1(8165° (8165° 45 4047 130

# ACEC-Canada Engineering Business Sentiment

# **2024 H2** NOVEMBER 2024



ASSOCIATION OF CONSULTING ENGINEERING COMPANIES CANADA

1 0,05 5

Research Conducted by:

ACEC RESEARCH

## ACEC-Canada Engineering Business Sentiment

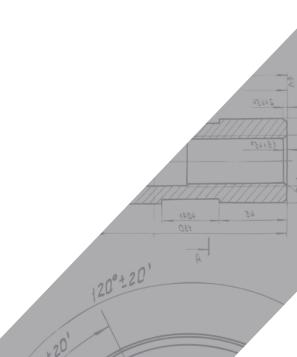
### TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
DEMOGRAPHICS	2
CURRENT BUSINESS CONDITIONS	5
Current Industry Sector Sentiment	6
Current Backlog	7
Current Open Positions	8
FUTURE BUSINESS CONDITIONS	10
Future Canadian Economy, Industry and Firm Sentiment	10
Reasons for Economic Sentiment 12 Months from Now	12
Future Industry Sector Sentiment	13
Future Backlog	14
Future Hiring Projections	15
Inflation	16
Likelihood of Recession in Next 6 Months	16
HOT TOPICS	17
Use of Artificial Intelligence (AI) in Projects	17
Opportunities and Risks Associated with	18
Artificial Intelligence (AI)	
Monetizing Artificial Intelligence (AI)	19
METHODOLOGY	20
STATISTICAL NOTES	20



\$20.A3

1 0,05 5



## **Executive Summary**

### **Current Business Conditions**

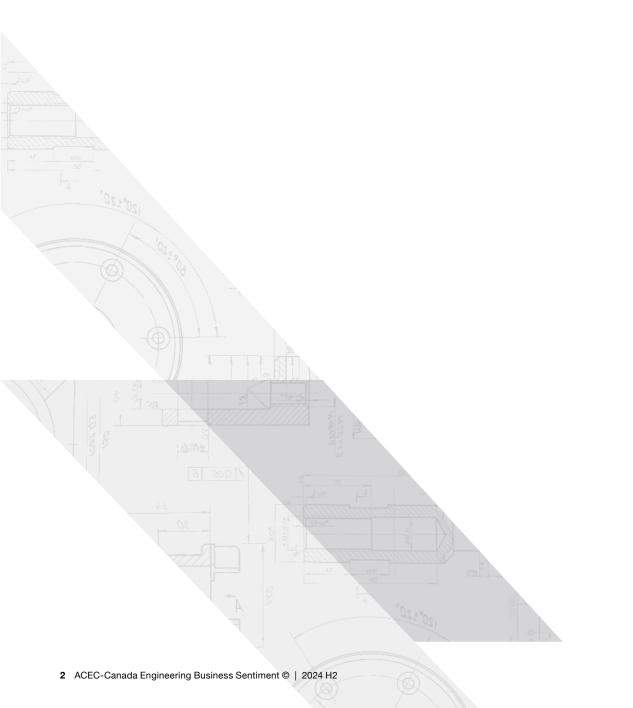
- Current sentiment is positive. The Net Ratings for the firm's finances (+88) and for industry (+71) are high. The Net Rating for the Canadian economy is +31.
- Optimism about the Canadian economy fell by six points compared to earlier this year. It fell four points regarding the condition of the industry but fell by only one point for the firm's finances.
- The Net Rating declined in most sectors compared to the first half of 2024. However, current sentiment remains very optimistic within all market sectors. Sentiment is strongest in Water/Wastewater (+79) and Roads & Bridges (+76). While still positive, current sentiment is relatively lower in the Education (+48), Government Buildings (+46) and Commercial Real Estate (+36) sectors.
- Sixty-one percent indicate their firm has a current backlog of less than a year. The median decreased from 9 months to 8 months.
- Eighty-seven percent of firms have at least one opening, down two percentage points from the first half of 2024. The median number of open positions is six, down from 10 in H1 2024.
- On average, 5 percent of positions remain unfilled, down from 8 percent in H1 2024.

