

# **Executive Summary**

## 2022-2023 AGC of Minnesota Construction Industry Assessment

The 2022-2023 AGC of Minnesota Survey Assessment provides a snapshot of the projected Minnesota construction market, construction business challenges and other influences that impact the architect, engineering, and construction (AEC) economy. Over 150 responses were tallied statewide from all AEC sectors and construction disciplines.

#### **MARKET OBSERVATIONS:**

Overall, there is tempered optimism that market demand for construction services will remain strong in 2023. This outlook is less positive than last year due to strong inflationary headwinds, a continued lack of workforce availability and stubborn supply chain challenges. Labor costs continue to lead as the top negative factor affecting businesses, while project funding and technology advances are the top positive indicators.

The strongest market sector optimism continues to reside in alternative energy, with utility infrastructure and highway sectors also posting strong positives. Commercial building markets continue to show a more sluggish outlook, with retail and office construction flagging. Both multi-family and senior housing responses reflect anticipated declines over prior year responses.

Equipment demand for new purchases remains strong into 2023, posting a 9% increase over 2022, which seems less constant with other market outlook responses.

#### LABOR MARKET IMPACT:

Overall, strong demand for workers persists. The outlook for hiring in 2023 is up slightly over 2022 responses and up significantly since the 2020 pandemic-influenced report. The top factors identified for attracting and retaining talent remain compensation and a positive workplace culture. Flexible work schedules remain an important retention strategy but seem to be waning when compared to other factors like career development and mentoring.

Joint Apprenticeship Training programs remain a top source to find qualified workers. Word of mouth recruiting remains the top factor influencing the performance level of workforce talent.

#### **DIVERSITY IN WORKFORCE AND SUBCONTRACTING:**

Developing a diverse workforce remains challenging in both field and office employment. Utilizing a deliberate approach is cited as the most helpful strategy, with 70 percent of respondents taking intentional actions. Compared to last year, respondents report increased difficulty finding diverse talent in their local market area and consistent challenges in recruiting needed diverse

craft talent. All respondents report that overall, 36 percent of clients are now requiring a DEI plan to evaluate in the proposal process.

Regarding subcontracting with disadvantaged firms, responses suggest a small increase in the overall spend and number of contracts awarded to veteran-owned firms, an increase of contracts awarded to women-owned firms, and a decline among minority-owned firms. Overall, respondents awarded more contracts to new disadvantaged firms than reported in 2021. Additionally, barriers to utilizing these firms are reported down over prior survey data.

#### **CONCLUSION:**

Survey readers should come away with recognition that the AEC sector is somewhat less optimistic for a strong and productive 2023 than the previous year. New challenges with rising inflation and supply chain complications are adding uncertainty to respondents' outlook. Longstanding underlying challenges in workforce availability and skills remain a consistent drag on business operations. All AEC sectors will carry strong hiring demand into the coming year.

Thank you to all who participated in the 2022-2023 AGC of Minnesota Survey Assessment. Your responses help frame the many challenges and opportunities for AEC firms in the Minnesota marketplace.

We remain Your Trusted Resource.

Tim Worke CEO

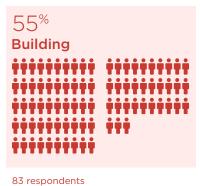


# **Respondent Snapshot**

Industry sectors, volume sales, and geographic areas

## **Industry Sectors**

Primary sector: Building





50 respondents



16 respondents

|% Heavy **‡**‡

2 respondents

#### sector as defined below. Building Highway

QUESTION 1

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

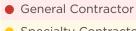
Please indicate your primary industry

= 1 respondent

Types of Firms

Top firm type: **General and Specialty Contractors** 





Specialty ContractorAffiliate

Architect

Engineer

# 34% of total 52 respondents34% of total 52 respondents

19% 29

8% *12* 4% 6

#### **QUESTION 2**

Which of the following best describes your firm?

General Contractor Specialty Contractor/Subcontractor

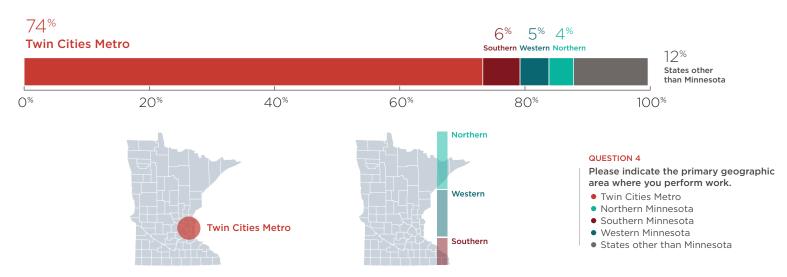
Engineer Architect

Architect

(materials supplier/service provider)

