ENGINEERING BUSINESS SENTIMENT

2022 Q2

JUNE 2022



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2022 Q2

TABLE OF CONTENTS

EXECUTIVE SUMMARY	
DEMOGRAPHICS	
CURRENT BUSINESS CONDITIONS	3
Current U.S. Economy, Industry and Firm Sentiment	3
Current Industry Sector Sentiment	5
Current Backlog	5
FUTURE BUSINESS CONDITIONS	6
Future U.S. Economy, Industry and Firm Sentiment	6
Future Industry Sector Sentiment	8
Future Backlog	9
Future Hiring Projections	10
HOT BUTTON ISSUES	11
Current Open Positions	11
Inflation and the Infrastructure Investment and Jobs Act	11
Average Salary - New Hires	12
Salary Increases - New Hires	13
Average Salary - Existing Employees	13
Salary Increases - Existing Employees	14
Environmental, Social, and Governance (ESG) Programs	14
Escalation Clauses	15
METHODOLOGY	17
STATISTICAL NOTES	17

EXECUTIVE SUMMARY

Current Business Conditions

- Sentiment regarding the U.S. Economy has fallen significantly over the past three months. The Net Rating fell 16 points from 2022 Q1 and currently stands at +13.
- While current *industry* sentiment remains extremely optimistic, it is showing slight signs of a pull back under the weight of the U.S. Economy. The Net Rating for the firms' overall finances is a very strong +84 (down 4 points) and +80 (down 2 points) for the engineering and design services industry.
- Current sentiment remains very optimistic within all market sectors, although nearly half have had some decline in the past quarter.
- The median firm backlog has increased to 11 months (from 10 months in 2022 Q1).

Future Business Conditions

- Future sentiment (looking 12 months ahead) has declined dramatically compared to last quarter. Future sentiment remains positive for firms' finances (Net Rating +33) but has declined 18 points. Future sentiment for the industry has declined a substantial 26 points and stands at +16. Future sentiment for the U.S. economy (-32) fell 29 points and is solidly in negative territory.
- Future sentiment regarding specific industry sectors has declined by 5 to 26 points, depending on the sector.
- Fifty-four percent of respondents believe their firms will see an increase in backlog of projects over the next year, down from 66% last quarter.
- Seventy-three percent of respondents predict there will be an increase in hiring over the next 12 months at their firms, down from 80% last quarter.

Hot Topics

- Ninety percent of respondents currently indicate their organization has at least one opening, the same as last quarter. The median number of open positions increased to six, up from five last quarter. This was due to increases in open positions among firms with more than 500 FTE.
- Concerns about inflation increased significantly since last quarter. The Net Rating for concern jumped from +62 to +85.
- Fourteen percent of firms are already seeing an increase in projects related to the Infrastructure Investment and Jobs Act (IIJA) and another 73% of firms expect to see an increase at some point. However, 28% of small firms (1-25 employees) suspect they will never see an increase at all.
- Eighty-nine percent of respondents say that the average salary for **new hires** at their firm increased in the past year. Eighty-nine percent of respondents also say that the average salary for **existing employees** at their firm has increased in the past year.
- The "average firm" salary increase for **new hires** was 10% over the past year, although 20% of firms report average increases of more than 10%. The "average firm" salary increase for **existing employees** was six percent over the past year, although 26% of firms report average increases of 10% or more.
- Nearly half (45%) of firms do not currently have plans for an ESG program. Larger firms are much more likely to have an ESG program or plans for one.
- Two-thirds of firms use escalation clauses in multi-year contracts with clients. As firm size increases, usage of escalation clauses also increases. The median percentage increase for escalation clauses is 2% to less than 3%.

