



# Minnesota Construction Industry Assessment **2020-2021**



# Executive Summary

## 2020-2021 AGC of Minnesota Construction Industry Assessment

2020 has seen tumultuous change, bringing unprecedented social impact and corresponding economic uncertainty and strain. Early year market optimism evaporated into survival instincts and strategy shifts to save the construction market and ensure continued business survival. The global pandemic unleashed successive waves of hardship, including supply chain disruptions, project schedule delays, owner induced cancellations, workforce reconfiguration and a general economic contraction. The Minnesota Construction Industry has weathered the pandemic storm. Yet hesitancy, uncertainty, and well-placed concern cast imposing 2021 shadows.

The overarching themes that rise collectively from this year's Survey Assessment echo many familiar concerns of recent prior years. Architects, engineers, general contractors, and specialty contractors all report lower-than-hoped 2020 market levels with guarded optimism toward the future, concern that workforce shortages and skill gaps could threaten that optimism, and confidence that technology can be a tool for positive change and competitive advantage. For both contractors and professional A/E services, strategic focus is being placed on uncovering new growth markets while business operations continue to reach for productive recruiting and retention strategies in a competitive labor market. Surprisingly, the level of project delays and decreased productivity among architects and engineers mirrored the levels reported by general and subcontractors.

Overall, our industry shares the economists' forecasts. Although a large increase in respondents predict a downturn in the 2021 market (10% last year to 42% this year), overall, more respondents still believe the economy will be the same or improve in 2021 (58%). These figures suggest the pandemic pall still shadows our expectations but is anticipated to fade in the mid-year timeframe. Market sector strength indicators reflect interesting variability among respondents. The alternative energy market leads the expansive or steady market prediction, while multi-family housing slips to mid-pack (still more see expanding than contracting), and commercial office and retail space is disproportionately negative.

To no surprise, COVID-19 dominates the negative factors and is acting as an overall drag on the industry. Looking past pandemic-related negatives, we find last year's top concern persisting - recruiting and training skilled workers. Union trained workers continue to be a strong labor source, but respondents continue to report some trades lagging. Looking ahead, respondents predict more layoffs than last year and reduced hiring, leading to a possible workforce surplus as the rollercoaster of workforce supply and demand continues to dog the industry.

Survey consumers and respondents should come away with two strong impressions from the data. First, our industry has strong foundations, not easily jolted by even the catastrophic waves of a pandemic. The construction market sector remains steady, focused, and optimistically positioned for the demise of COVID-19. Second, many of the underlying challenges for the industry stubbornly remain unimproved. AGC of Minnesota continues to work collaboratively with our many partners across the industry to identify common goals and strategies that will yield workable solutions that benefit the full spectrum of the construction industry.

Thank you to all who participated in the Survey Assessment by sharing your valuable insights and perspectives. Your responses help us better understand the intersecting complexities of where we have been and where we might be headed. We remain **Your Trusted Resource.**

Tim Worke  
CEO

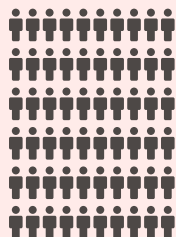
# Respondent Snapshot

Industry sectors, volume sales, and geographic areas

## Industry Sectors

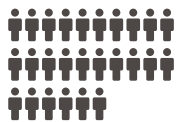
Primary sector: **Building**

60%  
**Building**



99 respondents

26%  
**Highway**



42 respondents

12%  
**UI**



19 respondents

2%  
**Heavy**



4 respondents

### QUESTION

Please indicate your primary industry sector as defined below.

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

= 1%

## Types of Firms

Top firm: **Specialty Contractor**



● Specialty Contractor

30% of total 49 respondents

● General Contractor

24% 40

● Engineer

20% 33

● Affiliate

13% 21

● Architect

13% 21

### QUESTION

Which of the following best describes your firm?

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

## Geographic Area Where Work is Performed

Top area: **Twin Cities Metro**

74%

**Twin Cities Metro**



0% 20% 40% 60% 80% 100%

16%

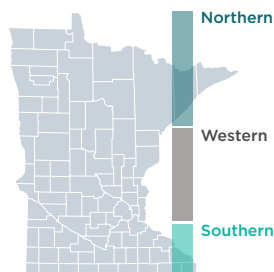
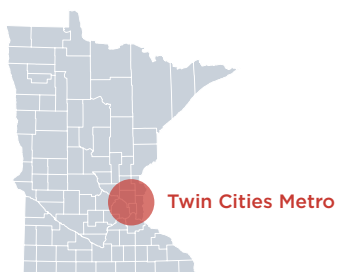
**Other states**

6%

**Northern MN**

2% **Western MN**

1% **Southern MN**



### QUESTION

Please indicate the primary geographic area where you perform work.

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

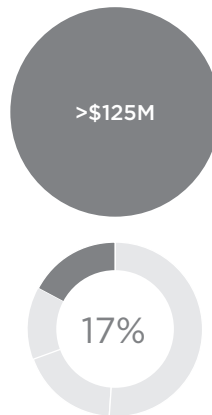
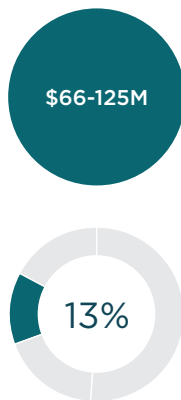
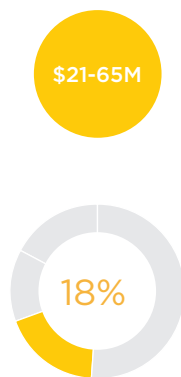
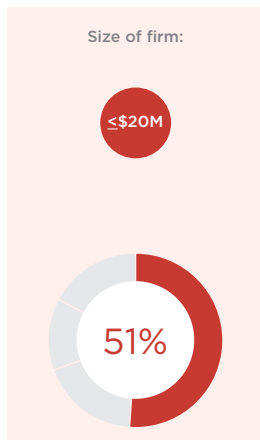
# Respondent Snapshot

## Size of firm in sales

ALL RESPONDENTS

### Size of Firm in Annual Volume Sales

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



#### QUESTION

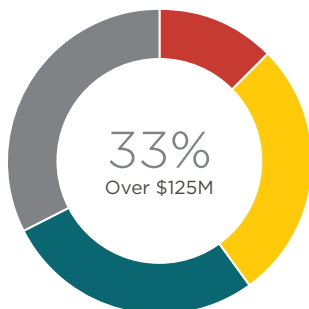
Please indicate the size of your firm in annual volume sales

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

## Responses By Firm Type

### General contractors

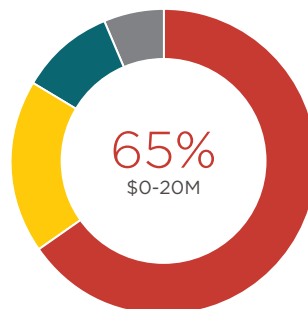
Top size: **over \$125M**



\$0-20M	12.5%
\$21-65M	27.5%
\$66-125M	27.5%
Over \$125M	32.5%

### Specialty contractors

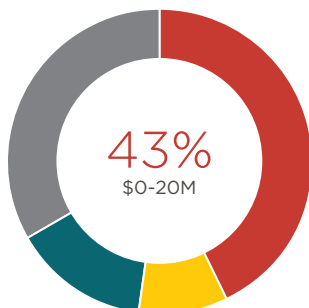
Top size: **\$0-20M**



\$0-20M	65.3%
\$21-65M	18.4%
\$66-125M	10.2%
Over \$125M	6.1%

### Affiliates (Material Suppliers /Service Providers)

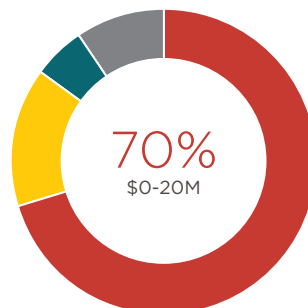
Top size: **\$0-20M**



\$0-20M	42.9%
\$21-65M	9.5%
\$66-125M	14.3%
Over \$125M	33.3%

### Architects and Engineers

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



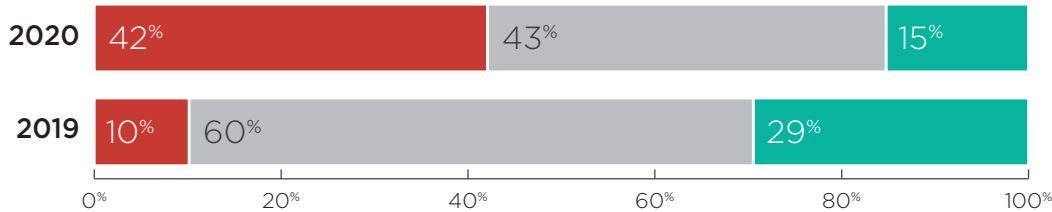
\$0-20M	70.4%
\$21-65M	14.8%
\$66-125M	5.6%
Over \$125M	9.3%

