

ENGINEERING BUSINESS SENTIMENT

2023 Q3

AUGUST 2023

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2023 Q3

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EXECUTIVE SUMMARY

Current Business Conditions

- The Net Rating for the U.S. economy improved 14 points to +32.
- Current sentiment for firms and the industry remains extremely optimistic. The Net Rating for the industry (+84) and for firms (+83) remain extremely high.
- Current sentiment remains very optimistic within most market sectors. Sentiment is strongest in Roads and Bridges (Net Rating +84) and Water/Wastewater (+83).
- Median backlog for projects decreased from 12 months to 11 months over the past quarter.

Future Business Conditions

- Future sentiment of the U.S. economy improved 22 points to a Net Rating of -2 this quarter. Future sentiment for the industry improved 12 points to a +25.
- Future sentiment also improved for firms' overall finances (Net Rating +43, up 8 points).
- Inflation (74%) and general economic uncertainty (71%) are the greatest concerns fueling negative future sentiment, though both concerns are lessening.
- Supply chain issues also continue to ease as only 32% of respondents cite this as a concern compared to 56% in Q4 2022.
- Half (52%) believe their firms will see a higher backlog of projects 12 months from now.
- All segments expect to see an increase in future backlog. Sentiment improved among many segments, particularly the smallest and the largest firms.
- Seventy percent predict there will be an increase in hiring over the next 12 months at their firms, a Net Rating of +66.

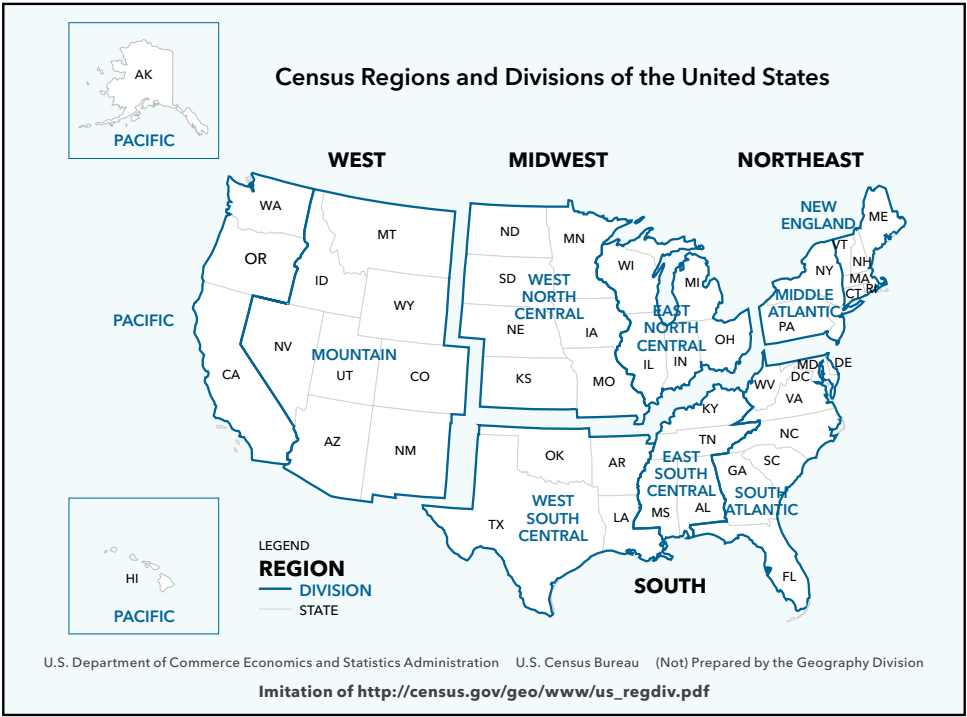
Hot Topics

- Eighty-seven percent currently indicate their firm has at least one opening, down slightly from 91% last quarter. The median number of open positions decreased from 5 to 4.
- Concern over the effects of inflation remains. However, firms are not quite as anxious about its impact as in recent quarters.
- In the past three months, over half of firms (52%) continue to turn down work due to workforce shortages.
- When asked about the likelihood of the U.S. economy going into recession over the next six months, respondents overall believe there is 46% chance (out of 100%), or almost 50/50.
- Seventy percent agree that a lack of qualified workers is the single largest barrier to growing their company. The Net Rating is +52, similar to when asked in 2021 Q4 (+53).

DEMOGRAPHICS

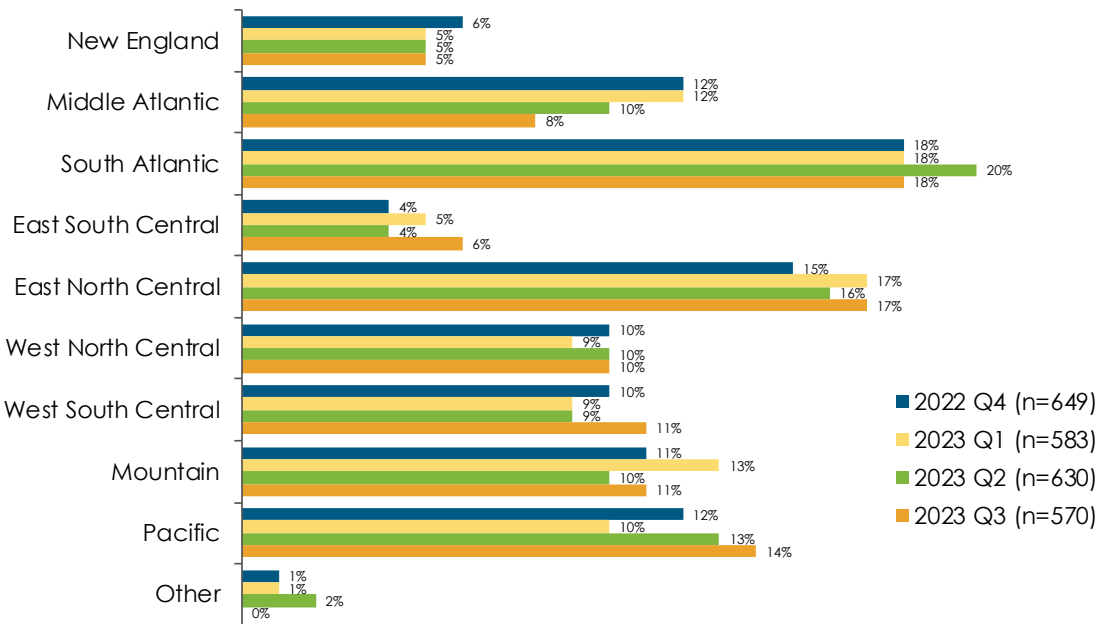
- For reference, the ACEC Research Institute uses the U.S. Census Bureau definition of geographic regions seen in Figure 1 below.

