

ENGINEERING BUSINESS SENTIMENT 2024 Q3

AUGUST 2024

ENGINEERING BUSINESS SENTIMENT

2024 Q3

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EXECUTIVE SUMMARY

Current Business Conditions

- Current sentiment remains positive. The Net Ratings for the firm's finances (+82) and for the industry (+83) are extremely high. The Net Rating for the U.S. economy is +38.
- Optimism about the U.S. economy was nearly steady compared to the previous quarter, declining only one point. This is 53 points higher than its low two years ago of -15 in Q3 2022.
- Current sentiment remains very optimistic within most market sectors. Sentiment is strongest in Roads and Bridges (Net Rating +83) and Water/Wastewater (+82).
- The median backlog increased slightly across some segments compared to last quarter, with a slight increase overall from a year ago (11 months up to 12 months). More than half (53%) indicate their firm has a current backlog of one year or more.
- Nine out of 10 (89%) firms still have at least one opening. The median number of open positions remains steady at five. On average, 9% of positions remain unfilled, which is the same as last quarter.

Future Business Conditions

- Future sentiment is positive on all metrics. Future sentiment for the U.S. economy improved 12 points from last quarter to +22, while industry sentiment improved one point to +27 and firm's finances improved one point to +46.
- Political environment/uncertainty (80%), General economic uncertainty (72%), and Inflation and rising costs (71%) are fueling negative future sentiment.
- Future industry sentiment is positive in all sectors for the first time and is highest in Energy and Utilities (+46), Transportation – Roads and Bridges (+42), and Transportation – Airports (+41).
- Half (48%) believe their firms will see a higher backlog of projects 12 months from now.
- Backlog sentiment for 12 months from now decreased four points from last quarter to a +35 Net Rating. It is one point lower than one year ago.
- Seventy-one percent predict there will be an increase in hiring over the next 12 months at their firms, a Net Rating of +65. Overall future hiring sentiment decreased six points from last quarter and is down one point from last year at this time.
- Concern about the impact of inflation fell seven points from last quarter (+48 Net Rating) and is the same as one year ago.
- The perceived likelihood of a recession in the next six months is the same as last quarter (40%) and down six points from one year ago.

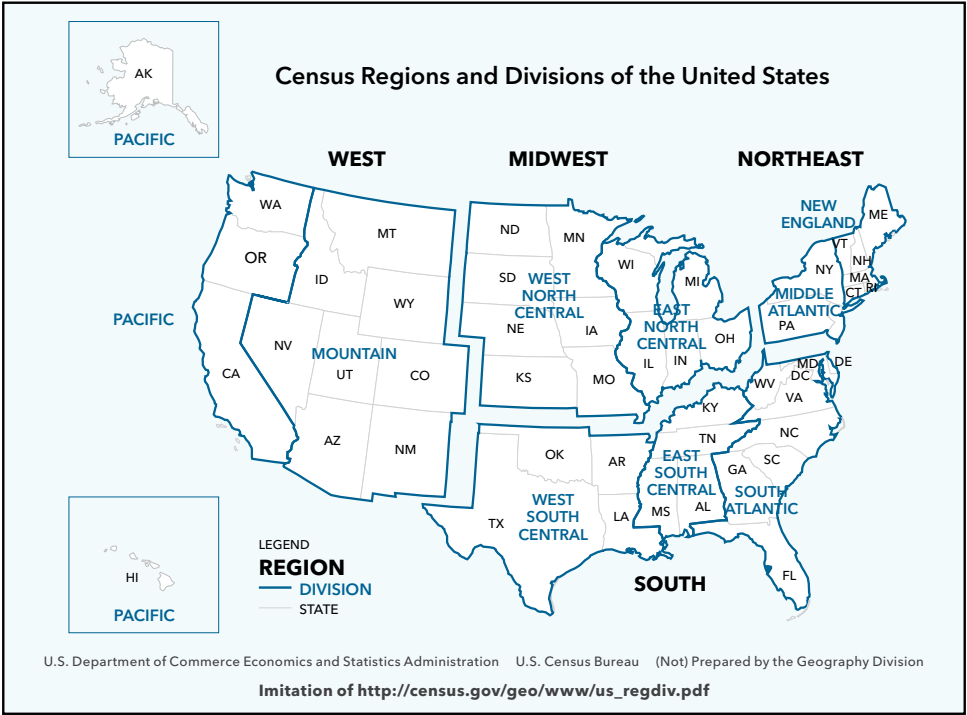
Hot Topics

- Lack of qualified workers is a significant constraint on firm growth. Seventy-eight percent at least somewhat agree this is the biggest barrier to growth.
- Concern about the lack of qualified workers rose 13 points from the same time one year ago.
- Nine out of 10 (89%) firm leaders say it is difficult to find qualified engineers right now while 62% say it is difficult to find qualified non-engineer staff.

DEMOGRAPHICS

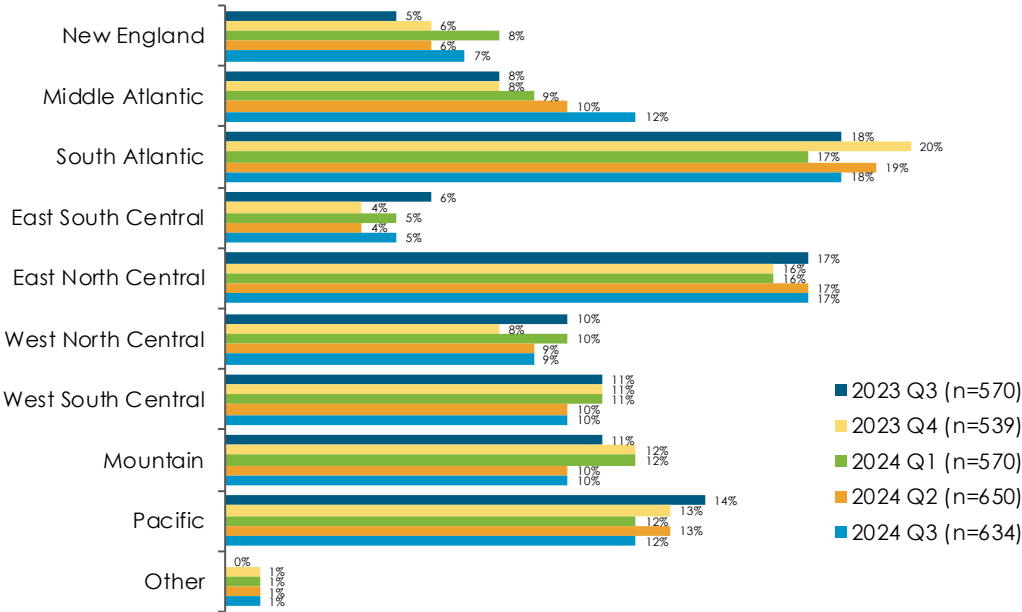
- For reference, the ACEC Research Institute uses the U.S. Census Bureau definition of geographic regions seen in Figure 1 below.

