

ENGINEERING BUSINESS SENTIMENT 2024 Q1

FEBRUARY 2024

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2024 Q1

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EXECUTIVE SUMMARY

Current Business Conditions

- Current sentiment remains positive. The Net Ratings for the firm's finances (+87) and for industry (+84) remain extremely high. The Net Rating for the U.S. economy is +35, an increase of seven points over the prior quarter and 23 points higher than a year ago.
- Nearly all segments (regions and firm sizes) are feeling more optimistic about the state of the U.S. economy than last quarter. All segments are feeling more optimistic than one year ago.
- The Net Rating for the Science and Technology sector saw a significant increase year-over-year (+13), while the Commercial Real Estate sector has seen the most precipitous decline over the past year (-20 points).
- Half of firm executives indicate their firm has a current backlog of one year or more, consistent with a year ago and the previous quarter.

Future Business Conditions

- Future sentiment is positive on all metrics. Future sentiment for the U.S. economy improved dramatically (up 25 points) from last quarter, while industry sentiment rose 14 points and firm's finances improved eight points.
- All segments (regions and firm sizes) saw an increase over the prior quarter and last year when asked about the future of the U.S. economy.
- Political environment/uncertainty (81%), general economic uncertainty (71%), and inflation and rising costs (70%) are the biggest concerns among firm executives with negative future sentiment. Recession concerns continue to recede falling 25 points from a year ago.
- Future industry sentiment is positive in most sectors including Transportation (Roads/Bridges/Transit/Airports), Energy and Utilities, and Water/Wastewater.
- Backlog sentiment for one year from now (+40) increased three points from the prior quarter and 13 points from one year ago.
- Overall future hiring sentiment (+73) increased five points from last quarter and eight points from last year at this time.
- Concern over the impact of inflation declined significantly from the previous quarter (the Net Rating fell from +62 to +39) but it remains elevated. Sixty-two percent at least somewhat agree that they are extremely concerned about the impact of inflation.

Hot Topics

- In the past three months, over half of firms (51%) continue to turn down work due to workforce shortages. This is consistent with a year ago.
- Among firms turning down work, most (88%) are being more selective about the projects they are accepting, up from 80% a year ago at this time.
- Wage inflation is the biggest single concern among firm executives as they head into 2024. Political disruption from the 2024 presidential election follows.
- Half (52%) of firms have an AI strategy in place or are working on one and 63% of firms believe that AI will have a positive impact on their firm in the coming year.

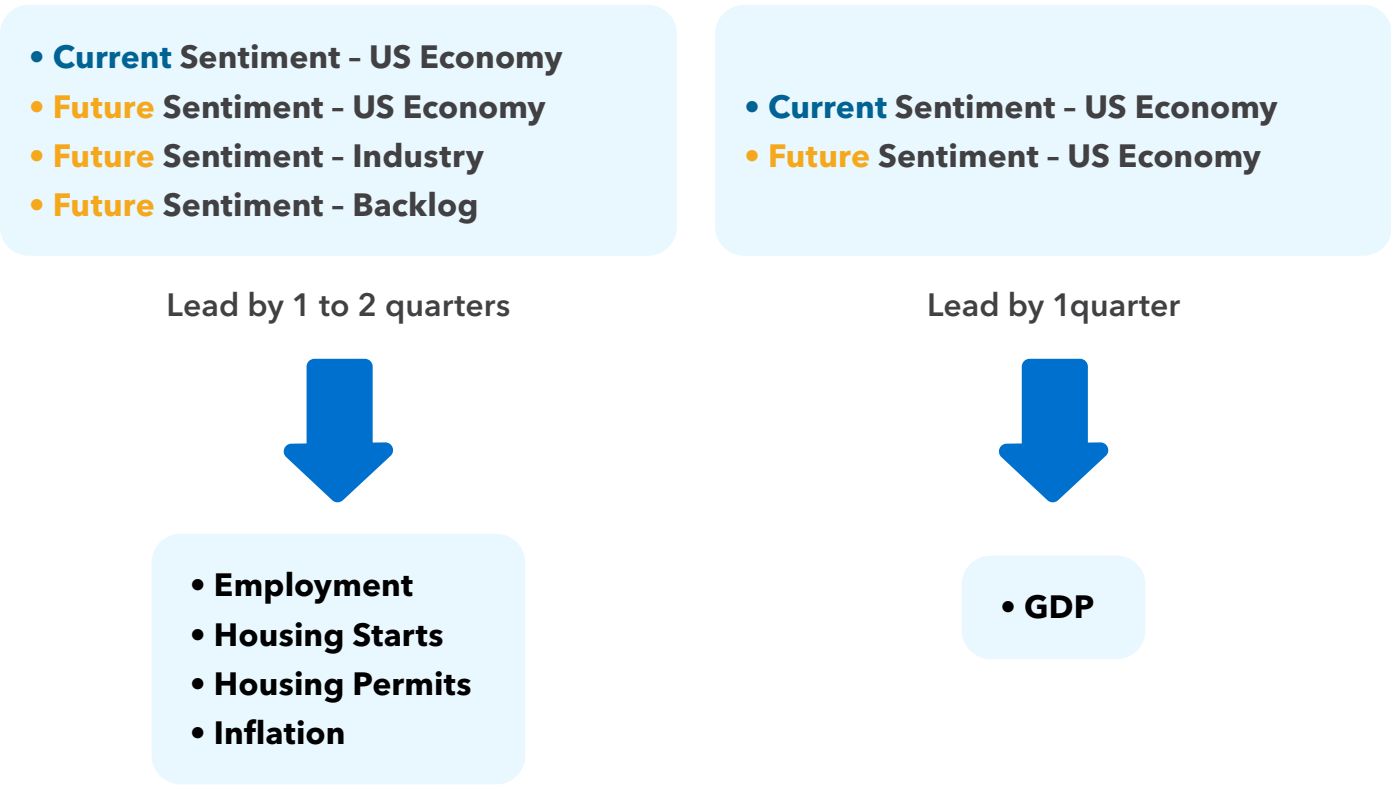
BUSINESS SENTIMENT STUDY AND ECONOMIC INDICATORS

After conducting the ACEC Business Sentiment Survey for ten quarters, the ACEC Research Institute (ACEC RI) performed a correlation analysis of various metrics within the survey and various macro-economic indicators.

The correlation analysis found many of the study metrics are coincidental indicators with various macro-economic indicators.

In the next step, offsetting the study metrics with the macro-economic indicators by one quarter and then by two quarters revealed even stronger correlations with the macro-economic indicators, signifying various study metrics are leading indicators for the macro-economic data.

As this report shows, since last quarter, current and future sentiment regarding the U.S. economy has improved significantly. In addition, future sentiment regarding the industry and backlog also improved. Due to improvement on these metrics in Q1 2024, we expect to see continued strengthening macro-economic indicators (GDP, Employment, Housing Starts, Housing Permits) and easing of inflation in Q2 and Q3 of 2024.