Figure 1: U.S. Census Regions of the United States



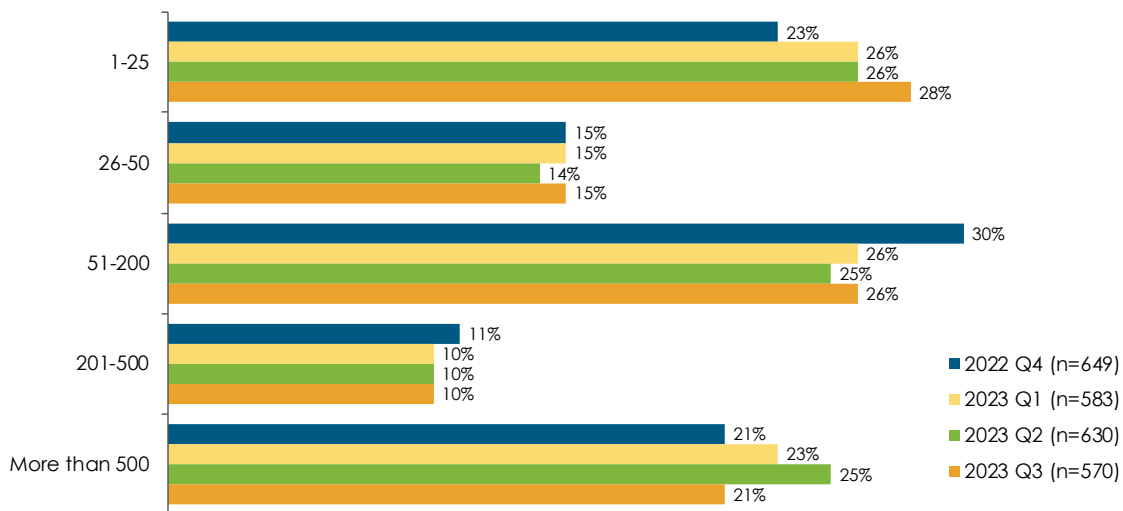
- Respondents' firms are widely dispersed around the United States. A few respondents (Other) indicate their firm is headquartered outside the U.S. These results are statistically similar to previous quarters.

Figure 2: Location of Organization Headquarters



- The median number of full-time employees at respondents' firms is 73 versus 80 last quarter.

Figure 3: Number of Full-Time Equivalents at Firm



CURRENT BUSINESS CONDITIONS

Current U.S. Economy, Industry and Firm Sentiment

- Current sentiment for firms and the industry remains extremely optimistic. The Net Rating for the industry (+84) and for firms (+83) remain extremely high.
- The Net Rating for the U.S. economy improved 14 points to +32.
- Firms with more than 500 FTEs are the most positive about their firm's finances (+98) and the industry (+94).
- Sentiment for the U.S. economy is strongest in the Midwest (+46), but weakest in the West (+21).

Figure 4: Current Economic Sentiment

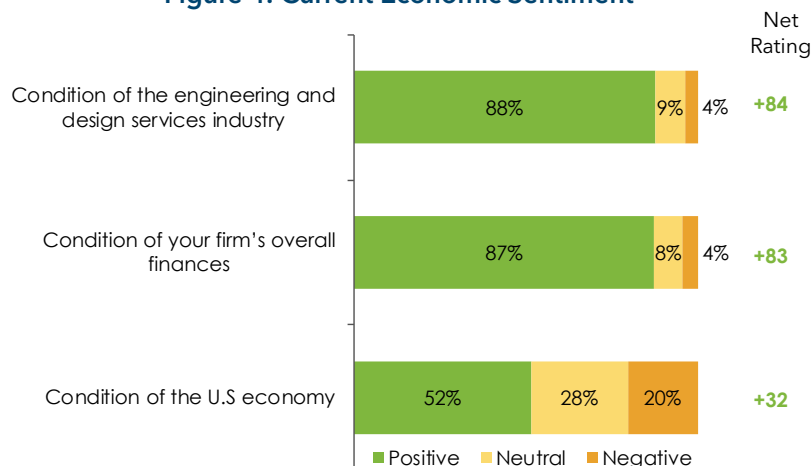
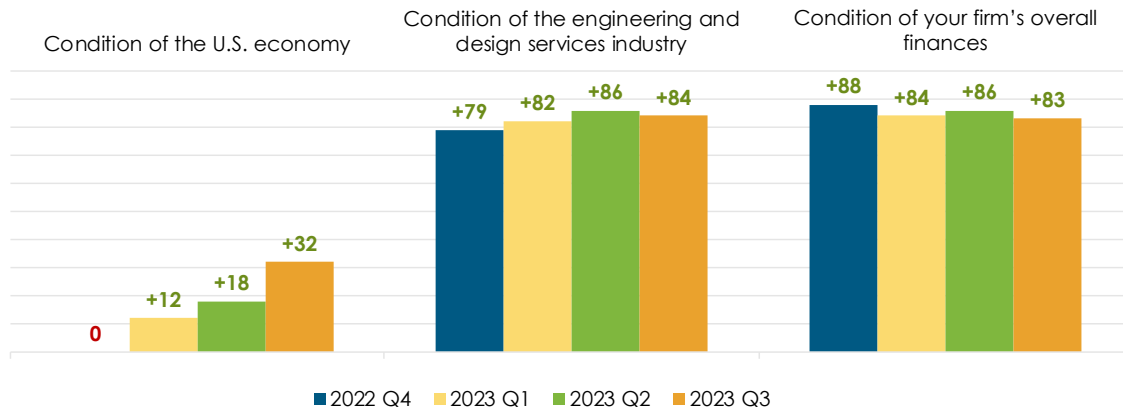


Figure 5: Current Economic Sentiment vs. Previous Quarters



- All segments are feeling more positive than last quarter about the state of the U.S. economy.