### **Future Business Conditions**

- Future sentiment is positive for the firm's finances (+30) and the industry (+8), but respondents remain less enthusiastic about the future of the Canadian economy (-2).
- Future sentiment fell by 7 points for the firm's finances but was largely unchanged for the industry and the Canadian economy.
- General economic uncertainty (70 percent) and political environment/uncertainty (67 percent) are fueling negative future sentiment. Concerns about inflation, interest rates and workforce shortages have eased considerably since earlier this year while recession concerns increased.
- Future industry sentiment is positive in all sectors; however, two-thirds of sectors saw declines in future sentiment compared to the first half of 2024. It is highest in Energy and Utilities (+36) and Roads and Bridges (+28). Future sentiment is weakest in Government Buildings (Net Rating +7) and Convention Centers, Sports Facilities and Cultural Facilities (+4).
- Half of firm executives (50 percent) believe their firms will see a higher backlog of projects 12 months from now, down just one point from H1 2024.
- Sixty-nine percent predict there will be an increase in hiring over the next 12 months, down from 74 percent in the first half of 2024. The resulting Net Rating declined four points to +66.
- Thirty-eight percent of firm executives agree they are extremely concerned about the impact of inflation on their firm; however, inflation concerns overall have moderated with the Net Rating falling from +27 in H1 2024 to +4 in H2 2024.
- The likelihood of recession in the next six months is 43 percent according to the average estimate among firm leaders. This is unchanged from the first half of 2024.

## Hot Topics – Artificial Intelligence (AI)

- A majority of firm executives indicate they are either experimenting with the use of AI in pilot projects (37 percent) or are using limited implementation across multiple projects (32 percent). No firms have fully integrated AI into projects.
- A majority of firms who are using AI are doing so for data analysis and reporting (58 percent), while nearly half (48 percent) are using AI for marketing and business development.
- The vast majority of firm executives (84 percent) believe that AI will bring increased efficiency and productivity to the industry. In addition, nearly half (46 percent) believe AI will result in cost savings.
- There are a variety of risks inherent with AI according to firm executives. These include reliability and accuracy (72 percent), data privacy and security (63 percent) and ethical and regulatory challenges (57 percent).
- A plurality of firm executives (40 percent) is not yet sure how they will monetize the use of AI. Another 18 percent say they will not change their billing structure.

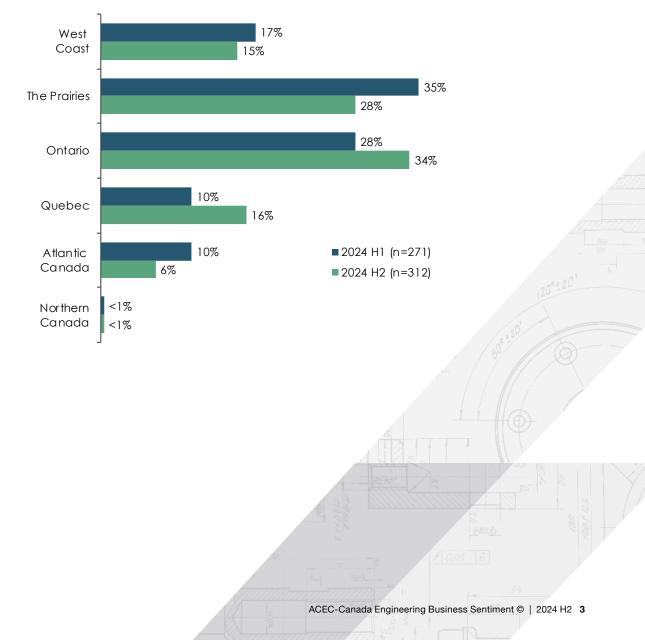


## **Demographics**

For reference, this report uses a modified five-region classification for geographic breaks of the data.

- West Coast includes the province of British Columbia.
- The Prairies includes the provinces of Manitoba, Saskatchewan, and Alberta.
- Central Canada includes the provinces of Ontario and Quebec; however, they are shown separately in this report.
- Atlantic Canada includes the provinces of Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick.
- Northern Canada includes the territories of Nunavut, Northwest Territories, and Yukon.

Respondents' firms are widely dispersed across Canada. The proportion of respondents was higher in the second half of 2024 (H2) than in the first half (H1) from Ontario and Quebec and lower in the Prairies and Atlantic Canada.



#### Figure 1: Location of Organization Headquarters - Trend

The median number of full-time employees at respondents' firms is 213, down from 240 in the first half of 2024. However, the overall results shown in the graph below are statistically similar to H1.