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



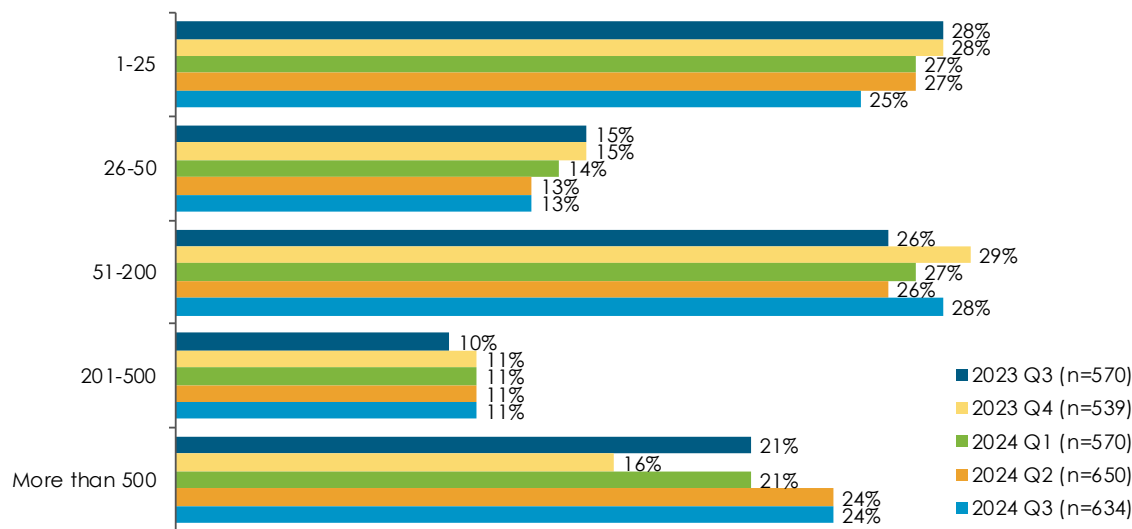
- Respondents' firms are widely dispersed around the United States. A few respondents (Other) indicate their firm is headquartered outside the U.S. These results are statistically similar to previous quarters.

Figure 2: Location of Organization Headquarters



The median number of full-time employees at respondents' firms is 96 versus 90 last quarter.

Figure 3: Number of Full-Time Equivalents at Firm



CURRENT BUSINESS CONDITIONS

Current U.S. Economy, Industry and Firm Sentiment

- Current sentiment remains positive. The Net Ratings for the firm's finances (+82) and for the industry (+83) are extremely high. The Net Rating for the U.S. economy is +38.
- Firms with more than 500 FTEs are the most positive about their firm's finances (+95).
- Firms with 201-500 FTEs have the highest confidence in the engineering and design services industry (+95).
- Sentiment for the U.S. economy is weakest among small firms (1-25 FTEs) (+24).

Figure 4: Current Economic Sentiment

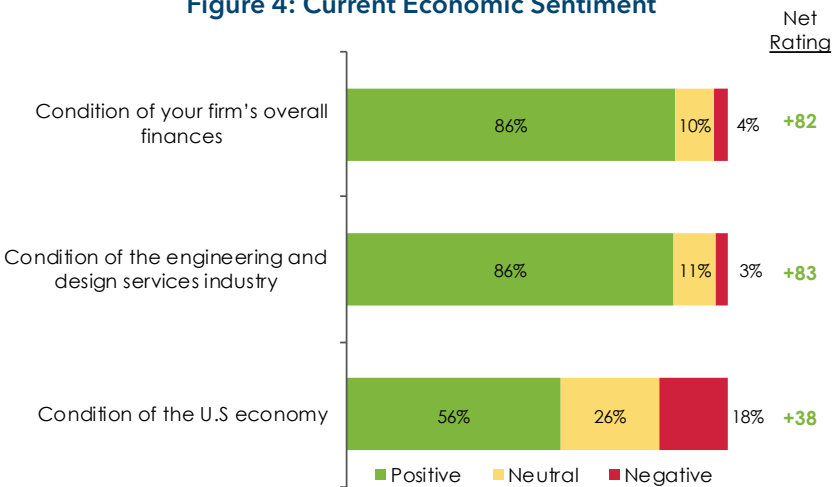
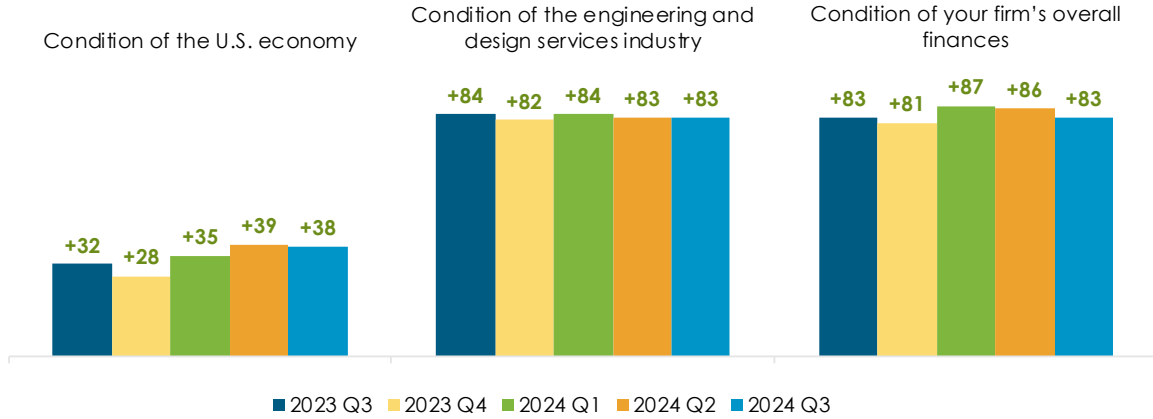


Figure 5: Current Economic Sentiment vs. Previous Quarters



- Optimism about the U.S. economy was nearly steady compared to the previous quarter, declining only one point. This is 53 points higher than its low two years ago of -15 in Q3 2022 (not shown).
- Some segments are feeling more (and some less) optimistic about the state of the U.S. economy than last quarter. Most segments are feeling more optimistic than one year ago.

