

ENGINEERING BUSINESS SENTIMENT

2022 Q1

FEBRUARY 2022

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EXECUTIVE SUMMARY

Current Business Conditions

- Current sentiment in the engineering and design services industry is extremely optimistic. The Net Rating for the firm's overall finances is a staggering +88 and +82 for the engineering industry. Both metrics improved significantly compared to last quarter (2021 Q4).
- The Net Rating for the U.S. Economy is much lower, although still positive, at +29 and represents a significant decline from +40 last quarter.
- Current sentiment remains strongly optimistic within all market sectors.
- The median firm backlog stands unchanged at 10 months.

Future Business Conditions

- Future sentiment is very optimistic for the firm's finances (Net Rating +51) and for the industry (+42), but very weak for the U.S. Economy (-3).
- Future sentiment increased slightly for firms and the industry but fell by 9 points for the U.S. Economy revealing continued concern about the economy at large.
- Sixty-six percent of respondents believe their firms will see an increase in backlog of projects over the next year, up slightly from 64% last quarter.
- Eighty percent of respondents predict there will be an increase in hiring over the next 12 months at their firms, up from 74% last quarter.

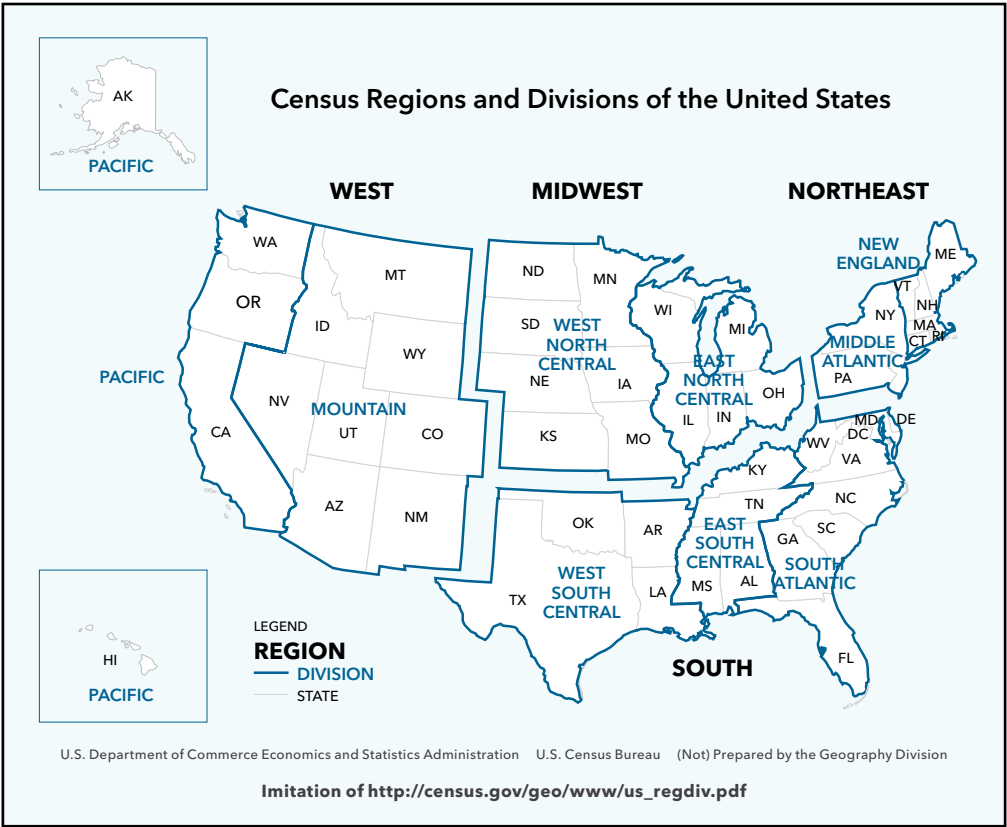
Hot Button Issues

- Ninety percent of respondents currently indicate their organization has at least one opening, an increase from 87% last quarter.
- Respondents are very concerned about inflation (73% agree), and while they believe the Infrastructure Investment and Jobs Act (IIJA) will provide opportunities for their firms (62%), they are less likely to believe it will lead to profitability for their firms (39%).
- Ninety percent of respondents say that the average salary at their firm increased in the past year.
- The "average firm" salary increased five percent over the past year, although 14% of firms report average increases of 10% or more.