DEMOGRAPHICS

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

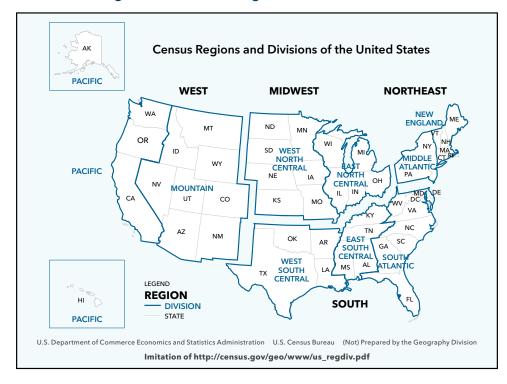


Figure 1: U.S. Census Regions of the United States

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 (2022 Q1).

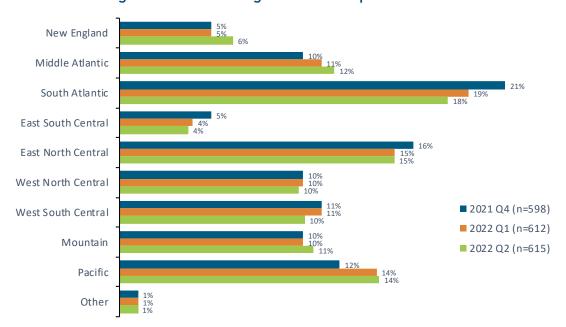


Figure 2: Location of Organization Headquarters

Respondents represent a wide range of firm sizes. While one-fourth of respondents represent firms with 25 or fewer full-time equivalents (FTEs), another 27% represent firms with more than 500 FTEs. The median firm size is 91 FTEs, statistically similar to 90 last quarter.

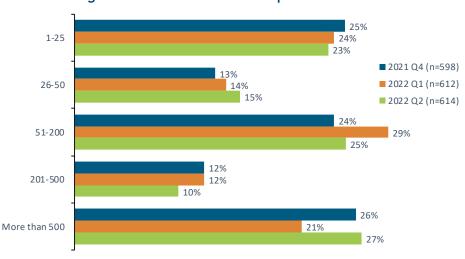


Figure 3: Number of Full-Time Equivalents at Firm

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 16 points from 2022 Q1 and currently stands at +13.

While current *industry* sentiment remains very optimistic, it is showing slight signs of a pull back under the weight of the U.S. Economy. The Net Rating for firms' overall finances is a very strong +84 (down 4 points) and +80 (down 2 points) for the engineering and design services industry.

Firms with more than 500 employees are the most positive about their firm's finances (+95 Net Rating).

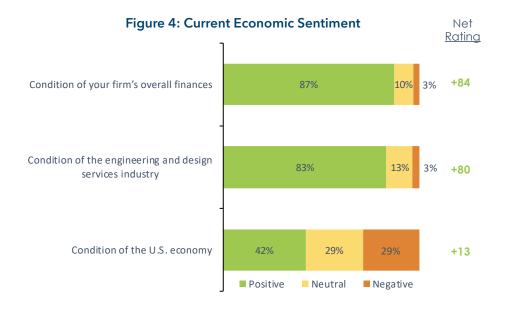
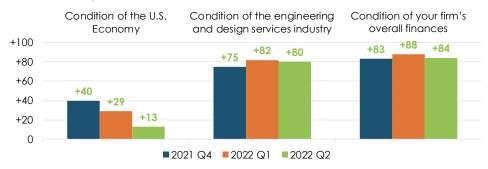


Figure 5: Current Economic Sentiment vs. Last Quarter



Except for firms with 201-500 FTEs, all segments express less optimism about the condition of their firms' finances than they did in 2022 Q1. Firms with 25-50 employees show the greatest drop in optimism.

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)	2022 Q2 (n=608)	Change vs. Previous Quarter
TOTAL	+83	+88	+84	-4
REGION				
Northeast	+85	+85	+88	+3
South	+77	+86	+85	-1
Midwest	+89	+95	+86	-9
West	+85	+88	+80	-8
FIRM SIZE				
1-25	+59	+76	+70	-6
26-50	+89	+94	+82	-12
51-200	+88	+91	+85	-6
201-500	+88	+87	+93	+6
More than 500	+96	+98	+95	-3

Current Industry Sector Sentiment

Current sentiment remains very optimistic within all market sectors, although nearly half have had some decline in the past quarter. Sentiment is strongest in the Water/Wastewater (Net Rating +77) and Roads and Bridges (+76) sectors.