# Looking ahead to 2021

How respondents perceive market conditions affecting their firm

## All Respondents

Declining Neither declining nor improving Improving



### QUESTION

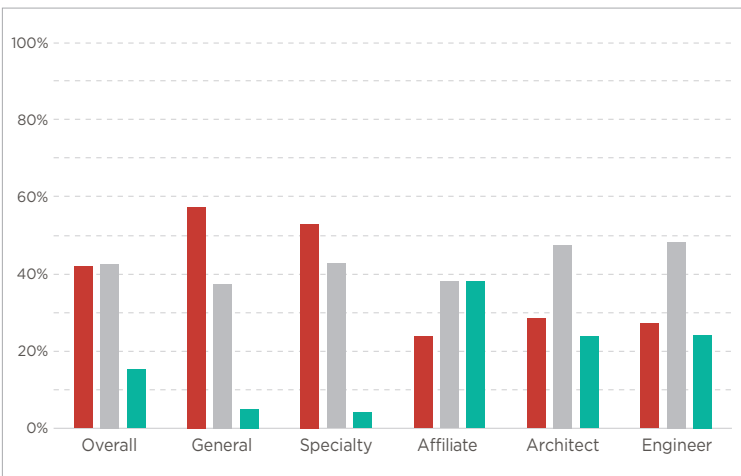
Looking ahead to 2021 in Minnesota, you see market conditions affecting your firm to be:

Improving  
Neither improving nor declining  
Declining

## Responses By Firm Type and Sector

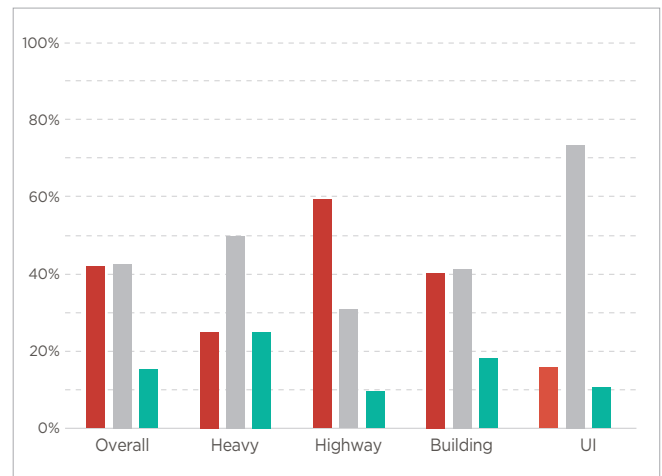
### Firm Type

Top by 'declining': General



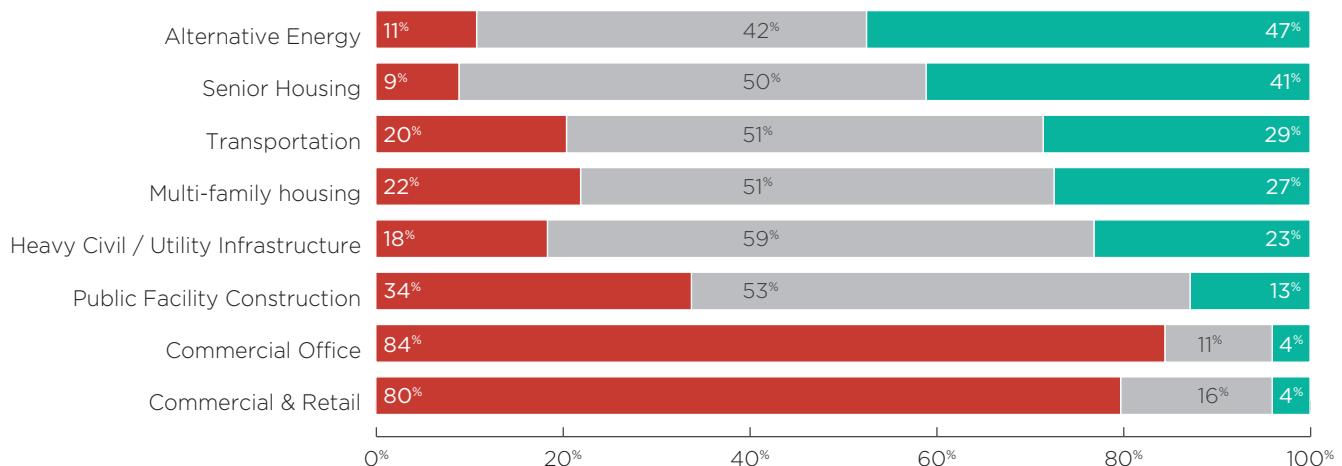
### Sector

Top by 'declining': Highway



## How do you anticipate the following construction market segments performing?

Declining Remaining constant Expanding



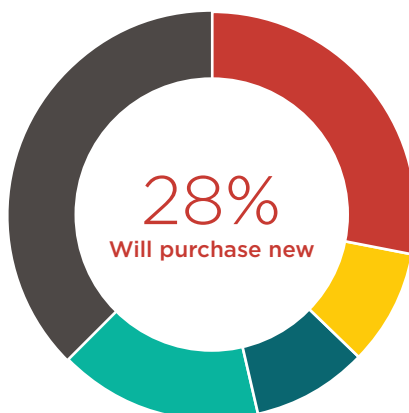


# Equipment plans for 2021

The majority of contractors will purchase new equipment

## All Responses

- Will purchase **new** equipment  
28% | 46 respondents
- Will purchase **used** equipment  
9% | 15
- Will depend on tax laws  
9% | 15
- Will lease equipment  
16% | 27
- Not applicable  
37% | 61



### QUESTION

Your plans for equipment additions or reductions for 2021 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



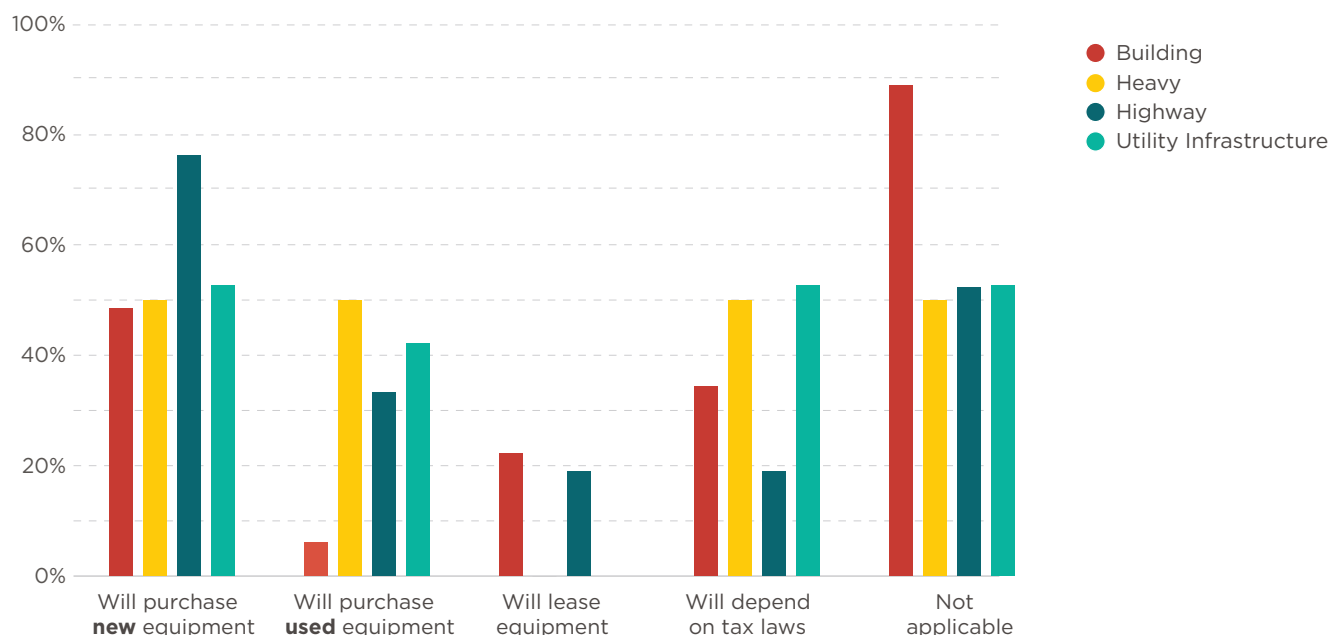
- Will purchase **new** equipment  
35% | 14 respondents
- Will purchase **used** equipment  
18% | 7
- Will lease equipment  
10% | 4
- Will depend on tax laws  
15% | 6
- Not applicable  
23% | 9

## Specialty Contractors



- Will purchase **new** equipment  
33% | 16 respondents
- Will purchase **used** equipment  
12% | 6
- Will lease equipment  
14% | 7
- Will depend on tax laws  
22% | 11
- Not applicable  
18% | 9