DEMOGRAPHICS

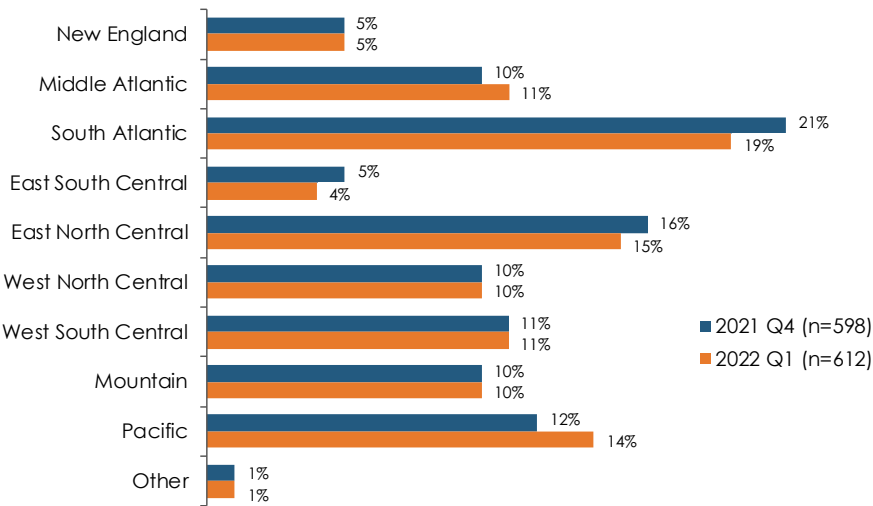
For reference, the ACEC Research Institute uses the U.S. Census Bureau definition of geographic regions seen in the below image.

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



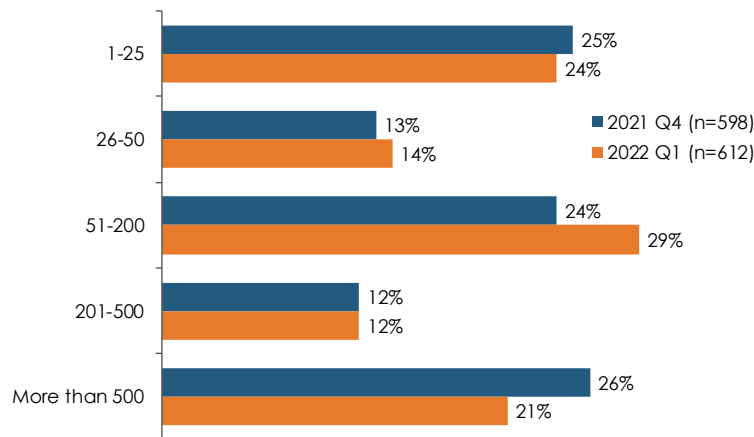
Respondents' firms are widely dispersed around the United States. A few respondents (Other) indicate their firm is headquartered outside the U.S. These results are statistically similar to respondents last quarter (2021 Q4).

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 21% represent firms with more than 500 FTEs. The median firm size is 90 FTEs, down from 99 last quarter due to fewer firms with 500+ FTEs responding this quarter.