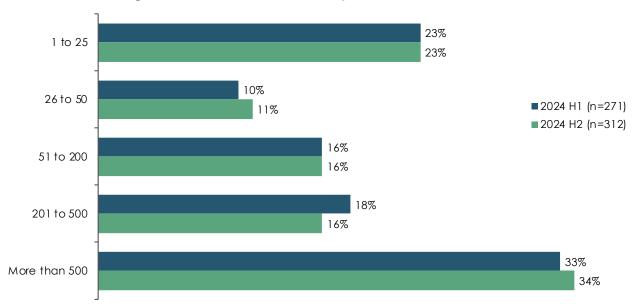
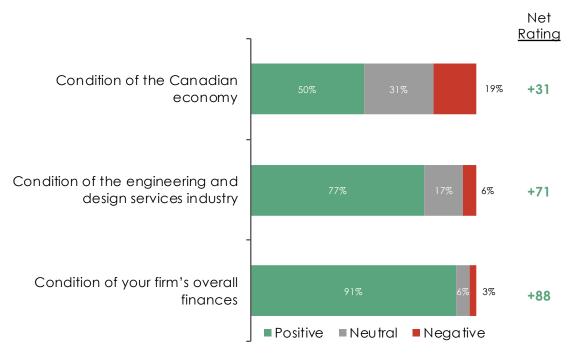


Figure 2: Number of Full-Time Equivalents at Firm – Trend

## **Current Business Conditions**

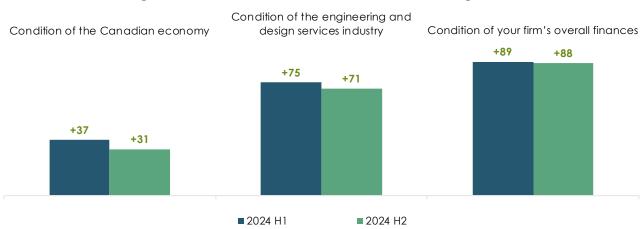
## **Current Canadian Economy, Industry and Firm Sentiment**

- Current sentiment is positive. The Net Ratings for firm's finances (+88) and for industry (+71) are high. The Net Rating for the Canadian economy is +31.
- *U.S. Comparison:* Similar to Canada, sentiment towards the U.S. economy (+36) is lower than industry (+83) and firm finance sentiment (+85).
- Sentiment for the Canadian economy remains strongest in Quebec (+67) but fell the most in Atlantic Canada (+26), down 37 points.
- Among firm sizes, Canadian economic sentiment fell in all segments except 1-25 FTEs where it increased nine points to +29.



#### Figure 3: Current Economic Sentiment

• Optimism about the Canadian economy fell by six points compared to earlier this year. It fell four points regarding the condition of the industry but fell by only one point for the firm's finances.



#### Figure 4: Current Economic Sentiment - Net Rating Trend

### **Current Industry Sector Sentiment**

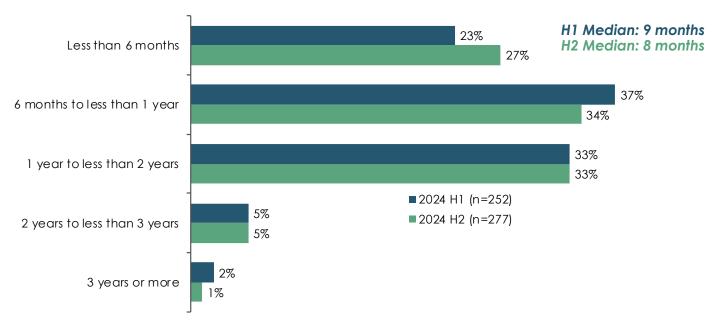
- Current sentiment remains very optimistic within all market sectors. Sentiment is strongest in Water/Wastewater (+79) and Roads and Bridges (+76).
- While still positive, current sentiment is relatively lower in the Education (+48), Government Buildings (+46) and Commercial Real Estate (+36) sectors.
- The Net Rating declined in most sectors compared to the first half of 2024.

#### Figure 5: Current Industry Sentiment by Sector - Net Rating Trend

Current Industry Sector Sentiment Net Rating	2024 H1 (n=115-206)	2024 H2 (n=122-214)	Change
Transportation – Roads and Bridges	+74	+76	+2
Water/Wastewater	+78	+79	+1
Energy and Utilities	+72	+72	0
Industrial and Manufacturing Facilities	+62	+60	-2
Data Centers	+71	+68	-3
Education (K-12 and Higher Education)	+51	+48	-3
Natural Resources (Mining, Forestry, Oil and Gas)	+67	+62	-5
Science and Technology	+72	+65	-7
Transportation – Transit (Rail, BRT)	+69	+61	-8
Convention Centers, Sports Facilities and Cultural Facilities	+66	+57	-9
Healthcare Facilities	+69	+59	-10
Residential – Land Development	+61	+51	-10
Transportation – Airports and Harbours	+78	+62	-16
Telecommunications	+70	+54	-16
Commercial Real Estate (Office, Hotel, Retail and Multifamily Residential)	+52	+36	-16
Federal/Military, Provincial and Local Government Buildings	+63	+46	-17

## **Current Backlog**

- Sixty-one percent indicate their firm has a current backlog of less than a year. The median decreased from nine months to eight months.
- U.S. Comparison: Median backlogs in the U.S. are 12 months, slightly higher than in Canada.