The Convention Centers (+51 Net Rating) and the Justice (+37) sectors are performing relatively less well, but sentiment is still good.

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

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

Current Backlog

The median firm backlog has increased to 11 months (from 10 months in 2022 Q1). In addition, 49% indicate that their firm has a current backlog of one year or more.

The current median backlog has not changed significantly across the segments.

Less Than 6 Months

6 Months to Less Than 1 Year

1 to Less Than 2 Years

2 to Less Than 3 Years

3 to Less Than 4 Years

4 Years or More

1 to Less Current Backlog

20%
20%
20%
20%
38%
34%
34%
37%
39%
2021 Q4 (n=512)
1%
2022 Q1 (n=534)
1%
1%
2022 Q2 (n=542)

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

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

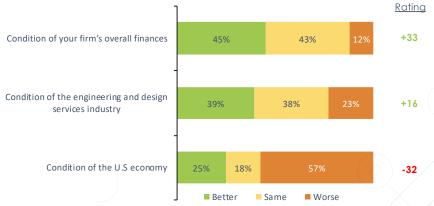
FUTURE BUSINESS CONDITIONS

Future U.S. Economy, Industry and Firm Sentiment

Future sentiment (looking 12 months ahead) has declined dramatically compared to last quarter. Future sentiment remains positive for firms' finances (Net Rating +33) but has declined 18 points.

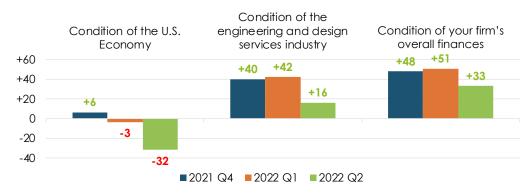
Future sentiment for the industry has declined a substantial 26 points and stands at +16. Future sentiment for the U.S. economy (-32) dropped 29 points and is solidly in negative territory

Figure 10: Economic Sentiment 12 Months from Now



Net

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



Firms in the Northeast and those with more than 500 FTE have the highest Net Ratings in all areas.

Future sentiment about the firms' overall finances is much less positive than last quarter. Firms with 26-50 employees show the greatest drop in optimism from 2022 Q1.

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)	2022 Q2 (n=511)	Change vs. Previous Quarter
TOTAL	+48	+51	+33	-18
REGION				
Northeast	+61	+57	+38	-19
South	+52	+52	+33	-19
Midwest	+61	+53	+33	-20
West	+18	+41	+30	-11
FIRM SIZE				
1-25	+28	+35	+12	-23
26-50	+45	+56	+26	-30
51-200	+51	+51	+39	-12
201-500	+54	+54	+29	-25
More than 500	+66	+65	+53	-12

Future Industry Sector Sentiment

Future sentiment is very optimistic in many sectors including Transportation (Net Ratings +45 to +55), Water/Wastewater (+45), and Energy and Utilities (+39).

Future sentiment is weakest in the Commercial Real Estate (Net Rating -11) and Residential Land Development (-12).

While most sectors have a positive Net Rating, all sectors have nevertheless seen a decline since last quarter.

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

	2021 Q4 (n = 208-366)	2022 Q1 (n = 205-400)	2022 Q2 (n = 202-411)	Change vs. Previous Quarter
Convention Centers, Sports Facilities and Cultural Facilities	0	-5	-10	-5
Justice	+1	+1	-4	-5
Federal/Military, State and Local Government Buildings	+36	+34	+27	-7
Transportation – Airports	+53	+53	+45	-8
Telecommunications	+43	+36	+28	-8
Data Centers	+32	+30	+21	-9
Transportation – Transit	+60	+55	+46	-9
Energy and Utilities	+55	+49	+39	-10
Science and Technology	+31	+32	+21	-11
Transportation – Roads and Bridges	+69	+67	+55	-12
Education	+23	+21	+8	-13
Water/Wastewater	+56	+59	+45	-14
Industrial and Manufacturing Facilities	+26	+34	+15	-19
Healthcare Facilities	+37	+41	+18	-23
Commercial Real Estate	+10	+13	-11	-24
Residential – Land Development	+18	+14	-12	-26

Future Backlog

Fifty-four percent of respondents believe their firms will see an increase in backlog of projects over the next year, down from 66% last quarter. Additionally, the Net Rating decreased from +56 to +36.