Figure 3: Number of Full-Time Equivalents at Firm



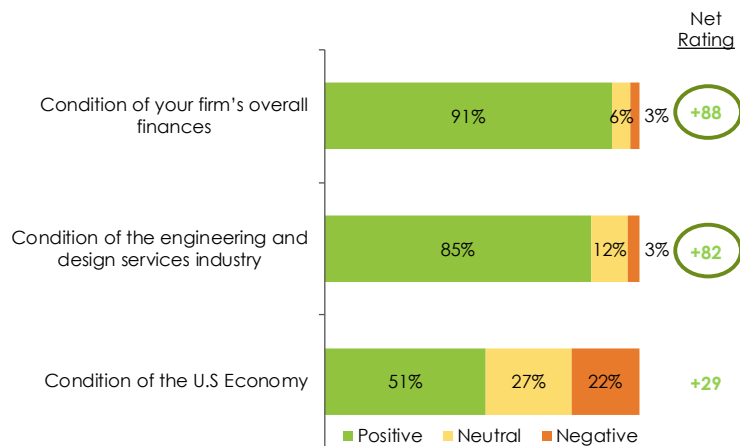
CURRENT BUSINESS CONDITIONS

Current U.S. Economy, Industry and Firm Sentiment

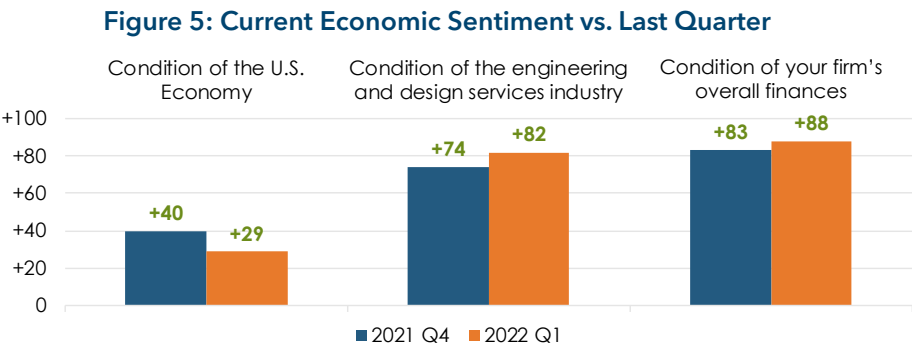
Current sentiment is extremely optimistic. The Net Rating for the firm’s overall finances is a staggering +88 and +82 for the engineering and design services industry. Although the Net Rating for the U.S. Economy is much lower at +29, it is still very good.

- Firms with more than 500 employees are the most positive about their firm’s finances (+98 Net Rating).
- Respondents in the Northeast are the least positive about the industry (+74) compared to all other regions (+78 to +86).
- Unlike last quarter, there is not much difference among the regions about the U.S. Economy (+28 to +32).

Figure 4: Current Economic Sentiment



While sentiment for the industry and the firm’s finances improved relative to last quarter, optimism about the U.S. economy has dipped 11 points.



Most segments express more optimism about the condition of their firm’s finances than they did three months ago, especially firms with 25 or fewer FTEs whose sentiment was lagging last quarter.

Sentiment regarding the condition of their firm’s finances improved significantly in the South and Midwest compared to last quarter. This is particularly good news in the South since it was lagging other regions previously.

In addition, sentiment improved in all areas among firms with 25 or fewer FTEs. These smaller firms saw the largest negative impact from the pandemic-induced recession, according to previous ACEC Research Institute surveys, and still lag larger firms. However, the gap is closing, indicating recovery among smaller firms.

Figure 6: Current Condition of Firm’s Finances vs. Last Quarter - By Region and Firm Size

| Condition of your firm's overall finances | 2021 Q4 (n=591) | 2022 Q1 (n=603) | Change vs. Previous Quarter |
|---|-----------------|-----------------|-----------------------------|
| TOTAL | +83 | +89 | +6 |
| REGION | | | |
| Northeast | +85 | +84 | -1 |
| South | +77 | +86 | +9 |
| Midwest | +88 | +95 | +7 |
| West | +85 | +88 | +3 |
| FIRM SIZE | | | |
| 1-25 | +59 | +76 | +17 |
| 26-50 | +88 | +94 | +6 |
| 51-200 | +89 | +91 | +2 |
| 201-500 | +89 | +86 | -3 |
| More than 500 | +96 | +98 | +2 |

Current Industry Sector Sentiment

Current sentiment is also extremely optimistic within all market sectors revealing a broad-based recovery. Sentiment is strongest in the Water/Wastewater (Net Rating +77), Healthcare Facilities (+75) and Data Centers (+74) sectors.

The Convention Centers (+42 Net Rating) and the Justice (+39) sectors are performing relatively less well, but sentiment is still very good.

While a few sectors dipped slightly, most improved relative to last quarter, including the Airports sector, which rose 9 points.

Figure 7: Current Industry Sentiment by Sector vs. Last Quarter

| | 2021 Q4 (n = 215-424) | 2022 Q1 (n = 192-446) | Change vs. Previous Quarter |
|---|--------------------------|--------------------------|--------------------------------|
| Transportation – Airports | +59 | +68 | +9 |
| Commercial Real Estate | +46 | +53 | +7 |
| Residential – Land Development | +65 | +72 | +7 |
| Science and Technology | +66 | +73 | +7 |
| Transportation – Transit | +54 | +59 | +5 |
| Energy and Utilities | +67 | +72 | +5 |
| Telecommunications | +65 | +69 | +4 |
| Transportation – Roads and Bridges | +63 | +67 | +4 |
| Industrial and Manufacturing Facilities | +65 | +69 | +4 |
| Healthcare Facilities | +73 | +75 | +2 |
| Convention Centers, Sports Facilities and Cultural Facilities | +40 | +42 | +2 |
| Justice | +39 | +39 | 0 |
| Water/Wastewater | +77 | +77 | 0 |
| Federal/Military, State and Local Government Buildings | +63 | +62 | -1 |
| Data Centers | +77 | +74 | -3 |
| Education | +59 | +55 | -4 |

Current Backlog

The median firm backlog stands unchanged at 10 months compared to last quarter (2021 Q4). In addition, 45% of respondents indicate their firm has a current backlog of one year or more. The current median backlog has not changed significantly across segments.

