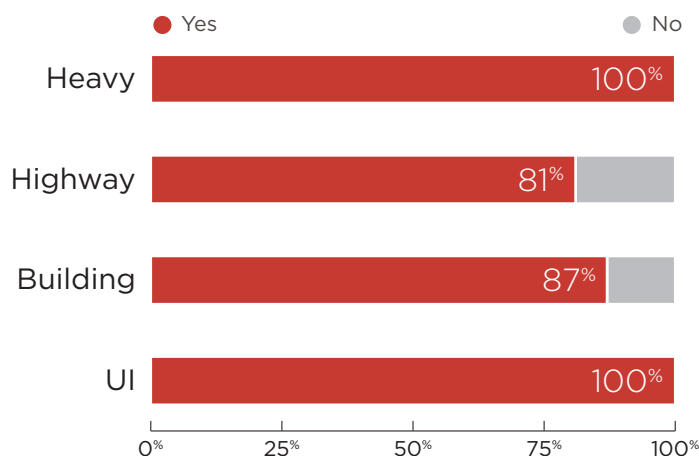
Specialty Contractors



● Yes
85% | 46 respondents

● No
15% | 8

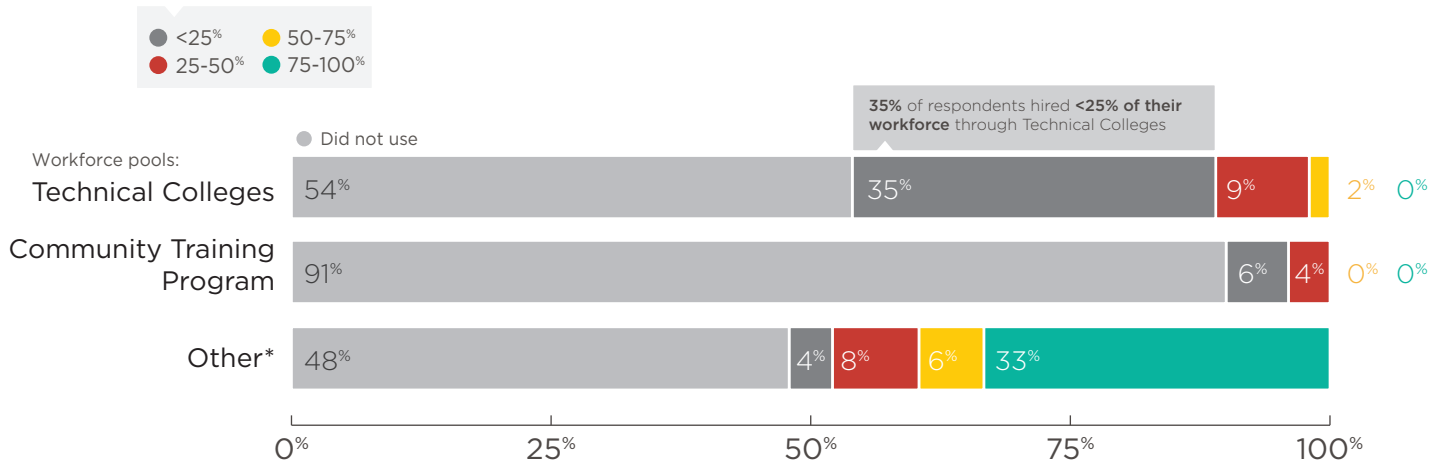
By Sector



Hiring Sources

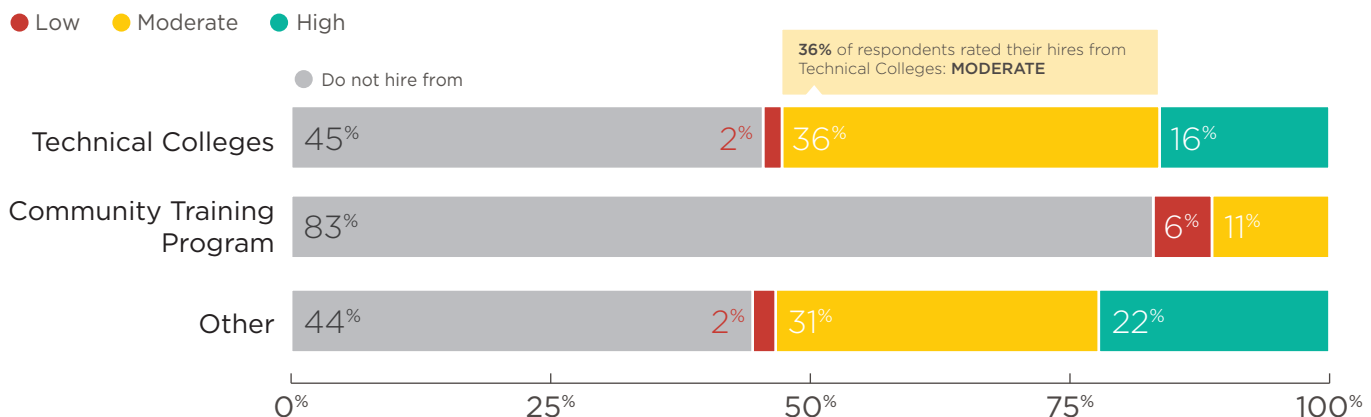
Non-Union Contractors