## By Sector



# Factors expected to impact respondent business

Impacts positively, negatively, or neutrally

## Top factors

### TOP POSITIVE IMPACT

45% of respondents expect this factor:

Technology changes

will impact business **positively**

### TOP NEUTRAL IMPACT

82% of respondents expect this factor:

Integrated Project Delivery

will not really impact business

### TOP NEGATIVE IMPACT

61% of respondents expect this factor:

Cost of materials

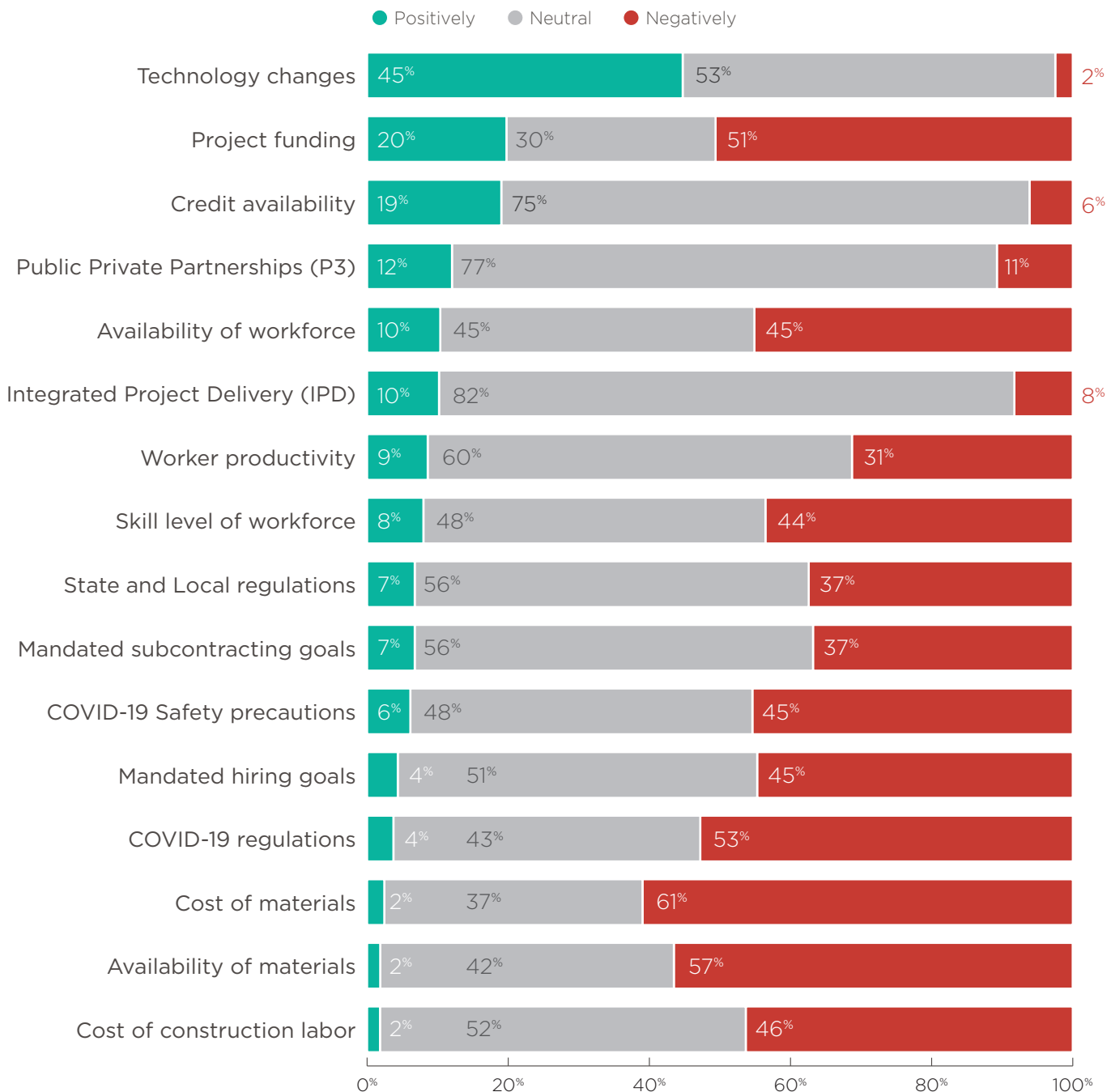
will impact business **negatively**

### QUESTION

How do you expect the following factors to impact your business through 2021?

Positively  
Neither  
Negative

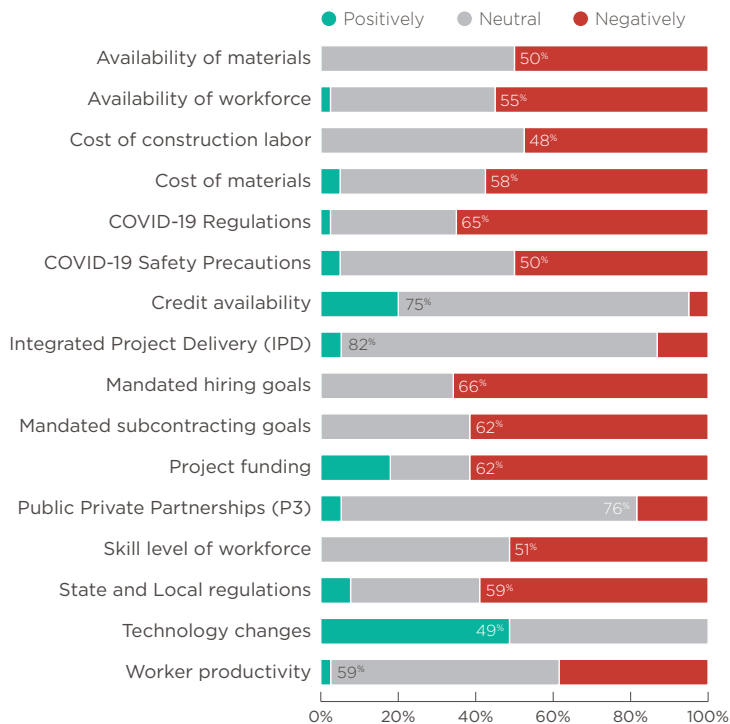
## All factors



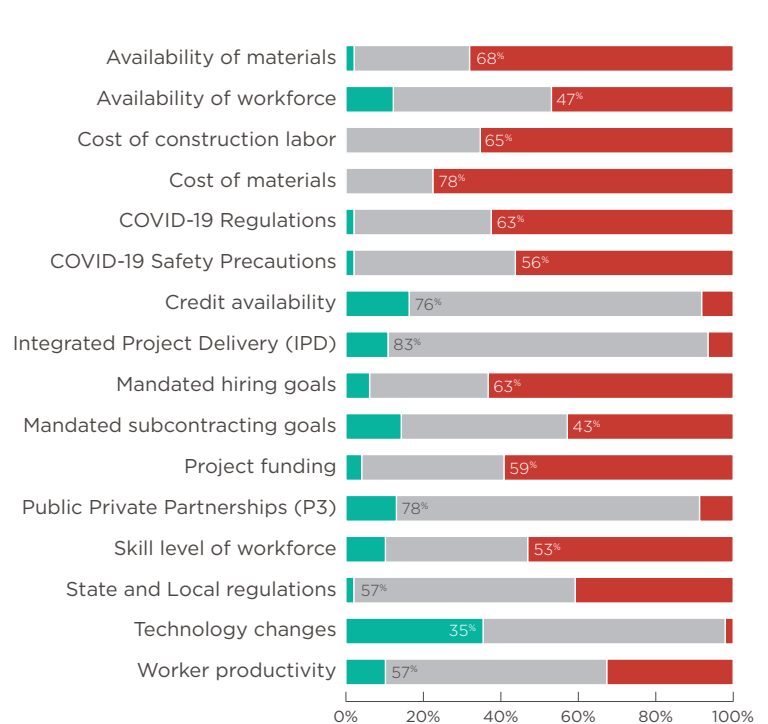
# Factors expected to impact business in 2021