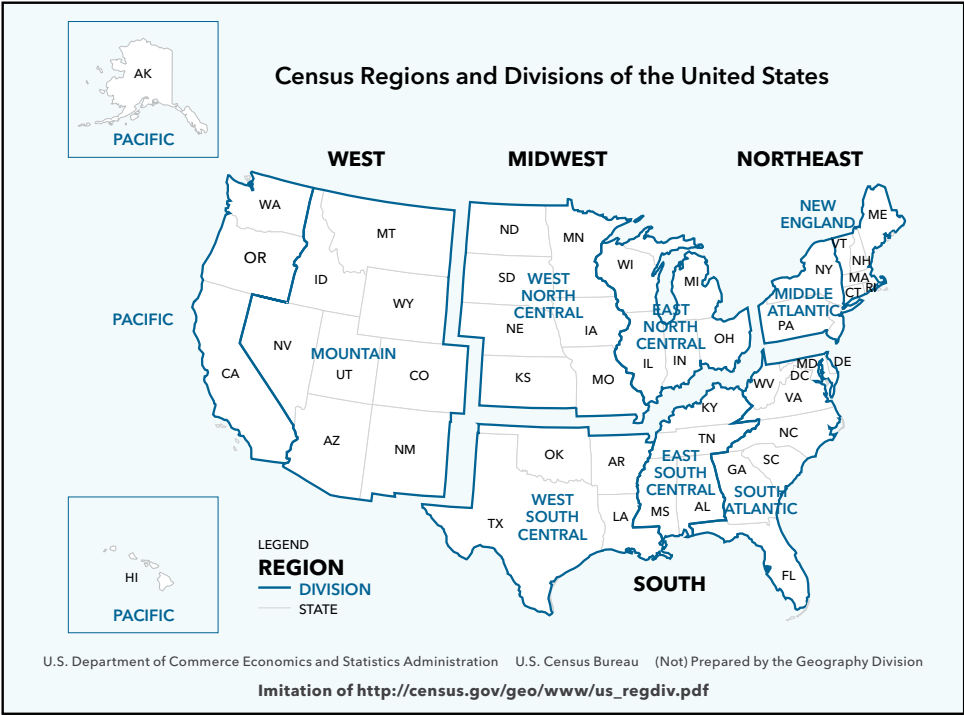


• Various sentiment study metrics are leading indicators of macro-economic indicators by 1 to 2 quarters. Due to improvement on these metrics seen in Q1 2024, we expect to see continued strengthening macro-economic indicators in Q2 and Q3 of 2024.

DEMOGRAPHICS

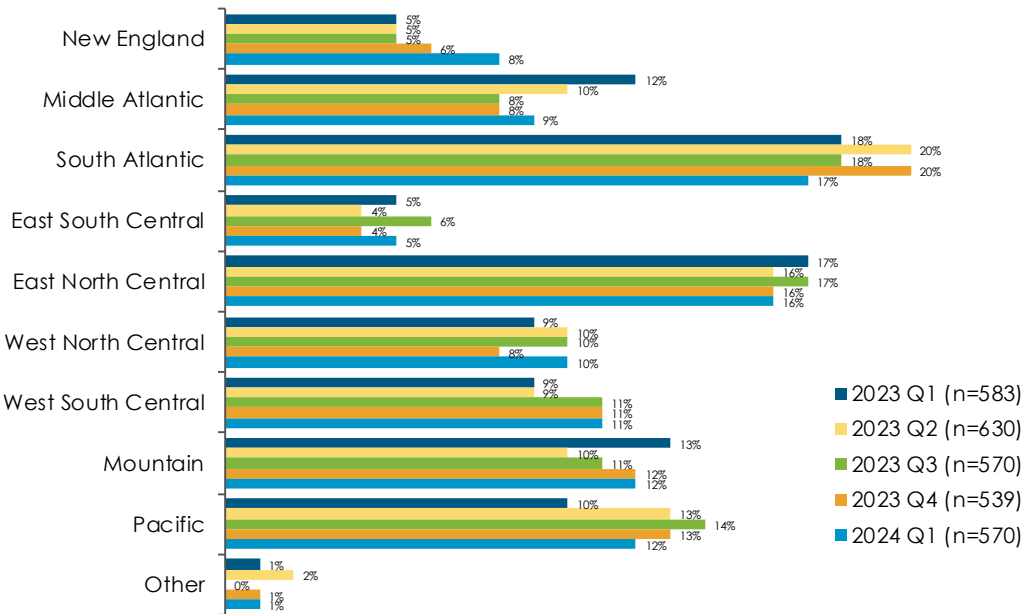
- For reference, the ACEC Research Institute uses the U.S. Census Bureau definition of geographic regions seen in Figure 1 below.

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



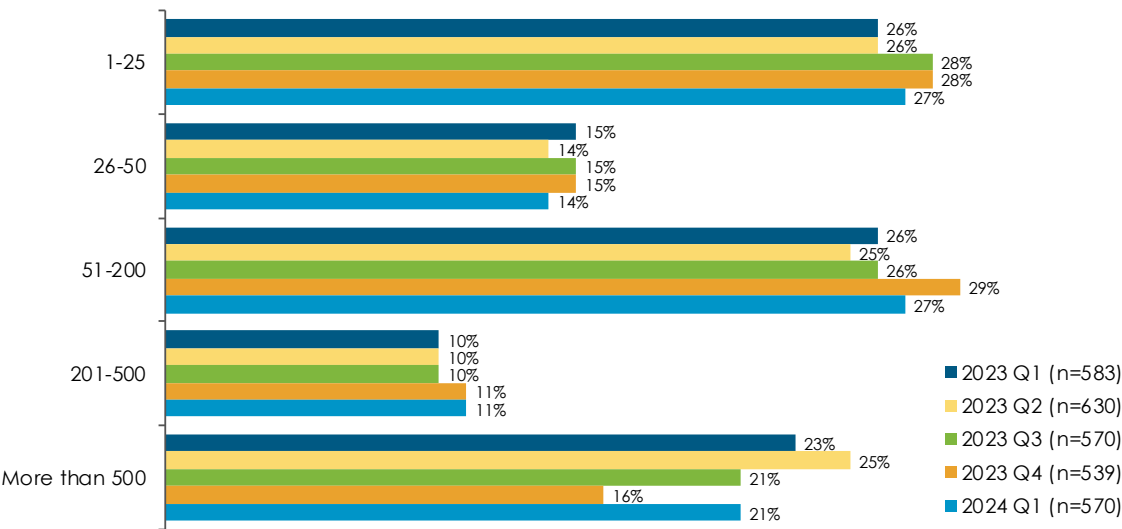
- Respondents' firms are widely dispersed around the United States. A few respondents (Other) indicate their firm is headquartered outside the U.S. These results are statistically similar to previous quarters.

Figure 2: Location of Organization Headquarters



The median number of full-time employees at respondents’ firms is 75 versus 70 last quarter. This is the result of a dip in the percentage of firms responding to the survey who had more than 500 FTE in the prior 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 (+87) and for industry (+84) remain extremely high. The Net Rating for the U.S. economy is +35.
- Firms with more than 500 FTEs are the most positive about their firm’s finances (+99).
- Sentiment for the U.S. economy is strongest in the Midwest (+44), but weakest among small firms (1-25 FTEs) (+23).

Figure 4: Current Economic Sentiment

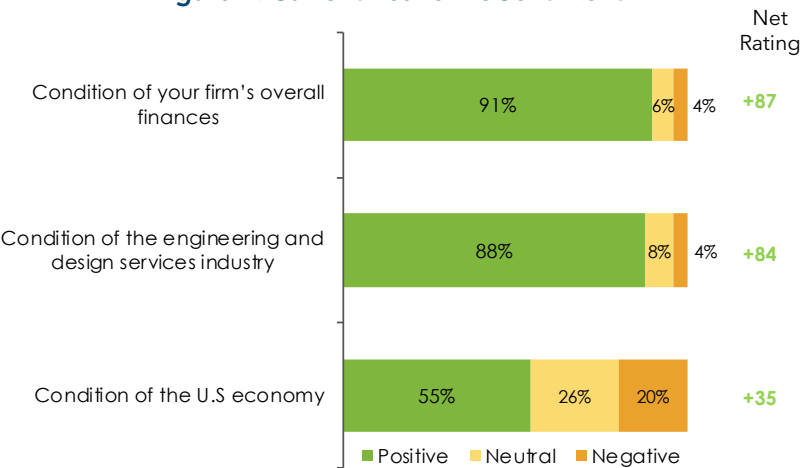
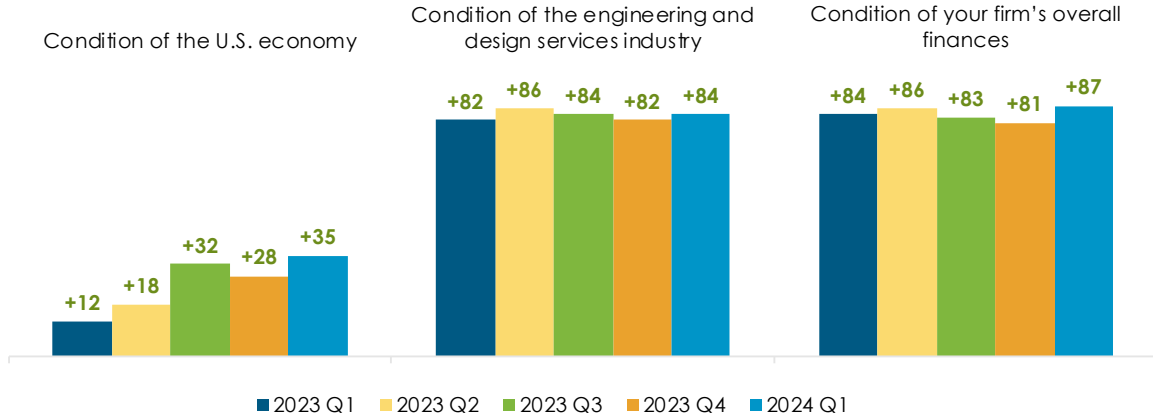