Figure 6: Current Condition of U.S. Economy vs. Previous Quarters - By Region and Firm Size

Condition of the U.S. economy	2022 Q4 (n=643)	2023 Q1 (n=583)	2023 Q2 (n=624)	2023 Q3 (n=565)	Change vs. Previous Quarter
TOTAL	0	+12	+18	+32	+14
REGION					
Northeast	+4	+28	+23	+36	+13
South	-5	+10	+19	+25	+6
Midwest	+7	+11	+14	+46	+32
West	-2	+5	+17	+21	+4
FIRM SIZE					
1-25	-9	+16	+18	+20	+2
26-50	+4	-6	+15	+32	+17
51-200	-5	+15	+8	+25	+17
201-500	+5	+13	+7	+40	+33
More than 500	+13	+18	+33	+50	+17

Current Industry Sector Sentiment

- Current sentiment remains very optimistic within most market sectors. Sentiment is strongest in Roads and Bridges (Net Rating +84) and Water/Wastewater (+83).
- The Residential – Land Development (+37 Net Rating) and the Commercial Real Estate (+23) sectors are performing relatively less well, but sentiment is still positive.
- Three-fourths of the sectors have increased relative to last quarter.

Figure 7: Current Industry Sentiment by Sector vs. Previous Quarters

Current Industry Sector Sentiment	2022 Q4 (n = 213-505)	2023 Q1 (n = 185-423)	2023 Q2 (n=202-483)	2023 Q3 (n = 192-438)	Change vs. Prev. Qtr.
Telecommunications	+65	+66	+55	+65	+10
Data Centers	+65	+69	+63	+71	+8
Residential – Land Development	+41	+30	+32	+37	+5
Energy and Utilities	+72	+78	+74	+79	+5
Federal/Military, State and Local Government Buildings	+66	+67	+68	+72	+4
Convention Centers, Sports Facilities and Cultural Facilities	+42	+39	+39	+43	+4
Transportation – Roads and Bridges	+78	+79	+80	+84	+4
Transportation – Transit (Rail, BRT)	+65	+69	+68	+72	+4
Water/Wastewater	+77	+74	+81	+83	+2
Science and Technology	+63	+64	+70	+71	+1
Justice (Courthouses and Corrections)	+27	+35	+38	+39	+1
Transportation – Airports	+73	+77	+77	+78	+1
Healthcare Facilities	+73	+75	+68	+68	0
Education (K-12 and Higher Education)	+50	+57	+56	+55	-1
Industrial and Manufacturing Facilities	+63	+62	+67	+65	-2
Commercial Real Estate (Office, Hotel, Retail and Multifamily Residential)	+47	+36	+26	+23	-3

Current Backlog

- Median backlog for projects decreased from 12 months to 11 months over the past quarter. However, half (50%) report one year or more in future backlogs.

Figure 8: Current Backlog

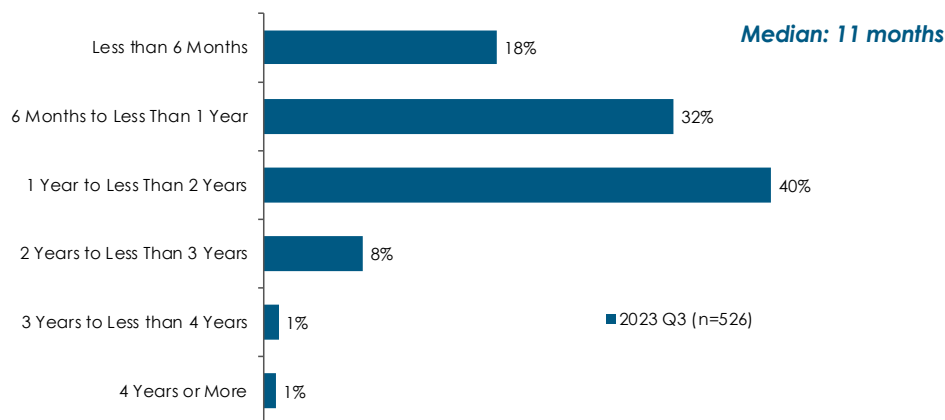


Figure 9: Current Backlog vs. Previous Quarters - By Region and Firm Size

Current Backlog	2022 Q4 (n=592)	2023 Q1 (n=529)	2023 Q2 (n=585)	2023 Q3 (n=526)	Change vs. Previous Quarter
TOTAL	12	10	12	11	-1
REGION					
Northeast	12	12	12	12	0
South	10	9	10	12	+2
Midwest	12	11	12	11	-1
West	10	8	10	10	0
FIRM SIZE					
1-25	6	6	6	6	0
26-50	9	9	10	10	0
51-200	12	10	12	10	-2
201-500	12	12	12	12	0
More than 500	13	13	14	14	0

FUTURE BUSINESS CONDITIONS

Future U.S. Economy, Industry and Firm Sentiment

- Future sentiment of the U.S. economy improved 22 points to a Net Rating of -2 this quarter. Future sentiment for the industry improved 12 points to a +25.
- Future sentiment also improved for firms' overall finances (Net Rating +43, up 8 points).