## Geographic Area Where Work is Performed

Top area: Twin Cities Metro





# **Respondent Snapshot**

Size of firm in sales

#### ALL RESPONDENTS

## Size of Firm in Annual Volume Sales

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





15%



14%





#### QUESTION 3

Please indicate the size of your firm in annual volume sales

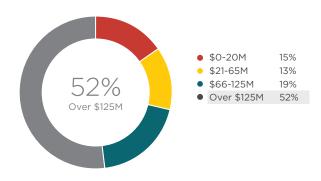
\$0-20M \$21-65M \$66-125M

Over \$125M

## **Responses By Firm Type**

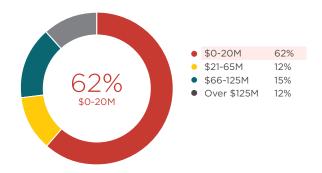
## General contractors

Top size: over \$125M



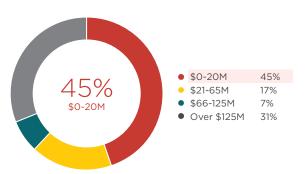
## Specialty contractors

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



## Affiliates (Materials Suppliers / Service Providers)

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



# Architects and Engineers

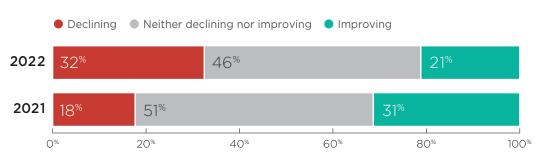
Top size: **\$0-20M** 



# Looking ahead to 2023

How respondents perceive market conditions affecting their firm

## **All Respondents**



#### **QUESTION 5**

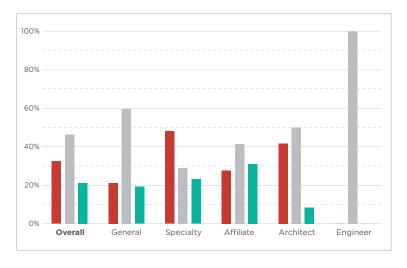
Looking ahead to 2023 in Minnesota, you anticipate market conditions affecting your firm to be:

Improving

Neither improving nor declining Declining

## **Responses By Firm Type and Sector**

# Firm Type Top by 'declining': 48% Specialty



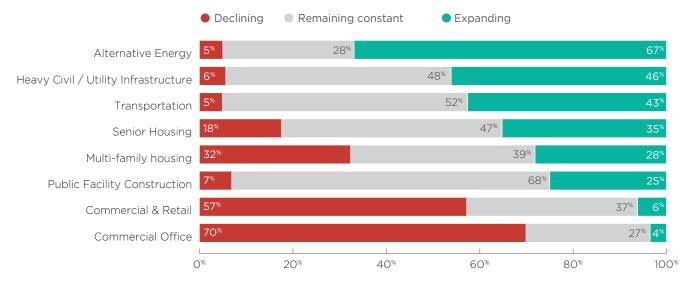
## Sector

Top by 'declining': 38% UI



#### QUESTION 6

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





# **Equipment plans for 2023**

The majority of contractors will purchase new equipment

## **All Responses**

- Will purchase new equipment45% | 68 respondents
- Will purchase used equipment
   11% | 16
- Will lease equipment
   7% | 11
- Will depend on tax laws11% | 16
- Not applicable26% | 40



#### QUESTION 7

Your plans for equipment additions or reductions for 2023 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**



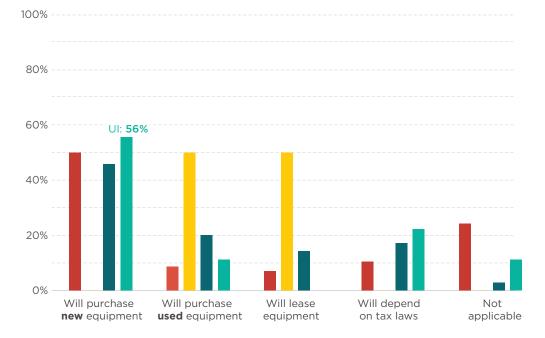
- Will purchase new equipment 56% | 29 respondents
- Will purchase used equipment
   10% | 5
- Will lease equipment
   12% | 6
- Will depend on tax laws
- Not applicable
   13% | 7

## **Specialty Contractors**



- Will purchase new equipment 40% | 21 respondents
- Will purchase used equipment17% | 9
- Will lease equipment
- Will depend on tax laws
- Not applicable

## By Sector



- Building
- Heavy
- Highway
- Utility Infrastructure



# Factors expected to impact respondent business

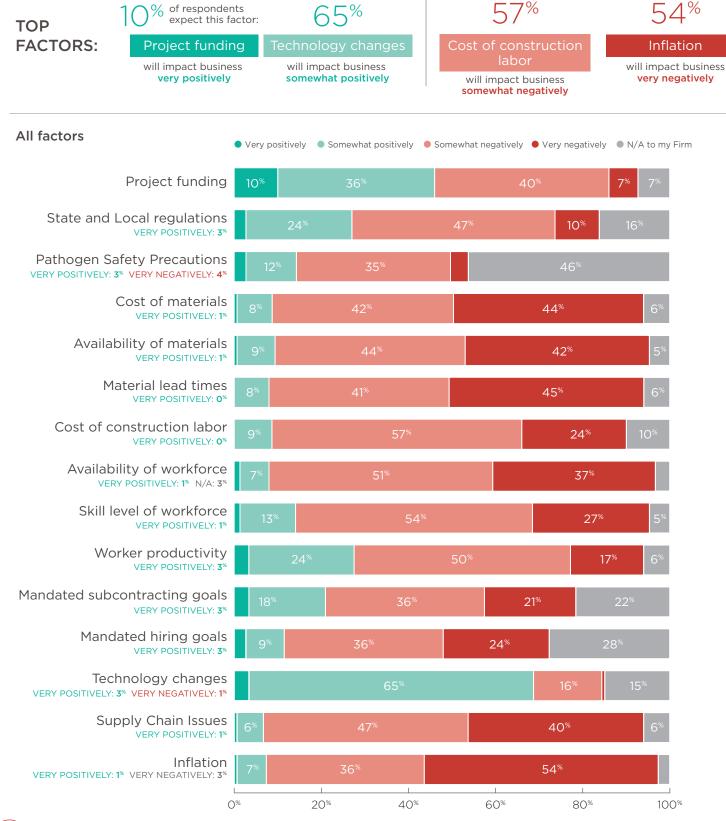
**TOP: NEGATIVELY** 

Impacts positively, negatively, or neutrally

#### **QUESTION 8**

How do you expect the following factors to impact your business through 2023?