What percentage of hiring have you done through the following workforce pools?



*Largest hiring sources in "Other": Referral and 4-year colleges

Please rate the performance of the workforce you have hired.



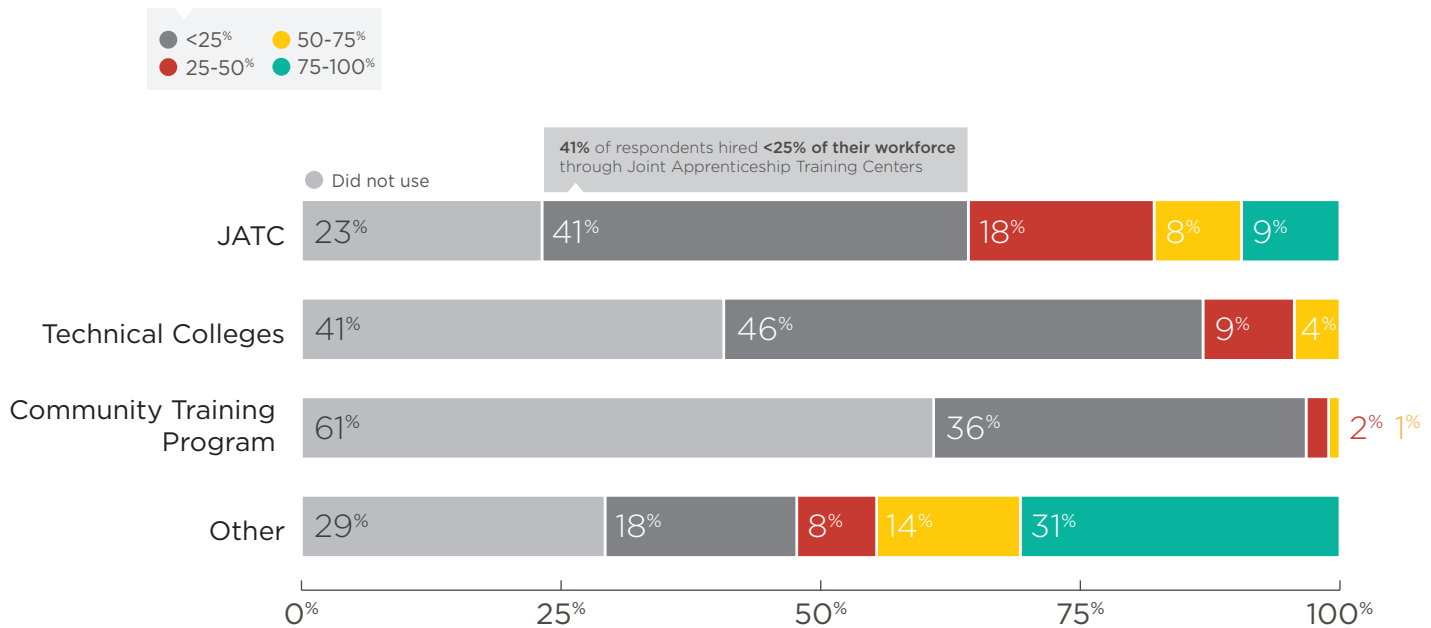
How much do you agree or disagree with the following statements?