Figure 10: Economic Sentiment 12 Months from Now

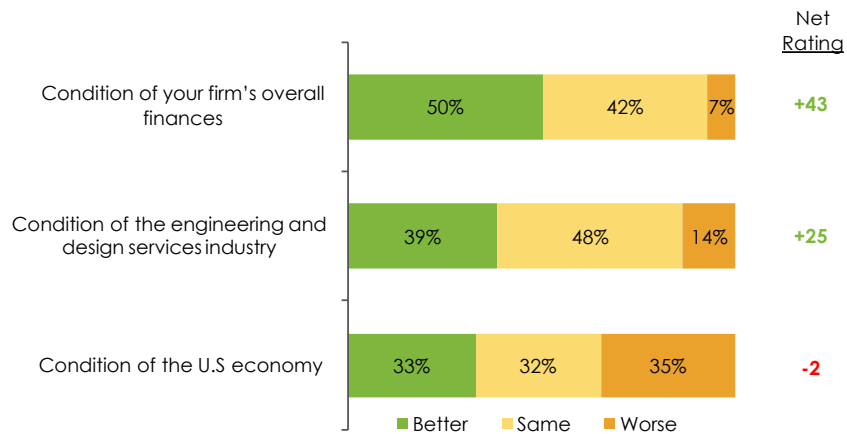
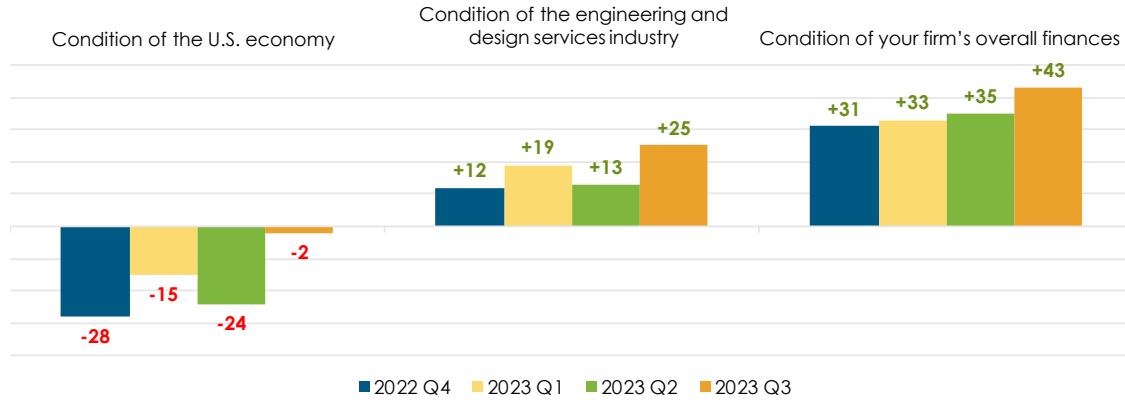


Figure 11: Economic Sentiment 12 Months from Now vs. Previous Quarters



- Future sentiment about the firm's overall finances has improved in most segments.

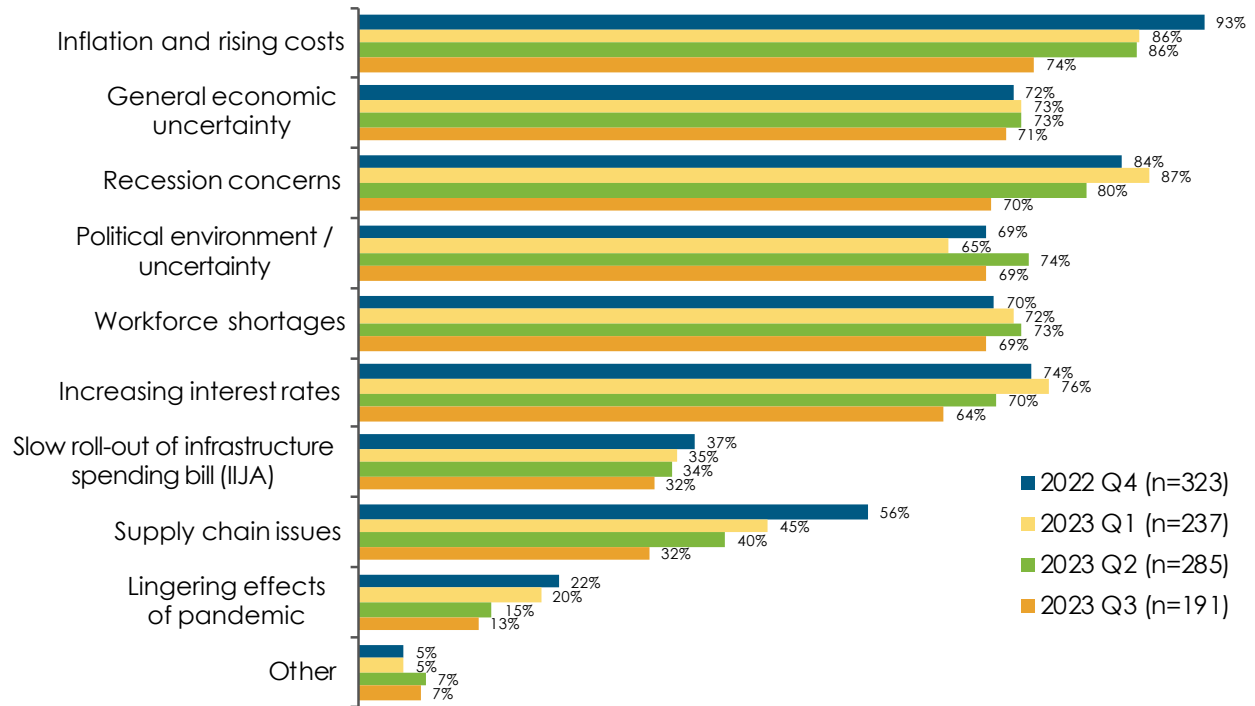
Figure 12: Condition of Firm's Finances 12 Months from Now vs. Previous Quarters - By Region and Firm Size

Condition of your firm's overall finances	2022 Q4 (n=590)	2023 Q1 (n=525)	2023 Q2 (n=576)	2023 Q3 (n=519)	Change vs. Previous Quarter
TOTAL	+31	+33	+35	+43	+8
REGION					
Northeast	+33	+56	+29	+49	+20
South	+35	+29	+33	+46	+13
Midwest	+35	+38	+35	+47	+12
West	+15	+14	+39	+32	-7
FIRM SIZE					
1-25	+8	+9	+14	+35	+21
26-50	+29	+30	+39	+43	+4
51-200	+39	+43	+44	+42	-2
201-500	+30	+33	+44	+58	+14
More than 500	+44	+50	+40	+50	+10

Reasons for Economic Sentiment 12 Months from Now

- Inflation (74%) and general economic uncertainty (71%) are the greatest concerns fueling negative future sentiment, though both concerns are lessening.
- Supply chain issues also continue to ease as only 32% of respondents cite this as a concern compared to 56% in Q4 2022.