#### Figure 6: Current Backlog - Trend

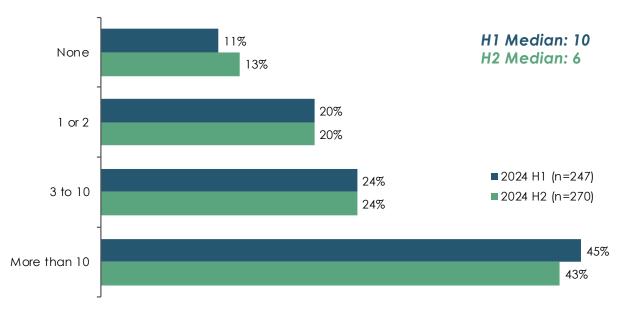
- Since the first half of 2024, many segments saw declines in backlog while two experienced increases.
- Backlog generally increases as firm size increases. Firms with 25 or fewer FTEs have a four-month backlog compared to 12 months for firms with more than 500 FTEs.

#### Figure 7: Current Backlog (Median) Trend – By Region and Firm Size

	2024 H1 Median (n=252)	2024 H2 Median (n=277)	Change
TOTAL	9	8	-1
REGION			
West Coast	9	6	-3
The Prairies	10	6	-4
Ontario	10	12	+2
Quebec	12	10	-2
Atlantic Canada	6	6	0
FIRM SIZE			
1-25	6	4	-2
26-50	6	6	0
51-200	10	6	-4
201-500	8	12	+4
More than 500	12	12	0

## **Current Open Positions**

- Eighty-seven percent of firms have at least one opening, down two percentage points from the first half of 2024. The median number of open positions is six, down from 10 in H1 2024.
- U.S. Comparison: Similar to Canada, nine out of 10 (92 percent) firms still have at least one opening. The median number of open positions held steady at five.



#### Figure 8: Current Open Positions - Trend

- Most segments saw declines in the number of open positions at firms compared to the first half of 2024.
- The largest firms (more than 500 FTEs) have a median of 50 open positions, down from 100.

Figure 9: Current Open Positions (Median) Trend – By Region and Firm Size

	2024 H1 (n=247)	2024 H2 (n=270)	Change
TOTAL	10	6	-4
REGION			
West Coast	11	7	-4
The Prairies	3	3	0
Ontario	15	12	-3
Quebec	88	50	-38
Atlantic Canada	2	2	0
FIRM SIZE			
1-25	2	1	-1
26-50	3	2	-1
51-200	3	4	+1
201-500	16	15	-1
More than 500	100	50	-50

• On average, 5 percent of positions remain unfilled, down from 8 percent in H1 2024. However, 15 percent of firms indicate this figure is 10 percent or more.

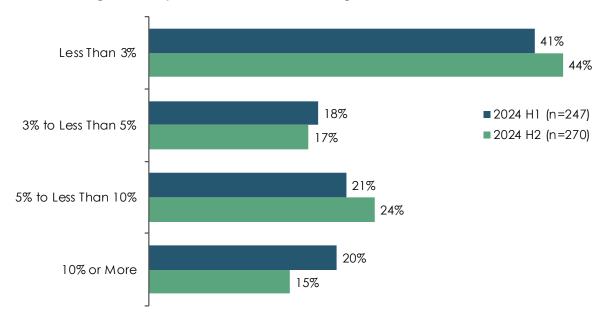


Figure 10: Open Positions as Percentage of Overall FTEs – Trend

- Most segments saw declines in open positions as a percentage of all FTEs compared to H1 this year.
- Firms with 50 or fewer FTEs have a much higher percentage of openings (10 percent).

