

ENGINEERING BUSINESS SENTIMENT

2022 Q3

AUGUST 2022

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EXECUTIVE SUMMARY

Current Business Conditions

- Continuing a downward slide begun last year, sentiment regarding the U.S. Economy has fallen significantly over the past three months. The Net Rating fell 28 points from 2022 Q2 and currently stands at -15, indicating overall pessimism.
- Current *industry* sentiment remains extremely optimistic and is holding steady. The Net Rating for firms' overall finances is a very strong +84 (same as Q2) and +80 (same as Q2) for the engineering and design services industry.
- Current sentiment remains optimistic within all market sectors, although most have experienced some decline in the past quarter.
- The median firm backlog has increased to 12 months (from 11 months in 2022 Q2).

Future Business Conditions

- Future sentiment (looking 12 months ahead) continued to decline compared to last quarter, continuing a dramatic downturn first noted in Q2. Future sentiment for the U.S. economy (-40) fell 8 points and is solidly in negative territory. Future sentiment remains positive for firms' finances (Net Rating +29) but has declined 4 points. Future sentiment for the industry has declined 5 points and stands at +11.
- Future sentiment has declined across most industry sectors.
- Forty-six percent of respondents believe their firms will see an increase in backlog of projects over the next year, down from 54% last quarter.
- Sixty-five percent of respondents predict there will be an increase in hiring over the next 12 months at their firms, down from 73% last quarter and a high of about 80% in Q1.

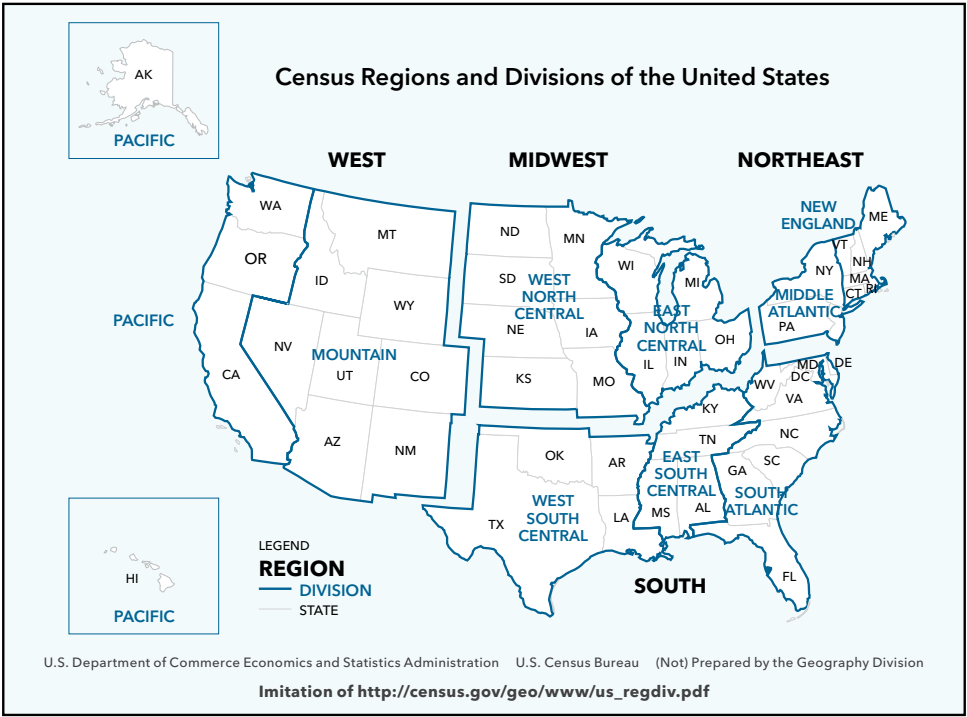
Hot Topics

- Eighty-eight percent of respondents currently indicate their organization has at least one opening, down two points from last quarter (90%). The median number of open positions decreased to five, down from six last quarter.
- Firms are facing a double-whammy when it comes to their workforce. Seventy-eight percent of firms are adding new positions and 60% are filling vacancies.
- Concern about inflation remains extremely high, however, it has subsided somewhat from last quarter. The Net Rating declined from +85 to +71.
- Underscoring the impact of a tight labor market, in the past three months, a majority of firms (52%) have turned down work due to workforce shortages.