Figure 13: Reasons for Economic Sentiment 12 Months from Now



Future Industry Sector Sentiment

- Future sentiment is positive in many sectors including transportation (Roads/Bridges/Transit/Airports), Water/Wastewater, and Energy and Utilities.
- Most sectors have a positive Net Rating, and most have seen a Net Rating increase since last quarter.

Figure 14: Industry Sentiment by Sector 12 Months from Now vs. Previous Quarters

Future Industry Sector Sentiment	2022 Q4 (n = 236-482)	2023 Q1 (n = 196-402)	2023 Q2 (n = 225-467)	2023 Q3 (n = 203-402)	Change vs. Previous Quarter
Telecommunications	+24	+33	+26	+38	+12
Commercial Real Estate	-29	-23	-24	-14	+10
Science and Technology	+22	+25	+25	+35	+10
Residential – Land Development	-39	-25	-19	-10	+9
Water/Wastewater	+42	+46	+45	+49	+4
Convention Centers, Sports Facilities and Cultural Facilities	-25	-13	-10	-6	+4
Industrial and Manufacturing Facilities	+4	+10	+17	+20	+3
Data Centers	+18	+9	+20	+23	+3
Education	+5	+9	+11	+14	+3
Healthcare Facilities	+17	+30	+23	+25	+2
Transportation – Airports	+39	+46	+42	+43	+1
Transportation – Roads and Bridges	+52	+58	+53	+54	+1
Justice	-11	-1	+4	+4	0
Federal/Military, State and Local Government Buildings	+30	+28	+32	+28	-4
Energy and Utilities	+44	+46	+51	+47	-4
Transportation – Transit	+42	+48	+49	+41	-8

Future Backlog

- Half (52%) believe their firm will see a higher backlog of projects 12 months from now.
- Compared to last quarter, more firms anticipate an increase in backlog twelve months from now.

Figure 15: Backlog 12 Months from Now

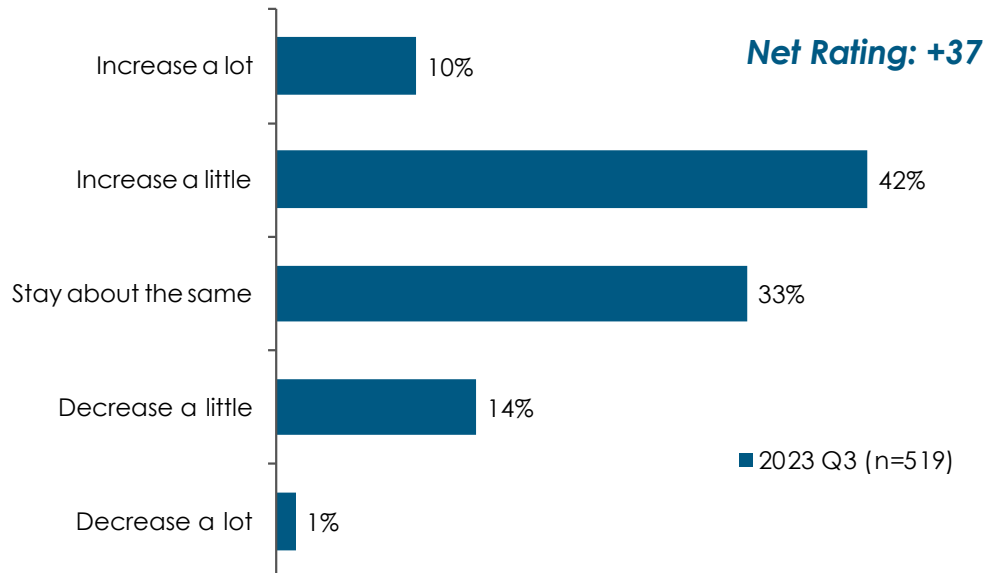
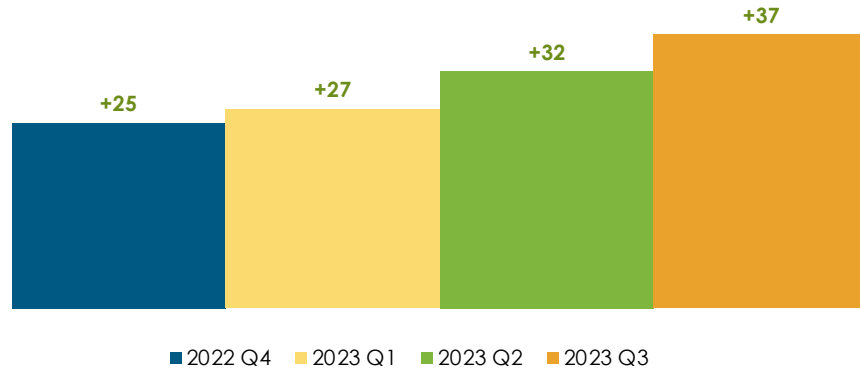


Figure 16: Backlog 12 Months from Now - Net Rating Trend



- All segments expect to see an increase in future backlog. Sentiment improved among many segments, particularly the smallest and the largest firms.

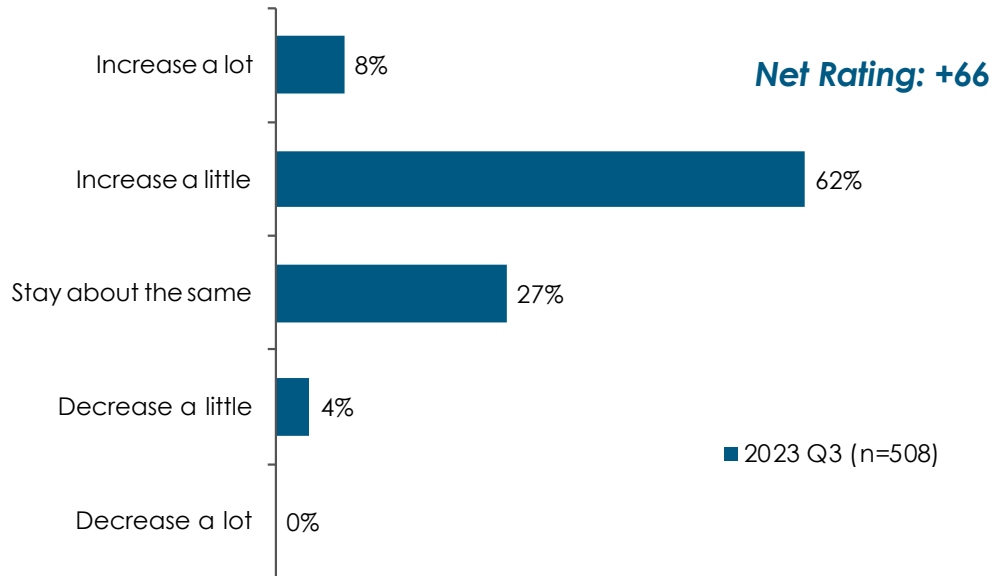
Figure 17: Backlog 12 Months from Now vs. Previous Quarters - By Region and Firm Size