Figure 5: Current Economic Sentiment vs. Previous Quarters



- The Net Rating for the U.S. economy increased seven points over the prior quarter and is 23 points higher than a year ago
- Nearly all segments (regions and firm size) are feeling more optimistic about the state of the U.S. economy than last quarter. All 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 Q1 (n=583)	2023 Q2 (n=624)	2023 Q3 (n=565)	2023 Q4 (n=524)	2024 Q1 (n=562)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	+12	+18	+32	+28	+35	+7	+23
REGION							
Northeast	+28	+23	+36	+35	+43	+8	+15
South	+10	+19	+25	+23	+24	+1	+14
Midwest	+11	+14	+46	+32	+44	+12	+33
West	+5	+17	+21	+28	+33	+5	+28
FIRM SIZE							
1-25	+16	+18	+20	+14	+23	+9	+7
26-50	-6	+15	+32	+31	+32	+1	+38
51-200	+15	+8	+25	+28	+37	+9	+22
201-500	+13	+7	+40	+30	+36	+6	+23
More than 500	+18	+33	+50	+50	+49	-1	+31

Current Industry Sector Sentiment

- The Net Rating for the Science and Technology sector saw a significant increase year-over-year (+13), while the Commercial Real Estate sector has seen the most precipitous decline over the past year (-20 points).
- Current sentiment remains very optimistic within most market sectors. Sentiment is strongest in Roads & Bridges (Net Rating +86) and Airports (+82).

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

Current Industry Sector Sentiment	2023 Q1 (n = 185-423)	2023 Q2 (n=202-483)	2023 Q3 (n = 192-438)	2023 Q4 (n = 174-387)	2024 Q1 (n=202-442)	Change vs. Previous Quarter	Change vs. Previous Year
Science and Technology	+64	+70	+71	+74	+77	+3	+13
Data Centers	+69	+63	+71	+70	+78	+8	+9
Transportation – Roads and Bridges	+79	+80	+84	+80	+86	+6	+7
Transportation – Transit (Rail, BRT)	+69	+68	+72	+70	+76	+6	+7
Water/Wastewater	+74	+81	+83	+79	+81	+2	+7
Transportation – Airports	+77	+77	+78	+80	+82	+2	+5
Convention Centers, Sports Facilities and Cultural Facilities	+39	+39	+43	+45	+42	-3	+3
Energy and Utilities	+78	+74	+79	+78	+80	+2	+2
Industrial and Manufacturing Facilities	+62	+67	+65	+65	+62	-3	0
Federal/Military, State and Local Government Buildings	+67	+68	+72	+65	+65	0	-2
Residential – Land Development	+30	+32	+37	+32	+27	-5	-3
Justice (Courthouses and Corrections)	+35	+38	+39	+38	+31	-7	-4
Education (K-12 and Higher Education)	+57	+56	+55	+58	+52	-6	-5
Healthcare Facilities	+75	+68	+68	+70	+70	0	-5
Telecommunications	+66	+55	+65	+56	+61	+5	-5
Commercial Real Estate (Office, Hotel, Retail and Multifamily Residential)	+36	+26	+23	+20	+16	-4	-20

Current Backlog

- Half indicate that their firm has a current backlog of one year or more, consistent with a year ago and the prior quarter.

Figure 8: Current Backlog

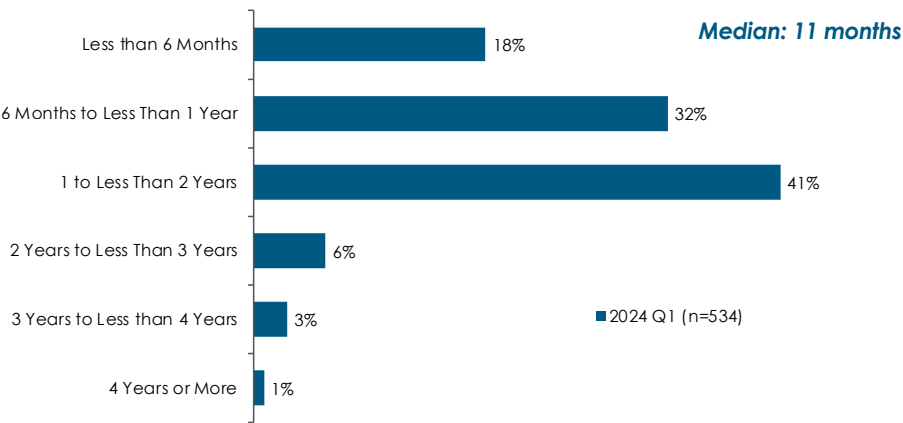


Figure 9: Current Backlog vs. Previous Quarters - By Region and Firm Size

Current Backlog	2023 Q1 (n=529)	2023 Q2 (n=585)	2023 Q3 (n=526)	2023 Q4 (n=498)	2024 Q1 (n=534)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	10	12	11	11	11	0	+1
REGION							
Northeast	12	12	12	12	12	0	0
South	9	10	12	10	10	0	+1
Midwest	11	12	11	11	12	+1	+1
West	8	10	10	10	10	0	+2
FIRM SIZE							
1-25	6	6	6	6	6	0	0
26-50	9	10	10	8	12	+4	+3
51-200	10	12	10	12	10	-2	0
201-500	12	12	12	12	12	0	0
More than 500	13	14	14	13	12	-1	-1

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 dramatically (up 25 points) from last quarter, while industry sentiment rose 14 points and firm's finances improved eight points.