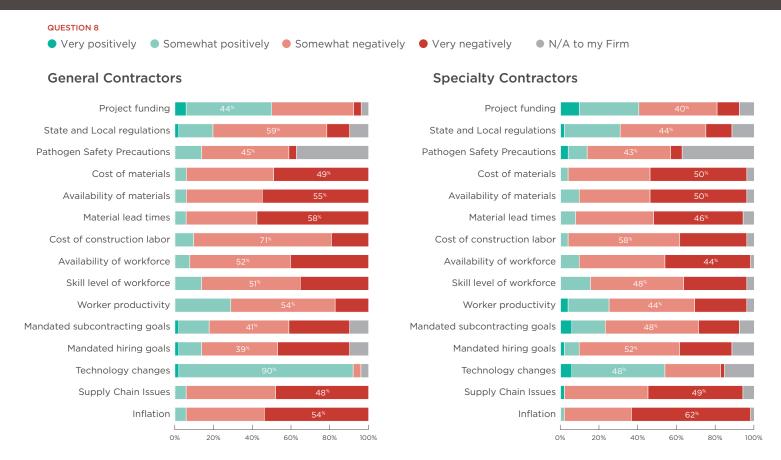
**TOP: POSITIVELY** 



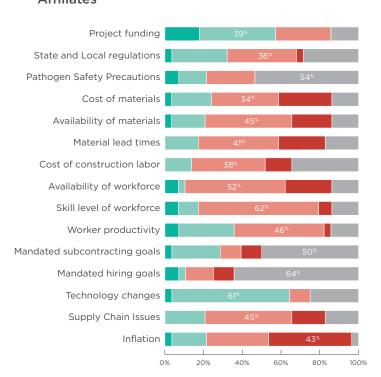


# Factors expected to impact business in 2023

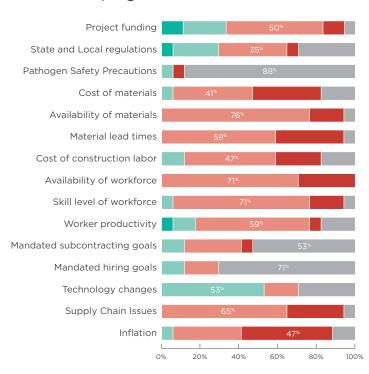
By firm type



#### **Affiliates**



#### Architects/Engineers





# **Working Remotely**

## Policy on professional staff working remotely

#### All Responses

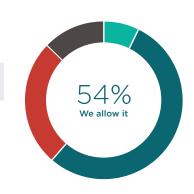
7% • We encourage it staff may work remotely full time if they are able to do their job well

54% • We allow it staff may work remotely part of the time if they are able to do their job well

26% • We discourage it staff may work remotely on a case by case and day by day basis, if approved by management

13% We do not allow it

all staff must work in the office unless ill or using PTO



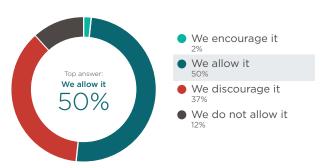
#### **QUESTION 9**

What is your firm's policy on professional office staff working remotely?

We encourage it
We allow it
We discourage it
We do not allow it

## By firm type

#### General contractors



#### Specialty contractors



#### **Affiliates**

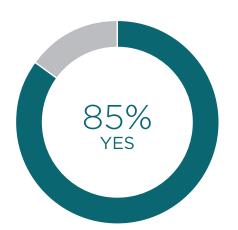


## Architects and Engineers



# **Contractor Signatory Status**

Overall, by firm, and by sector



## Are you signatory with any union?

Yes: 85% No: 15%

#### **QUESTION 10**

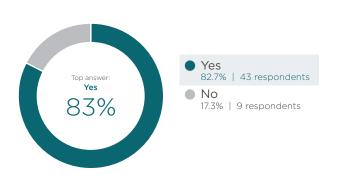
Are you signatory with any union?