	2022 Q4 (n=585)	2023 Q1 (n=522)	2023 Q2 (n=578)	2023 Q3 (n=519)	Change vs. Previous Quarter
TOTAL	+25	+27	+32	+37	+5
REGION					
Northeast	+36	+61	+39	+48	+9
South	+25	+21	+32	+32	0
Midwest	+26	+39	+33	+42	+9
West	+12	+2	+26	+28	+2
FIRM SIZE					
1-25	+3	+7	+11	+27	+16
26-50	+20	+13	+21	+20	-1
51-200	+31	+32	+40	+34	-6
201-500	+29	+33	+51	+50	-1
More than 500	+38	+56	+45	+58	+13

Future Hiring Projections

- Seventy percent predict there will be an increase in hiring over the next 12 months at their firms, resulting in a Net Rating of +66.

Figure 18: Hiring Over the Next 12 Months



- Future hiring sentiment declined overall one point, though a few segments still saw increases.
- Although still optimistic, future hiring sentiment in the South and West (+60) are lower than all other regions.
- Firms with 201-500 FTEs (+88, up 7 points) are the most optimistic about future hiring.

Figure 19: Expectations for Hiring Increases Over the Next 12 Months vs Previous Quarters - By Region and Firm Size

	2022 Q4 (n=580)	2023 Q1 (n=514)	2023 Q2 (n=569)	2023 Q3 (n=508)	Change vs. Previous Quarter
TOTAL	+65	+65	+67	+66	-1
REGION					
Northeast	+66	+83	+73	+77	+4
South	+66	+54	+60	+60	0
Midwest	+71	+77	+73	+74	+1
West	+56	+50	+63	+60	-3
FIRM SIZE					
1-25	+45	+37	+42	+51	+9
26-50	+66	+62	+65	+66	+1
51-200	+69	+77	+73	+63	-10
201-500	+72	+70	+83	+81	-2
More than 500	+76	+81	+81	+88	+7

HOT TOPICS

Current Open Positions

- Eighty-seven percent currently indicate their firm has at least one opening, down slightly from 91% last quarter. The median number of open positions decreased from 5 to 4.
- Sixty-three percent of executives indicate that open positions constitute at least 5% of all FTEs. On average, one out of 10 positions is currently unfilled.

Figure 20: Current Open Positions vs. Previous Quarters

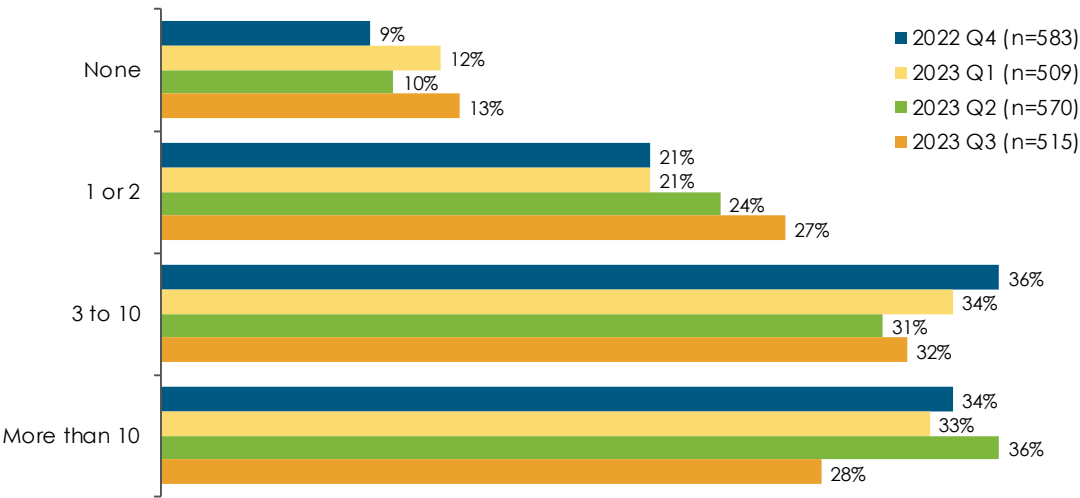
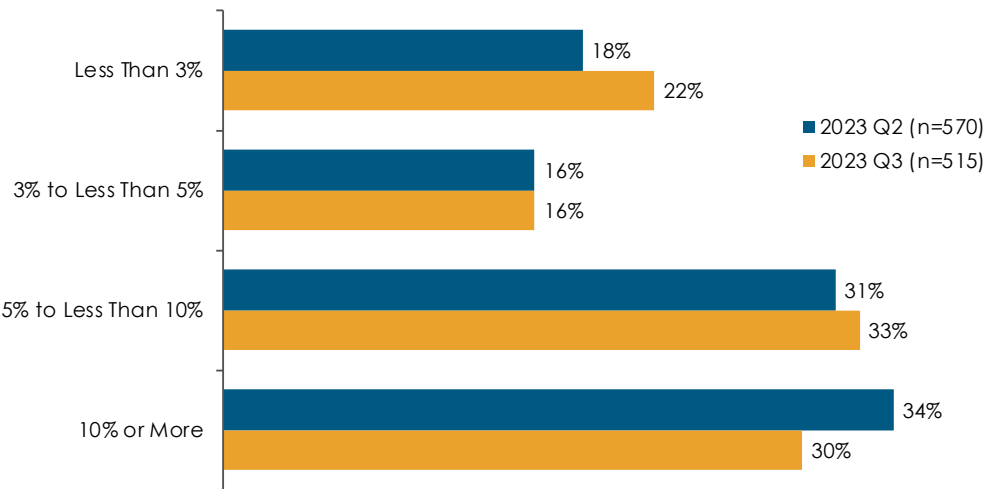


Figure 21: Open Positions as Percentage of Overall FTEs



Inflation

- Concern over the effects of inflation remains.
- However, firms are not quite as anxious about its impact as in recent quarters.