Figure 10: Economic Sentiment 12 Months from Now

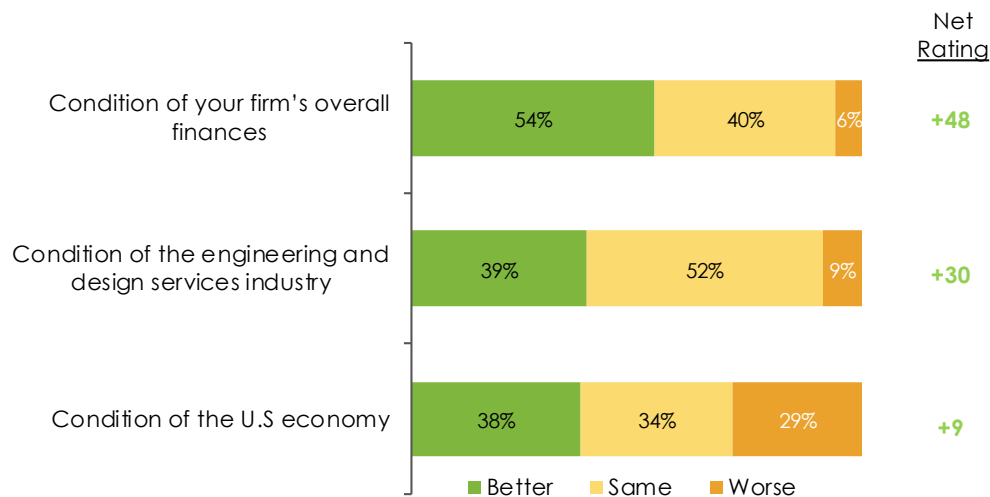
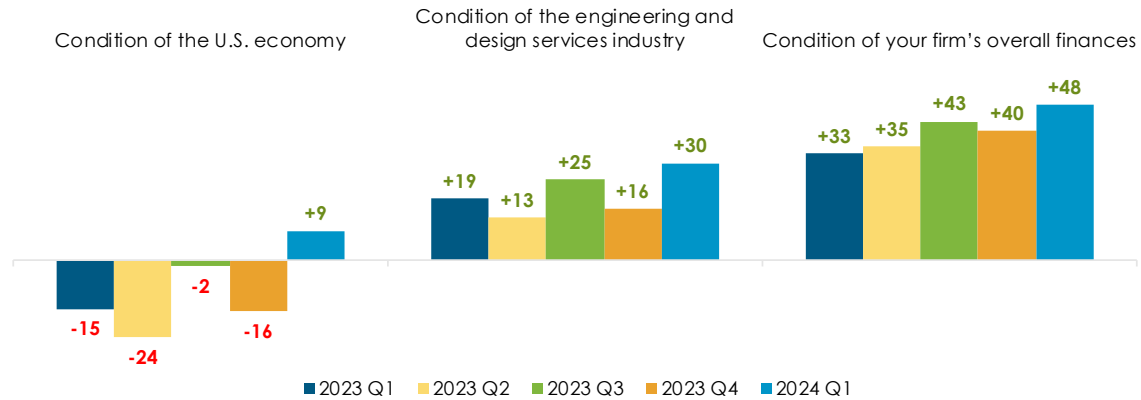


Figure 11: Economic Sentiment 12 Months from Now vs. Previous Quarters



- All segments saw an increase over the prior quarter and last year when asked about the future of the U.S. economy.

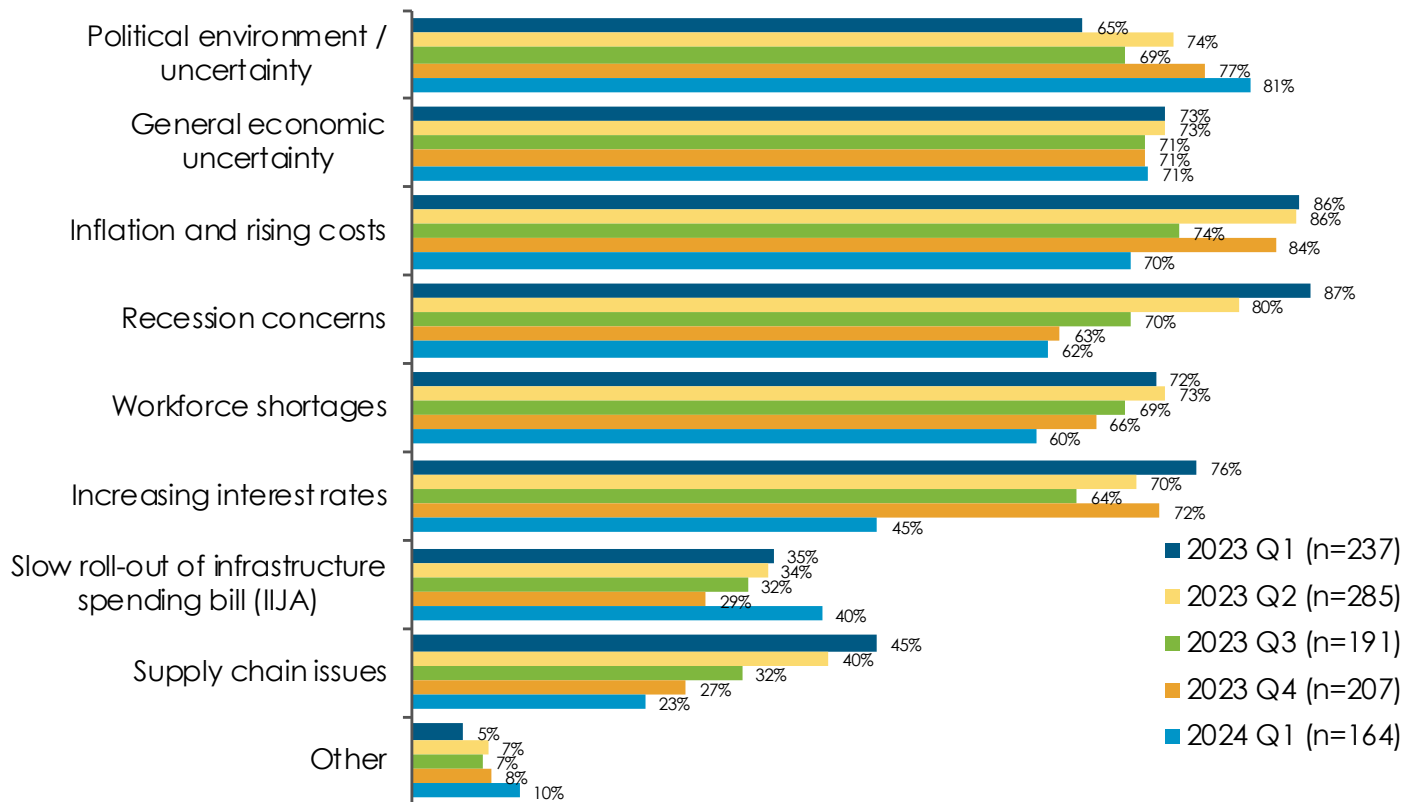
Figure 12: Condition of Firm's Finances 12 Months from Now vs. Previous Quarters - By Region and Firm Size

Condition of your firm's overall finances	2023 Q1 (n=525)	2023 Q2 (n=576)	2023 Q3 (n=519)	2023 Q4 (n=488)	2024 Q1 (n=530)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	+33	+35	+43	+40	+48	+8	+15
REGION							
Northeast	+56	+29	+49	+50	+59	+9	+3
South	+29	+33	+46	+39	+50	+11	+21
Midwest	+38	+35	+47	+35	+42	+7	+4
West	+14	+39	+32	+40	+46	+6	+32
FIRM SIZE							
1-25	+9	+14	+35	+32	+40	+8	+31
26-50	+30	+39	+43	+33	+48	+15	+18
51-200	+43	+44	+42	+40	+48	+8	+5
201-500	+33	+44	+58	+48	+52	+4	+19
More than 500	+50	+40	+50	+52	+59	+7	+9

Reasons for Economic Sentiment 12 Months from Now

- Political environment/uncertainty (81%), general economic uncertainty (71%), and inflation and rising costs (70%) are the biggest concerns among firm executives holding a negative future sentiment.
- Recession concerns continue to recede falling another point from last quarter and down 25 points from a year ago.
- Supply chain issues also continue to fall from 45% last year at this time to 23% this quarter

Figure 13: Reasons for Economic Sentiment 12 Months from Now



Future Industry Sector Sentiment

- Future industry sentiment is positive in most sectors including Transportation (Roads/Bridges/Transit/Airports), Energy and Utilities, and Water/Wastewater.
- Future industry sentiment has increased in all but one sector from last quarter and about half have increased compared to one year ago.