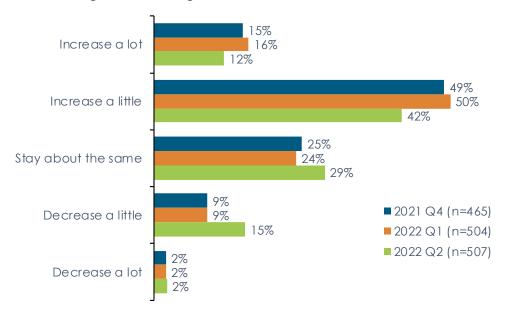


Figure 14: Backlog 12 Months from Now vs. Last Quarter

Firms in the West have the lowest future backlog Net Rating (+31), although it is still strong.

Firms with 25 employees or fewer have the lowest future backlog Net Rating (+11) compared to other firm sizes.

As firm size increases, future backlog Net Ratings increase. Most segments' positive expectations for future backlog have declined compared to the previous quarter.

2021 Q4 2022 Q1 2022 Q2 **Change vs. Previous** (n=465) (n=504) (n=507) Quarter **TOTAL** -20 **REGION** Northeast -22 South +55 +55 +35 -20 Midwest +64 -28 West +33 +41 +31 -10 **FIRM SIZE** 1-25 +27 +30 +11 -19 26-50 +47 +16 -36 51-200 +55 +60 +37 -23 201-500 +76 +41 -35 +77 More than 500 +75 +70 +70

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

Future Hiring Projections

Seventy-three percent of respondents predict there will be an increase in hiring over the next 12 months at their firms, down from 80% last quarter.

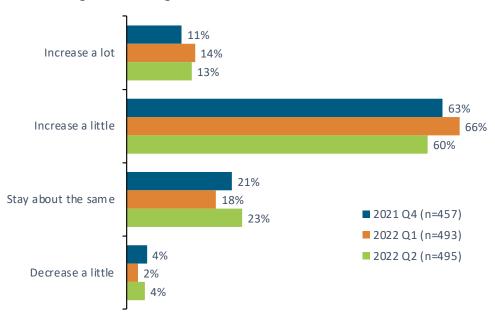


Figure 16: Hiring Over the Next 12 Months vs. Last Quarter

The Northeast is most optimistic about an increase in employment (79%), while the West is the least optimistic at 66%.

Firms with 25 employees or fewer are significantly less optimistic about an increase in employment (49%) compared to other firms.

Compared to last quarter, all segments are less likely to indicate that FTEs will increase over the next year.

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

	2021 Q4 (n=457)	2022 Q1 (n=493)	2022 Q1 (n=495)	Change vs. Previous Quarter
TOTAL	74%	80%	73%	-7
REGION				
Northeast	80%	81%	79%	-2
South	76%	78%	71%	-7
Midwest	78%	87%	77%	-10
West	64%	74%	66%	-8
FIRM SIZE				
1-25	54%	59%	49%	-10
26-50	72%	80%	66%	-14
51-200	79%	84%	79%	-5
201-500	86%	88%	80%	-8
More than 500	88%	95%	90%	-5

HOT BUTTON ISSUES

Current Open Positions

Ninety percent of respondents currently indicate their organization has at least one staff opening, the same as last quarter. The median number of open positions increased to six, up from five last quarter.

The largest firms (more than 500 employees) now have a median of 97 open positions, an increase from 80 last quarter, as well as the largest growth of any segment in the past quarter.