DEMOGRAPHICS

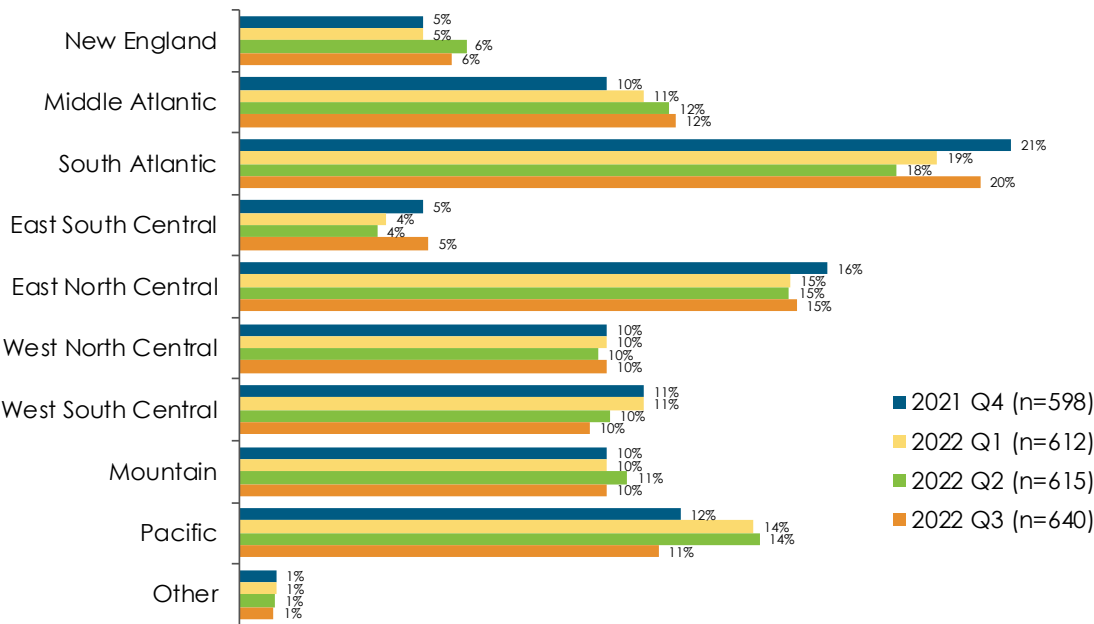
- For reference, the ACEC Research Institute uses the U.S. Census Bureau definition of geographic regions seen in Figure 1 below.

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



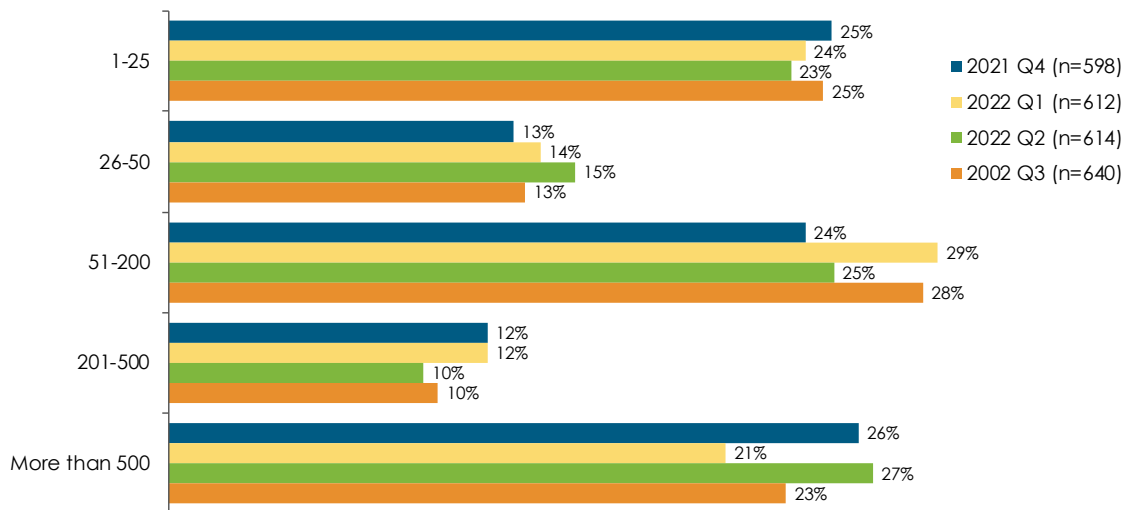
- Respondents' firms are widely dispersed around the United States. A few respondents (Other) indicate their firm is headquartered outside the U.S. These results are statistically similar to respondents last quarter (2022 Q2).

Figure 2: Location of Organization Headquarters



- Respondents represent a wide range of firm sizes. While one-fourth of respondents represent firms with 25 or fewer full-time equivalents (FTEs), another 23% represent firms with more than 500 FTEs. The median firm size is 88 FTEs, statistically similar to 91 last quarter.

Figure 3: Number of Full-Time Equivalents at Firm



CURRENT BUSINESS CONDITIONS

Current U.S. Economy, Industry and Firm Sentiment

- Sentiment regarding the U.S. Economy has fallen significantly over the past three months. The Net Rating fell 28 points from 2022 Q2 and currently stands at -15.
- The current *industry* sentiment remains very optimistic and is holding steady despite overall pessimism in the U.S. Economy. The Net Rating for firms' overall finances remains a very strong +84 (same as Q2) and +80 (same as Q2) for the engineering and design services industry.
- Firms between 201 to 500 employees are the most positive about their firm's finances (+93 Net Rating).