		Strongly Agree	Agree	Disagree	Strongly Disagree	Do not use
TECHNICAL COLLEGES	The pool of workers through technical colleges is empty/exhausted	0%	30%	25%	2%	44%
	The pool of workers through technical colleges does not perform at a skill level necessary to do the work	2%	14%	32%	9%	44%
COMMUNITY TRAINING PROGRAMS	The pool of workers through community training programs is empty/exhausted	0%	16%	11%	0%	73%
	The pool of workers through community training programs does not perform at a skill level necessary to do the work	4%	12%	11%	2%	72%

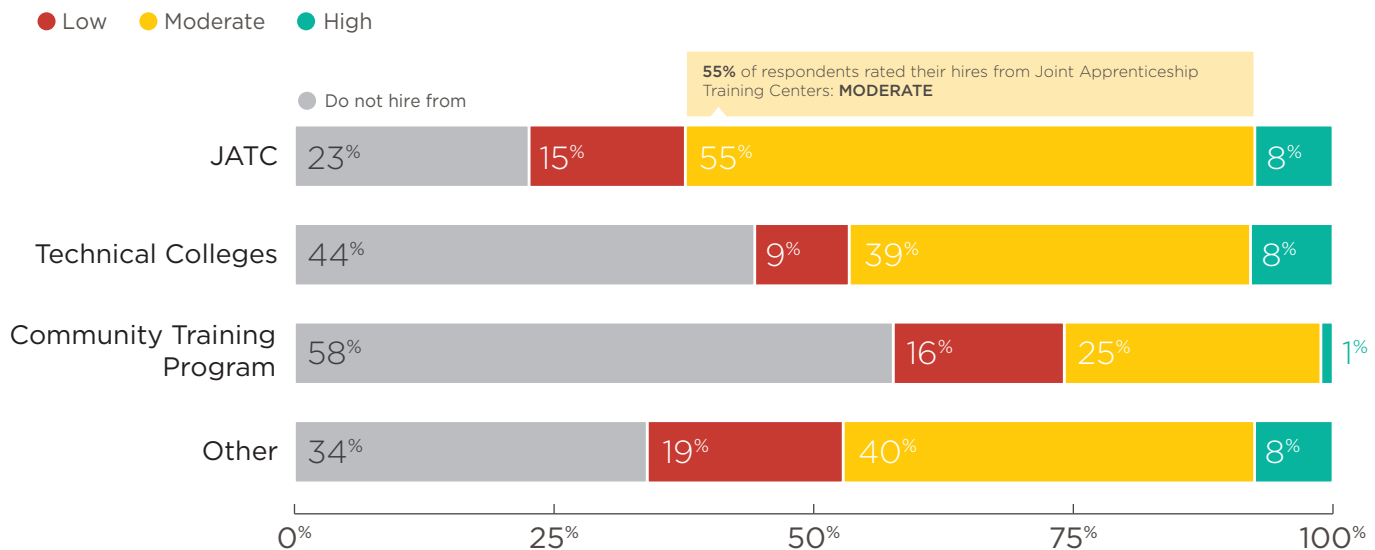
Hiring Sources

Union Contractors

What percentage of hiring have you done through the following workforce pools?



Please rate the performance of the workforce you have hired?



Hiring Sources

Union Contractors

Do the Taft Hartley Joint Apprenticeship Training Committees address the priorities of an industry-driven workforce by delivering industry-relevant training?

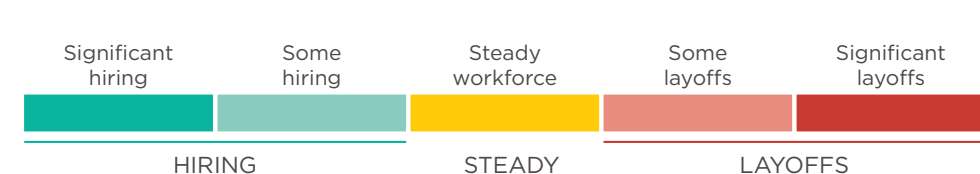
YES 60% NO 39%

How much do you agree or disagree with the following statements?