Figure 22: Inflation Concerns

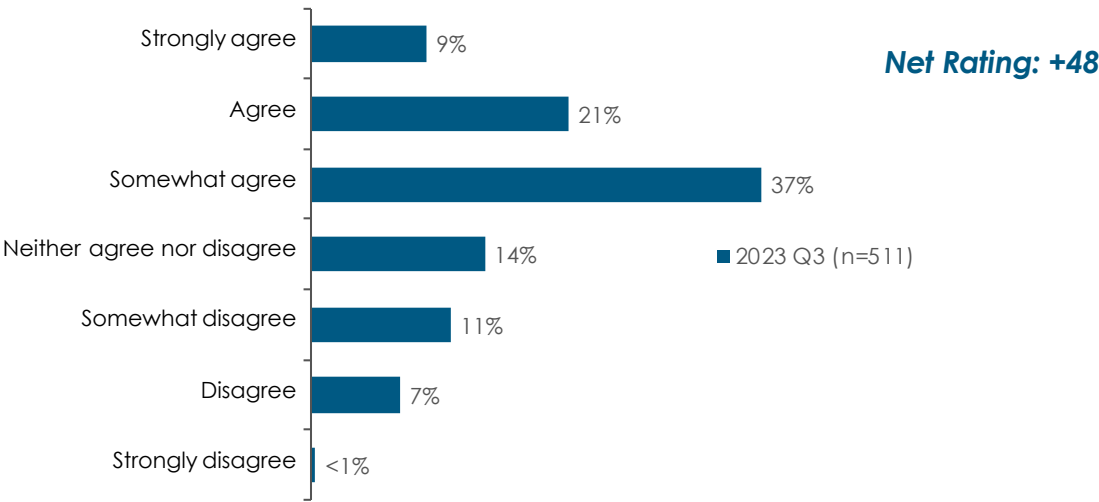
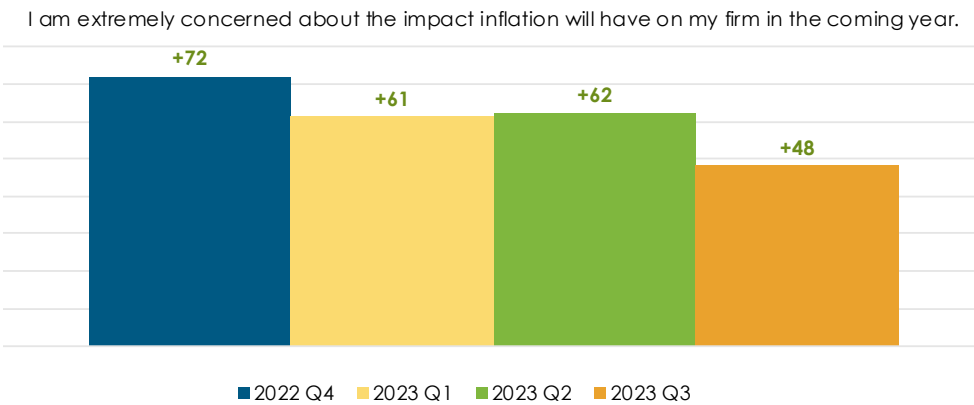


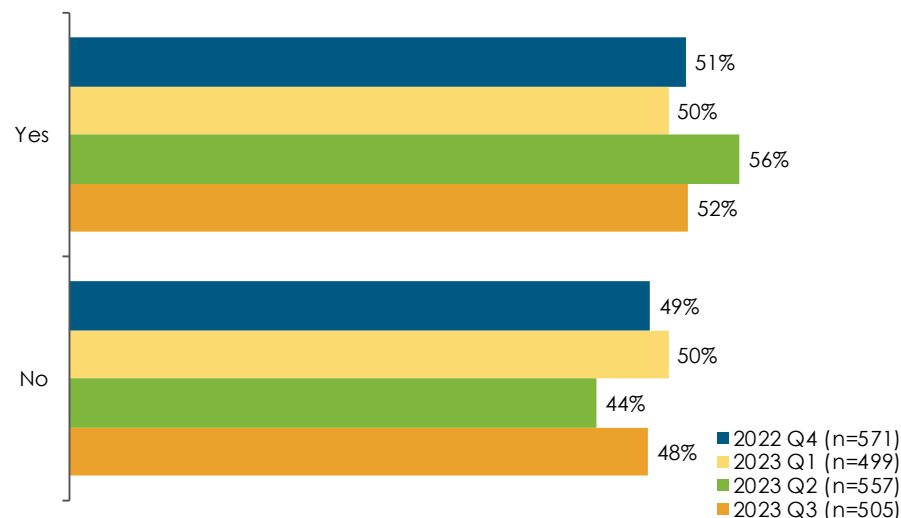
Figure 23: Inflation Concerns vs. Previous Quarters



Turned Down Work Due to Workforce Shortages

- In the past three months, over half of firms (52%) continue to turn down work due to workforce shortages.
- Workforce shortage is having the greatest impact in the Midwest, where 62% have turned down work, followed by 61% in the West.