Figure 4: Current Economic Sentiment

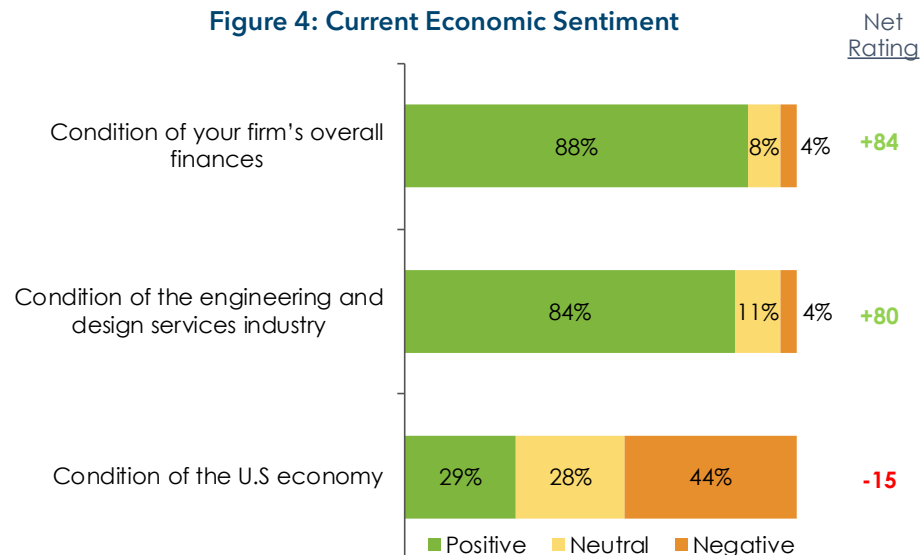
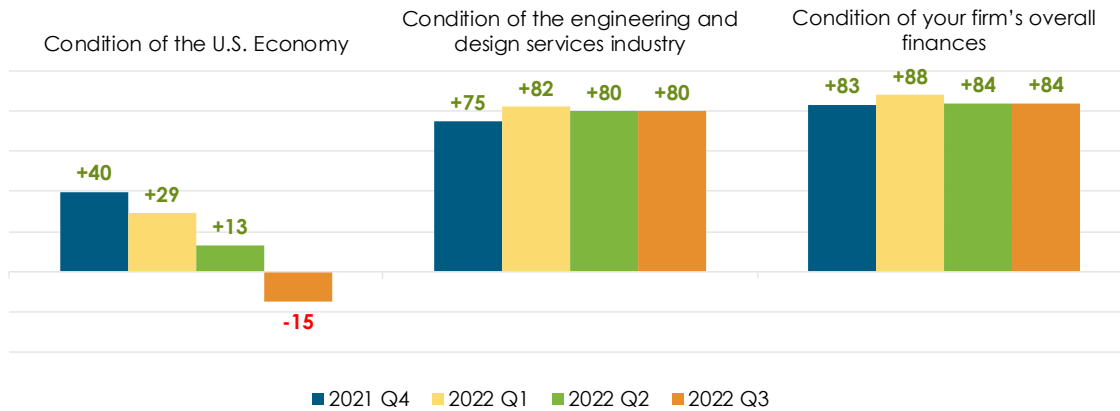


Figure 5: Current Economic Sentiment vs. Previous Quarters



- All segments are feeling much more negative than last quarter about the state of 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	2021 Q4 (n=591)	2022 Q1 (n=600)	2022 Q2 (n=609)	2022 Q3 (n=634)	Change vs. Previous Quarter
TOTAL	+40	+29	+13	-15	-28
REGION					
Northeast	+32	+32	+22	-19	-41
South	+40	+29	+13	-23	-36
Midwest	+50	+32	+13	-8	-21
West	+32	+27	+8	-9	-17
FIRM SIZE					
1-25	+19	+27	-1	-22	-21
26-50	+55	+22	+17	-10	-27
51-200	+42	+30	+10	-16	-26
201-500	+53	+36	+19	-22	-41
More than 500	+45	+34	+25	-7	-32

Current Industry Sector Sentiment

- Current sentiment remains very optimistic within all market sectors. All but three experienced some decline in the past quarter. Sentiment is strongest in the Roads and Bridges (Net Rating +77) and Water/Wastewater (+76) sectors.
- The Convention Centers (+43 Net Rating) and the Justice (+33) sectors are performing relatively less well, but sentiment is still good.

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

	2021 Q4 (n = 215-424)	2022 Q1 (n = 192-446)	2022 Q2 (n = 200-464)	2022 Q3 (n = 196-473)	Change vs. Prev. Qtr.
Transportation – Transit	+54	+59	+65	+68	+3
Transportation – Roads and Bridges	+63	+67	+76	+77	+1
Federal/Military, State and Local Government Buildings	+63	+62	+63	+63	0
Water/Wastewater	+77	+77	+77	+76	-1
Healthcare Facilities	+73	+75	+73	+72	-1
Transportation – Airports	+59	+68	+73	+72	-1
Data Centers	+77	+74	+71	+70	-1
Industrial and Manufacturing Facilities	+65	+69	+68	+66	-2
Justice	+39	+39	+37	+33	-4
Education	+59	+55	+56	+52	-4
Telecommunications	+65	+69	+64	+59	-5
Energy and Utilities	+67	+72	+73	+67	-6
Convention Centers, Sports Facilities and Cultural Facilities	+40	+42	+51	+43	-8
Science and Technology	+66	+73	+73	+64	-9
Commercial Real Estate	+46	+53	+59	+44	-15
Residential – Land Development	+65	+72	+68	+50	-18

Current Backlog

- The median firm backlog has increased to 12 months (from 11 months in 2022 Q2). In addition, 51% indicate that their firm has a current backlog of one year or more.
- The current median backlog has not changed significantly across the segments.