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

Condition of the U.S. economy	2023 Q3 (n=565)	2023 Q4 (n=524)	2024 Q1 (n=562)	2024 Q2 (n=640)	2024 Q3 (n=627)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	+32	+28	+35	+39	+38	-1	+6
REGION							
Northeast	+36	+35	+43	+54	+53	-1	+17
South	+25	+23	+24	+35	+39	+2	+14
Midwest	+46	+32	+44	+40	+41	+1	-5
West	+21	+28	+33	+33	+35	+2	+14
FIRM SIZE							
1-25	+20	+14	+23	+27	+24	-3	+4
26-50	+32	+31	+32	+34	+30	-4	-2
51-200	+25	+28	+37	+37	+44	+7	+19
201-500	+40	+30	+36	+54	+44	-10	+4
More than 500	+50	+50	+49	+51	+56	+5	+6

Current Industry Sector Sentiment

- While about half of all sectors saw declines compared to last quarter, most sectors declined compared to one year ago.
- Current sentiment remains very optimistic within most market sectors. Sentiment is strongest in Roads and Bridges (Net Rating +83) and Water/Wastewater (+82).

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

Current Industry Sector Sentiment	2023 Q3 (n = 192-438)	2023 Q4 (n = 174-387)	2024 Q1 (n=202-442)	2024 Q2 (n=218-501)	2024 Q3 (n=208-489)	Change vs. Previous Quarter	Change vs. Previous Year
Data Centers	+71	+70	+78	+74	+73	-1	+2
Transportation – Airports	+78	+80	+82	+78	+79	+1	+1
Convention Centers, Sports Facilities and Cultural Facilities	+43	+45	+42	+56	+44	-12	+1
Federal/Military, State and Local Government Buildings	+72	+65	+65	+72	+71	-1	-1
Healthcare Facilities	+68	+70	+70	+69	+67	-2	-1
Transportation – Roads and Bridges	+84	+80	+86	+83	+83	0	-1
Transportation – Transit (Rail, BRT)	+72	+70	+76	+71	+71	0	-1
Water/Wastewater	+83	+79	+81	+81	+82	+1	-1
Commercial Real Estate (Office, Hotel, Retail and Multifamily Residential)	+23	+20	+16	+14	+21	+7	-2
Industrial and Manufacturing Facilities	+65	+65	+62	+66	+63	-3	-2
Energy and Utilities	+79	+78	+80	+76	+75	-1	-4
Justice (Courthouses and Corrections)	+39	+38	+31	+42	+35	-7	-4
Education (K-12 and Higher Education)	+55	+58	+52	+56	+51	-5	-4
Residential – Land Development	+37	+32	+27	+39	+32	-7	-5
Telecommunications	+65	+56	+61	+64	+59	-5	-6
Science and Technology	+71	+74	+77	+68	+65	-3	-6

Current Backlog

- More than half (53%) indicate their firm has a current backlog of one year or more.
- The median backlog increased slightly across some segments compared to last quarter, with a slight increase overall from a year ago.

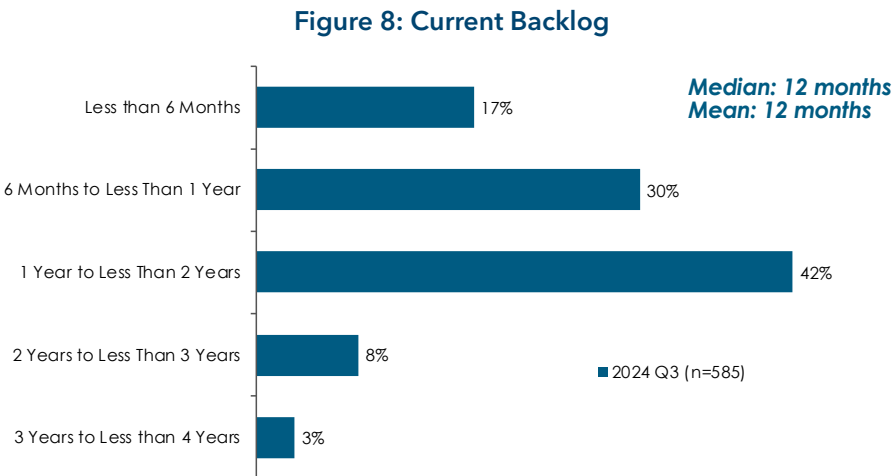


Figure 9: Current Backlog vs. Previous Quarters - By Region and Firm Size

Current Backlog	2023 Q3 (n=526)	2023 Q4 (n=498)	2024 Q1 (n=534)	2024 Q2 (n=596)	2024 Q3 (n=585)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	11	11	11	11	12	+1	+1
REGION							
Northeast	12	12	12	12	12	0	0
South	12	10	10	12	12	0	0
Midwest	11	11	12	12	12	0	+1
West	10	10	10	9	10	+1	0
FIRM SIZE							
1-25	6	6	6	6	6	0	0
26-50	10	8	12	10	12	+2	+2
51-200	10	12	10	11	12	+1	+2
201-500	12	12	12	12	12	0	0
More than 500	14	13	12	13	12	-1	-2

Current Open Positions

- Nine out of 10 (89%) firms still have at least one opening. The median number of open positions remains steady at five.
- On average, 9% of positions remain unfilled, which is the same as last quarter.
- Firms with 25 or fewer FTEs have a much higher percentage of openings (16%).