Yes No

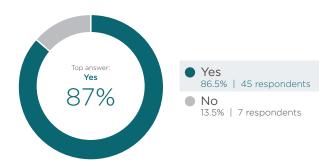
Filter: all contractors

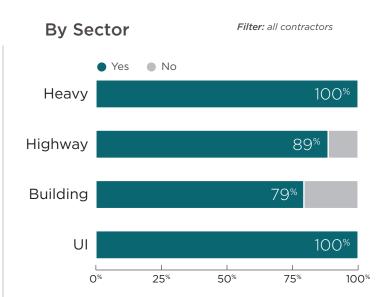
## By Firm Type

## General Contractors



## Specialty Contractors

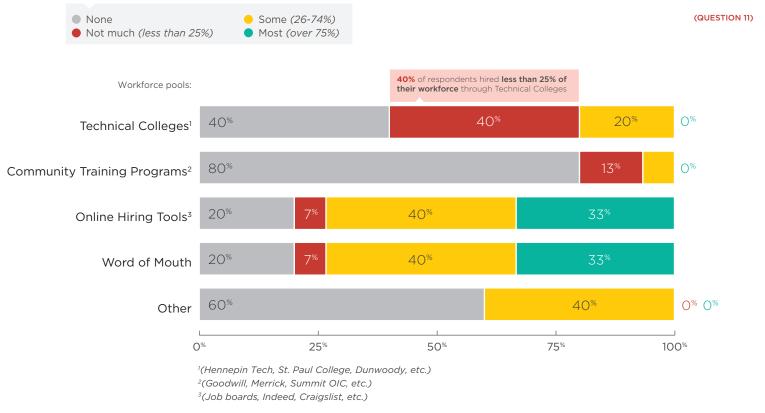




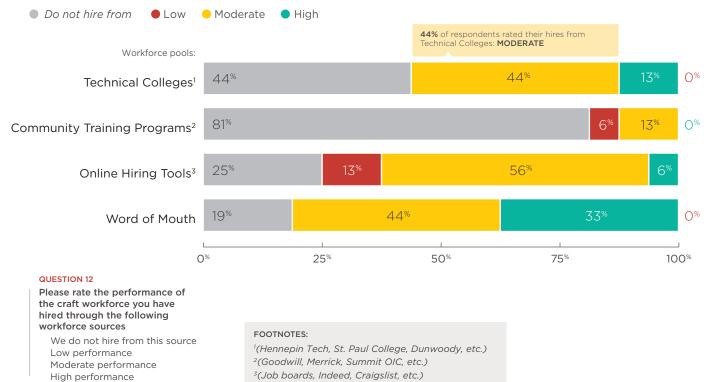
# Hiring Sources - Field Craft Workforce

Non-Union Contractors

## What percentage of field craft hiring have you done through the following workforce sources?



## Please rate the performance of the workforce you have hired.





# Hiring Sources - Field Craft Workforce

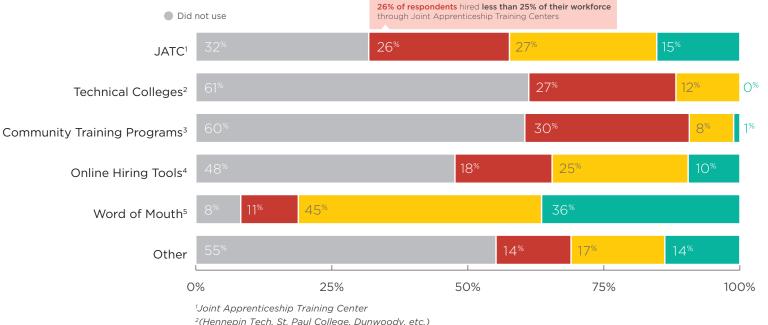
#### **Union Contractors**



Thinking of your hiring in the past year, what percentage of your field craft hiring have you done through the following workforce sources?

None Some Not much (Less than 25%) Most (over 75%)

## **Hiring Sources**

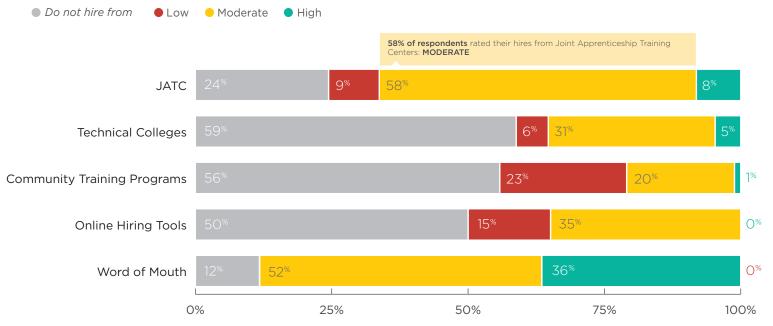


<sup>&</sup>lt;sup>2</sup>(Hennepin Tech, St. Paul College, Dunwoody, etc.)

#### QUESTION 15

Please rate the performance of the craft workforce you have hired through the following workforce sources.

## Please rate the performance of the workforce you have hired





<sup>&</sup>lt;sup>3</sup>(Goodwill, Merrick, Summit OIC, etc.)

<sup>&</sup>lt;sup>4</sup>(job boards, Indeed, Craigslist, etc.)

# **Hiring Sources - Field Craft Workforce**

**Union Contractors** 

#### QUESTION 13

Do the Joint Apprenticeship Training Committees (JATCs) address the priorities of an industry-driven workforce by delivering industry-relevant training?



**Yes: 74%** No: 26%

#### QUESTION 16

What suggestions would you make to improve the availability and quality of workforce from these traditional sources?

"These sources need to be more selective on who they bring into their training programs."

"They should kick underperforming people out of the union and train on emerging market technologies."

"Quit pitching college for all, college is not meant for everyone."

"More emphasis on use of technology in construction, specifically around BIM and modular construction."

"Continue to promote the trades as an attractive career path as early as possible to students."

"More supervisory training availability."

"Better screening of the apprentices entering into the JATC."

"More school fairs. Engaging young people to join the crafts. Kids think their only avenue is college."

"They need to make it easier to get into the apprenticeship. They need to allow the apprentices to have more scope."

"Explain to government agencies that we are signatory and required to hire through our JATC or hiring hall."

"Workers need to be trained in productivity. Not just how to do the work, but how to do it quickly and to show up every day."

"Additional training for balancing life issues with work responsibilities."

"They all need to recruit more young people into the field."

"Advertise to high schools that trade schools/apprentice programs will provide skills to obtain well-paying jobs."

"More and more people are joining the team with very little experience. When we thought people were starting at "zero" before, we were wrong."

"Get shop classes back in schools and get counselors to acknowledge that college is not for everyone and that is OK."