Figure 8: Current Backlog

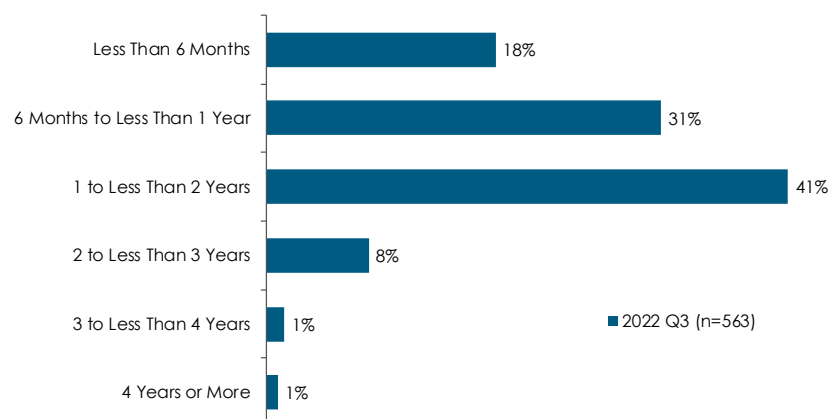


Figure 9: Current Backlog vs. Previous Quarters - By Region and Firm Size

	2021 Q4 (n=512)	2022 Q1 (n=534)	2022 Q2 (n=542)	2022 Q3 (n=563)	Change vs. Previous Quarter
TOTAL	10	10	11	12	+1
REGION					
Northeast	12	12	12	12	0
South	9	9	10	10	0
Midwest	10	12	11	12	+1
West	10	9	10	9	-1
FIRM SIZE					
1-25	6	6	6	6	0
26-50	9	10	9	10	+1
51-200	10	11	12	12	0
201-500	10	12	12	12	0
More than 500	12	12	13	14	+1

FUTURE BUSINESS CONDITIONS

Future U.S. Economy, Industry and Firm Sentiment

- Future sentiment overall (looking 12 months ahead) declined again compared to last quarter, continuing a dramatic downturn first noted in Q2. Future sentiment for the U.S. economy (-40) fell 8 points and is solidly in negative territory.
- Future sentiment remains positive for firms' finances (Net Rating +29) but has declined 4 points. Future sentiment for the industry has declined 5 points and stands at +11.

Figure 10: Economic Sentiment 12 Months from Now

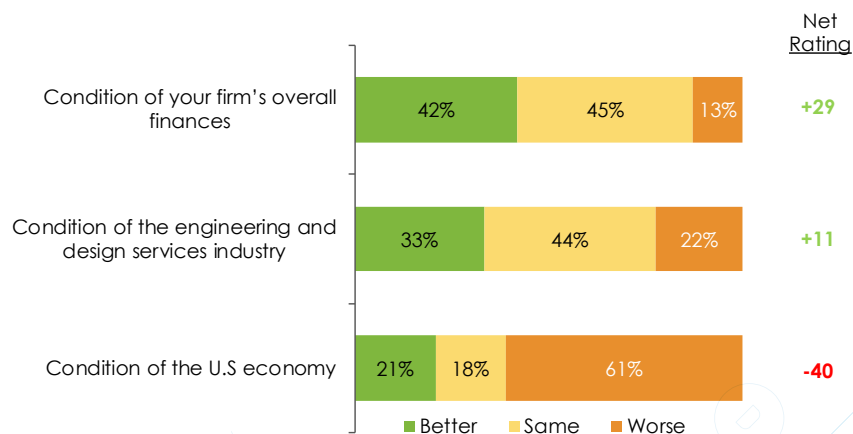
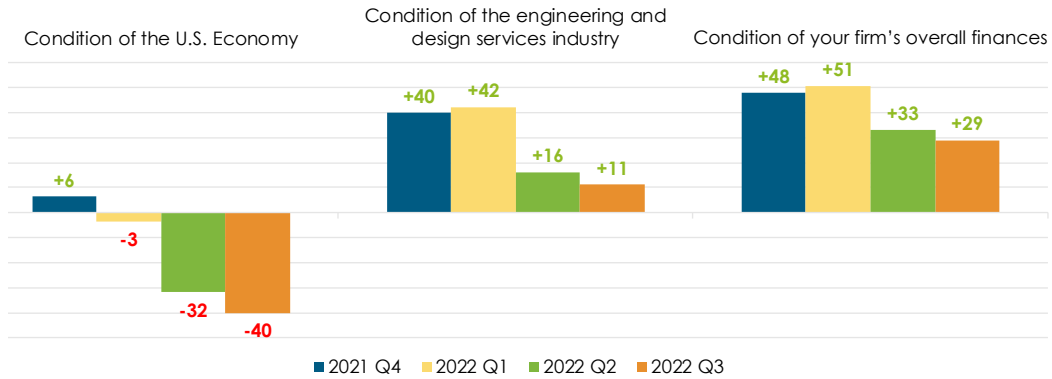