	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
The pool of union workers is empty/exhausted	22%	60%	15%	0%	3%
The pool of union workers does not perform at a skill level necessary to do the work	15%	40%	37%	5%	2%
The pool of workers through technical colleges is empty/exhausted	2%	29%	29%	0%	40%
The pool of workers through technical colleges does not perform at a skill level necessary to do the work	1%	26%	34%	2%	37%
The pool of workers through community training programs is empty/exhausted	3%	27%	20%	2%	47%
The pool of workers through community training programs does not perform at a skill level necessary to do the work	7%	29%	17%	0%	47%

Workforce plans for 2020

Hiring, steady workforce, or layoffs

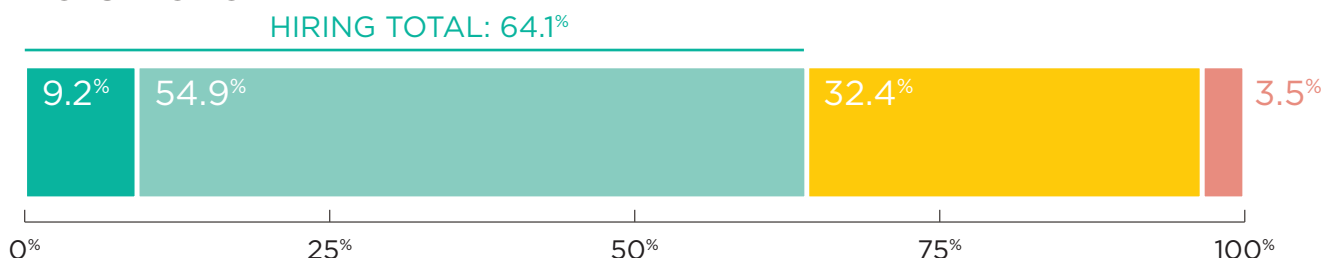


QUESTION

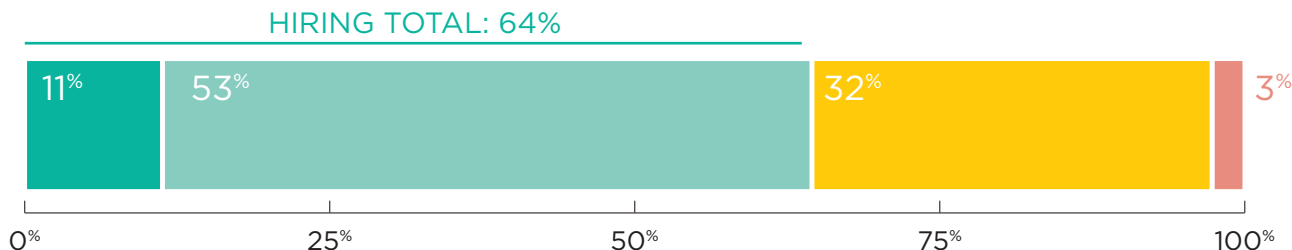
Your workforce plans for 2020 are best described as:

- Significant hiring
- Some hiring
- Steady workforce
- Some layoffs
- Significant layoffs

2019-2020

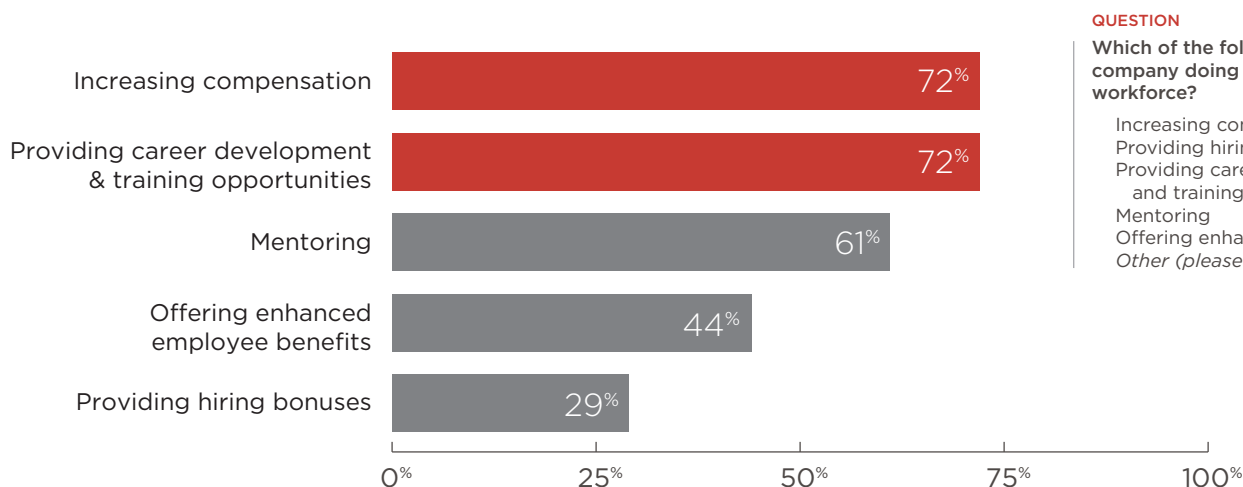


2018-2019



Workforce hiring strategies for contractors

Which strategies have you found to be most effective in attracting/retaining workforce?