Figure 8: Current Backlog

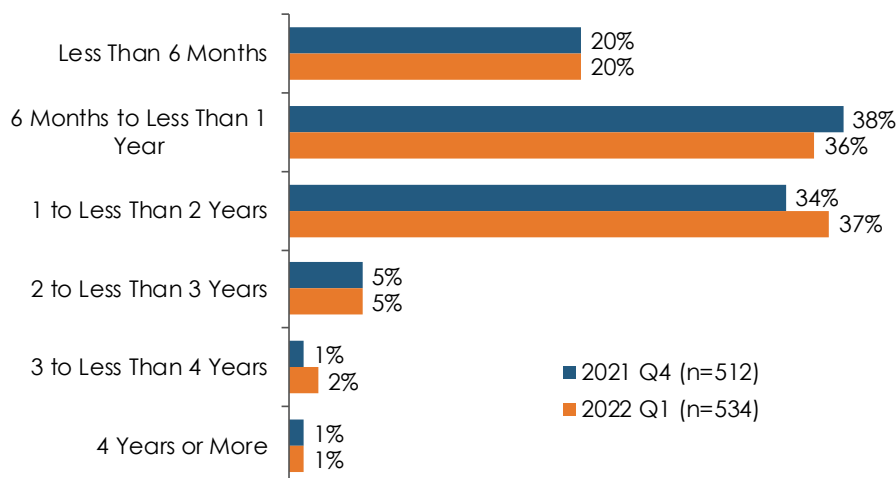


Figure 9: Current Backlog vs. Last Quarter - By Region and Firm Size

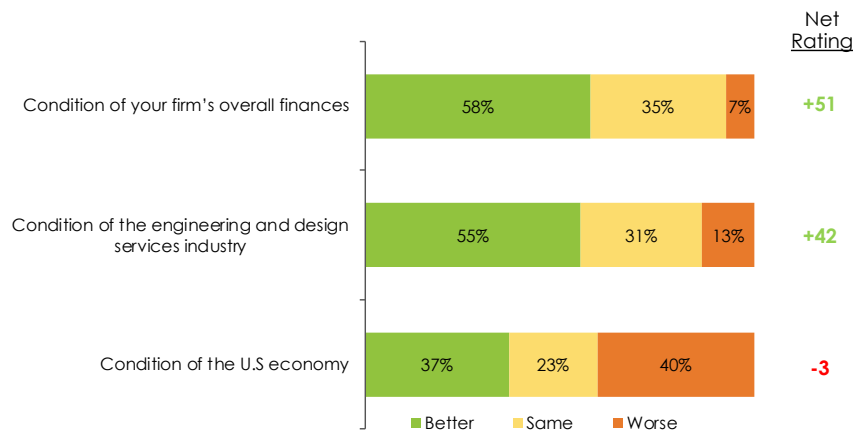
| | 2021 Q4 (n=512) | 2022 Q1 (n=534) | Change vs. Previous Quarter |
|------------------|-----------------|-----------------|-----------------------------|
| TOTAL | 10 | 10 | 0 |
| REGION | | | |
| Northeast | 12 | 12 | 0 |
| South | 9 | 9 | 0 |
| Midwest | 10 | 12 | +2 |
| West | 10 | 9 | -1 |
| FIRM SIZE | | | |
| 1-25 | 6 | 6 | 0 |
| 26-50 | 9 | 10 | +1 |
| 51-200 | 10 | 11 | +1 |
| 201-500 | 10 | 12 | +2 |
| More than 500 | 12 | 12 | 0 |

FUTURE BUSINESS CONDITIONS

Future U.S. Economy, Industry and Firm Sentiment

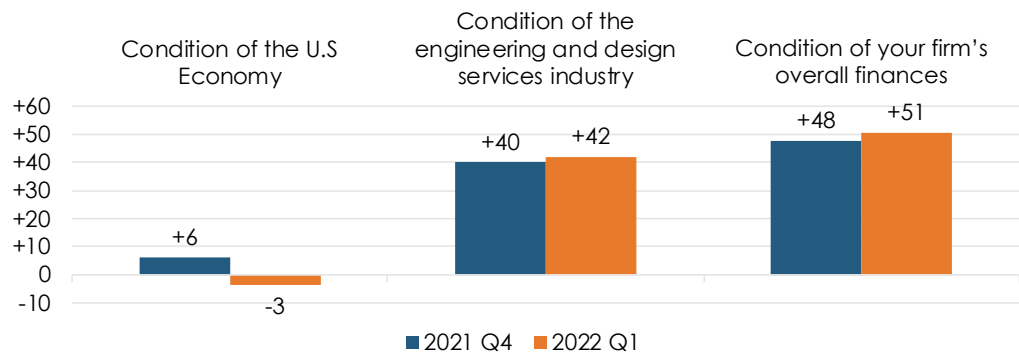
Future sentiment is very optimistic for the firm's overall finances (Net Rating +51) and the industry (+42), but very weak for the U.S. economy (-3).