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

<i>Future Industry Sector Sentiment</i>	2023 Q1 (n = 196-402)	2023 Q2 (n = 225-467)	2023 Q3 (n = 203-402)	2023 Q4 (n = 177-362)	2024 Q1 (n=213-419)	Change vs. Previous Quarter	Change vs. Previous Year
Residential – Land Development	-25	-19	-10	-15	+15	+30	+40
Data Centers	+9	+20	+23	+25	+31	+6	+22
Industrial and Manufacturing Facilities	+10	+17	+20	+12	+30	+18	+20
Commercial Real Estate (Office, Hotel, Retail and Multifamily Residential)	-23	-24	-14	-21	-6	+15	+17
Convention Centers, Sports Facilities and Cultural Facilities	-13	-10	-6	-10	+1	+11	+14
Science and Technology	+25	+25	+35	+21	+38	+17	+13
Education (K-12 and Higher Education)	+9	+11	+14	+11	+15	+4	+6
Federal/Military, State and Local Government Buildings	+28	+32	+28	+26	+31	+5	+3
Energy and Utilities	+46	+51	+47	+38	+46	+8	0
Water/Wastewater	+46	+45	+49	+37	+46	+9	0
Healthcare Facilities	+30	+23	+25	+24	+28	+4	-2
Justice (Courthouses and Corrections)	-1	+4	+4	-1	-4	-3	-3
Transportation – Airports	+46	+42	+43	+36	+43	+7	-3
Transportation – Transit (Rail, BRT)	+48	+49	+41	+35	+43	+8	-5
Telecommunications	+33	+26	+38	+22	+27	+5	-6
Transportation – Roads and Bridges	+58	+53	+54	+46	+47	+1	-11

Future Backlog

- More than half (53%) believe their firms will see a higher backlog of projects 12 months from now.
- Firms in the Northeast have the highest future backlog Net Rating (+61) compared to other regions.
- Firms with 26-50 FTEs have the lowest future backlog Net Rating (+19) compared to other firm sizes.

Figure 15: Backlog 12 Months from Now vs. Last Quarter

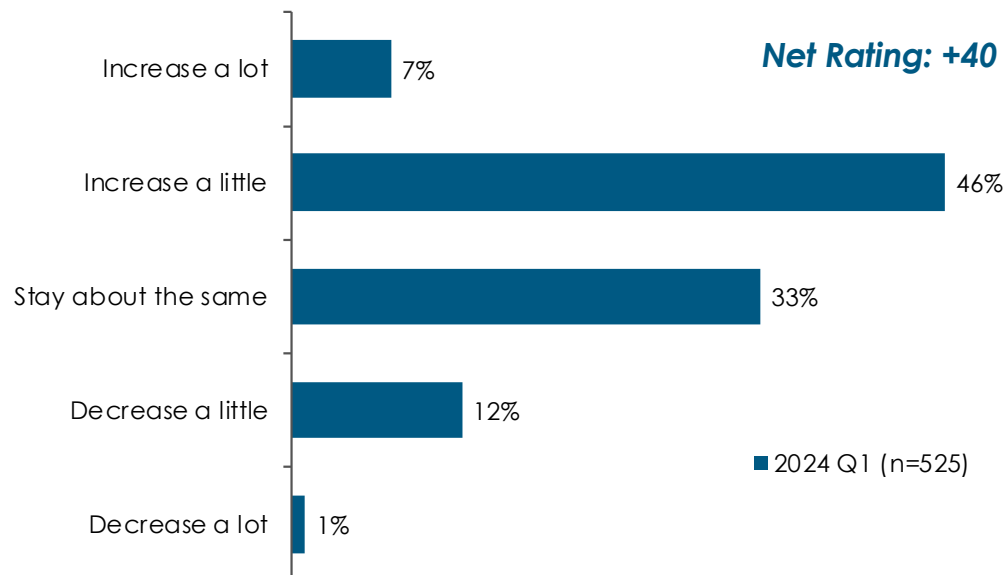
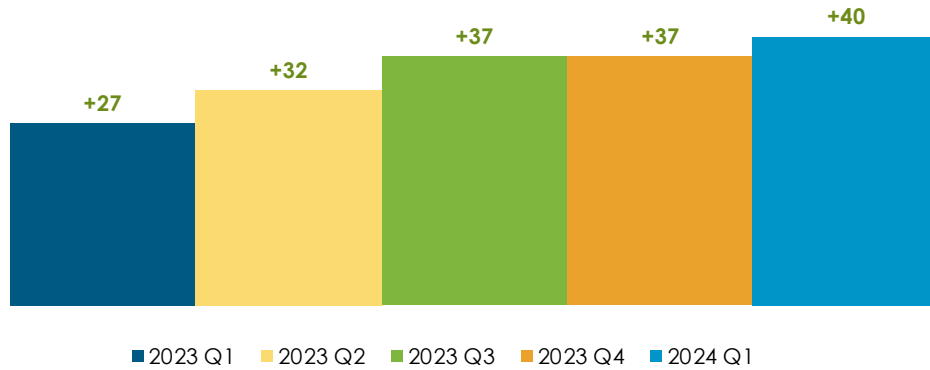


Figure 16: Backlog 12 Months from Now - Net Rating Trend



- Backlog sentiment for one year from now increased for most segments compared to last quarter and one year ago.

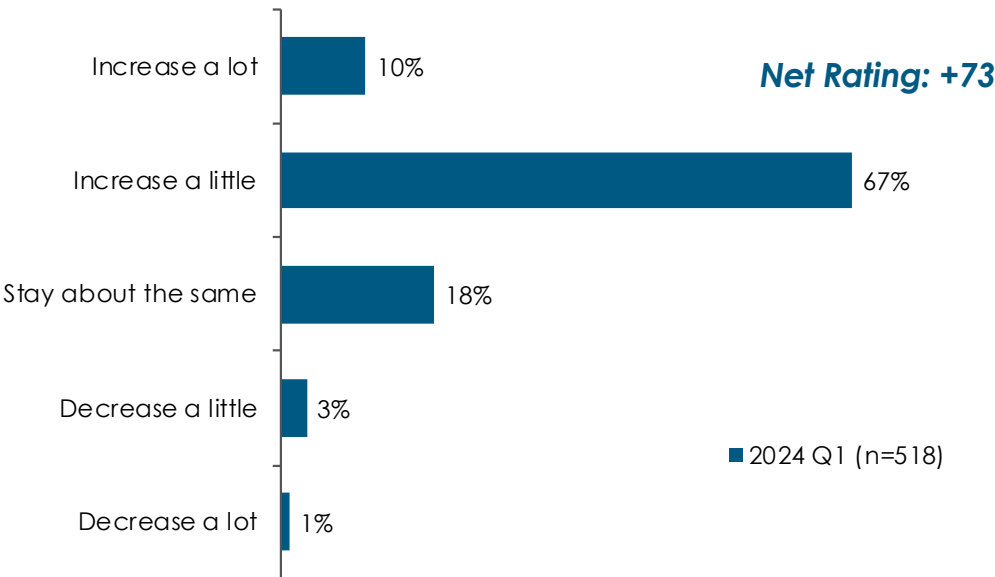
Figure 17: Backlog 12 Months from Now vs. Previous Quarters - By Region and Firm Size

Backlog	2023 Q1 (n=522)	2023 Q2 (n=578)	2023 Q3 (n=519)	2023 Q4 (n=485)	2024 Q1 (n=525)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	+27	+32	+36	+37	+40	+3	+13
REGION							
Northeast	+61	+39	+48	+45	+61	+16	0
South	+21	+32	+32	+36	+31	-5	+10
Midwest	+39	+33	+42	+37	+35	-2	-4
West	+2	+26	+28	+32	+42	+10	+40
FIRM SIZE							
1-25	+7	+11	+27	+29	+22	-7	+15
26-50	+13	+21	+20	+17	+19	+2	+6
51-200	+32	+40	+34	+40	+49	+9	+17
201-500	+33	+51	+50	+49	+54	+5	+21
More than 500	+56	+45	+58	+57	+56	-1	0

Future Hiring Projections

- 77% predict there will be an increase in hiring over the next 12 months at their firms, resulting in a Net Rating of +73.