"Make more strict rules for JATC members that are currently "looking for work." I have had a few that were supposed to start work and then stopped answering their phones."

# What impacts General Contractors' use of JATCs?

## Factors that impact the use of JATC training programs

Select all that apply:

# Productivity

63%

Concerns about workforce productivity



**QUESTION 17** 

Do any of the following factors impact your firm's use of JATC training programs and/or hiring of apprentices? (select all that apply)



39%

Unable to provide sufficient mentoring and development of apprentices



11%

23%

Unfamiliar with the JATC model

Unsure of how to access and utilize apprentices

"They don't train on Solar and EV Charging Stations, nor do they kick out underperforming people out of fear of lawsuits."

"We do not self perform work, however it would be good to understand the JATC model for our subcontractors."

"Hiring has been through word of mouth - haven't needed JATC."

"Unable to provide enough people through the program. Bricklayers in particular."

"Timing of the classes is an issue when they are held during the work day or not frequently enough during the day, throughout the year."

#### QUESTION 18

# What have been the most successful strategies you have utilized to encourage your workforce to use the JATC training program(s)?

"Our field staff is part of local 563. We strongly encourage them to do 40 hours of union training and training offered specific to our work. Full time people are offered 40 hours of paid training."

"None. I try to get them to take continuing education and they want over-time or double-time pay to take it. Which I cannot afford."

"Encourage the foremen to train the next generation of tradespeople."

"Require training. Provide incentives. Lots of positive feedback and recognition."

"Pay them hourly to go on top of their stipend."

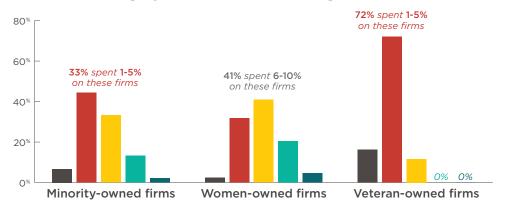
"None."

"No strategies at this time."

# Diversity in Subcontracting

This page of questions was answered by general contractors.

## Subcontracting spend on disadvantaged firms

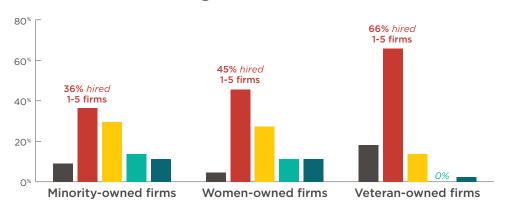


#### **QUESTION 19**

In the past year, what percentage of your firm's total subcontracting spend was with MWBE and veteran-owned firms?



## Number of disadvantaged firms awarded contracts



#### **QUESTION 20**

In the past year, how many MWBE and veteran-owned firms were awarded contracts by your firm?



## NEW disadvantaged firms awarded contracts



#### QUESTION 21

In the past year, how many contracts were awarded by your firm to NEW MWBE and veteran-owned firms?



## Barriers that prevent more diversity in subcontracting

- **52.6%** Minority-owned, women-owned, and veteran-owned firms are not readily available for the specific work that my firm performs.
- **39.5%** Minority-owned, women-owned, and veteran-owned firms are not readily available in the primary geographic area where my firm does business.
- **36.8**% The process for finding Minority-owned, women-owned, and veteran-owned subcontractors is challenging.
- 21.1% Long-standing relationships with existing subcontractors.

#### **QUESTION 22**

What are the top two barriers that prevent your firm from doing more business with minority-owned, women-owned, and veteran-owned firms? (Please choose a maximum of two)



# Workforce plans for 2023

Hiring, steady workforce, or layoffs

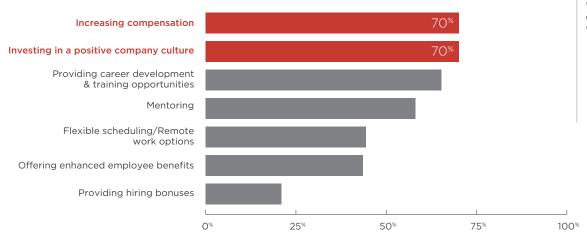


#### **QUESTION 23**

Your workforce plans for 2023 are best described as:

Significant hiring Some hiring Steady workforce Some layoffs Significant layoffs

## Workforce hiring strategies



#### **QUESTION 24**

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

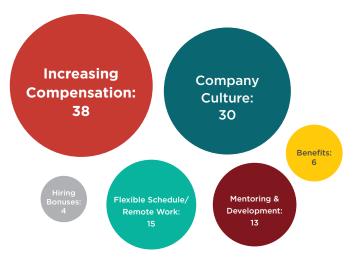
Offering enhanced employee benefits Flexible scheduling/Remote work options Investing in a positive company culture

## Most effective strategies

92 survey participants left comments, indicating that the following were the most effective.

#### QUESTION 25

Of the strategies you selected above, which have you found to be most effective in attracting and retaining workforce?



"The bonus has been a game changer. Running well kept and newer equipment. Using technology to your advantage."

"None, it all comes down to geography these days, it seems. Everyone wants to work close to home."

"Unlimited PTO and gas card."

"Treat people right, trust their judgement and show them you care. When you do this, they spread the word and people want to work for us."

"Leadership engagement with the workforce. Show that we actually do care and address their concerns."

"Positive company culture. People tend to stay if they like coming to work and they enjoy the people they work with."