Figure 10: Economic Sentiment 12 Months from Now



Faith in the future of the U.S. economy dropped from a Net Rating of +6 last quarter to -3 this quarter, while future sentiment for the firm’s finances and the industry improved slightly.

Figure 11: Economic Sentiment 12 Months from Now vs. Last Quarter



Firms in the Northeast are more optimistic in all areas than firms in the West, Midwest, and South. However, the West showed the most improvement when it comes to the firm’s finances and the industry as a whole which is important as it was lagging other regions in the previous quarter.

As firm size increases so too does optimism about the future (in all areas). For example, the Net Rating for the firm’s finances among firms with 25 or fewer FTEs is +35 compared to +65 for firms with more than 500 FTEs. However, smaller firms saw the most improvement in future sentiment again pointing to continued improvements among smaller firms relative to larger firms.

Figure 12: Condition of Firm’s Finances 12 Months from Now vs. Last Quarter - By Region and Firm Size

| Condition of your firm's overall finances | 2021 Q4 (n=468) | 2022 Q1 (n=504) | Change vs. Previous Quarter |
|---|-----------------|-----------------|-----------------------------|
| TOTAL | +48 | +51 | +3 |
| REGION | | | |
| Northeast | +62 | +57 | -5 |
| South | +51 | +52 | +1 |
| Midwest | +61 | +53 | -8 |
| West | +18 | +41 | +23 |
| FIRM SIZE | | | |
| 1-25 | +27 | +35 | +8 |
| 26-50 | +45 | +56 | +11 |
| 51-200 | +51 | +51 | 0 |
| 201-500 | +54 | +53 | -1 |
| More than 500 | +66 | +65 | -1 |

Future Industry Sector Sentiment

Future sentiment is very optimistic in most sectors in the first quarter of 2022. Optimism is strongest in the Roads and Bridges (Net Rating +67) and Water/Wastewater (+59) sectors. Future sentiment is weakest in the Justice (Net Rating 0) and Convention Centers, Sports Facilities and Cultural Facilities sectors (-5).

Compared to last quarter (2021 Q4), sentiment in most sectors is lower now, perhaps reflecting concerns about the U.S. Economy as a whole going forward.

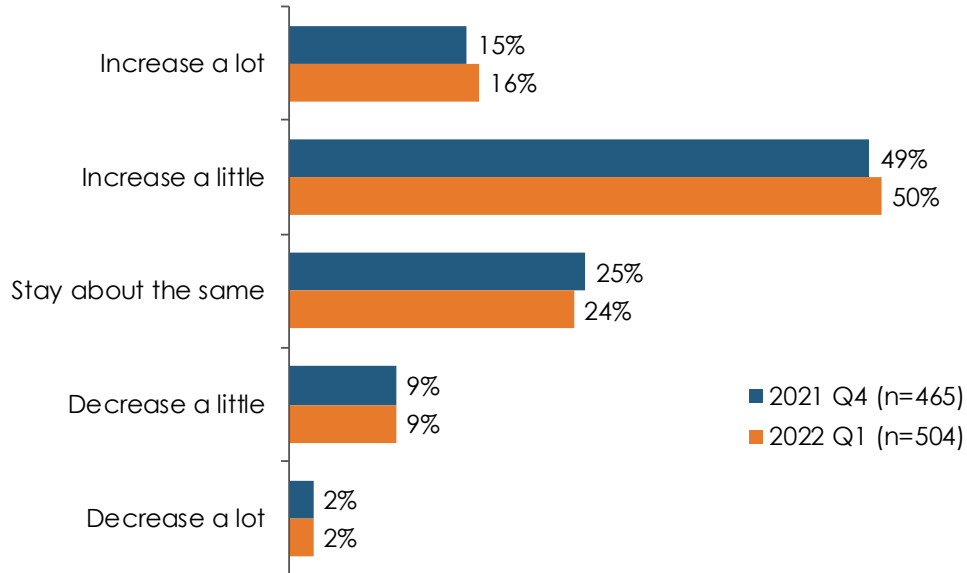
Figure 13: Economic Sentiment by Sector 12 Months from Now vs. Last Quarter