By firm type

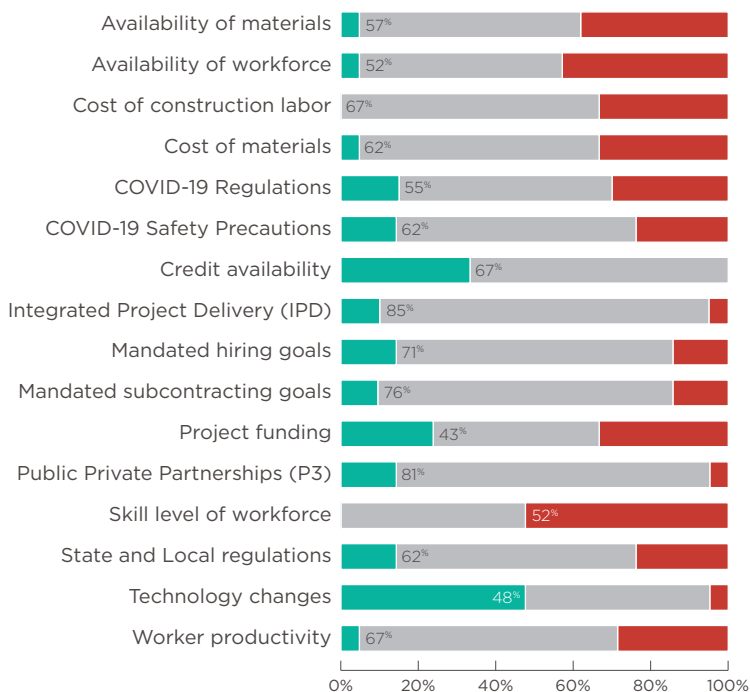
## General Contractors



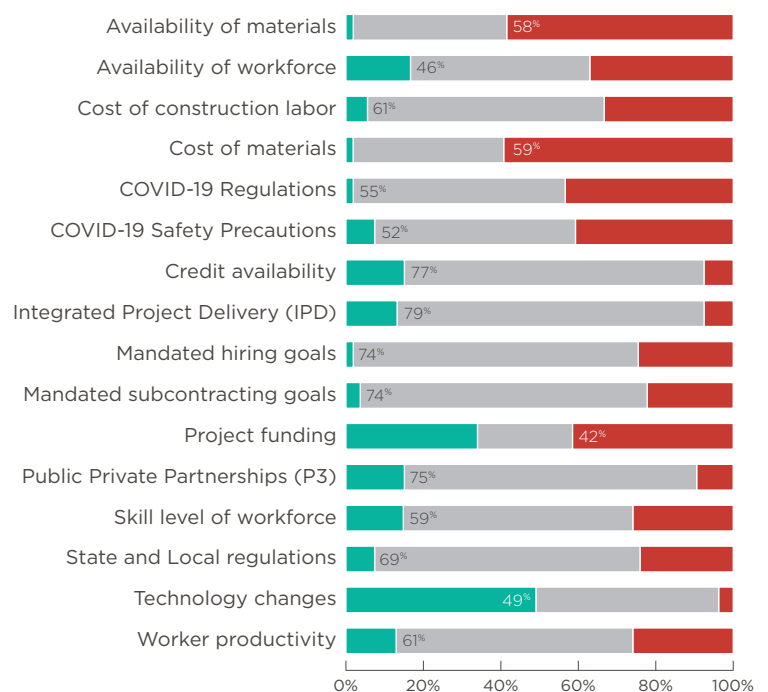
## Specialty Contractors



## Affiliates



## Architects/Engineers





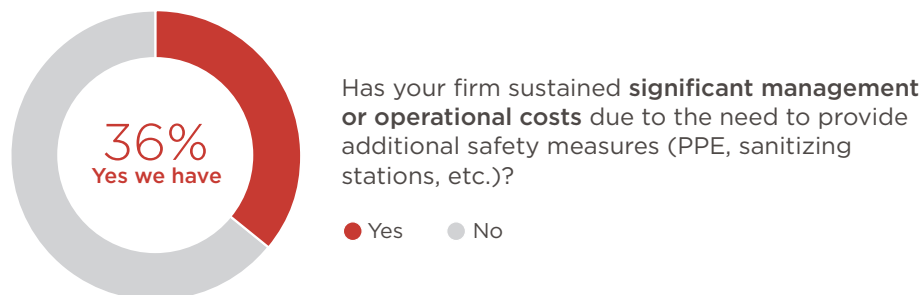
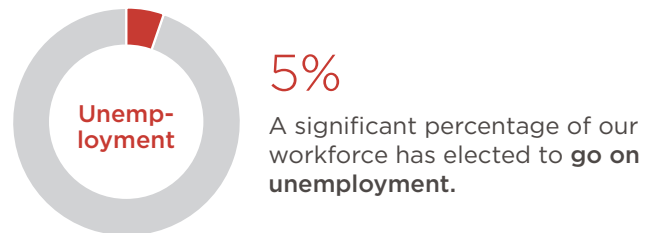
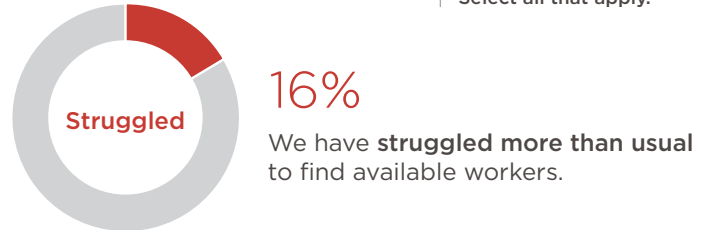
# The Effect of COVID-19 on Workforce

How has COVID-19 affected your firm's workforce?

Select all that apply:

## QUESTION

How has your workforce been affected by the COVID-19 pandemic?  
Select all that apply.



# COVID-19 related project productivity

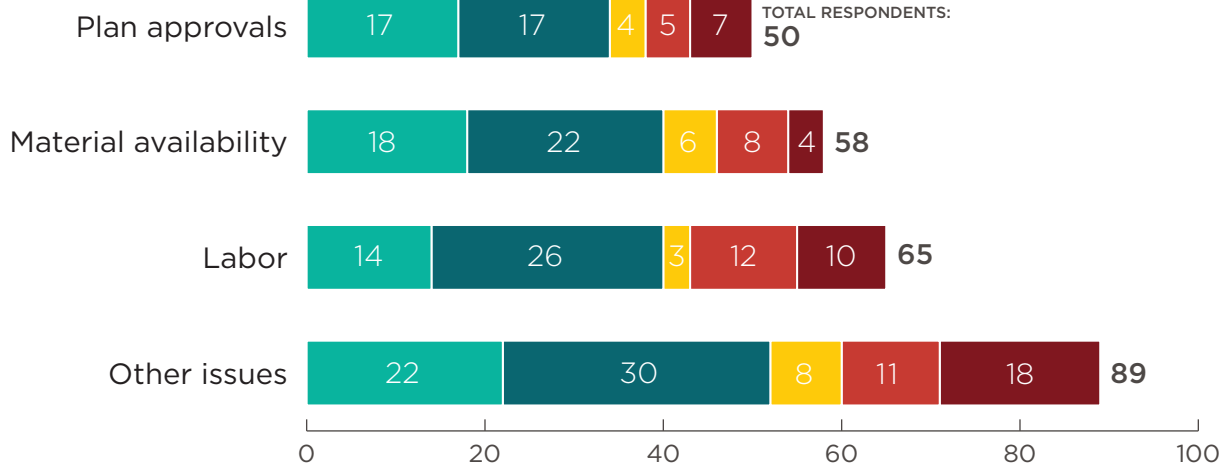
By firm type

## Project delays and decreased productivity

BY FIRM TYPE

General Contractors Specialty Contractors Affiliates Architects Engineers

17 respondents experienced project delays or decreased productivity due to plan approvals



### QUESTION

Have you experienced project delays or decreased productivity due to any of the following? Please select all that apply.

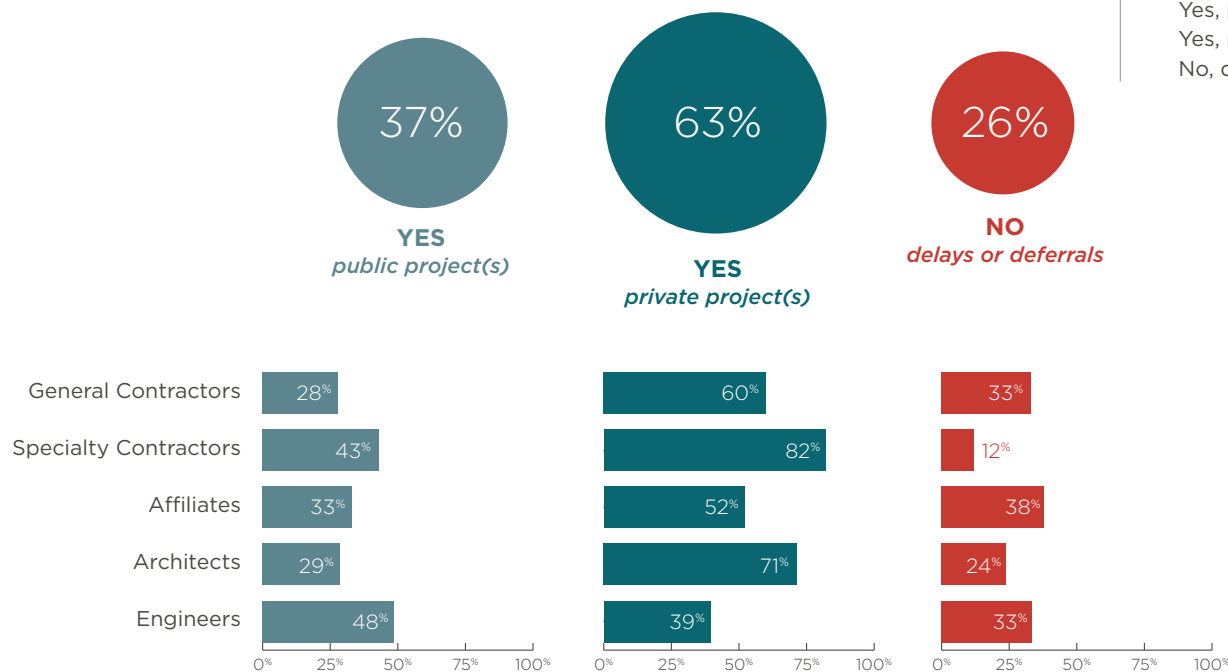
- Plan approvals
- Material availability
- Labor
- Other issues