Figure 11: Economic Sentiment 12 Months from Now vs. Previous Quarters



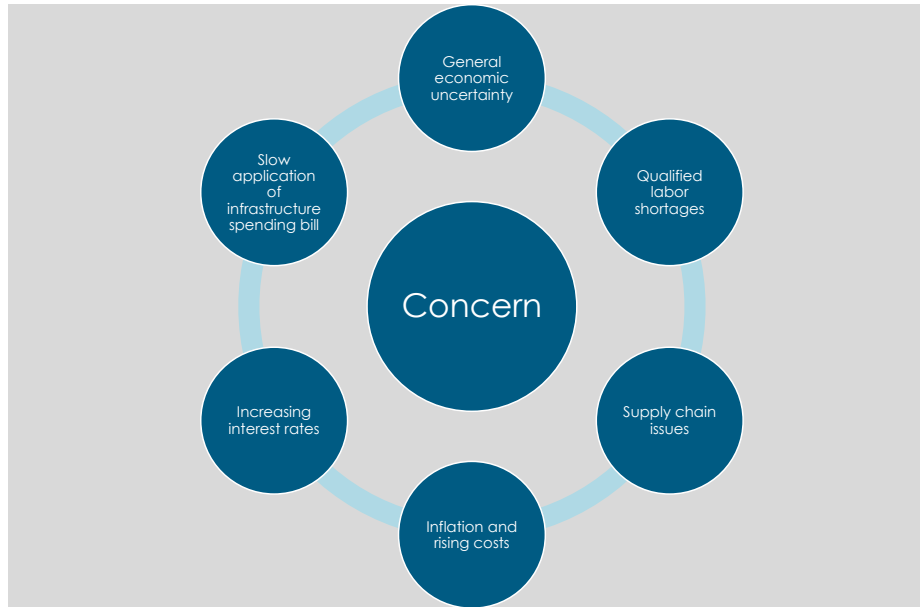
- Future sentiment about the firms' overall finances is generally less positive than last quarter.

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	2021 Q4 (n=468)	2022 Q1 (n=504)	2022 Q2 (n=511)	2022 Q3 (n=561)	Change vs. Previous Quarter
TOTAL	+48	+51	+33	+29	-4
REGION					
Northeast	+61	+57	+38	+29	-9
South	+52	+52	+33	+32	-1
Midwest	+61	+53	+33	+29	-4
West	+18	+41	+30	+22	-8
FIRM SIZE					
1-25	+28	+35	+12	+13	+1
26-50	+45	+56	+26	+19	-7
51-200	+51	+51	+39	+28	-11
201-500	+54	+54	+29	+40	+11
More than 500	+66	+65	+53	+52	-1

Reasons for Economic Sentiment 12 Months from Now

Figure 13: Reasons for Economic Sentiment 12 Months from Now



Future Industry Sector Sentiment

- Future sentiment remains optimistic in most, but not all, sectors including Transportation sectors (Net Ratings +38 to +55), Water/Wastewater (+37), and Energy and Utilities (+33).
- Future sentiment is decidedly negative in the Commercial Real Estate (Net Rating -37) and Residential Land Development (-43).
- Most sectors have seen a decline since last quarter.

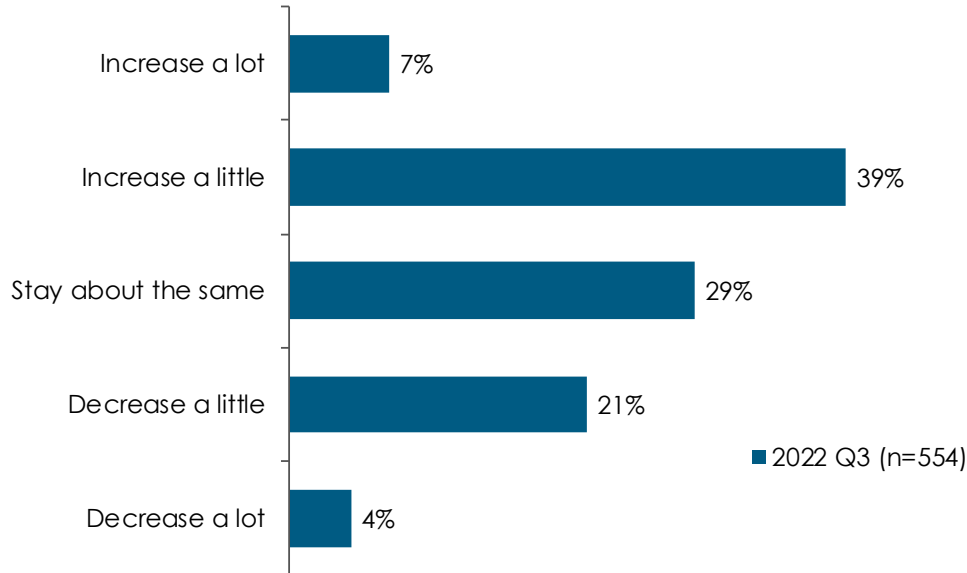
Figure 14: Economic Sentiment by Sector 12 Months from Now vs. Previous Quarters