| | 2021 Q4 (n = 208-366) | 2022 Q1 (n = 205-400) | Change vs. Previous Quarter |
|--|--------------------------|--------------------------|--------------------------------|
| Industrial and Manufacturing Facilities | +26 | +34 | +8 |
| Healthcare Facilities | +37 | +41 | +4 |
| Commercial Real Estate | +10 | +14 | +4 |
| Water/Wastewater | +56 | +59 | +3 |
| Science and Technology | +31 | +32 | +1 |
| Transportation – Airports | +53 | +53 | 0 |
| Justice | +1 | 0 | -1 |
| Transportation – Roads and Bridges | +69 | +67 | -2 |
| Data Centers | +32 | +30 | -2 |
| Federal/Military, State and Local Government Buildings | +36 | +34 | -2 |
| Education | +23 | +20 | -3 |
| Residential – Land Development | +18 | +14 | -4 |
| Transportation – Transit | +60 | +55 | -5 |
| Convention Centers, Sports Facilities and Cultural Facilities | 0 | -5 | -5 |
| Energy and Utilities | +55 | +49 | -6 |
| Telecommunications | +43 | +36 | -7 |

Future Backlog

Sixty-six percent of respondents believe their firms will see an increase in backlog of projects over the next year, up slightly from 64% last quarter. The overall Net Rating also increased slightly from +53 to +55.

Figure 14: Backlog 12 Months from Now vs. Last Quarter



Firms in the West have the lowest future backlog Net Rating (+41) although it has improved significantly since last quarter.

Firms with 25 employees or fewer have the lowest future backlog Net Rating (+30) compared to other firm sizes. However, small and mid-sized firms saw increases in their Net Rating compared to last quarter while larger firms saw declines.

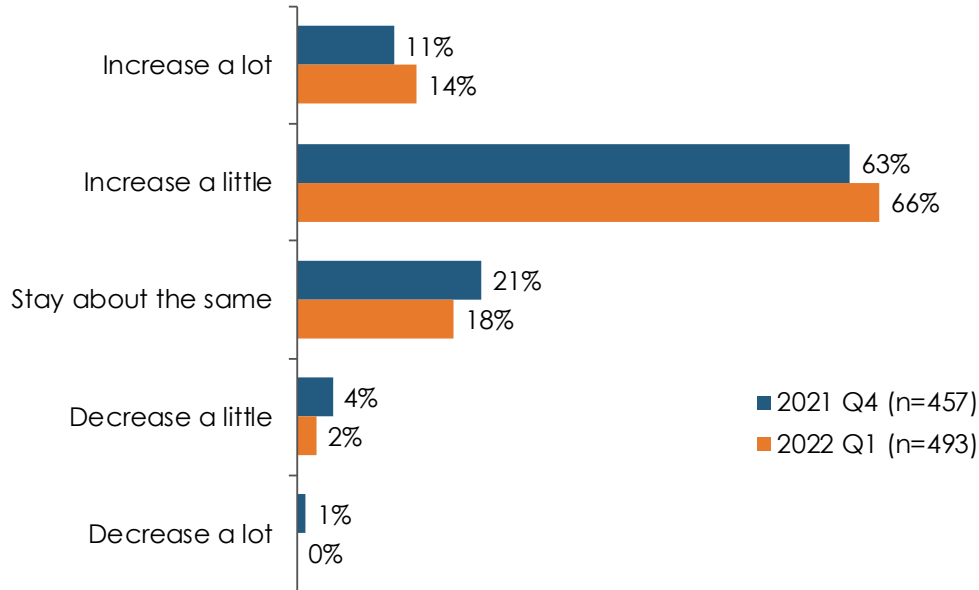
Figure 15: Backlog 12 Months from Now vs. Last Quarter - By Region and Firm Size

| | 2021 Q4 (n=465) | 2022 Q1 (n=504) | Change vs. Previous Quarter |
|------------------|--------------------|--------------------|--------------------------------|
| TOTAL | +53 | +55 | +2 |
| REGION | | | |
| Northeast | +69 | +68 | -1 |
| South | +55 | +55 | 0 |
| Midwest | +60 | +64 | +4 |
| West | +33 | +41 | +8 |
| FIRM SIZE | | | |
| 1-25 | +27 | +30 | +3 |
| 26-50 | +47 | +52 | +5 |
| 51-200 | +55 | +60 | +5 |
| 201-500 | +77 | +66 | -11 |
| More than 500 | +75 | +70 | -5 |

Future Hiring Projections

Eighty percent of respondents predict there will be an increase in hiring over the next 12 months at their firms, up from 74% last quarter.