## Projects cancelled or deferred due to COVID-19

### QUESTION

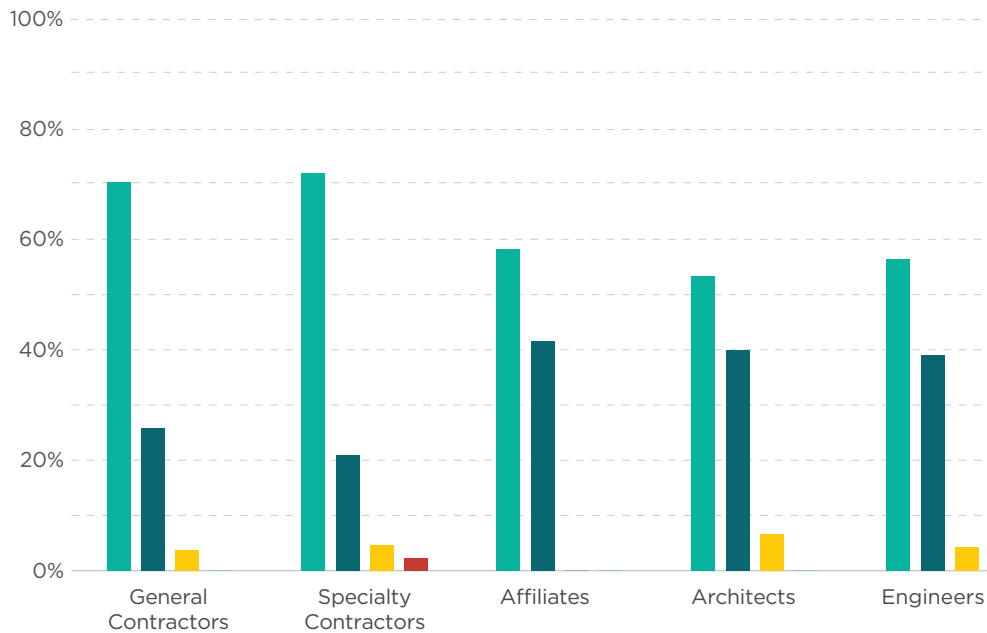
Have you had Minnesota projects cancelled or deferred due to COVID-19?

- Yes, public project(s)
- Yes, private project(s)
- No, delays or deferrals



# COVID-19 related project productivity (cont.)

## Percentage of Work Portfolio Affected by Delays

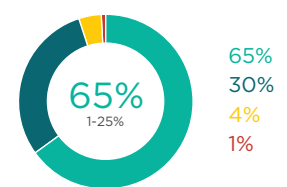


### QUESTION

Please estimate the percentage of your total work portfolio affected by the delay(s)

- 1-25%
- 26-50%
- 51-75%
- 76-100%

### Overall

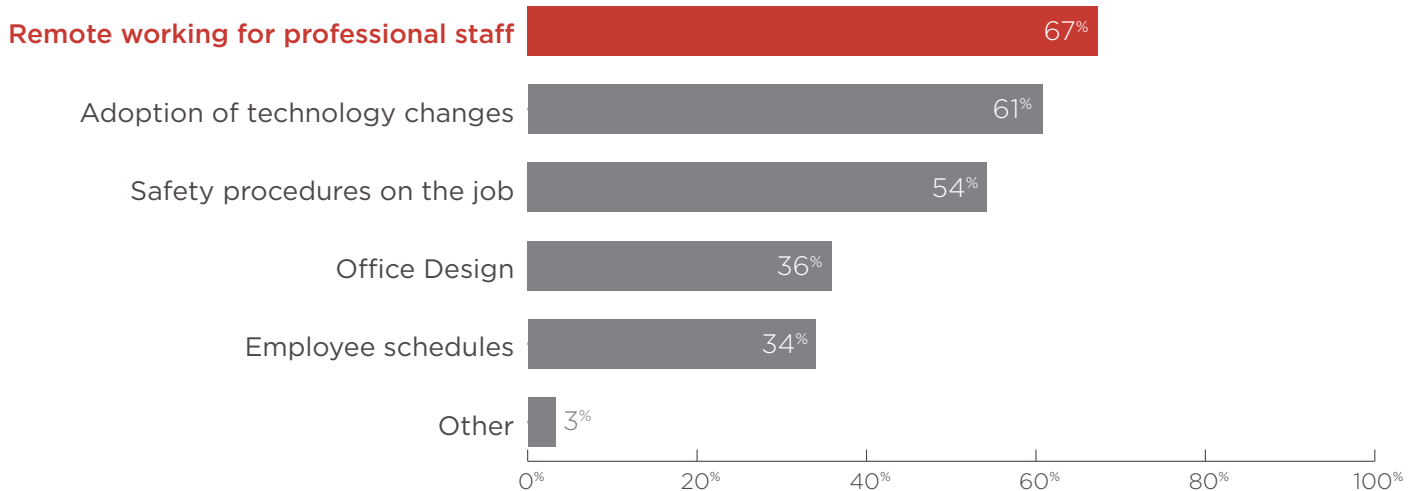


## COVID-19 work adjustments

### Permanent changes for the future

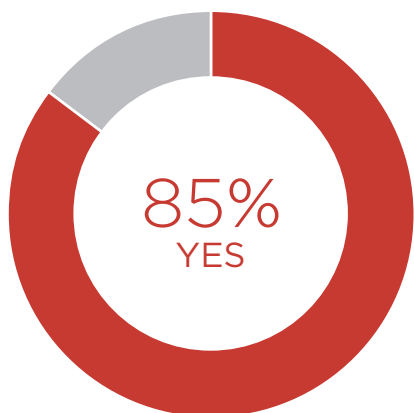
### QUESTION

Which COVID-19 adjustments to the way your firm works do you think will become permanent or change how work is done in the future?