Figure 10: Current Open Positions vs. Previous Quarters

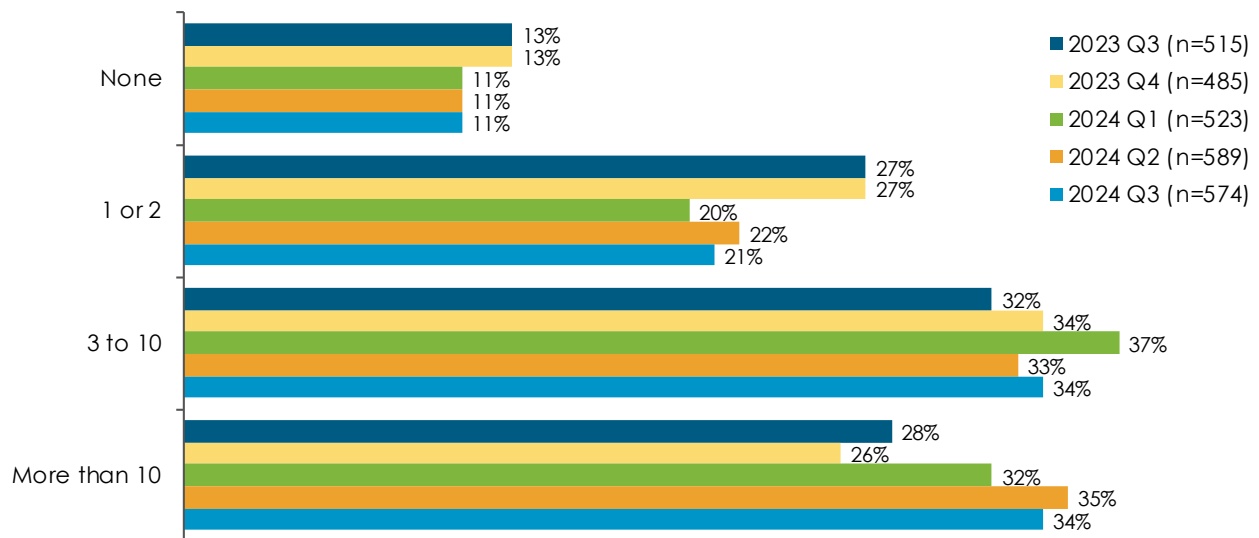


Figure 11: Open Positions as Percentage of Overall FTEs vs. Previous Quarters

Open Positions	2023 Q3 (n=515)	2023 Q4 (n=485)	2024 Q1 (n=523)	2024 Q2 (n=589)	2024 Q3 (n=573)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	9%	9%	9%	9%	9%	0	0
REGION							
Northeast	7%	10%	7%	10%	7%	-3	0
South	9%	9%	8%	10%	11%	+1	-2
Midwest	9%	10%	12%	8%	8%	0	-1
West	10%	9%	8%	9%	8%	-1	-2
FIRM SIZE							
1-25	15%	15%	15%	16%	16%	0	+1
26-50	6%	8%	8%	7%	7%	0	+1
51-200	6%	6%	7%	7%	6%	-1	0
201-500	7%	7%	7%	7%	6%	-1	-1
More than 500	6%	7%	6%	7%	6%	-1	0

FUTURE BUSINESS CONDITIONS

Future U.S. Economy, Industry and Firm Sentiment

- Future sentiment is positive on all metrics.
- Future sentiment for the U.S. economy improved 12 points from last quarter to +22, while industry sentiment improved one point to +27 and firm's finances improved one point to +46.

Figure 12: Economic Sentiment 12 Months from Now

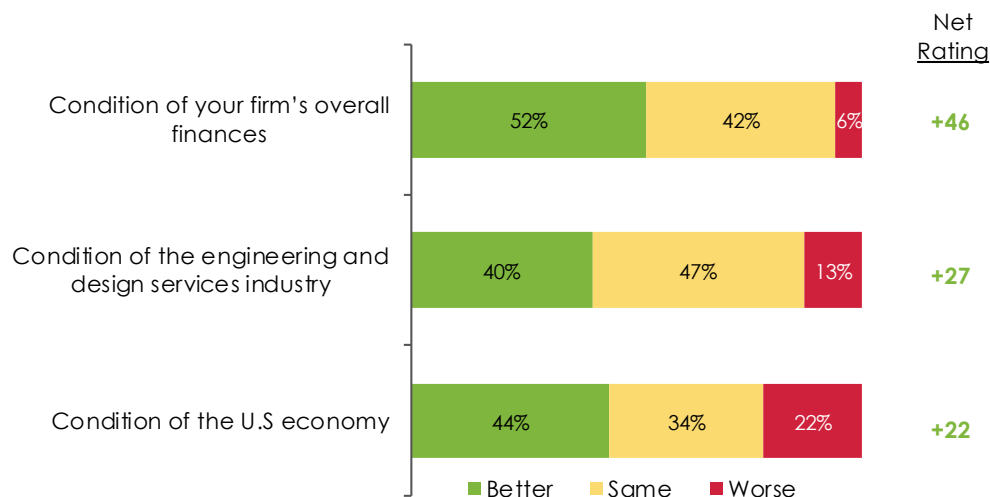
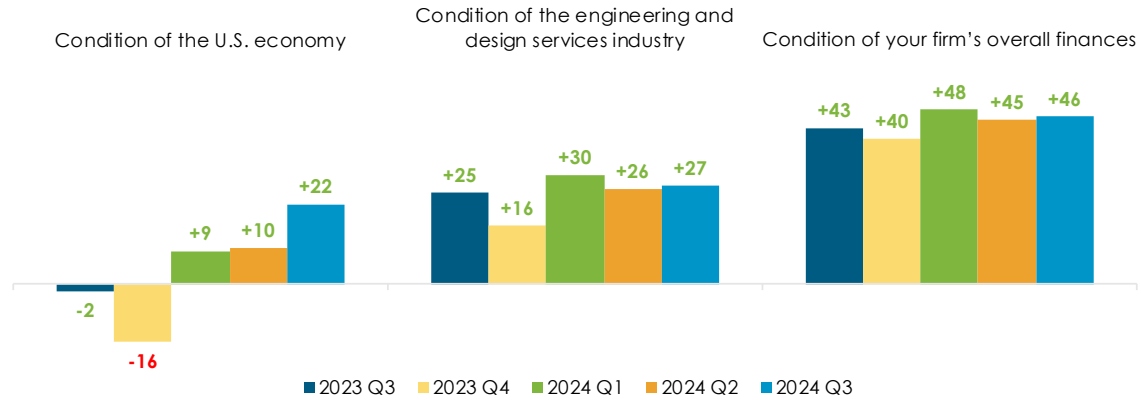


Figure 13: Economic Sentiment 12 Months from Now vs. Previous Quarters



- Most segments improved substantially over the prior quarter and all segments have seen a dramatic increase over the past year when asked about the future of the U.S. economy.