QUESTION

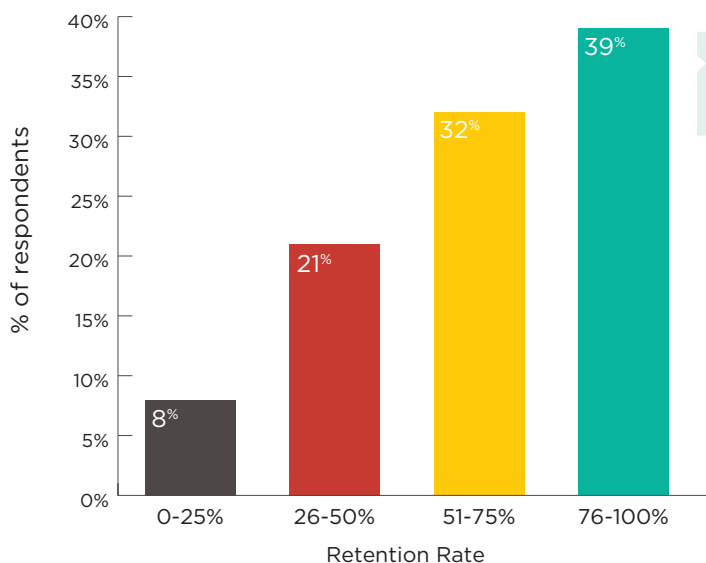
Which of the following is your company doing to attract and retain workforce?

- Increasing compensation
- Providing hiring bonuses
- Providing career development and training opportunities
- Mentoring
- Offering enhanced employee benefits
- Other (please specify)

Retention rate

With regard to your recent hires*, what is the retention rate of these employees?

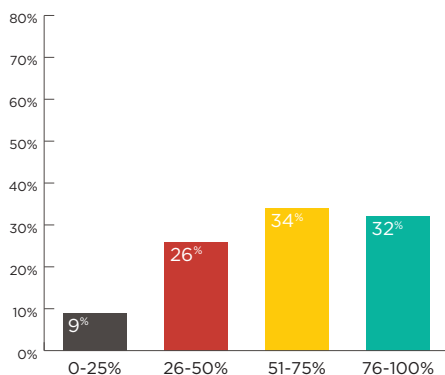
Overall



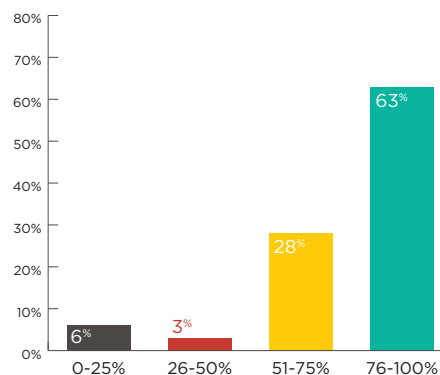
39% of respondents' recent hires had a **76-100%** retention rate

*Recent hires = last 1-3 years

Contractors & Suppliers



Architects & Engineers



List the #1 factor impacting the engagement or retention of your new hires

TOP POSITIVE FACTORS LISTED:

- Good company culture
- Good wages and benefits
- Better training and onboarding process
- Opportunities for advancement
- Perks that prevent them from being recruited by competition
- Clear role developed with opportunities to be part of the next project

TOP NEGATIVE FACTORS LISTED:

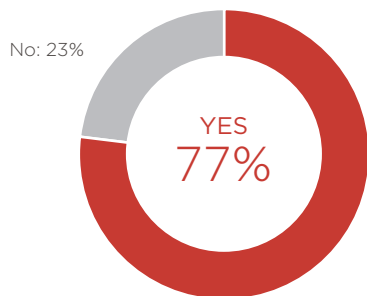
- Lack of work
- Lack of qualified/skilled workers
- Poor work ethic
- Taking chances on underqualified hires that ends up not working out
- Expectation that the work will be easier than it is
- Workforce is more transient

Efforts to increase workforce diversity

Measures taken to attract and retain people of color and women

Taking deliberate measures?