Figure 16: Hiring Over the Next 12 Months vs. Last Quarter



The Midwest is most optimistic about an increase in employment (87%), while the West is least optimistic at 74%. However, both regions saw significant improvements in sentiment compared to last quarter.

Firms with 25 employees or fewer are significantly less optimistic about an increase in employment (59%) compared to other firms. However, firms of all sizes are more optimistic this quarter compared to last.

Figure 17: Hiring Over the Next 12 Months vs Last Quarter - By Region and Firm Size

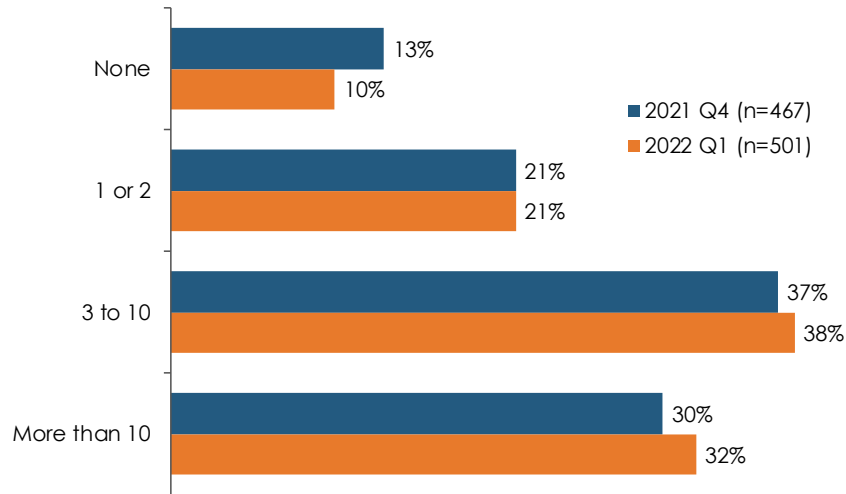
| | 2021 Q4 (n=457) | 2022 Q1 (n=493) | Change vs. Previous Quarter |
|------------------|--------------------|--------------------|--------------------------------|
| TOTAL | 74% | 80% | +6 |
| REGION | | | |
| Northeast | 80% | 81% | +1 |
| South | 76% | 78% | +2 |
| Midwest | 78% | 87% | +9 |
| West | 64% | 74% | +10 |
| FIRM SIZE | | | |
| 1-25 | 54% | 59% | +5 |
| 26-50 | 72% | 80% | +8 |
| 51-200 | 79% | 84% | +5 |
| 201-500 | 86% | 88% | +2 |
| More than 500 | 88% | 95% | +7 |

HOT BUTTON ISSUES

Current Open Positions

Ninety percent of respondents currently indicate their organization has at least one staff opening, an increase from 87% last quarter. Although the median number of open positions overall remains unchanged at five, the median opening at firms with more than 500 FTEs surged from 60 to 80.

Figure 18: Current Open Positions vs. Last Quarter



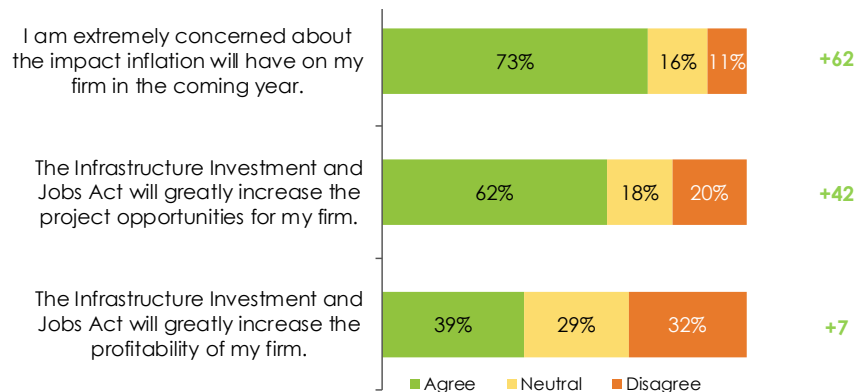
Inflation and the Infrastructure Investment and Jobs Act

Respondents are very concerned about inflation (73% agree), and while they believe the Infrastructure Investment and Jobs Act (IIJA) will provide opportunities for their firms (62%), they are less likely to believe it will lead to profitability for their firms (39%).