	2021 Q4 (n = 208-366)	2022 Q1 (n = 205-400)	2022 Q2 (n = 202-411)	2022 Q3 (n=215-460)	Change vs. Previous Quarter
Federal/Military, State and Local Government Buildings	+36	+34	+27	+28	+1
Telecommunications	+43	+36	+28	+29	+1
Transportation – Roads and Bridges	+69	+67	+55	+55	0
Transportation – Transit	+60	+55	+46	+46	0
Data Centers	+32	+30	+21	+20	-1
Healthcare Facilities	+37	+41	+18	+17	-1
Justice	+1	+1	-4	-6	-2
Science and Technology	+31	+32	+21	+17	-4
Energy and Utilities	+55	+49	+39	+33	-6
Education	+23	+21	+8	+2	-6
Transportation – Airports	+53	+53	+45	+38	-7
Water/Wastewater	+56	+59	+45	+37	-8
Industrial and Manufacturing Facilities	+26	+34	+15	+4	-11
Convention Centers, Sports Facilities and Cultural Facilities	0	-5	-10	-26	-16
Commercial Real Estate	+10	+13	-11	-37	-26
Residential – Land Development	+18	+14	-12	-43	-31

Future Backlog

- Forty-six percent believe their firms will see an increase in backlog of projects over the next year, down from 54% last quarter. The Net Rating also decreased from +36 to +21.

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



- Firms in the West have the lowest future backlog Net Rating (+6).
- Firms with 25 employees or fewer have the lowest future backlog Net Rating (+1) compared to other firm sizes.
- All but one segment, firms with 201-500 FTEs, expect to see less of an increase in future backlog compared to three months ago.

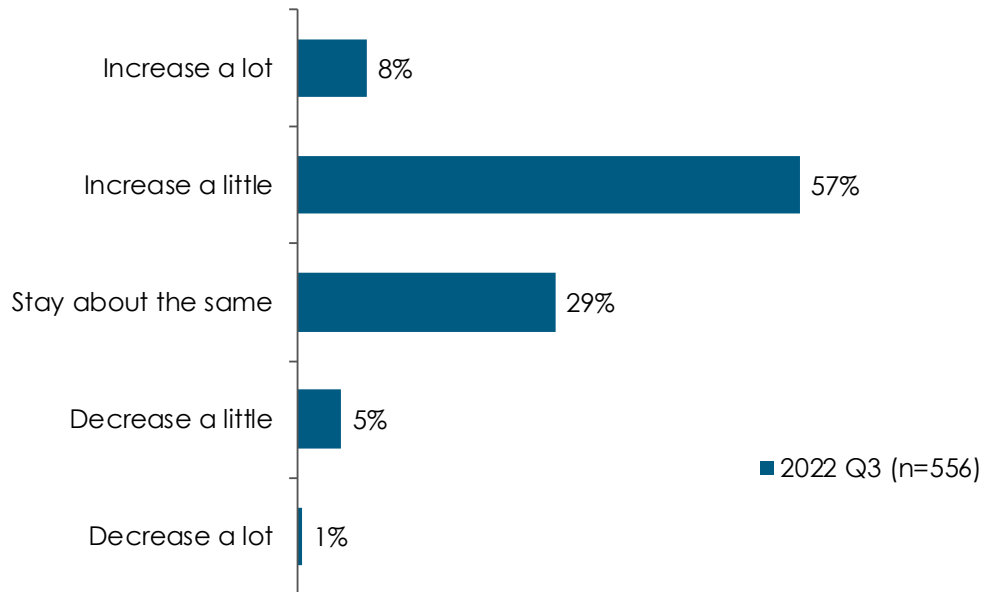
Figure 16: Backlog 12 Months from Now vs. Previous Quarters - By Region and Firm Size

	2021 Q4 (n=465)	2022 Q1 (n=504)	2022 Q2 (n=507)	2022 Q3 (n=554)	Change vs. Previous Quarter
TOTAL	+53	+56	+36	+21	-15
REGION					
Northeast	+69	+68	+46	+40	-6
South	+55	+55	+35	+21	-14
Midwest	+60	+64	+36	+23	-13
West	+33	+41	+31	+6	-25
FIRM SIZE					
1-25	+27	+30	+11	+1	-10
26-50	+47	+52	+16	+9	-7
51-200	+55	+60	+37	+24	-13
201-500	+77	+76	+41	+43	+2
More than 500	+75	+70	+70	+36	-34

Future Hiring Projections

- Sixty-five percent of respondents predict there will be an increase in hiring over the next 12 months at their firms, down from 73% last quarter.