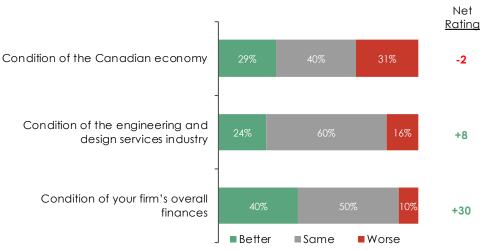
#### Figure 11: Open Positions as Percentage of Overall FTEs Trend – By Region and Firm Size

Open Positions	2024 H1 (n=247)	2024 H2 (n=270)	Change
TOTAL	8%	5%	-3
REGION			
West Coast	9%	4%	-5
The Prairies	8%	5%	-3
Ontario	6%	5%	-1
Quebec	6%	6%	0
Atlantic Canada	10%	10%	0
FIRM SIZE			
1-25	15%	10%	-5
26-50	15%	6%	-9
51-200	4%	4%	0
201-500	5%	5%	0
More than 500	4%	3%	-1

## **Future Business Conditions**

### Future Canadian Economy, Industry and Firm Sentiment

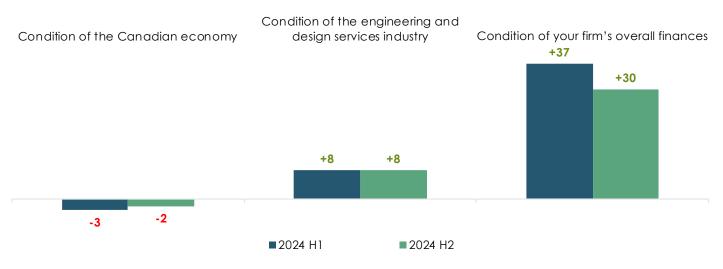
- Future sentiment is positive for the firm's finances (+30) and the industry (+8), but respondents are less enthusiastic about the future of the Canadian economy (-2).
- U.S. Comparison: Future sentiment remains more positive in the U.S., although the trend is similar in that firm executives are more positive about the firm's finances (+39) and less positive about the industry (+19) and the overall U.S. economy (+11).



#### Figure 12: Economic Sentiment 12 Months from Now

• Future sentiment fell by seven points for the firm's finances but was largely unchanged for the industry and the Canadian economy.

#### Figure 13: Economic Sentiment 12 Months from Now - Net Rating Trend



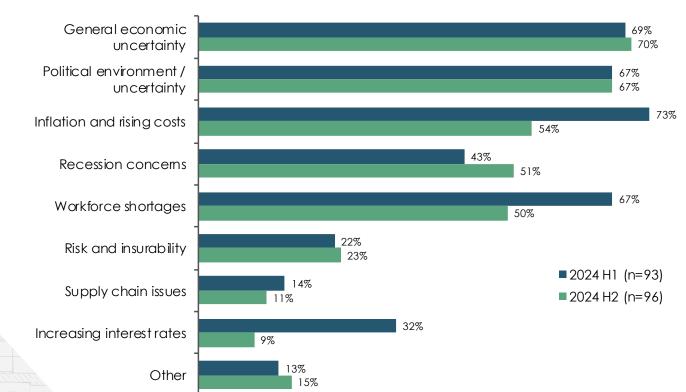
• While most segments saw a decline, all segments remained optimistic about the future of the firm's finances.

#### Figure 14: Condition of Firm's Finances 12 Months from Now Trend – By Region and Firm Size

Condition of your firm's overall finances	2024 H1 (n=251)	2024 H2 (n=270)	Change
TOTAL	+37	+30	-7
REGION			
West Coast	+43	+41	-2
The Prairies	+41	+35	-6
Ontario	+43	+30	-13
Quebec	+12	+12	0
Atlantic Canada	+28	+23	-5
FIRM SIZE			
1-25	+37	+12	-25
26-50	+26	+28	+2
51-200	+47	+44	-3
201-500	+45	+33	-12
More than 500	+34	+33	-1

## Reasons for Economic Sentiment 12 Months from Now

- General economic uncertainty (70 percent) and political environment/uncertainty (67 percent) are fueling negative future sentiment.
- Concerns about inflation, interest rates, and workforce shortages have eased considerably since earlier this year while recession concerns increased.
- U.S. Comparison: The same three areas are fueling negative economic sentiment in the U.S., albeit at higher levels: general economic uncertainty (83 percent), political environment/uncertainty (81 percent), and inflation and rising costs (75 percent).