# Contractor Signatory Status

Overall, by firm, and by sector



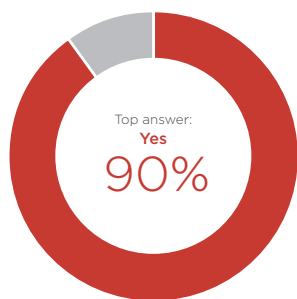
*Are you signatory with any union?*

*Yes: 85.4%*

*No: 14.6%*

## By Firm Type

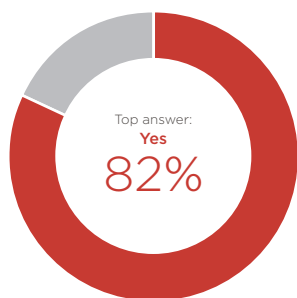
### General Contractors



● Yes  
90% | 36 respondents

● No  
10% | 4 respondents

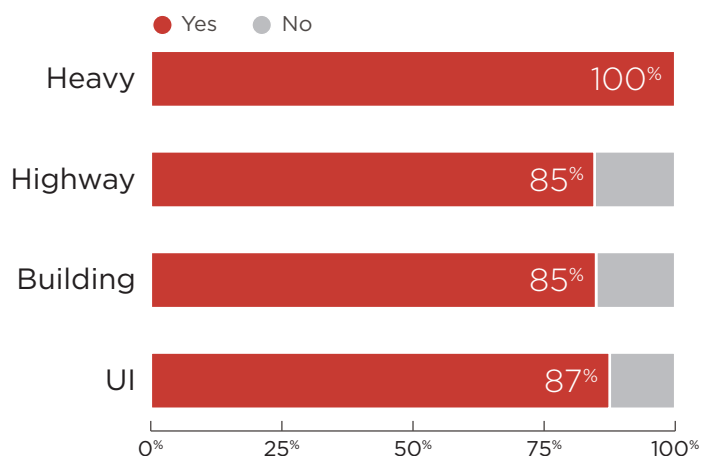
### Specialty Contractors



● Yes  
82% | 40 respondents

● No  
18% | 9 respondents

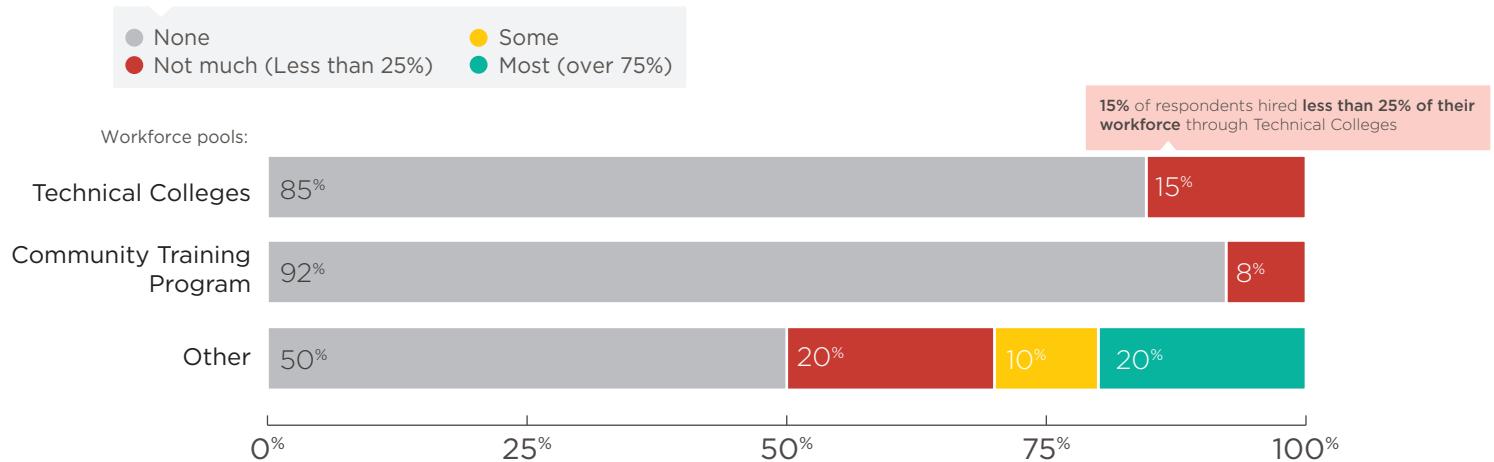
## By Sector



# Hiring Sources

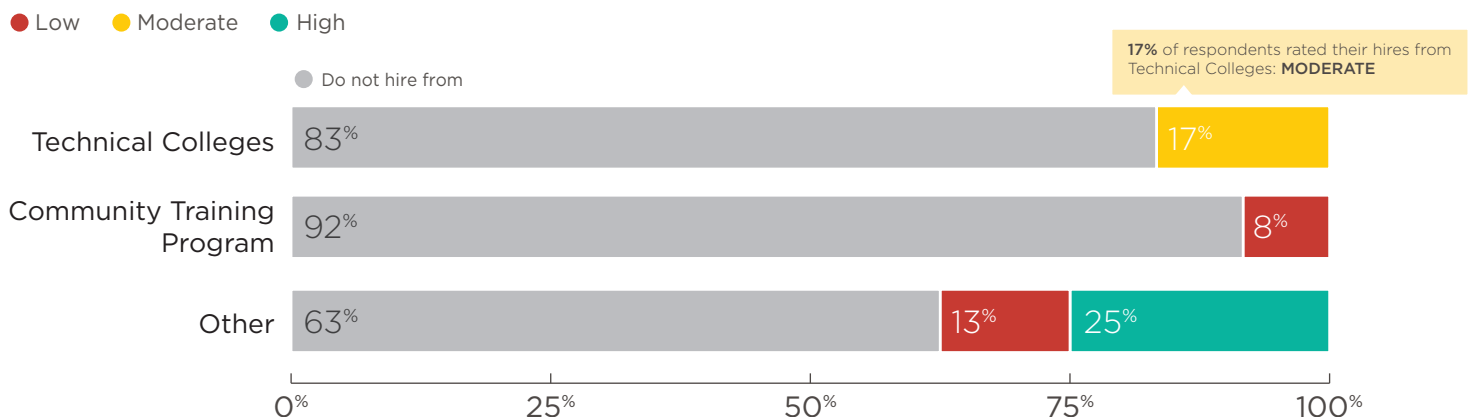
## Non-Union Contractors

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.



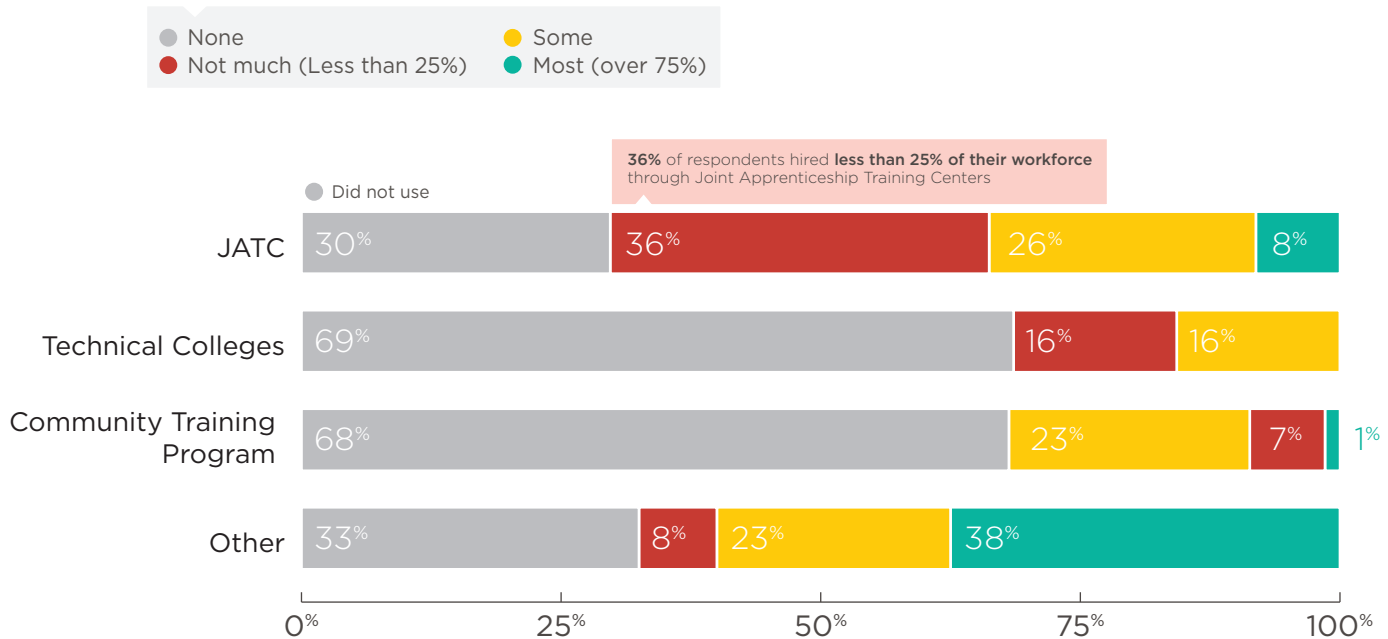
How much do you agree or disagree with the following statements?

		Strongly Agree	Agree	Disagree	Strongly Disagree	Do not use
TECHNICAL COLLEGES	The pool of workers through technical colleges is <b>empty/exhausted</b>	0%	42%	8%	0%	50%
	The pool of workers through technical colleges <b>does not perform at a skill level necessary</b> to do the work	0%	25%	25%	0%	50%
COMMUNITY TRAINING PROGRAMS	The pool of workers through community training programs is <b>empty/exhausted</b>	0%	42%	8%	0%	75%
	The pool of workers through community training programs <b>does not perform at a skill level necessary</b> to do the work	0%	33%	0%	0%	67%