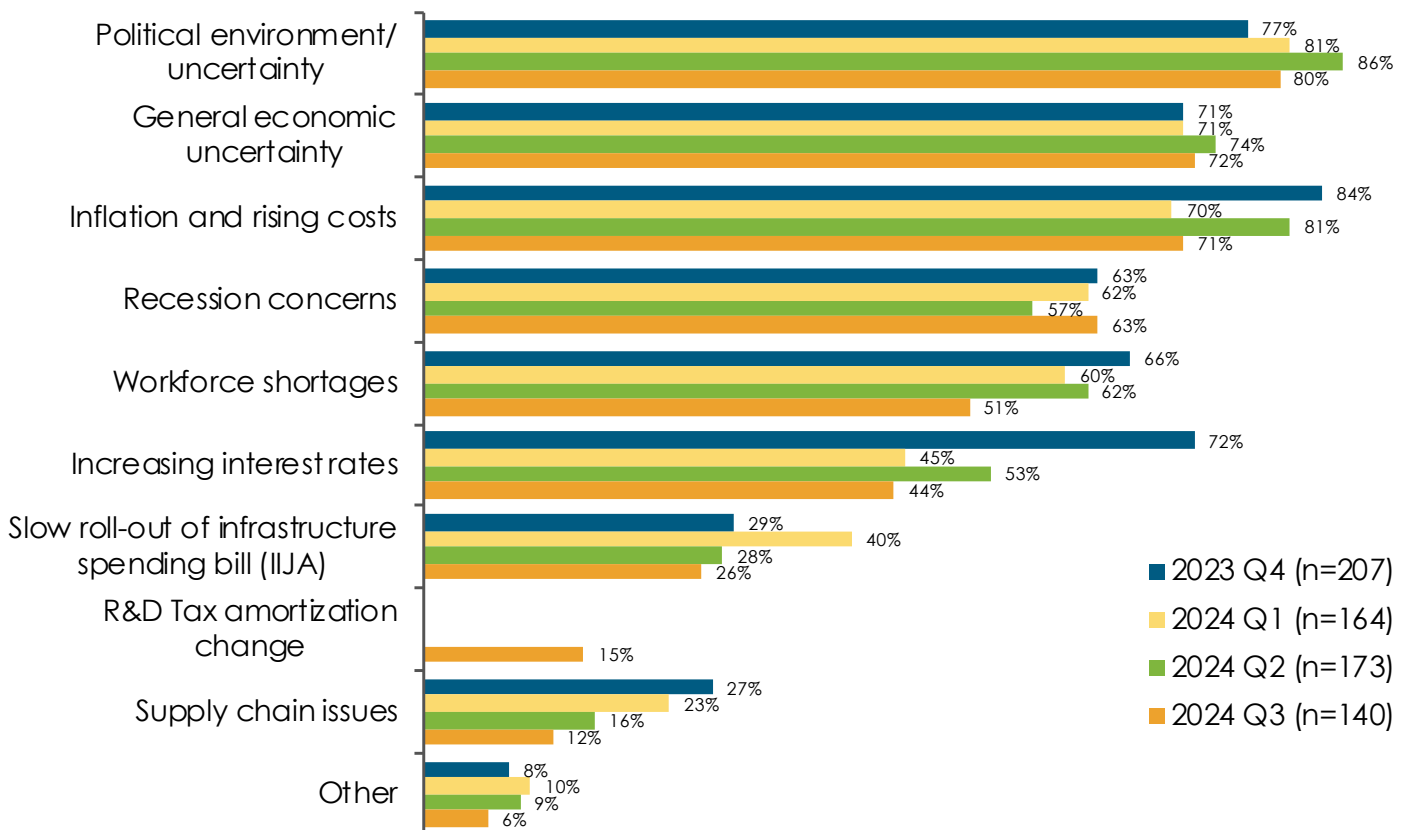
Figure 14: Condition of U.S. Economy 12 Months from Now vs. Previous Quarters - By Region and Firm Size

Condition of the U.S. economy	2023 Q3 (n=507)	2023 Q4 (n=481)	2024 Q1 (n=510)	2024 Q2 (n=579)	2024 Q3 (n=543)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	-2	-16	+9	+10	+22	+12	+20
REGION							
Northeast	+13	-6	+18	+17	+28	+11	+15
South	-11	-13	+10	+8	+24	+16	+13
Midwest	+12	-26	+6	+9	+29	+20	+17
West	-13	-19	+2	+12	+9	-3	+22
FIRM SIZE							
1-25	-15	-21	+1	+6	+11	+5	+26
26-50	+2	-30	+10	+18	+1	-17	-1
51-200	-3	-13	+9	+9	+30	+21	+27
201-500	+20	-8	+12	+3	+42	+39	+22
More than 500	+3	-4	+18	+18	+28	+10	+25

Reasons for Negative Economic Sentiment 12 Months from Now

- Political environment/uncertainty (80%), General economic uncertainty (72%), and Inflation and rising costs (71%) are fueling negative future sentiment.
- Political environment/uncertainty fell six points but remains the number one concern.
- Concerns about inflation fell 10 points from last quarter.
- Workforce shortages declined significantly (by 11 points).
- Increasing interest rates fell by nine points.
- Supply chain issues also continue to fall.
- For the first time, we asked about R&D Tax amortization as a reason for negative sentiment. Only 15% cite it as a reason.

Figure 15: Reasons for Economic Sentiment 12 Months from Now



Future Industry Sector Sentiment

- Future industry sentiment is positive in **all sectors for the first time** and is highest in Energy and Utilities (+46), Transportation – Roads and Bridges (+42), and Transportation – Airports (+41).
- Over the past year, future sentiment increased the most for Residential – Land Development (up 26 points to +16) and Commercial Real Estate (up 18 points to +4).
- Future industry sentiment has increased across a majority of segments from last quarter and half have increased compared to one year ago.

Figure 16: Industry Sentiment by Sector 12 Months from Now vs. Previous Quarters

Future Industry Sector Sentiment	2023 Q3 (n = 203-402)	2023 Q4 (n = 177-362)	2024 Q1 (n=213-419)	2024 Q2 (n=229-482)	2024 Q3 (n=230-465)	Change vs. Previous Quarter	Change vs. Previous Year
Residential – Land Development	-10	-15	+15	+16	+16	0	+26
Commercial Real Estate	-14	-21	-6	-1	+4	+5	+18
Data Centers	+23	+25	+31	+37	+35	-2	+12
Convention Centers, Sports Facilities and Cultural Facilities	-6	-10	+1	+7	+3	-4	+9
Industrial and Manufacturing Facilities	+20	+12	+30	+26	+28	+2	+8
Healthcare Facilities	+25	+24	+28	+28	+30	+2	+5
Education	+14	+11	+15	+14	+19	+5	+5
Justice	+4	-1	-4	-1	+5	+6	+1
Energy and Utilities	+47	+38	+46	+45	+46	+1	-1
Transportation – Transit	+41	+35	+43	+37	+40	+3	-1
Federal/Military, State and Local Government Buildings	+28	+26	+31	+28	+26	-2	-2
Transportation – Airports	+43	+36	+43	+40	+41	+1	-2
Science and Technology	+35	+21	+38	+29	+30	+1	-5
Water/Wastewater	+49	+37	+46	+43	+39	-4	-10
Transportation – Roads and Bridges	+54	+46	+47	+46	+42	-4	-12
Telecommunications	+38	+22	+27	+24	+26	+2	-12

Future Backlog

- Half (48%) believe their firms will see a higher backlog of projects 12 months from now.
- Firms in the West have the lowest future backlog Net Rating (+23) compared to other regions.
- Firms with 1-25 FTEs have the lowest future backlog Net Rating (+22) compared to other firm sizes.