#### Figure 15: Reasons for Economic Sentiment 12 Months from Now Trend – Among those Predicting Worse Business Conditions

## **Future Industry Sector Sentiment**

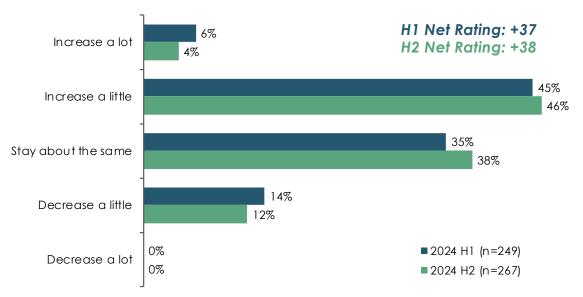
- Two-thirds of sectors saw declines in future sentiment compared to the first half of 2024.
- Future industry sentiment is positive in all sectors. It is highest in Energy and Utilities (+36) and Roads and Bridges (+28).
- Future sentiment is weakest in Government Buildings (Net Rating +7) and Convention Centers, Sports Facilities and Cultural Facilities (+4).

#### Figure 16: Industry Sentiment by Sector 12 Months from Now - Net Rating Trend

Current Industry Sector Sentiment Net Rating	2024 H1 (n=124-199)	2024 H2 (n=125-200)	Change
Data Centers	+17	+25	+8
Transportation – Transit (Rail, BRT)	+20	+27	+7
Energy and Utilities	+31	+36	+5
Convention Centers, Sports Facilities and Cultural Facilities	0	+4	+4
Education (K-12 and Higher Education)	+11	+12	+1
Transportation – Roads and Bridges	+29	+28	-1
Telecommunications	+14	+11	-3
Commercial Real Estate (Office, Hotel, Retail and Multifamily Residential)	+12	+9	-3
Transportation – Airports and Harbours	+25	+21	-4
Water/Wastewater	+32	+27	-5
Science and Technology	+26	+21	-5
Federal/Military, Provincial and Local Government Buildings	+12	+7	-5
Natural Resources (Mining, Forestry, Oil and Gas)	+20	+14	-6
Residential – Land Development	+32	+25	-7
Healthcare Facilities	+24	+17	-7
Industrial and Manufacturing Facilities	+23	+9	-14

## **Future Backlog**

- Half of firm executives (50 percent) believe their firms will see a higher backlog of projects 12 months from now, down just one point from H1 2024.
- U.S. Comparison: Future backlog sentiment is slightly lower in the U.S. (+33).



#### Figure 17: Backlog 12 Months from Now - Trend

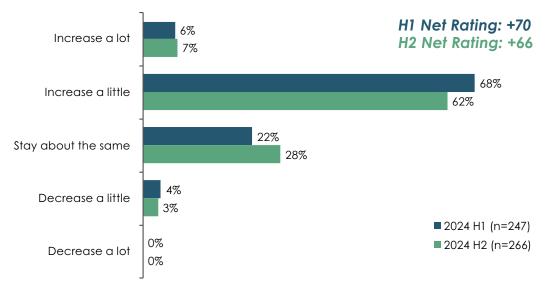
- Backlog sentiment for one year from now increased by one point overall and remains positive across all segments.
- Firms in Quebec have the highest future backlog (+54) compared to other regions.
- Firms with 1-25 FTEs have the lowest future backlog (+15) compared to other firm sizes.

#### Figure 18: Backlog 12 Months from Now Net Rating Trend – By Region and Firm Size

Backlog	2024 H1 (n=249)	2024 H2 (n=267)	Change
TOTAL	+37	+38	+1
REGION			
West Coast	+37	+28	-9
The Prairies	+36	+46	+10
Ontario	+32	+31	-1
Quebec	+61	+54	-7
Atlantic Canada	+28	+5	-23
FIRM SIZE			
1-25	+34	+15	-19
26-50	+8	+28	+20
51-200	+35	+44	+9
201-500	+51	+31	-20
More than 500	+41	+55	+14

## **Future Hiring Projections**

- Sixty-nine percent predict there will be an increase in hiring over the next 12 months, down from 74 percent in the first half of 2024. The resulting Net Rating declined four points to +66.
- *U.S. Comparison:* Future hiring projections are slightly lower in the U.S. where sixty-eight percent predict there will be an increase in hiring over the next 12 months at their firm, resulting in a Net Rating of +61.



#### Figure 19: Hiring Over the Next 12 Months – Trend

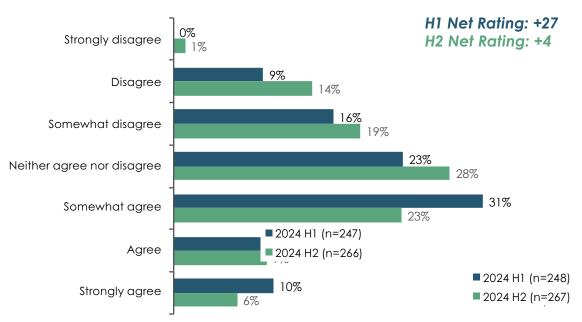
- Although future hiring sentiment remains high across all segments, nearly all segments saw declines compared to earlier this year.
- The Prairies was the only region to see an increase in future hiring sentiment.
- Hiring sentiment improves as firm size increases. Firms with more than 500 FTEs have the highest sentiment and are the only size segment that increased.