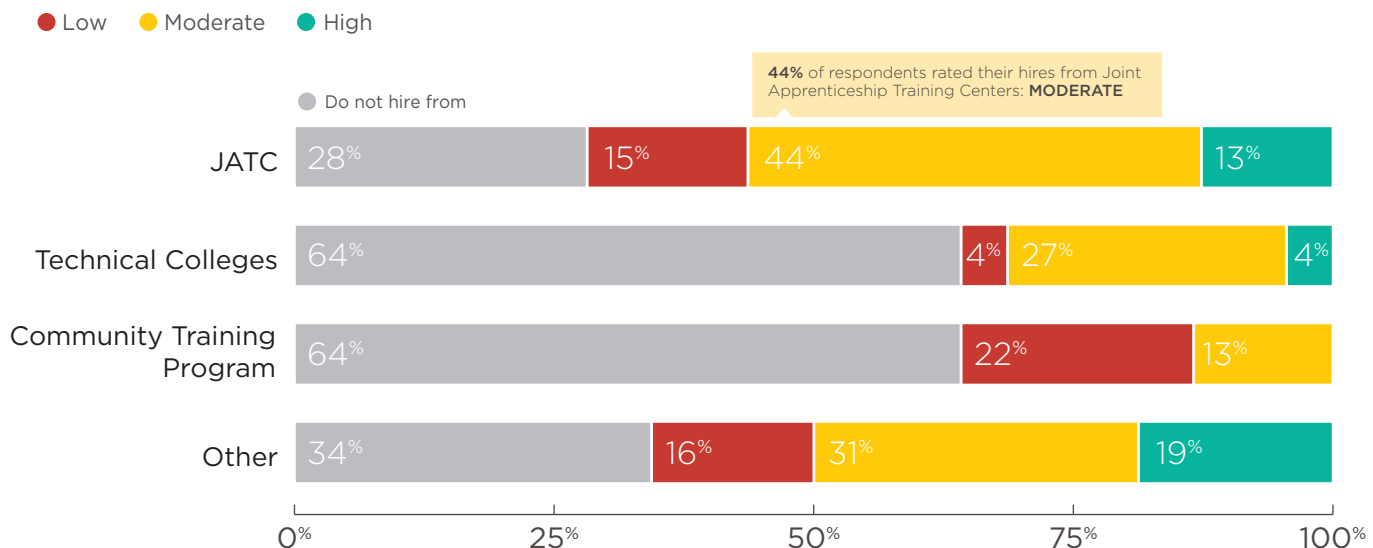
# Hiring Sources

## 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 56% NO 44%

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	13%	57%	23%	4%	3%
The pool of union workers does not perform at a skill level necessary to do the work	16%	40%	36%	5%	3%
The pool of workers through technical colleges is empty/exhausted	1%	28%	22%	1%	47%
The pool of workers through technical colleges does not perform at a skill level necessary to do the work	3%	22%	22%	3%	47%
The pool of workers through community training programs is empty/exhausted	5%	24%	17%	1%	53%
The pool of workers through community training programs does not perform at a skill level necessary to do the work	13%	28%	12%	1%	45%

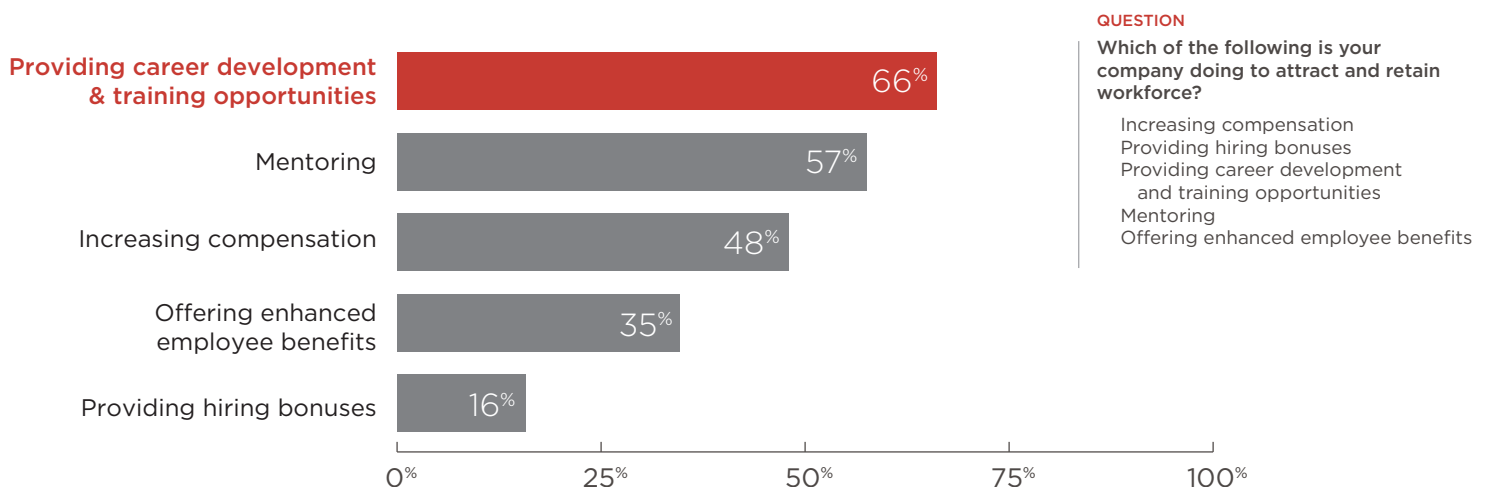
# Workforce plans for 2021

Hiring, steady workforce, or layoffs



## Workforce hiring strategies for contractors

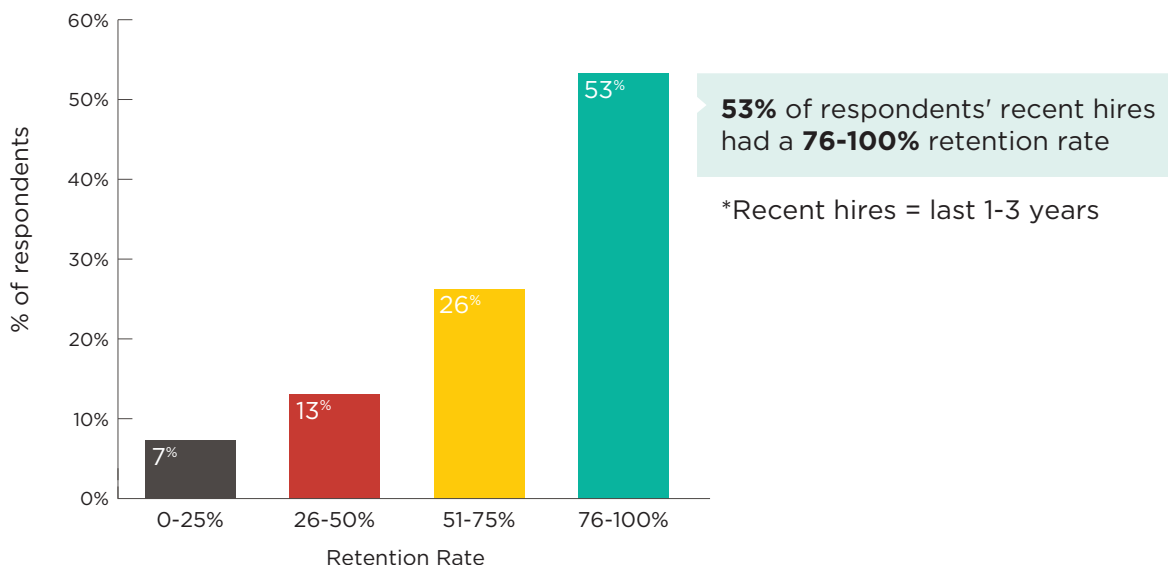
Which strategies have you found to be most effective in attracting/retaining workforce?



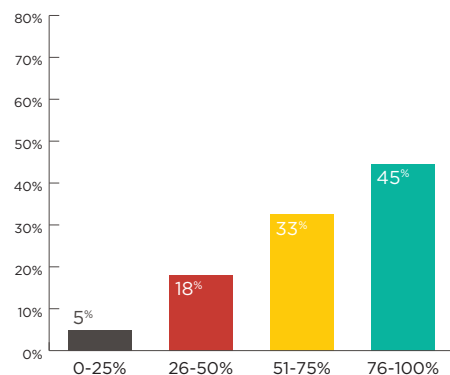
# Retention rate

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

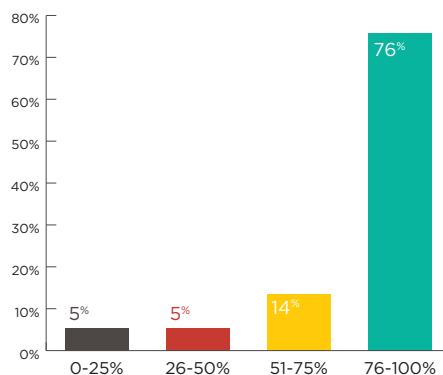
## Overall



## Contractors



## Architects & Engineers



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

### TOP POSITIVE FACTORS LISTED:

- Providing career development and training opportunities/Mentoring
- Competitive or slightly over scale compensation/ Increased subsistence pay to attract travelers / Bonuses
- Company culture / Respect for employees / Inclusive and respectful place to work / Being a good place to work
- Enhanced/Competitive benefits
- Flexible work hours / Schedules that fit employee needs / Flexible working arrangements
- Good facilities / Well-maintained tools and equipment
- Ownership of projects / Growth opportunities / Promoting from within / Hiring those who may not be hired by other companies

### TOP NEGATIVE FACTORS LISTED:

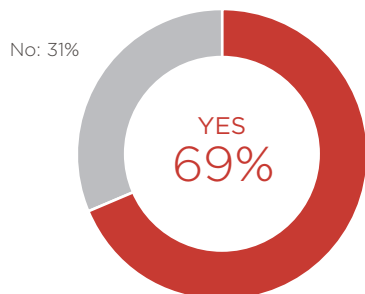
- Availability of work / Economy
- Lack of skill/training
- Travel requirements / Remote work site locations / Driving distance / Relocation / Schedule demands in the Metro from MnDot making quality of life tough for many workers with families
- Lack of commitment / Motivation / Work ethic / Unrealistic expectations
- Other companies are able to offer higher compensation/ better benefits
- Work from home environment has negatively impacted mentoring relationships