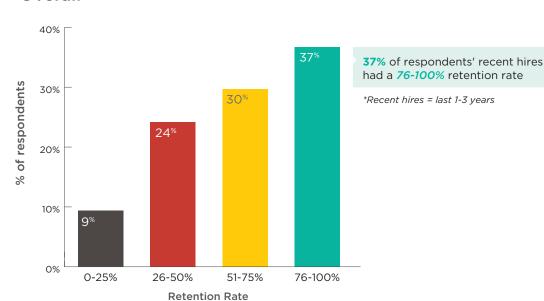
"Compensation attracts and a positive culture helps to retain."



## Retention rate

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

#### Overall



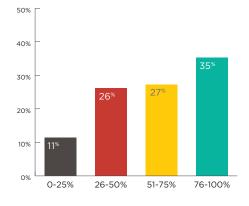
#### **QUESTION 26**

With regard to your recent hires (last 1-3 years), what is the retention rate of these employees?

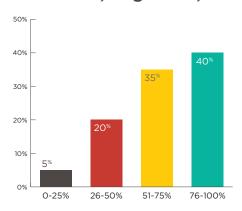
0-25% 26-50%

51-75% 76-100%

#### Contractors



## Architects, Engineers, and Affiliates



#### **QUESTION 27**

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

#### **TOP POSITIVE FACTORS LISTED:**

- Treating people well / Positive company culture
- Compensation
- Connection to Current Employees
- Mentoring / Showing a Career Path
- Flexible Scheduling / Remote Work
- Benefits

## TOP **NEGATIVE** FACTORS LISTED:

- Competitors offer higher compensation
- Poor work ethic
- Lack of consistent work
- Travel required / Location of work
- Unskilled / Unqualified
- Hours required to work

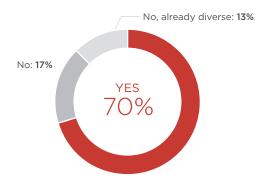


# Efforts to increase workforce diversity

Measures taken to attract and retain people of color and women

## Taking deliberate measures?

Yes: 70%



#### QUESTION 28

In your workforce recruitment efforts, has your firm undertaken deliberate measures to attract and retain minorities, women, and veterans?

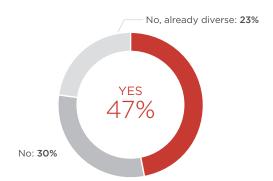
Yes

No

No, because our firm is already very diverse

## Are deliberate measures making a difference?

Yes: **47%** 



#### **QUESTION 30**

Has your firm increased its percentage of minorities, women, and/or veterans in its workforce since employing these strategies?

163

No

N/A - Our firm is already very diverse

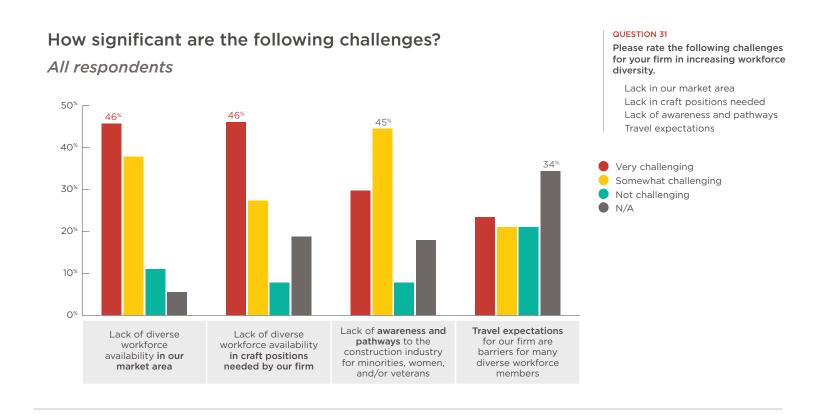
#### QUESTION 29

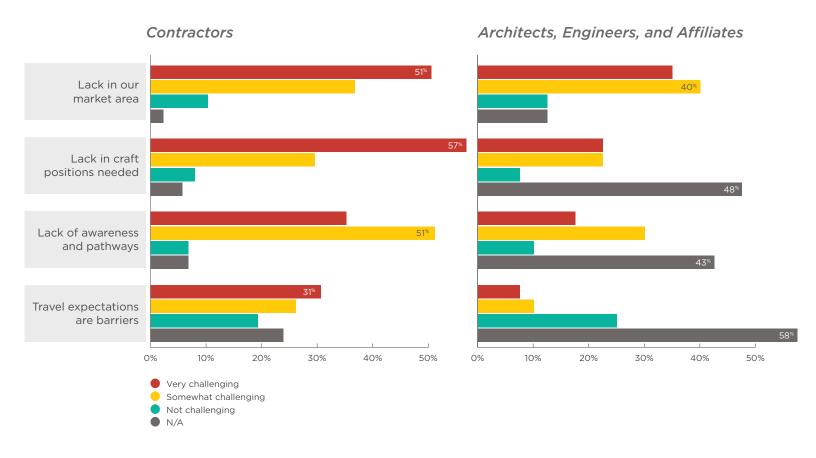
If yes, indicate which measures have been most successful in attracting and retaining people of color and/or women.