Yes: **77%**



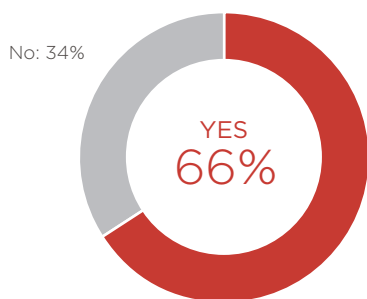
QUESTION

In your workforce recruitment efforts, has your firm undertaken deliberate measures to attract and retain people of color and women?

Yes
No

Are deliberate measures making a difference?

Yes: **66%**



QUESTION

Has your firm increased its percentage of people of color and women in its workforce since employing these strategies?

Yes
No

If yes, indicate which measures have been most successful in attracting and retaining people of color and/or women.

- Word of Mouth/Personal Referrals
- Positive Work Environment /Culture
- Keeping in close communication with minority employees to create trust
- Intentional recruiting in communities with a higher percentage of people of color, and using recruiters that are of the age group and gender that we are trying to attract
- Diversity & Inclusion workforce initiatives
- Partnerships with local unions / good relationship with local union business agents

Workforce hiring challenges

Professional and craft workforce

Professional workforce

With 1 being least difficult and 4 being most difficult, indicate your degree of difficulty in hiring for these professional positions.

	Least difficult → Most				
General Contractors	1	2	3	4	N/A
Estimating Professionals	4%	21%	27%	31%	17%
Project Managers/Supervisors	6%	25%	42%	23%	4%
Engineers	4%	23%	15%	6%	51%
Business Development	11%	13%	13%	17%	47%
Safety Professionals	11%	28%	30%	9%	23%
Design Professionals	2%	9%	17%	0%	72%

	Least difficult → Most				
Specialty Contractors	1	2	3	4	N/A
Estimating Professionals	6%	23%	30%	21%	19%
Project Managers/Supervisors	6%	26%	26%	30%	13%
Engineers	4%	4%	9%	13%	69%
Business Development	9%	13%	7%	13%	58%
Safety Professionals	13%	16%	20%	7%	44%
Design Professionals	7%	4%	7%	9%	73%

	Least difficult → Most				
Architects/Engineers	1	2	3	4	N/A
Estimating Professionals	3%	0%	9%	13%	75%
Project Managers/Supervisors	0%	10%	23%	45%	23%
Engineers	0%	9%	19%	38%	34%
Business Development	3%	25%	22%	9%	41%
Safety Professionals	6%	16%	3%	0%	74%
Design Professionals	3%	16%	41%	31%	9%

FOR GENERAL & SPECIALTY CONTRACTORS

The **most difficult** positions to fill are:

- #1. Project Managers/Supervisors
- #2. Estimating Professionals

FOR ARCHITECTS AND ENGINEERS

The **most difficult** positions to fill are:

- #1. Managers
- #2. Engineers
- #3. Designers

Craft workforce

	Least difficult → Most				
General Contractors	1	2	3	4	N/A
Bricklayers	0%	5%	2%	16%	77%
Carpenters	0%	14%	41%	18%	27%
Cement Masons	0%	5%	26%	23%	47%
Drywall Installers	0%	2%	5%	7%	86%
Electricians	0%	2%	7%	5%	86%
Equipment Operators	2%	23%	30%	23%	23%
Ironworkers	0%	2%	10%	10%	79%
Laborers	2%	36%	33%	27%	2%
Millwrights	0%	7%	10%	0%	83%
Painters	0%	2%	2%	5%	91%
Pipefitters/Welders	0%	5%	5%	9%	81%
Plumbers	0%	2%	2%	5%	91%
Roofers	0%	2%	2%	2%	93%
Sheet Metal Workers	0%	5%	0%	2%	93%
Tile Setters	2%	0%	7%	2%	88%
Truck Drivers	0%	16%	14%	19%	51%

	Least difficult → Most				
Specialty Contractors	1	2	3	4	N/A
Bricklayers	0%	0%	4%	15%	80%
Carpenters	2%	0%	17%	11%	70%
Cement Masons	0%	0%	9%	9%	82%
Drywall Installers	0%	2%	0%	4%	93%
Electricians	0%	0%	5%	2%	93%
Equipment Operators	2%	11%	16%	18%	53%
Ironworkers	0%	2%	9%	7%	82%
Laborers	11%	11%	29%	20%	29%
Millwrights	0%	0%	2%	0%	98%
Painters	0%	0%	0%	4%	96%
Pipefitters/Welders	0%	2%	0%	4%	93%
Plumbers	0%	0%	2%	0%	98%
Roofers	2%	0%	4%	4%	89%
Sheet Metal Workers	2%	0%	11%	4%	83%
Tile Setters	0%	2%	0%	7%	91%
Truck Drivers	0%	9%	4%	27%	60%