Figure 18: Hiring Over the Next 12 Months



- Overall future hiring sentiment increased five points from last quarter and eight points from last year at this time.
- The Northeast is the most optimistic, with a Net Rating of +85.
- Firms with 500+ FTEs (+87) 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

Status of Hiring	2023 Q1 (n=514)	2023 Q2 (n=569)	2023 Q3 (n=508)	2023 Q4 (n=478)	2024 Q1 (n=518)	Change vs. Previous Quarter	Change vs. Previous Year
TOTAL	+65	+67	+66	+68	+73	+5	+8
REGION							
Northeast	+83	+73	+77	+72	+85	+13	+2
South	+54	+60	+60	+67	+68	+1	+14
Midwest	+77	+73	+74	+68	+75	+7	-2
West	+50	+63	+60	+68	+72	+4	+22
FIRM SIZE							
1-25	+37	+42	+51	+57	+54	-3	+17
26-50	+62	+65	+66	+57	+71	+14	+9
51-200	+77	+73	+63	+68	+78	+10	+1
201-500	+70	+83	+81	+76	+83	+7	+13
More than 500	+81	+81	+88	+92	+87	-5	+6

Current Open Positions

- Eighty-nine percent of firms have at least one opening, a slight increase over last quarter. The median number of open positions increased to five (up from four).
- On average, 9% of positions remain unfilled, which is the same as last quarter.
- Firms with 25 or fewer FTE have a much higher percentage of openings (15%).

Figure 20: Current Open Positions vs. Previous Quarters

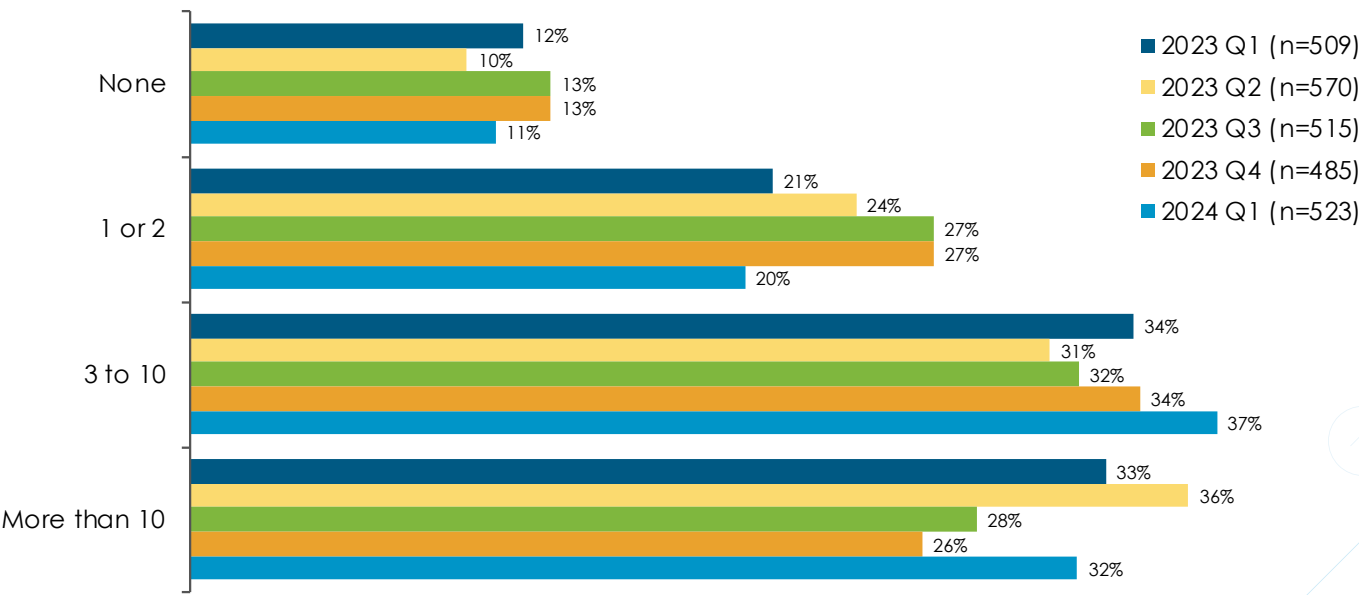


Figure 21: Open Positions as Percentage of Overall FTEs vs. Previous Quarters

Open Positions	2023 Q2 (n=570)	2023 Q3 (n=515)	2023 Q4 (n=485)	2024 Q1 (n=523)	Change vs. Previous Quarter
TOTAL	10%	9%	9%	9%	0
REGION					
Northeast	8%	7%	10%	7%	-3
South	10%	9%	9%	8%	-1
Midwest	10%	9%	10%	12%	+2
West	10%	10%	9%	8%	-1
FIRM SIZE					
1-25	16%	15%	15%	15%	0
26-50	8%	6%	8%	8%	0
51-200	7%	6%	6%	7%	+1
201-500	8%	7%	7%	7%	0
More than 500	7%	6%	7%	6%	-1

Inflation

- Concern over the impact of inflation declined significantly from the previous quarter (the Net Rating fell from +62 to +39) but it remains elevated. Sixty-two percent at least somewhat agree that they are extremely concerned about the impact of inflation.

Figure 22: Inflation Concerns

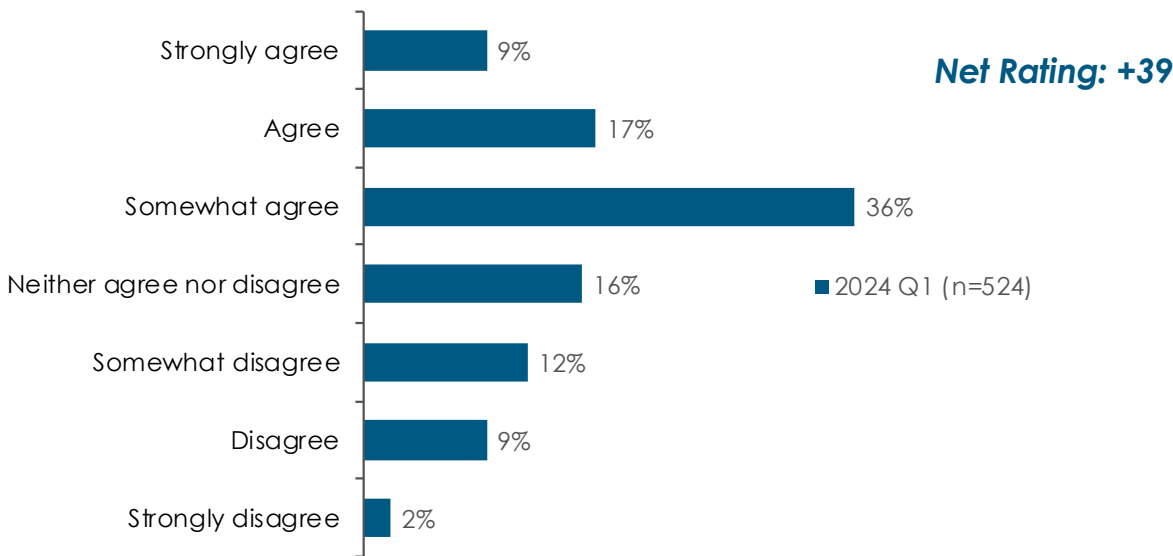
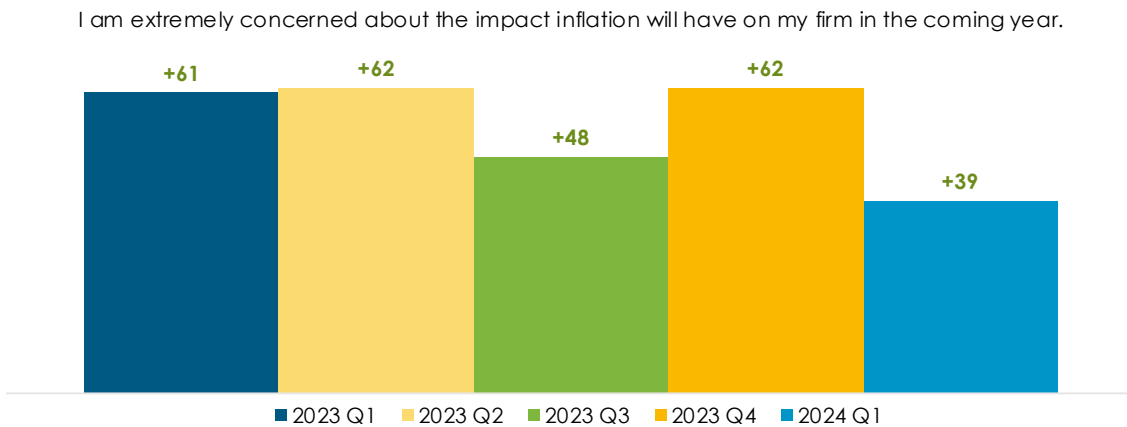


Figure 23: Inflation Concerns vs. Previous Quarters



Likelihood of Recession in Next 6 Months

- Leaders anticipate the likelihood of recession in the next six months to be 41% a decline of eight points since last quarter.