#### Figure 20: Expectations for Hiring Increases Over the Next 12 Months Net Rating Trend – By Region and Firm Size

Future Hiring	2024 H1 (n=247)	2024 H2 (n=266)	Change
TOTAL	+70	+66	-4
REGION			
West Coast	+68	+59	-9
The Prairies	+65	+67	+2
Ontario	+74	+70	-4
Quebec	+81	+69	-12
Atlantic Canada	+72	+44	-28
FIRM SIZE			
1-25	+56	+46	-10
26-50	+64	+59	-5
51-200	+71	+68	-3
201-500	+80	+69	-11
More than 500	+77	+82	+5

## Inflation

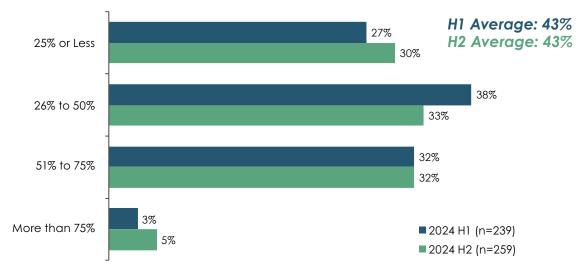
- Thirty-eight percent of firm executives agree they are extremely concerned about the impact of inflation on their firm; however, inflation concerns overall have moderated with the Net Rating falling from +27 in H1 2024 to +4 in H2 2024.
- U.S. Comparison: Inflation concerns are higher in the U.S. where 59 percent of firm executives are concerned, resulting in a Net Rating of +37.





### Likelihood of Recession in Next 6 Months

- The likelihood of recession in the next six months is 43 percent according to the average estimate among firm leaders. This is unchanged from the first half of 2024.
- U.S. Comparison: The likelihood of a recession (43 percent), according to firm executives, is the same in the U.S.

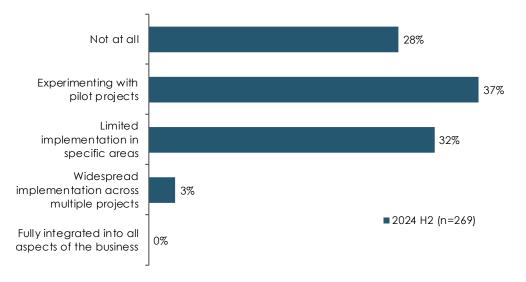


#### Figure 22: Likelihood of Recession in Next 6 Months - Trend

## **Hot Topics**

## Use of Artificial Intelligence (AI) in Projects

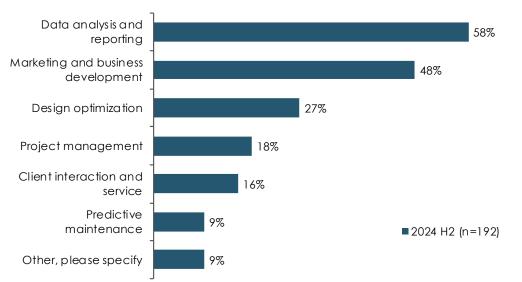
- A majority of firm executives indicate they are either experimenting with the use of AI in pilot projects (37 percent) or are using limited implementation across multiple projects (32 percent). No firms have fully integrated AI into projects.
- As firm size increases, so too does the use of AI in projects. For instance, 37 percent of firms with 1-25 FTEs are using AI in some way, compared to 99 percent of firms with 500+ FTEs.



#### Figure 23: Use of AI in Projects

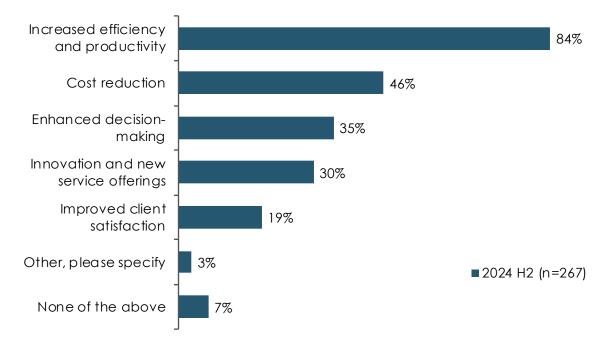
• A majority of firms who are using AI are doing so for data analysis and reporting (58 percent), while nearly half (48 percent) are using AI for marketing and business development.