Figure 17: Backlog 12 Months from Now

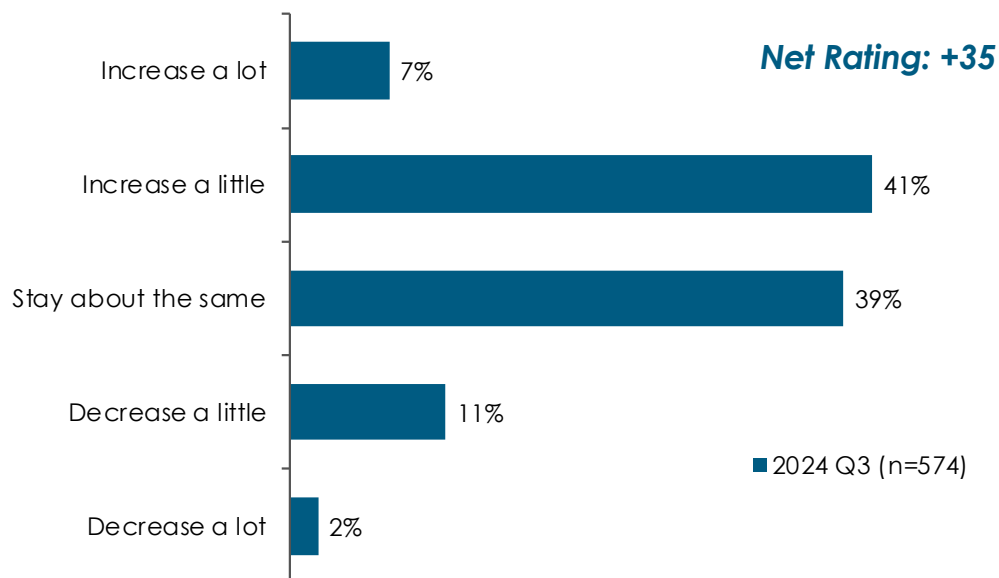
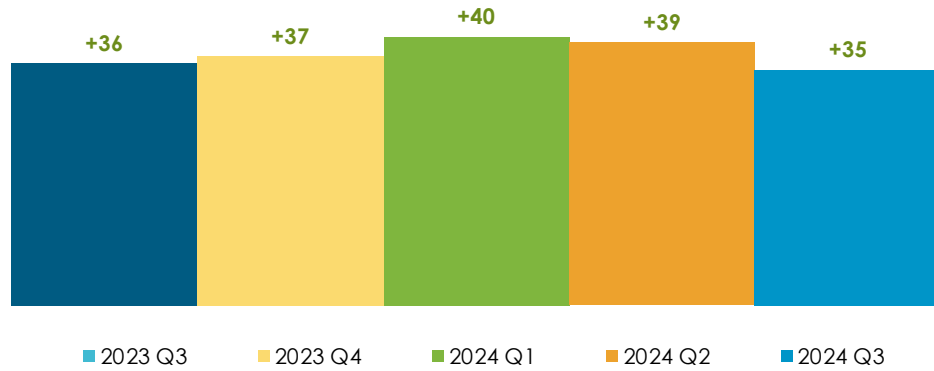


Figure 18: Backlog 12 Months from Now - Net Rating Trend



- Backlog sentiment for 12 months from now decreased four points from last quarter to a +35 Net Rating. It is one point lower than one year ago.
- Firms with more than 200 FTEs are the most optimistic while firms located in the West are the least.
- Future backlog sentiment fell the most among firms with more than 500 FTEs and those located in the Northeast.

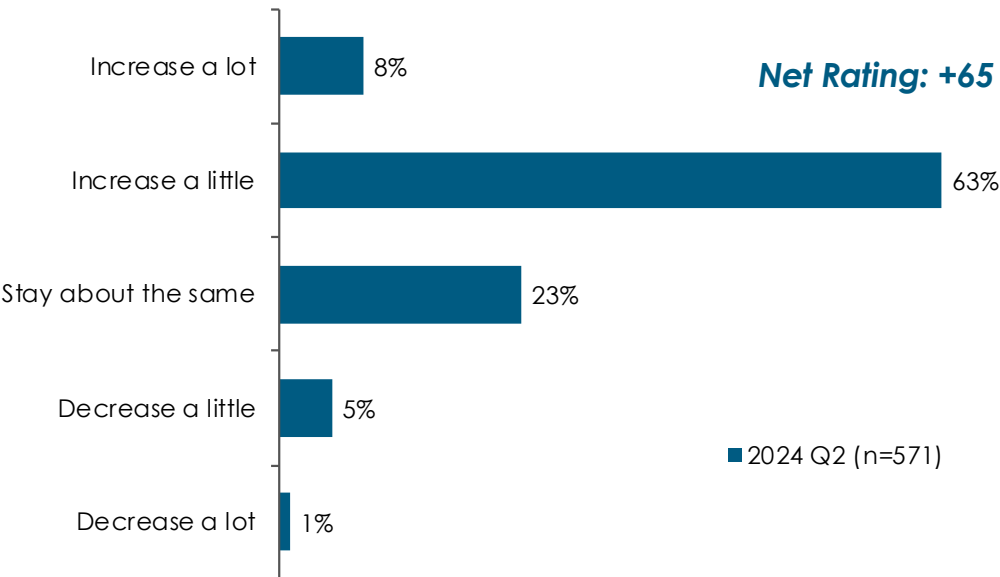
Figure 19: Backlog 12 Months from Now vs. Previous Quarters - By Region and Firm Size

Backlog	2023 Q3 (n=519)	2023 Q4 (n=485)	2024 Q1 (n=525)	2024 Q2 (n=596)	2024 Q3 (n=574)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	+36	+37	+40	+39	+35	-4	-1
REGION							
Northeast	+48	+45	+61	+55	+40	-15	-8
South	+32	+36	+31	+42	+41	-1	+9
Midwest	+42	+37	+35	+35	+40	+5	-2
West	+28	+32	+42	+27	+23	-4	-5
FIRM SIZE							
1-25	+27	+29	+22	+24	+22	-2	-5
26-50	+20	+17	+19	+29	+34	+5	+14
51-200	+34	+40	+49	+36	+37	+1	+3
201-500	+50	+49	+54	+35	+50	+15	0
More than 500	+58	+57	+56	+65	+43	-22	-15

Future Hiring Projections

- Seventy-one percent predict there will be an increase in hiring over the next 12 months at their firms, a Net Rating of +65.