Figure 17: Hiring Over the Next 12 Months vs. Last Quarter



- The Northeast is most optimistic about an increase in employment (Net Rating +71), while the West is the least optimistic at +49.
- Firms with 25 employees or fewer are less optimistic about an increase in employment (+42) compared to other firms.
- Compared to last quarter, all segments are less likely to indicate that FTEs will increase over the next year.

Figure 18: Expectations for Hiring Increases Over the Next 12 Months vs Previous Quarters - By Region and Firm Size

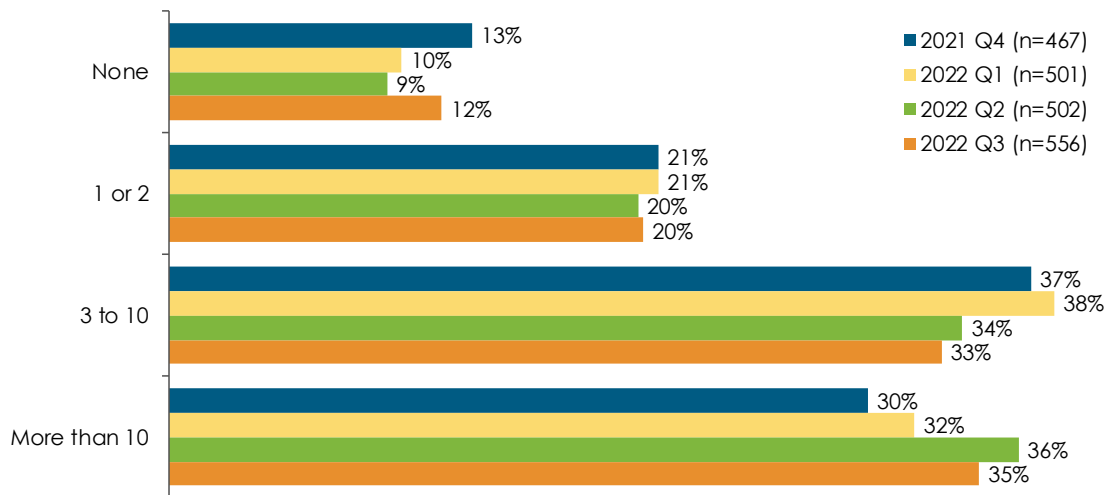
	2021 Q4 (n=457)	2022 Q1 (n=493)	2022 Q2 (n=495)	2022 Q3 (n=556)	Change vs. Previous Quarter
TOTAL	+70	+78	+69	+59	-10
REGION					
Northeast	+78	+80	+75	+71	-4
South	+70	+76	+67	+56	-11
Midwest	+76	+85	+73	+67	-6
West	+58	+71	+61	+49	-12
FIRM SIZE					
1-25	+49	+56	+38	+42	+4
26-50	+69	+79	+62	+46	-16
51-200	+71	+80	+77	+68	-9
201-500	+84	+88	+78	+69	-9
More than 500	+86	+95	+89	+75	-14

HOT TOPICS

Current Open Positions

- Eighty-eight percent of respondents currently indicate their organization has at least one staff opening, down two points from 90% last quarter. The median number of open positions decreased to five, down from six last quarter.
- The largest firms (more than 500 employees) now have a median of 100 open positions, up from 97 last quarter, as well as the largest growth of any segment in the past quarter.

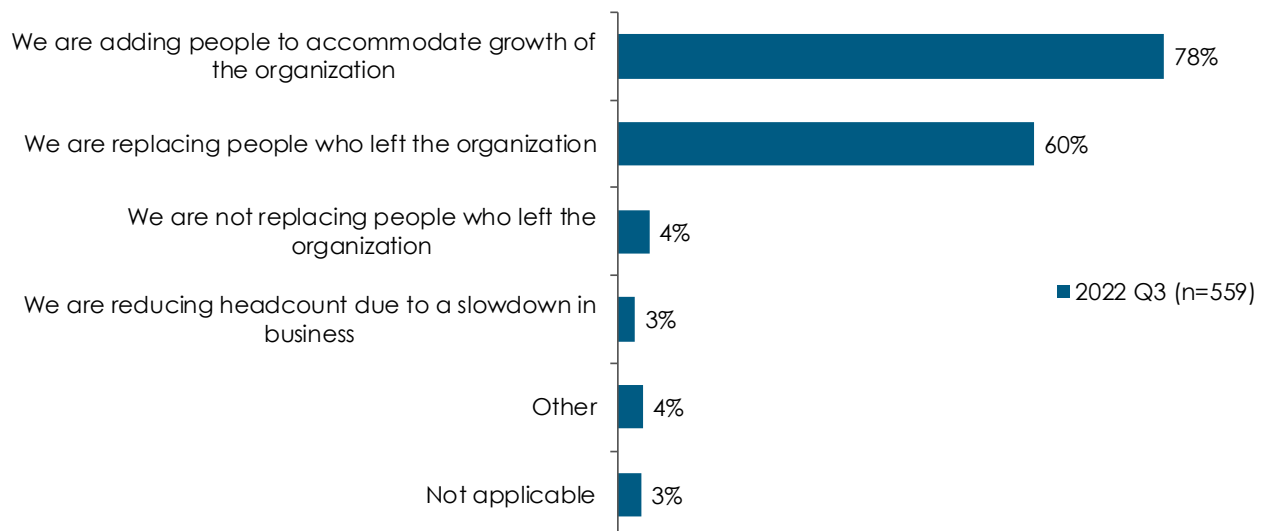
Figure 19: Current Open Positions vs. Previous Quarters