- Working with local workforce agencies / organizations / career fairs
- Diverse leadership & recruiters
- Increasing recruitment channels
- Company culture
- Word of mouth from current happy employees
- Development opportunities & training
- Flexible scheduling
- Participating in MBE events, committees

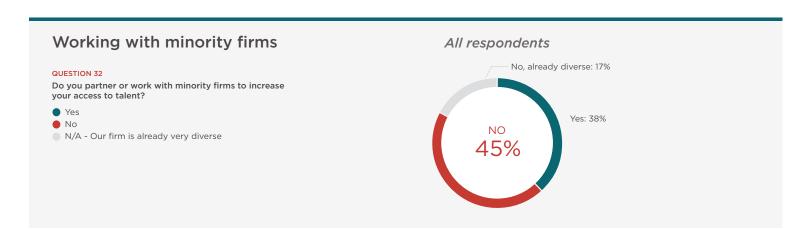


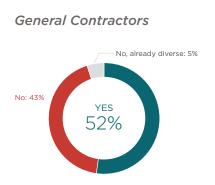
# Challenges in increasing workforce diversity

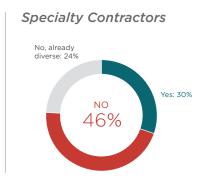


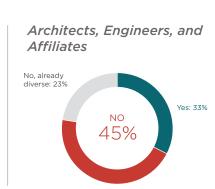


# **DEI Partnering and Plans**

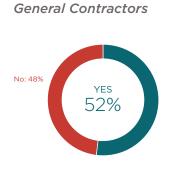


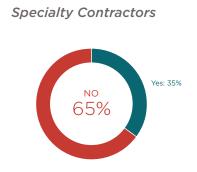


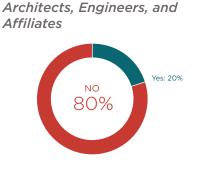




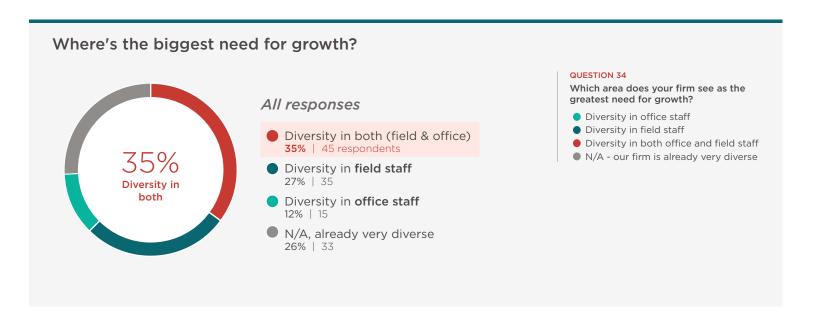




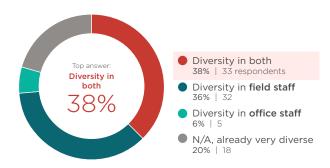




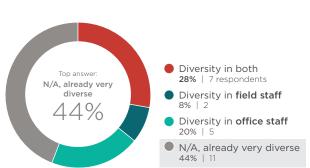
# Diversity in field staff and office staff



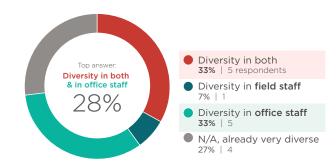




#### **Affiliates**



#### Architects & Engineers



# Workforce hiring challenges

Professional and craft workforce

#### **QUESTION 38**

#### Professional workforce

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

	Least diffic	ult			
General Contractors	1	2	3	4	N/A
Estimating Professionals	0%	19%	31%	40%	10%
Project Managers/Supervisors	2%	14%	43%	36%	5%
Safety professionals	10%	17%	22%	22%	29%
Engineers	7%	17%	20%	12%	44%
Business development	2%	17%	15%	10%	56%
Design professionals	5%	10%	5%	2%	78%

	Least diffici	ult		Most		
<b>Specialty Contractors</b>	1	2	3	4	N/A	
Estimating Professionals	2%	11%	30%	37%	20%	
Project Managers/Supervisors	2%	13%	30%	37%	17%	
Engineers	2%	2%	15%	15%	65%	
Business development	4%	17%	7%	13%	59%	
Design professionals	0%	9%	9%	11%	72%	
Safety professionals	4%	20%	13%	7%	57%	

	Least diffic	ult			
Architects/Engineers	1	2	3	4	N/A
Design Professionals	0%	13%	33%	33%	20%
Project Managers/Supervisors	0%	13%	27%	27%	33%
Business development	0%	7%	14%	14%	64%
Engineers	0%	0%	27%	13%	60%
Estimating professionals	0%	0%	0%	7%	93%
Safety professionals	7%	7%	0%	0%	87%

FOR GENERAL & SPECIALTY CONTRACTORS The  $\boldsymbol{most}$  difficult positions to fill are:

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

FOR ARCHITECTS AND ENGINEERS
The most difficult positions to fill are:

#1. Project Managers/Supervisors #2. Design professionals

#### **QUESTION 39**

## Craft workforce

Clair Workloice	Least diffic	ult	Most	:		
General Contractors	1	2	3	4	N/A	
Bricklayers	0%	2%	5%	7%	85%	
Carpenters	0%	28%	20%	18%	35%	
Cement Masons	0%	8%	15%	25%	53%	
Drywall Installers	0%	0%	7%	0%	93%	
Electricians	0%	0%	0%	0%	100%	
Equipment Operators	0%	19%	29%	24%	29%	
Ironworkers	0%	0%	7%	7%	85%	
Laborers	10%	43%	21%	14%	12%	
Millwrights	0%	2%	7%	0%	90%	
Painters	3%	0%	3%	3%	93%	
Pipefitters/Welders	0%	0%	2%	10%	88%	
Plumbers	0%	0%	2%	2%	95%	
Roofers	0%	0%	3%	0%	98%	
Sheet Metal Workers	0%	0%	2%	0%	98%	
Tile Setters	0%	2%	0%	0%	98%	
Truck Drivers	0%	19%	10%	29%	43%	