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

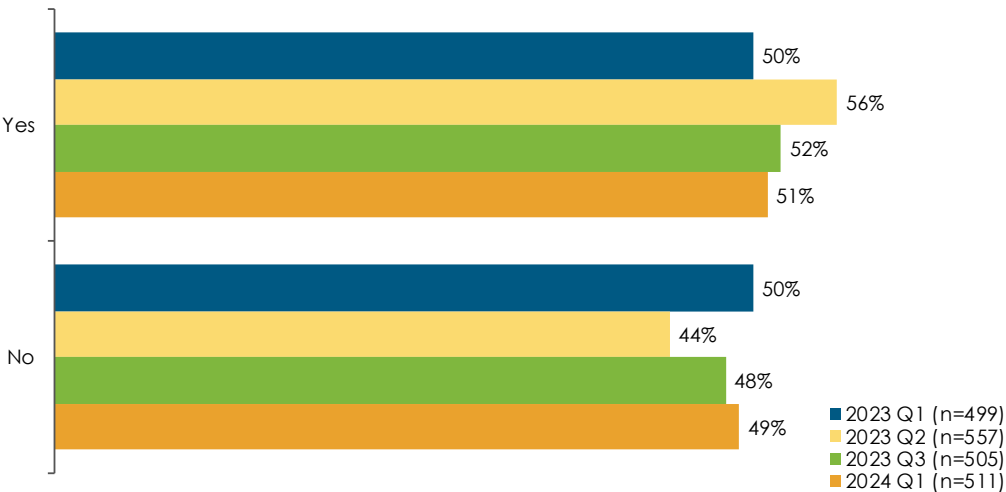
Likelihood of Recession	2023 Q3 Average (n=518)	2023 Q4 Average (n=473)	2024 Q1 Average (n=508)	Change vs. Previous Quarter
TOTAL	46%	49%	41%	-8
REGION				
Northeast	43%	46%	38%	-8
South	48%	51%	41%	-10
Midwest	44%	49%	42%	-7
West	48%	48%	43%	-5
FIRM SIZE				
1-25	50%	53%	46%	-7
26-50	48%	51%	40%	-11
51-200	46%	47%	42%	-5
201-500	42%	47%	37%	-10
More than 500	42%	45%	38%	-7

HOT TOPICS

Workforce Shortage

- In the past three months, over half of firms (51%) continue to turn down work due to workforce shortages, similar to one year ago.
- The workforce shortage is having the least impact in the South, where only 40% have turned down work.

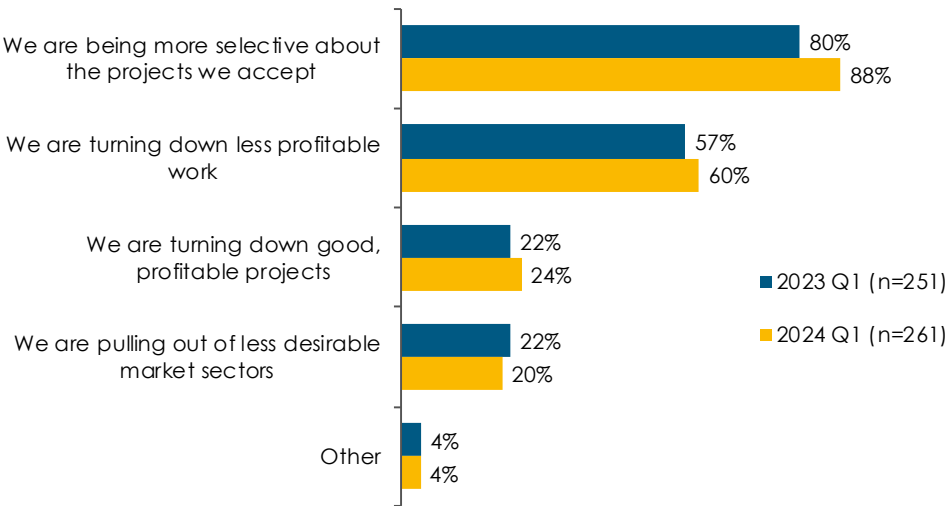
Figure 25: Turned Down Work Due to Workforce Shortage



Work Turned Down

- Among firms turning down work, most (88%) are being more selective about the projects they are accepting, up from 80% a year ago at this time.
- 60% of firms also indicated that they are turning down less profitable work, slightly more than last year at this time.
- Still, nearly one-fourth of firms (24%) are turning down good, profitable projects.

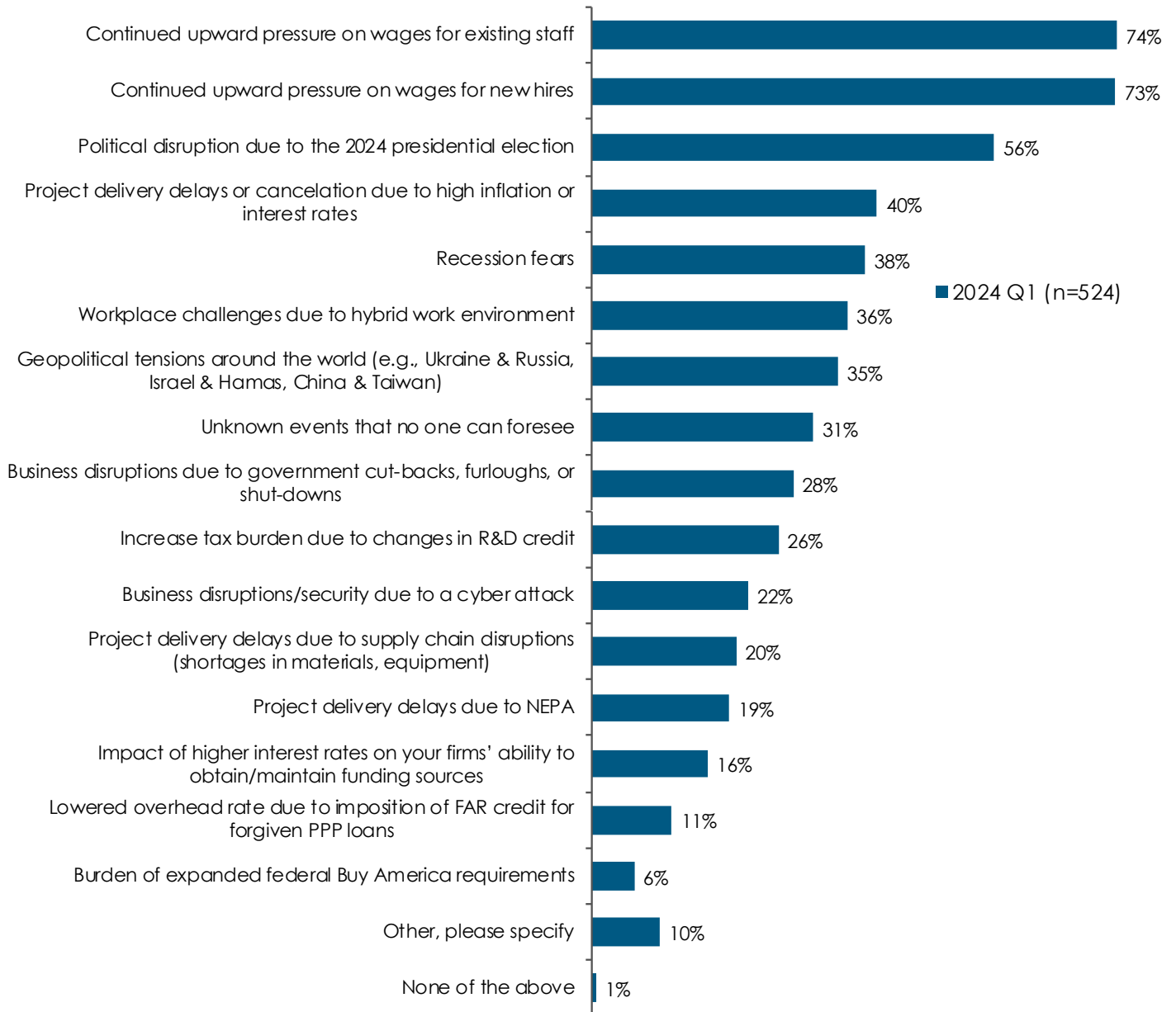
Figure 26: Types of Work Turned Down



Biggest Concerns

- Wage inflation is the biggest single concern among firm executives as they head into 2024. Political disruption from the 2024 presidential election follows.
- The top three concerns are the same among all firm sizes and firm locations.