Overall Business Challenges for 2020

TOP 5 CHALLENGES



Business Challenges for 2020 and Beyond

	Overall	General	Specialty	Affiliate	Architect/ Engineer
Finding skilled and trained workers	58%	29%	60%	50%	43%
Developing new leadership	27%	33%	17%	25%	34%
Finding available workers	26%	29%	23%	50%	17%
Increasing productivity	26%	19%	34%	17%	29%
Discovering new markets	20%	19%	21%	8%	23%
Managing client expectations	16%	13%	6%	8%	37%
Workforce hiring goals	15%	23%	19%	0%	3%
Reducing costs	13%	13%	13%	25%	11%
Managing cash flow	11%	4%	19%	8%	11%
Navigating the regulatory environment	6%	6%	2%	0%	11%
Implementing Integrated Project Delivery (IPD)	1%	0%	2%	0%	0%

Comments from respondents

Please tell us what we haven't included in this survey that keeps you up at night

Below are unedited comments from respondents

Do people within our industry have any concerns about the trend for most to avoid participating in their industry associations? There is much less interaction with each other in face-to-face networking and attendance at industry functions. Instead, most all of our interactions are through email and texts. Obviously this is a trend across all segments of our society, but is it something to be regularly and openly discussed to attempt to change? Or is it simply a wave we should ride out until the next change happens?

Employees these days seem to expect to be at the top immediately without having to put in some time. Employee loyalty and devotion seems low. Applicants don't have the skills or drive to be able to stick with the jobs at hand for extended periods of time. Seems we are hiring a new crew each year.

Work Zone Safety

Union efforts to attract workers and train new workers

Finding work and finding workers

Payment terms and how long it takes to get paid coupled with not knowing how long in general it takes. Cash flow and weekly payroll. Finding out about awards of a project in a timely manner.

Why are the subcontractors financing the building.... this is wrong - the only field that you work first and then get paid in 60-90 days. This needs to change. We have to pay for everything in 30 days. We cannot tell our credit card issuer that we have not gotten paid, so how about we pay you when we get paid but no interest charges either. Keep our credit rating the same too! Tell that to the mortgage company, insurance company, equipment leasing company, and a host of others as well. What is WRONG with this industry????? GC and owners, you are effectively holding our paycheck ransom.

Current political landscape and how long can this economy last? Having gone through two downturns, makes me nervous how the run will eventually end... The next election cycle also makes us concerned. There are some real nuts running and selling everything for free. That is just not sustainable but they are selling this B.S. to the workforce we are trying to desperately recruit to go into the trades. Why work for a living when the candidates are promising to give you everything you need for free. The Marijuana legalization effort is also a bad idea. This will lead to conflicts between DOT and other drug free environments.

Where are the next projects coming from? How can we do a better job of employee retainage? Where do we find upper level professionals?

Skill, expertise and experience of workforce. Quality control of the product. Life cycle cost. Disposal of containers and products at the site. Durability and maintenance of structures. Lack of overall knowledge of a system vs. expert for each type of material and assembly.

When will the construction industry start to experience a slow down and what will be the severity of the slow down?

How do we compete with larger firms from the Twin Cities and other metro areas.

Risk of accidents and injuries of our workers

Finding enough qualified subcontractors to meet the demand

When is the next recession going to hit?

Employees making good decisions to work safely.

Not enough time to do what I want to do in a leadership role in my company.

All State and Federal Transportation funding is being funneled into a smaller number of projects every year, which leaves the unsuccessful bidders with no work. MEGA projects with alternative delivery methods only are not the answer, but that is the easy one from the Owner's perspective! Quality of the plans being generated is deteriorating, so greater and greater risk is being transferred to the general contractor.

Reducing cost.

Slow payment. Unrealistic and demanding schedules that command significant resources (weekend closures) Work zone intrusions and too high of speed through work zones.

How has the weather impacted you this season? - It's very difficult and project timelines/owners are not understanding of the delays caused by the wet cycle we have been in for two straight years.