	Least diffic	ult	Most		
Specialty Contractors	1	2	3	4	N/A
Bricklayers	0%	2%	0%	4%	93%
Carpenters	0%	7%	14%	9%	70%
Cement Masons	0%	2%	5%	2%	91%
Drywall Installers	0%	0%	2%	0%	98%
Electricians	0%	5%	7%	2%	86%
Equipment Operators	2%	5%	30%	14%	50%
Ironworkers	2%	5%	9%	2%	82%
Laborers	5%	18%	23%		39%
Millwrights	0%	2%	0%	0%	98%
Painters	0%	0%	2%	0%	98%
Pipefitters/Welders	0%	7%	5%	0%	89%
Plumbers	0%	5%	0%	0%	95%
Roofers	0%	0%	0%	2%	98%
Sheet Metal Workers	0%	7%	2%	2%	89%
Tile Setters	0%	0%	0%	2%	98%
Truck Drivers	0%	5%	14%	18%	64%

# **Overall Business Challenges for 2023**

Biggest challenges your company faces in 2023 & beyond

#### **QUESTION 40**

The two biggest challenges your company faces in 2023 and beyond are (please select only two):

## **TOP 5 CHALLENGES**

1 2 3 4 5

Finding skilled and trained workers

Supply Chain issues

Inflation

Finding available workers

Developing new leadership

Business Challenges for 2022 and Beyond	Overall	General	Specialty	Affiliate	Architect/ Engineer
Finding skilled and trained workers	44%	52%	50%	36%	13%
Supply Chain issues	28%	38%	24%	28%	13%
Inflation	28%	26%	28%	36%	20%
Finding available workers	20%	26%	17%	12%	27%
Developing new leadership	14%	14%	11%	20%	13%
Increasing productivity	12%	7%	15%	4%	27%
Managing cash flow	12%	7%	11%	12%	27%
Managing client expectations	9%	12%	4%	16%	7%
Discovering new markets	9%	2%	11%	12%	13%
Reducing costs	8%	5%	11%	8%	7%
Succession planning/Business leadership transition	8%	5%	4%	12%	20%
Workforce hiring goals	2%	0%	7%	0%	0%
Navigating the regulatory environment	2%	2%	4%	0%	0%
Responding to COVID-19 work and safety issues	1%	0%	0%	4%	0%

# **Comments from respondents**

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

#### Below are comments from respondents

Project Financing that is out of our control.

This survey covered the topics very well.

The recession could get interesting.

In regards to diversity: I'm a minority myself and .... I think the industry should not only attract more women and people of color for all the right ethical reasons but also because it opens an entirely new labor pool of people willing to work. This new labor force can help break the entitlement of the existing labor force since supply is limited.... Also, it's proven that minority owned business tend to be more open and diverse and hire more women and minorities... Additionally, in order to combat all the views that I have personally experienced and see others experience, I think data and facts on the DBE programs should be advertised/marketed.\*

Productivity and safety. With less experienced workers in the field including many who aren't invested in our work as their career -- or even as a stepping stone in their career path, we're finding it more difficult to meet our quality standards as well as productivity goals. And general erosion of quality and productivity makes me concerned about workers adhering to our safety practices.

Finding profitable work. We are finding it much more profitable to work outside the 7-county metro area and even better in North and South Dakota. When we are bidding work that only includes performing labor, the margins are very low. It is very cut-throat in our arena.

Not being able to get certified as a DBE because of the process/requirements being out of date or being difficult to navigate

We're using people from outside the country for some office work now, because of how hard it is to find office talent.

Steady and consistent flow of available projects to avoid hiring and layoff waves.

Availability of work in the short term.

Timelines for heavy highway projects seem to have gotten more difficult especially with the lack of skilled workers. MnDOT requirements are not small business friendly.

Government regulation that also impacts the list above. Example. New energy codes making HVAC units no longer deployable, thus compounding supply chain and labor issues. Intent is noble but the execution is flawed and compounds many issues business deal with today.

The lack of loyalty and appreciation from employees. We have a great culture, benefits, workload, and training and still they only focus on the

hourly payrate. They don't mind moving from company to company, even less than a year.

The economy - though you covered that!

I was recently sent an article by our insurance. The jury awarded close to a billion dollar settlement in a multiple car crash situation. No way the business or insurance company can survive that type of settlement.

DBE requirements are going up, Workforce is going up, projects are getting more difficult to build in shorter amount of time. And it all falls on deaf ears. The owners will tell you they understand, but it's easier not to do anything because who wants to work anymore. MnDOT is a joke with the talent they have working for them. They can't even provide a competent individual on site.

Uncertainty of the industry, current administration

Useless and unworkable government regulations. Harmful government interference in the free market. Government programs that discourage people from working. Government fiscal policies that increase inflation rather than curb it.

Project delivery from Owners (ie MnDOT, SDDOT, NDOT, Counties, Municipalities, Private Developers). I am concerned that the Infrastructure Act passed in DC will not get to us very quickly.

Lack of employees and supply chain are the most that keep me up at night.

Attracting clients, getting our message out that we are a resource for tools/safety

One sided contracts. General Contractors treating subcontractors unfairly. Compressed schedules being forced by owners and general contractors that require "Out of sequence work" and Overtime without fair compensation. Lack of inflation clauses in government contracts/ unwillingness to negotiate price increases.

\*Edited for length