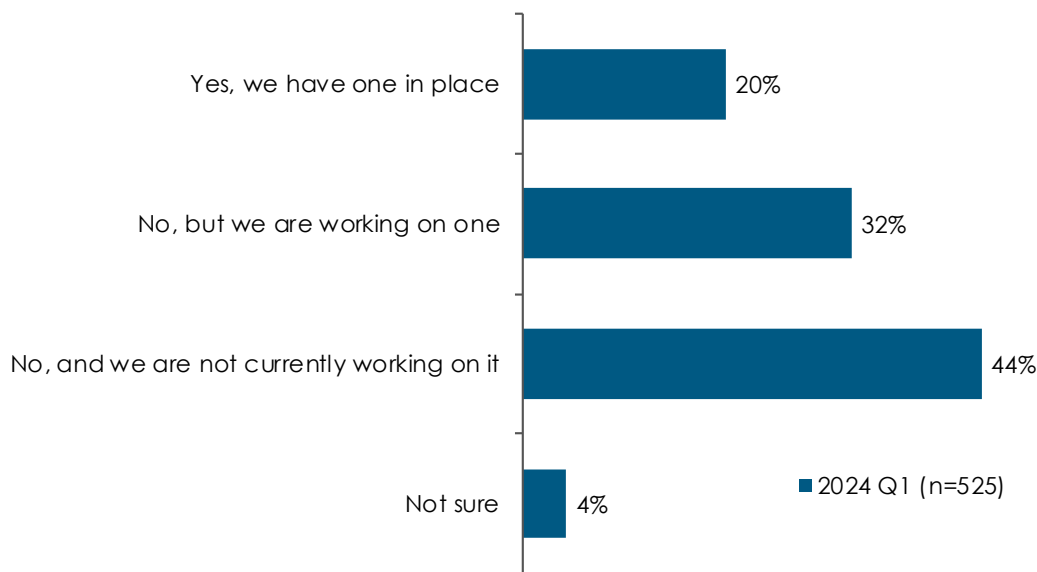
Figure 27: Biggest Concerns



Artificial Intelligence

- Half (52%) of firms have an AI strategy in place or are working on one.

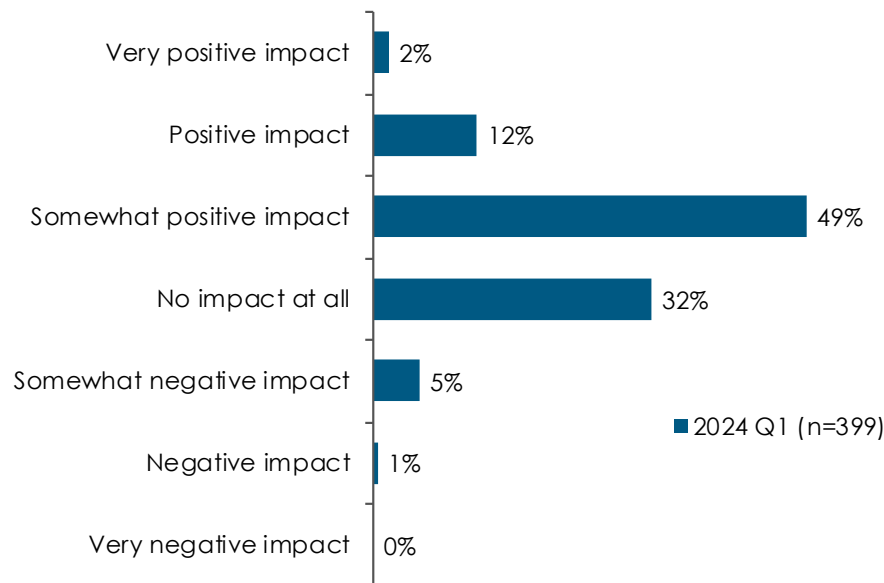
Figure 28: Artificial Intelligence (AI) Strategy



Impact of Artificial Intelligence

- 63% of firms believe that AI will have a positive impact on their firm in the coming year.

Figure 29: Impact of Artificial Intelligence (AI)



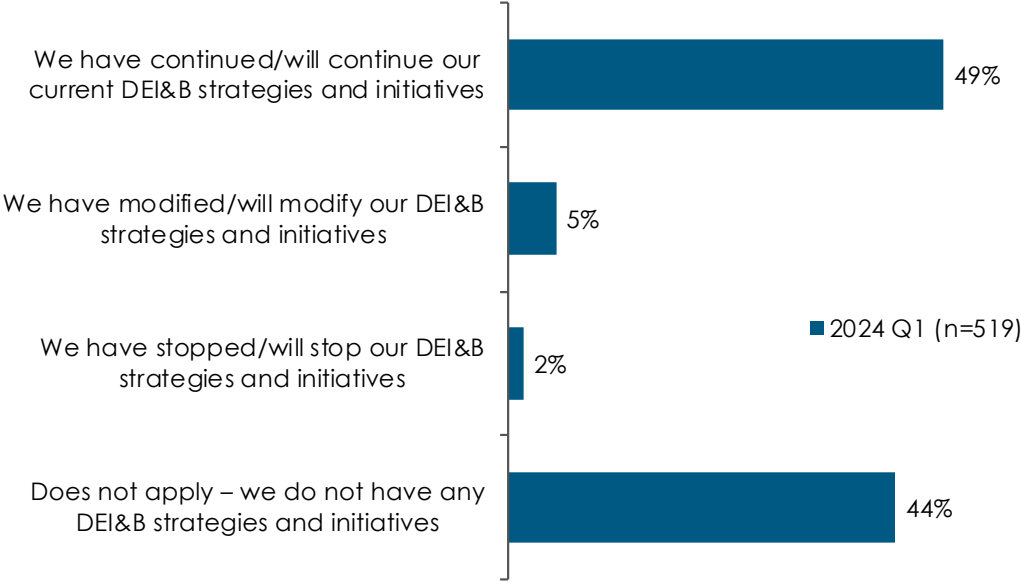
DEI&B Strategies

On June 29, 2023, the U.S. Supreme Court issued a long-awaited decision addressing the legality of race-conscious affirmative action in college admissions programs in *Students for Fair Admissions, Inc. (SFFA) v. President & Fellows of Harvard College (Harvard)* and *SFFA v. University of North Carolina (UNC)*.

In a 6–3 ruling, the Court held that Harvard and UNC’s admissions programs, which account for race at various stages in the process, violate the Equal Protection Clause of the Fourteenth Amendment to the U.S. Constitution (the UNC/Harvard decision).

- Nearly half (49%) of firms have continued their DEI&B initiatives, while only 7% were affected by the Supreme Court’s ruling.

Figure 30: Impact of Supreme Court Ruling on DEI&B



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 January 16 and January 30, 2024.

A total of 9,289 invitations were emailed, although 1,978 bounced and 214 opted out, resulting in a total of 7,097 potential respondents. Individuals who did not respond to the first email were sent three follow-up reminders.

In all, 571 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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