Firms in the Northeast (76%) are the most likely to agree that there will be more project opportunities, while firms in the West are most likely to disagree (29%).

Smaller firms are significantly more likely to disagree with statements regarding IIJA. Not surprisingly, the larger firms are significantly more likely to agree with them.

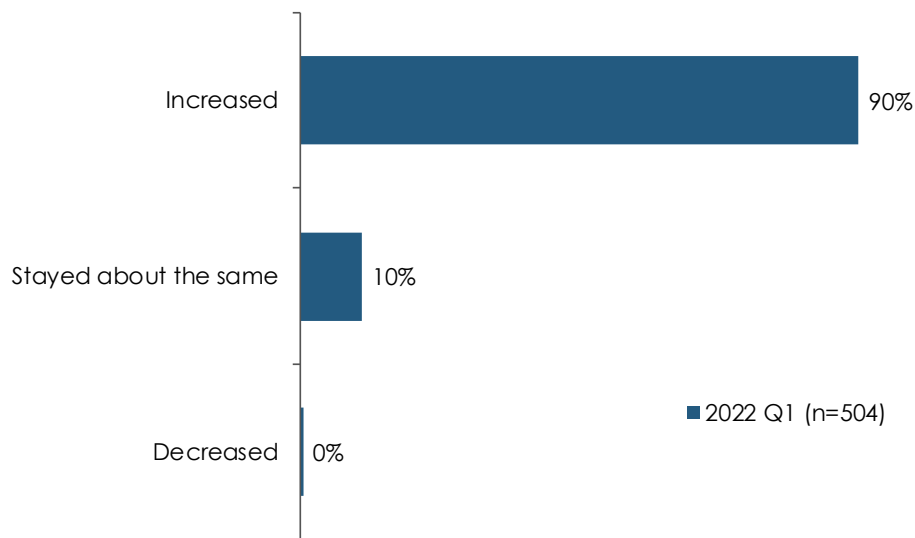
Figure 19: Inflation and the Infrastructure Investment and Jobs Act



Average Salary

Ninety percent of respondents say that the average salary at their firm increased in the past year. The smallest firms (1 to 25 FTEs) are more likely to report salaries staying the same compared to larger firms (21% vs. 5% to 12% for larger firms).

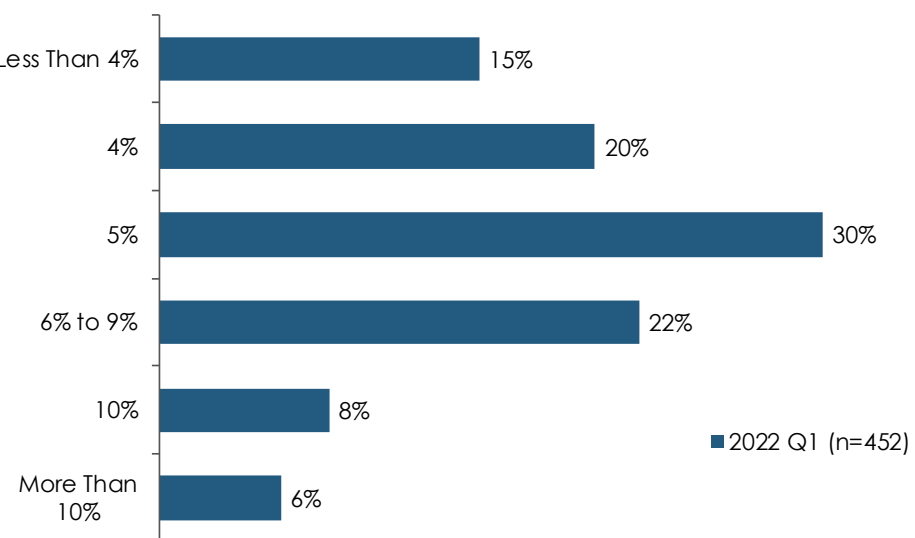
Figure 20: Employee Salary



Salary Increases

The “average firm” salary increased five percent over the past year, although 14% of firms report average increases of 10% or more.

Figure 21: Average Firm Salary Increase Over the Past 12 Months



METHODOLOGY

The ACEC Research Institute sent the survey to the leadership within ACEC member firms. Data collection occurred between January 12 and January 23, 2022.

A total of 11,389 invitations were emailed, although 1,719 bounced and 78 opted-out, resulting in a total of 9,592 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, 612 individuals completed the survey for an overall response rate of 6%.

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

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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