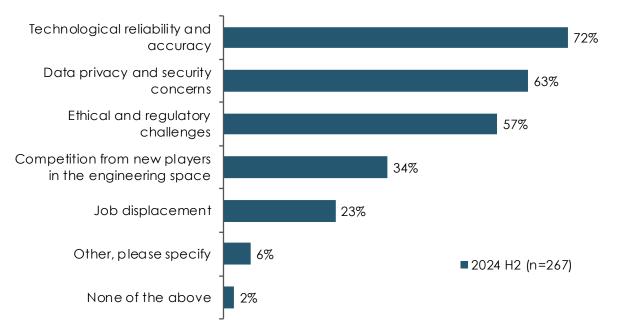
### **Opportunities and Risks Associated with Artificial Intelligence (AI)**

- The vast majority of firm executives (84 percent) believe that AI will bring increased efficiency and productivity to the industry. In addition, nearly half (46 percent) believe AI will result in cost savings.
- There are a variety of risks inherent with AI according to firm executives. These include reliability and accuracy (72 percent), data privacy and security (63 percent) and ethical and regulatory challenges (57 percent).



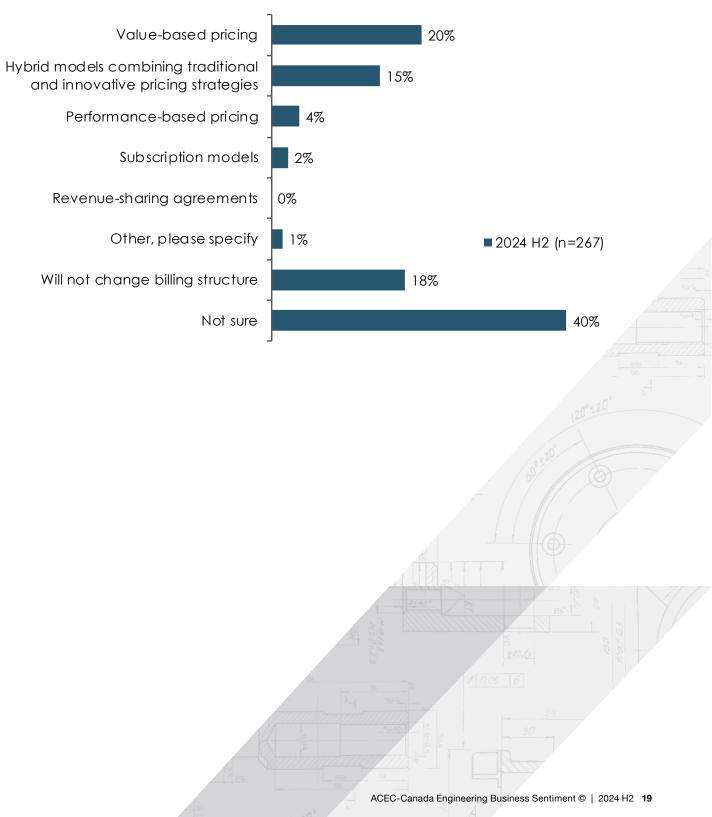
#### Figure 25: Greatest Opportunities to the Industry for AI





## Monetizing Artificial Intelligence (AI)

- A plurality of firm executives (40 percent) is not yet sure how they will monetize the use of AI. Another 18 percent say they will not change their billing structure.
- The lack of direction is compounded by the fact that three-fourths of firms with 1-50 FTEs are either not sure how to monetize AI or will not change their billing structure.



#### Figure 27: Intended Methods to Monetize the Use of AI

## Methodology

The Institute for Association and Nonprofit Research (IFANR) surveyed senior executives from among the database list of members provided by ACEC-Canada. For the first half of 2024 (H1), data collection occurred between March 21 and April 1, 2024. For the second half of 2024 (H2), data collection occurred between September 5 to 18, 2024.

In H2 2024, a total of 1,308 invitations were emailed, although 98 bounced and 8 opted out, resulting in a total of 1,202 potential respondents. Individuals who did not respond to the first email were sent up to three follow-up reminders.

In all, 312 individuals completed the survey for an overall response rate of 26 percent. In H1, 271 individuals completed the survey for an overall response rate of 23 percent.

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 percent 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-Canada 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