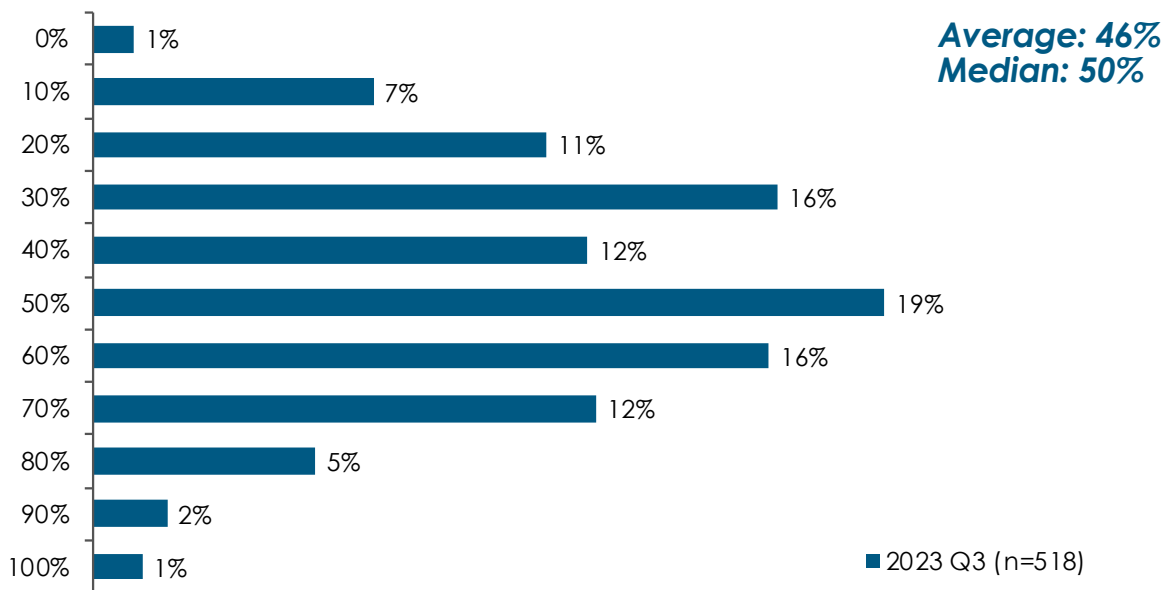
Figure 24: Turned Down Work Due to Workforce Shortages



Likelihood of Recession in Next 6 Months (Q20)

- When asked about the likelihood of the U.S. economy going into recession over the next six months, respondents believe there is 46% chance (out of 100%), or almost 50/50.

Figure 25: Likelihood of Recession in Next 6 Months



Lack of Qualified Workers

- Seventy percent agree that a lack of qualified workers is the single largest barrier to growing their company. This is a Net Rating of +52, similar to when asked in 2021 Q4 (+53).
- The lack of qualified workers is becoming more of an issue in the South (+12) and for smaller firms (+12 for those with 25 or fewer FTEs; +9 for those with 26-50 FTEs).

Figure 26: Lack of Qualified Workers

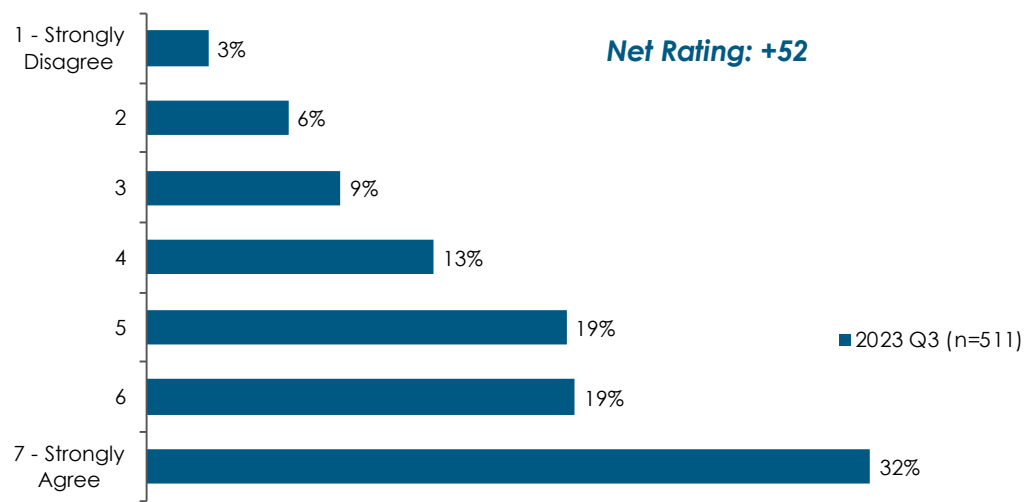


Figure 27: Lack of Qualified Workers by Region and Firm Size

	2021 Q4 (n=458)	2023 Q3 (n=511)	Change vs. Previous Time
TOTAL	+53	+52	-1
REGION			
Northeast	+52	+36	-16
South	+39	+51	+12
Midwest	+65	+59	-6
West	+61	+55	-6
FIRM SIZE			
1-25	+31	+43	+12
26-50	+41	+50	+9
51-200	+73	+60	-13
201-500	+67	+66	-1
More than 500	+55	+50	-5

METHODOLOGY

The Institute for Association and Nonprofit Research (IFANR) recruited individuals from among the database list of members provided by the ACEC Research Institute. Data collection occurred between July 13 and July 27, 2023.

A total of 9,072 invitations were emailed, although 1,757 bounced and 59 opted-out, resulting in a total of 7,256 potential respondents. Individuals who did not respond to the first email were sent three follow-up reminders.

In all, 570 individuals completed the survey for an overall response rate of 8%.

Throughout this report meaningful, statistically significant differences are noted for various subgroups, including geographic region and firm size.

NOTE: Throughout this report, “Net Ratings” are shown on many graphs to quantify the sentiment of respondents. The Net Rating is calculated by subtracting the negative ratings from the positive ratings. Therefore, a positive Net Rating indicates overall sentiment is optimistic while a negative Net Rating indicates an overall pessimistic sentiment. The higher the numeric value the stronger the sentiment (either optimistic or pessimistic).

STATISTICAL NOTES

Due to rounding, not all graphs total 100%.

Statistically significant differences are evaluated at a 95% confidence interval.

There is no margin of sampling error as this was a census of all executive-level individuals at member firms in the ACEC database.

Although every effort was taken to minimize survey bias, there is no way to eliminate all sources of potential bias. Sources of potential bias include, but are not limited to, the following:

- Non-response bias
- Confounding bias
- Question wording bias
- Question order bias
- Habituation
- Sponsor bias
- Confirmation bias

The ACEC Research Institute provides the engineering industry with cutting edge research, trend data, and economic analysis to help firm owners make decisions and delivers thought leadership that advances engineering's essential value to society.

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