Figure 20: Hiring Over the Next 12 Months



- Overall future hiring sentiment decreased six points from last quarter and is down one point from last year at this time.
- The Northeast is the most optimistic, with a +80 Net Rating.
- Firms with 201 - 500 FTEs (+86) are the most optimistic about future hiring.

Figure 21: Expectations for Hiring Increases Over the Next 12 Months vs Previous Quarters - By Region and Firm Size

Status of Hiring	2023 Q3 (n=508)	2023 Q4 (n=478)	2024 Q1 (n=518)	2024 Q2 (n=589)	2024 Q3 (n=571)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	+66	+68	+73	+71	+65	-6	-1
REGION							
Northeast	+77	+72	+85	+86	+80	-6	+3
South	+60	+67	+68	+66	+65	-1	+5
Midwest	+74	+68	+75	+73	+68	-5	-6
West	+60	+68	+72	+64	+54	-10	-6
FIRM SIZE							
1-25	+51	+57	+54	+44	+35	-9	-16
26-50	+66	+57	+71	+67	+62	-5	-4
51-200	+63	+68	+78	+75	+75	0	+12
201-500	+81	+76	+83	+84	+86	+2	+5
More than 500	+88	+92	+87	+92	+83	-9	-5

Inflation

- Concern over the impact of inflation remains elevated. Sixty-six percent at least somewhat agree that they are extremely concerned about the impact of inflation.
- Concern about the impact of inflation fell seven points from last quarter (+48 Net Rating) and is the same as one year ago.

Figure 22: Inflation Concerns

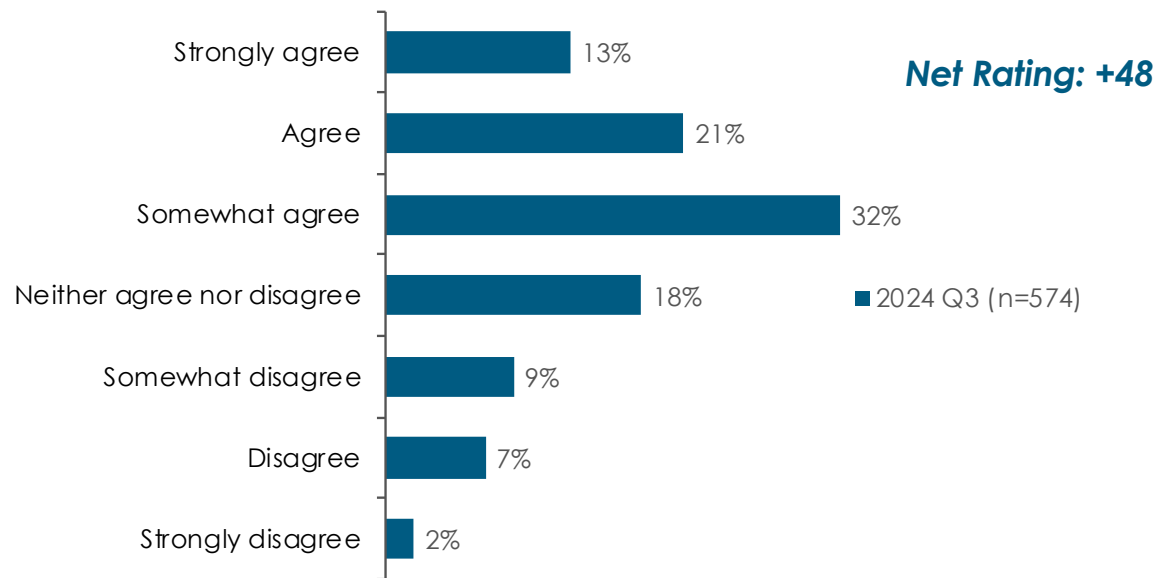
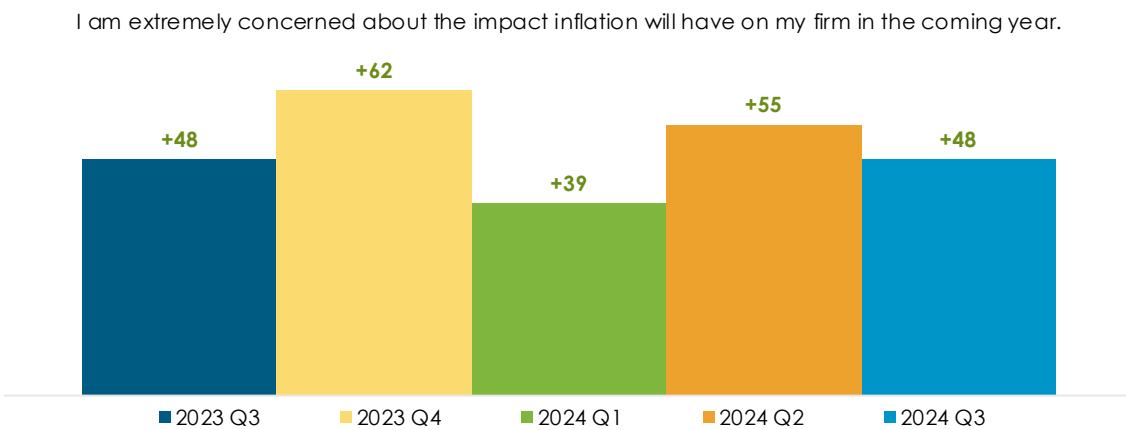


Figure 23: Inflation Concerns vs. Previous Quarters



Likelihood of Recession in Next 6 Months

- The perceived likelihood of a recession in the next six months is the same as last quarter (40%) and down six points from one year ago.