# Efforts to increase workforce diversity

Measures taken to attract and retain people of color and women

## Taking deliberate measures?

Yes: **69%**



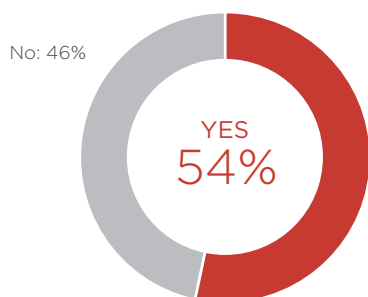
### QUESTION

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: **54%**



### 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.

- Diversity attracts diversity – sending women and people of color to career fairs to do recruitment
- Seeing that other people of color or women are being retained and promoted in the company
- Working with the JATC
- EEO practices in the workplace / Internal HR awareness / Increasing interview levels
- Word of mouth / Networking with existing employees / Looking for employees from within the communities where projects are being built
- Having workload in the metro area

# 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	5%	19%	32%	35%	8%
Project Managers/Supervisors	11%	26%	37%	24%	3%
Engineers	5%	5%	24%	5%	61%
Business Development	3%	21%	24%	8%	45%
Safety Professionals	8%	21%	24%	13%	34%
Design Professionals	5%	5%	16%	0%	74%

	Least difficult → Most				
Specialty Contractors	1	2	3	4	N/A
Estimating Professionals	5%	23%	32%	14%	27%
Project Managers/Supervisors	5%	27%	25%	16%	27%
Engineers	0%	14%	9%	13%	72%
Business Development	5%	5%	23%	13%	55%
Safety Professionals	9%	19%	16%	7%	56%
Design Professionals	0%	7%	7%	9%	81%

	Least difficult → Most				
Architects/Engineers	1	2	3	4	N/A
Estimating Professionals	0%	11%	0%	5%	84%
Project Managers/Supervisors	0%	5%	18%	39%	23%
Engineers	3%	5%	32%	37%	34%
Business Development	3%	5%	34%	24%	41%
Safety Professionals	8%	5%	0%	0%	74%
Design Professionals	5%	15%	35%	30%	9%

#### FOR GENERAL & SPECIALTY CONTRACTORS

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

Project Managers/Supervisors  
Estimating Professionals

#### FOR ARCHITECTS AND ENGINEERS

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

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

### Craft workforce

	Least difficult → Most				
General Contractors	1	2	3	4	N/A
Bricklayers	0%	3%	3%	19%	75%
Carpenters	3%	16%	38%	11%	32%
Cement Masons	0%	11%	22%	24%	43%
Drywall Installers	3%	6%	6%	8%	78%
Electricians	3%	0%	3%	3%	92%
Equipment Operators	3%	14%	49%	22%	14%
Ironworkers	3%	8%	8%	3%	78%
Laborers	22%	35%	16%	22%	5%
Millwrights	3%	14%	3%	0%	81%
Painters	3%	3%	3%	3%	89%
Pipefitters/Welders	3%	6%	3%	11%	78%
Plumbers	0%	0%	0%	8%	92%
Roofers	3%	3%	3%	0%	92%
Sheet Metal Workers	3%	3%	0%	0%	94%
Tile Setters	3%	3%	0%	3%	92%
Truck Drivers	3%	14%	31%	11%	42%

	Least difficult → Most				
Specialty Contractors	1	2	3	4	N/A
Bricklayers	0%	0%	2%	12%	85%
Carpenters	0%	0%	13%	8%	80%
Cement Masons	0%	3%	3%	5%	90%
Drywall Installers	0%	0%	3%	0%	98%
Electricians	5%	3%	3%	3%	87%
Equipment Operators	8%	8%	15%	13%	58%
Ironworkers	0%	3%	3%	0%	95%
Laborers	8%	18%	20%	13%	43%
Millwrights	0%	3%	0%	3%	95%
Painters	0%	0%	0%	0%	100%
Pipefitters/Welders	0%	3%	3%	5%	90%
Plumbers	0%	5%	3%	0%	93%
Roofers	0%	3%	5%	3%	90%
Sheet Metal Workers	2%	2%	5%	5%	85%
Tile Setters	0%	0%	0%	2%	98%
Truck Drivers	3%	10%	13%	15%	60%



# Overall Business Challenges for 2021

## TOP 5 CHALLENGES



### Business Challenges for 2021 and Beyond

	Overall	General	Specialty	Affiliate	Architect/ Engineer
Lack of work due to COVID-19	39%	33%	46%	41%	36%
Finding skilled and trained workers	30%	44%	30%	24%	20%
Discovering new markets	21%	18%	24%	24%	20%
Increasing productivity	18%	13%	26%	12%	18%
Developing new leadership	15%	21%	9%	18%	16%
Finding available workers	13%	13%	4%	41%	11%
Reducing costs	12%	8%	11%	6%	18%
Managing cash flow	10%	3%	11%	12%	13%
Workforce hiring goals	8%	13%	11%	0%	4%
Managing client expectations	7%	3%	2%	12%	16%
COVID-19 business and project-related costs	6%	5%	7%	6%	7%
Responding to COVID-19 work and safety issues	4%	8%	4%	0%	2%
Navigating the regulatory environment	2%	3%	2%	6%	0%
Implementing Integrated Project Delivery (IPD)	1%	0%	0%	0%	2%



# 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

Maintaining a adequate sales and revenue goal with the decreased project opportunities.

We expect a gap in available projects next year based on the reduction in architect billings during the first half of 2020. We think the results of this election will have very differing consequences on business activity and don't have a prediction for how that will sort out.

Infrastructure funding at all levels of government

How to manage more work with less staff and getting new clients to sign up sooner since it always comes at once.

The governor and mayors refusal to control rioting and looting earlier in the year as well as their inability to defend the police who are attempting to make our cities safe, as well as these same politicians inability to deal with the homeless communities free-run in our cities is harming our communities. All of this, in addition to the cherry-picking of which businesses will be allowed to stay open and which businesses are forced to close during a flu-virus is an unwinnable hurdle for many businesses and crippling for many industries. Businesses and citizens should be allowed the freedom to hide in their basement or go outside, or go shopping or order out for goods and services, or decide to wear a mask or not wear a mask.

All of the above is of course harming our construction industry. Much of it unnecessary and based on overreaction and political gamesmanship with our industry as one of the victims. Being contractors in cities where retailers, developers, and small businesses of all sorts are being crushed by the above noted mess is an epic and historically destructive mismanagement by our governor and mayors. Tell them so.

I have noticed that there are more non-union firms being awarded most of the work that we have bid. These companies can bid lower due to lower cost employees. I feel compelled to start a non-union arm of business in order to compete on a level playing field. This has been the toughest year in business out of the last 15 years! I would like to explore partnering / forming a coalition with general contractors. All businesses and people have suffered due to COVID-19. Can't wait to get this behind us.

Cash flow

Everything in construction. The overall unknown is causing serious disruptions from owners to employees. We are keeping our head down and going forward, but for a small business, this is a trying time. We cannot "buy" work like the bigger companies and there is so much competition right now for projects that normally would have have just a few bidders. Shows that everyone is nervous about the future.

Pushing down of traditional owner risks to contractors in all manner of procurement, hard bid, CMGC, DB and P3.

Introduction of additional non-union general contractors into this market, specifically in the housing sector.

Union GC's that continue to solicit and hire non-union sub contractors and union BA's that don't do anything about it.

There is definitely an increase in frustration among experienced Foremen and Superintendents in the "new" labor force. It is having the most personal impact on them. They are forced to try to do more with less experienced people and some who have no idea on how to work professionally in the trades. I fear many of these people will retire early out of constant stress of the challenge....with no one of equal talent or drive to replace them. Complicating this is the workforce hiring goals and trying to manage that on an already a challenging situation imposed just by having to train Gen Z and millennials. The Unions have not seemed up to the task in regards to recruiting and training. Our culture seems to value a college degree beyond working in the trades which can be a rewarding career both professionally and monetarily. I hope I don't come off as the old guy (I'm 56) who is saying "kids nowadays" as that refrain has been going on for every generation...but this does seem different. The new labor force is not used to working with their hands and have not been imbued with a sense of duty and perseverance. I believe everyone, Contractors, the AGC, Technical Colleges, Training Programs, and Labor Unions really need to work together to solve these problems.

Long term funding solution to transportation

Response of the financial markets to finance projects, both equity financing and debt / bank financing.

Political polarization. Climate change. The dumping down of Americans.

Just a forecast of what will be constructed in the next 3 to 5 years while we recover from this pandemic slowdown.

Uncertainty created by the current administration, and COVID19, is holding back investments in construction

Being on the line for the actions of my people who are exposed to so many varied risk exposures.