Hiring Trends

- A majority of firms are hiring. Seventy-eight percent of firms are adding new positions and 60% are filling vacancies (47% are doing both).

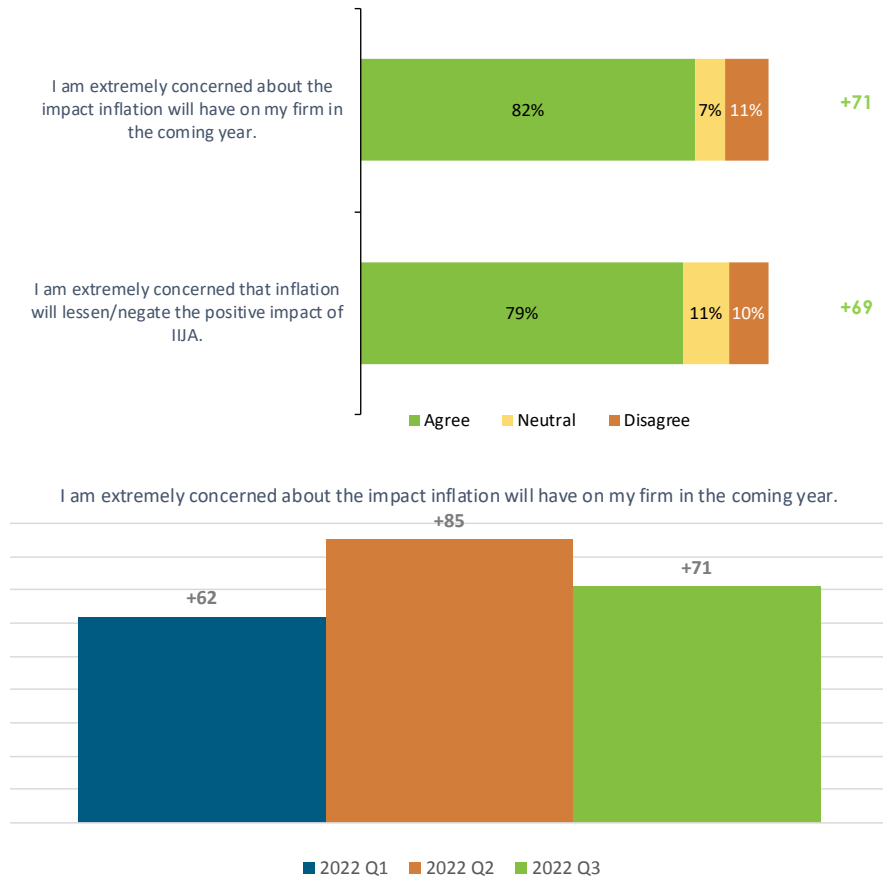
Figure 20: Hiring Trends



Inflation

- Respondents are still very concerned about the impact inflation will have on their firm in the coming year (82% agree). However, respondents are a little less concerned about inflation this quarter (Net Rating +71), than they were last quarter (+85).
- Respondents are also concerned that inflation will lessen/negate the positive impact of IIJA (79% agree).

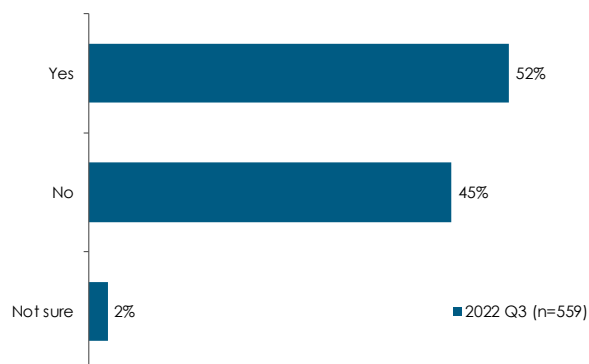
Figure 21: Inflation Concern



Workforce Shortage

- In the past three months, a majority of firms (52%) have turned down work due to workforce shortages.
- At 61%, firms in the West are most likely to have turned down work. Firms in the South are least likely to have turned down work (47%).

Figure 22: Workforce Shortages



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 11 and July 25, 2022.

A total of 11,195 invitations were emailed, although 1,939 bounced and 45 opted-out, resulting in a total of 9,211 potential respondents. Individuals who did not respond to the first email were sent one follow-up reminder, and a final reminder email was sent to the remaining non-respondents.

In all, 640 individuals completed the survey for an overall response rate of 7%.

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

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