Figure 24: Likelihood of Recession in Next 6 Months vs. Previous Quarter

Likelihood of Recession	2023 Q3 (n=518)	2023 Q4 (n=473)	2024 Q1 (n=508)	2024 Q2 (n=567)	2024 Q3 (n=551)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	46%	49%	41%	40%	40%	0	-6
REGION							
Northeast	43%	46%	38%	38%	36%	-2	-7
South	48%	51%	41%	41%	43%	+2	-5
Midwest	44%	49%	42%	38%	37%	-1	-7
West	48%	48%	43%	40%	40%	-1	-8
FIRM SIZE							
1-25	50%	53%	46%	44%	46%	+2	-4
26-50	48%	51%	40%	42%	40%	-2	-8
51-200	46%	47%	42%	39%	39%	0	-7
201-500	42%	47%	37%	33%	35%	+2	-7
More than 500	42%	45%	38%	37%	35%	-2	-7

HOT TOPICS

Workforce

- Lack of qualified workers is a significant constraint on firm growth. Seventy-eight percent at least somewhat agree this is the biggest barrier to growth.
- Concern about the lack of qualified workers rose 13 points from the same time one year ago.

Figure 25: Lack of Qualified Workers is Biggest Barrier to Firm’s Growth

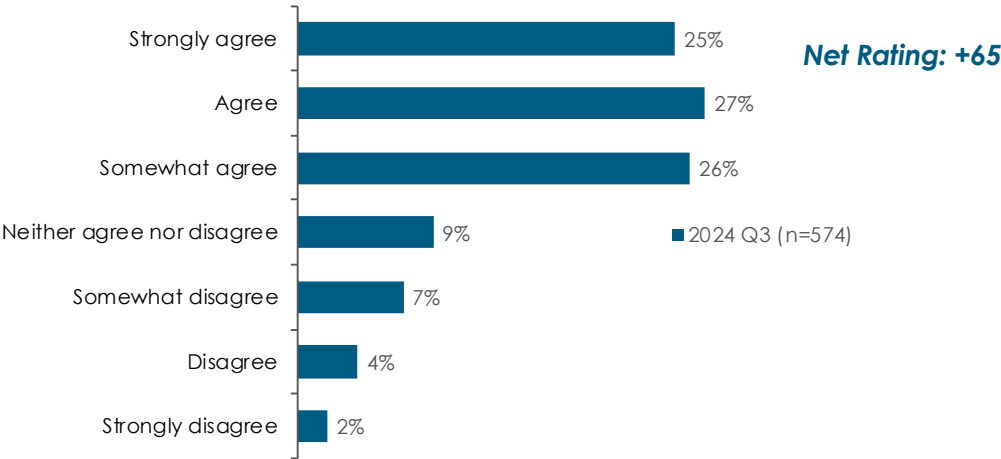
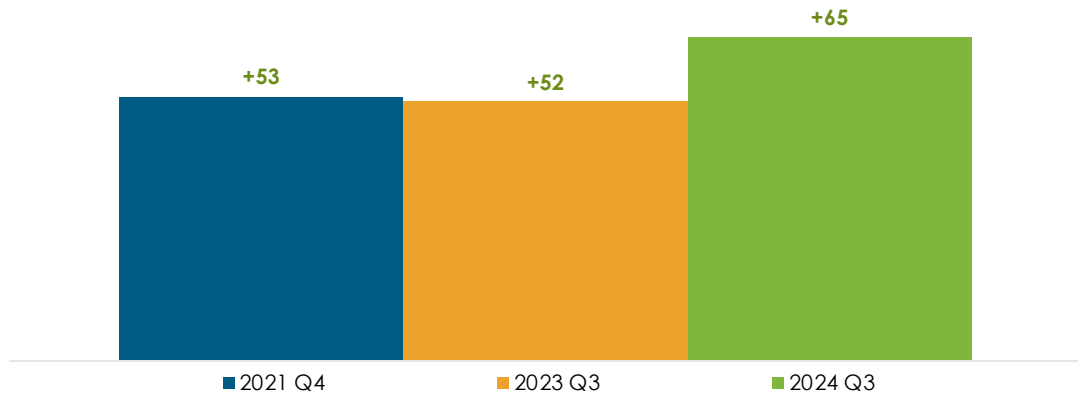
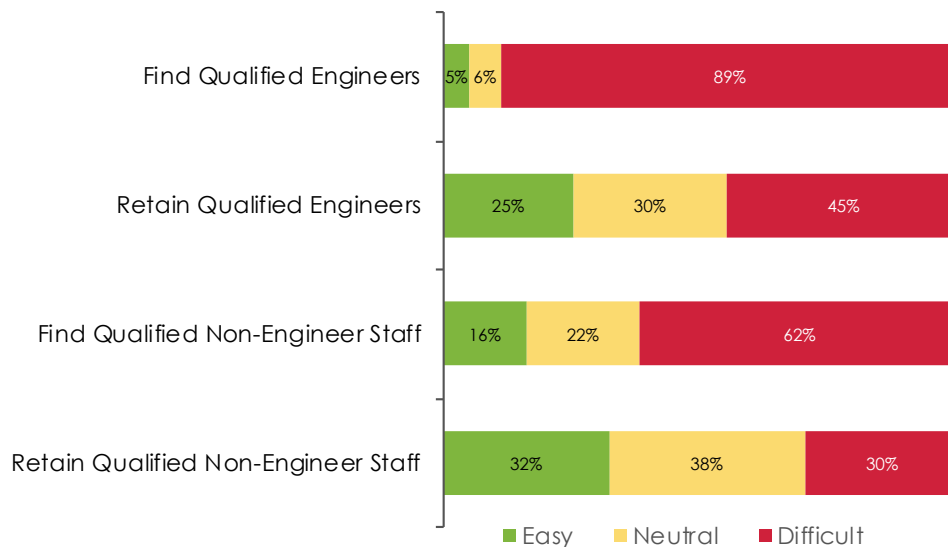


Figure 26: Lack of Qualified Workers is Biggest Barrier to Firm's Growth vs. Previous Years



- Nine out of 10 (89%) firm leaders say it is difficult to find qualified engineers right now. The silver lining is that it's a little easier to retain qualified engineers than to find them. Finding and retaining non-engineering staff is a bit less challenging.
- There are no significant differences by firm size when it comes to finding and retaining engineers.
- However, when it comes to finding non-engineer staff, firms with 50 or fewer FTEs are having a more difficult time (72%) compared to firms with more than 500 FTEs (51%).

Figure 27: Ease of Finding and Retaining Engineers and Staff



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 18 and 31, 2024.

A total of 9,307 invitations were emailed, although 2,303 bounced and 28 opted out, resulting in a total of 6,976 potential respondents. Individuals who did not respond to the first email were sent up to three follow-up reminders.

In all, 634 individuals completed the survey for an overall response rate of 9%.

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.

The ACEC Research Institute wishes to extend its sincere appreciation to its generous contributors.

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