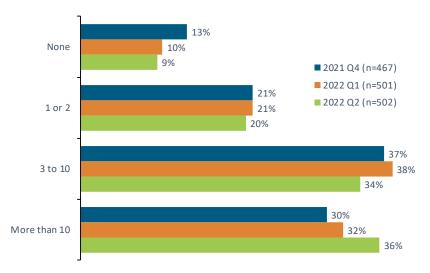


Figure 18: Current Open Positions vs. Last Quarter

Inflation and the Infrastructure Investment and Jobs Act

Respondents are very concerned about the impact inflation will have on their firm in the coming year (89%) agree). Respondents are much more concerned about inflation this quarter (Net Rating +85), than they were last quarter (+62).

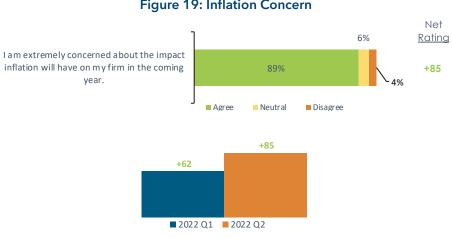


Figure 19: Inflation Concern

Fourteen percent of firms are already seeing an increase in projects related to the Infrastructure Investment and Jobs Act (IIJA) and another 73% of firms expect to see an increase at some point. However, 28% of small firms (1-25 employees) suspect they will never see an increase at all.

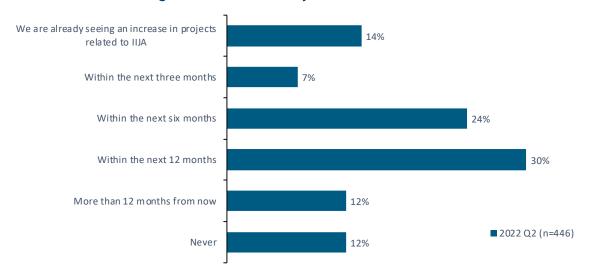


Figure 20: Increase in Projects as a Result of IIJA

Average Salary - New Hires

Eighty-nine percent of respondents say that the average salary for new hires 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 (28% vs. 6% for firms with more than 25 FTEs).

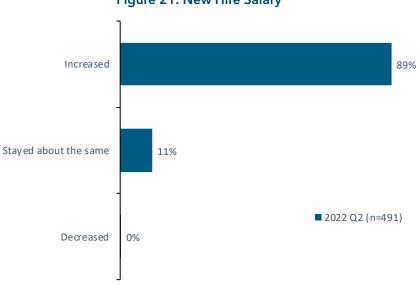


Figure 21: New Hire Salary

Salary Increases - New Hires

The "average firm" salary increase for new hires was 10% over the past year, although 20% of firms report average increases of more than 10%.

Thirty-one percent of small firms (1-25 employees) have increased salaries by more than 10%, more than any other segment.

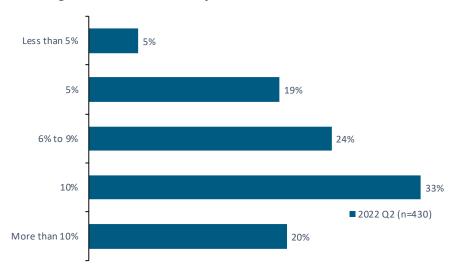


Figure 22: New Hire Salary Increase Over the Past 12 Months

Average Salary - Existing Employees

Eighty-nine percent of respondents say that the average salary for existing employees at their firm has increased in the past year.

The smallest firms (1 to 25 FTEs) were more likely to have seen salaries stay the same (25% vs. 7% for firms with more than 25 FTEs).

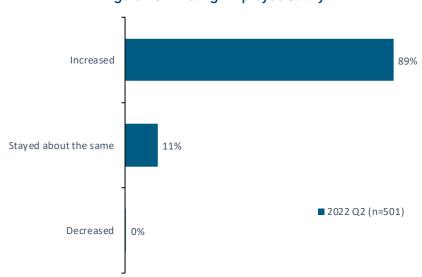


Figure 23: Existing Employee Salary

Salary Increases - Existing Employees

The "average firm" salary increase for existing employees was six percent over the past year, although 26% of firms report average increases of 10% or more.

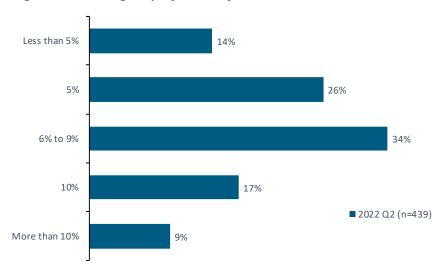


Figure 24: Existing Employee Salary Increase Over the Past 12 Months

Environmental, Social, and Governance (ESG) Programs

Nearly half (45%) of firms do not currently have plans for an ESG program.

Although half (50%) of large firms (firms with more than 500 employees) have a formalized set of initiatives related to an ESG program, only 20% of firms with between 201 and 500 FTE have one. This compares to 10% of firms with 50 to 200 FTE who have a formal ESG program and 1% of those with 50 or less FTE.

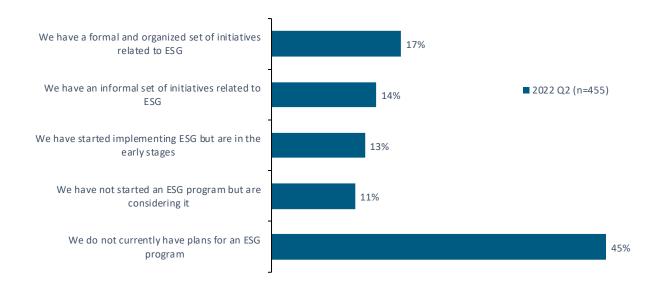


Figure 25: Status of ESG Program

Escalation Clauses

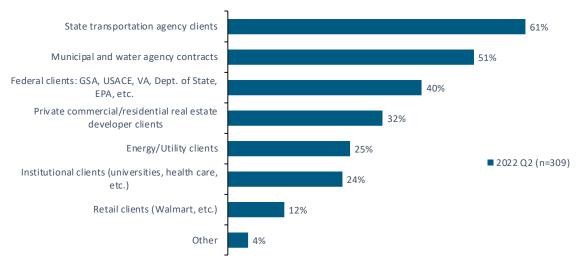
Two-thirds of firms use escalation clauses in multi-year contracts with clients. As firm size increases, usage of escalation clauses increases.

Figure 26: Use of Escalation Clauses in Multi-Year Contracts

	Total	Northeast	South	Midwest	West	1-25	26-50	51-200	201-500	More than 500
Yes	67%	79%	59%	73%	63%	39%	51%	71%	88%	91%
No	33%	21%	41%	27%	37%	61%	49%	29%	12%	9%

State agencies (61%) and municipal agencies (51%) are the most common clients for which escalation clauses are used.

Figure 27: Types of Clients with Escalation Clauses



The median percentage increase for escalation clauses is 2% to less than 3%.

1% to < 2% 6% 2% to < 3% 51% 3% to < 4% 32% 4% to < 5% ■ 2022 Q2 (n=307) 10% 5% to <6%

Figure 28: Percentage Increase for Escalation Clauses

Among those using escalation clauses, 70% report at least some resistance to wage escalations for additional years.

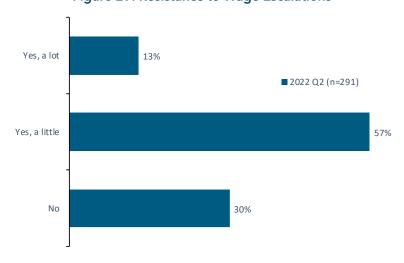


Figure 29: Resistance to Wage Escalations

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 May 3 and May 12, 2022.

A total of 11,309 invitations were emailed, although 1,886 bounced and 105 opted-out, resulting in a total of 9,318 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, 615 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



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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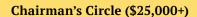






John & Karen Carrato













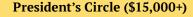




Ed & Brenda Alizadeh

Anonymous Contributor

Jay & Ann Wolverton



































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