

2023 CIRT SENTIMENT INDEX

Fourth Quarter Report



EXECUTIVE SUMMARY

The CIRT Sentiment Index fell slightly in the fourth quarter, declining to 58.9 from 59.7 in the third quarter, with the Design Index dropping to 62.7 from 68.5.

While most index components were close to last quarter's readings, decreased optimism about the U.S. economy, the economy where members operate, and members' construction businesses all fell sharply going into the fourth quarter. Respondents' sentiment toward the U.S. economy recorded the largest decline, falling to 36.1 from 45.5.

Conversely, members' outlooks toward the nonresidential sector improved slightly alongside gains in backlog measures. However, construction inputs including labor, materials and productivity all indicate ongoing challenges. Compared to the third quarter, going into year end, the outlook for design services fell across most segments apart from heavy civil and industrial. Declines were most severe for design international work. On the other hand, construction sentiment improved notably in the nonmanufacturing industrial and international segments, while retreating across commercial, health care and public works.

Members replied to a series of current issues questions this quarter focused on use of technology and planned technology investments. Responses revealed that a majority of CIRT members consider their companies above average when it comes to technological advancement. Currently, slightly less than half of respondents are currently using artificial intelligence and/or machine learning in their operations, with an additional 38% of members planning to use or integrate it within the next 12 to 24 months.

Over the next three years, more than half of respondents plan to invest in software for project management and design, modeling and building information modeling (BIM). Most believe the largest benefits to technological innovation will improve project controls and performance tracking, labor productivity and design, as well as scheduling and

INDEX MOVEMENT					
Sentiment Index 58.9	Design Index 62.7				
		Q4 2023	Q3 2023		
Overall U.S. Economy	•	36.11	45.52		
Economy Where We Do Business	₩	47.92	53.73		
Our Construction Business	₩	64.46	67.28		
Nonresidential Sector	•	54.93	54.62		
Backlog	•	65.74	65.42		
Cost of Labor	•	86.81	86.57		
Cost of Materials	•	65.97	64.93		
Productivity	₩	44.44	44.78		

sequencing. Common concerns and challenges in technology integration are data security and lack of understanding of its capabilities.

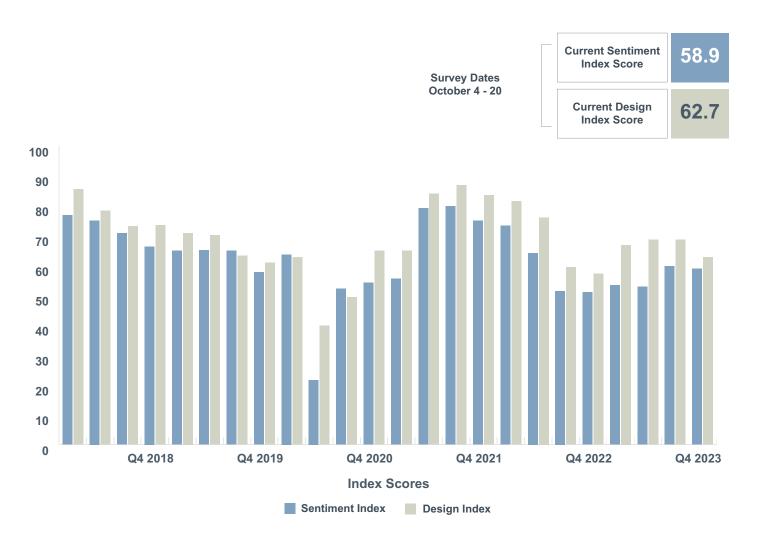
Previously, in the third quarter, a significant portion of members reported a need to add staff to complete projects safely and on time. To follow up, we posed additional questions on how those labor resources were sourced. This quarter, members provided detail that most of their labor resources were permanent additions (>50%). Also, subcon-

tractor resources were diversely sourced across permanent additions, resources pulled from other active projects and temporary hires.

Among the industries represented by CIRT's member base, transportation and heavy civil are the only two where most continue to expect both short- and long-term gains in design opportunities (as represented by growth figures reported above 3.5).

Conversely, commercial design opportunities are expected to remain challenged through at least mid-year 2024 and residential design opportunities through most of 2024. Office and commercial construction are likely to be muted through 2024. The industrial, manufacturing, public works and transportation sectors will likely see expanding opportunities over the short- and long-term.

CIRT Sentiment Index and Design Index Scores From Q1 2018 to Q4 2023





Local and National Economic Predictions for Next Quarter

The overall U.S. economy will:



The economy where we do business will:

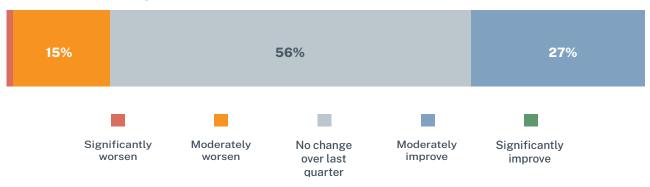


Expectations for the Residential and Nonresidential Building Markets for Next Quarter

Residential Building Construction Market

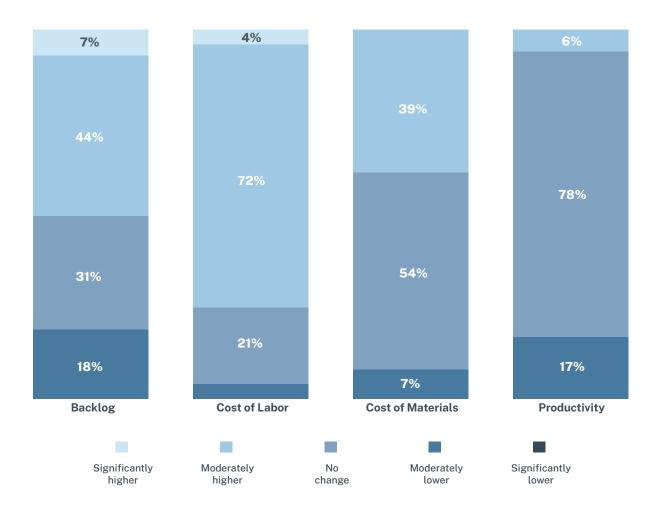


Nonresidential Building Construction Market



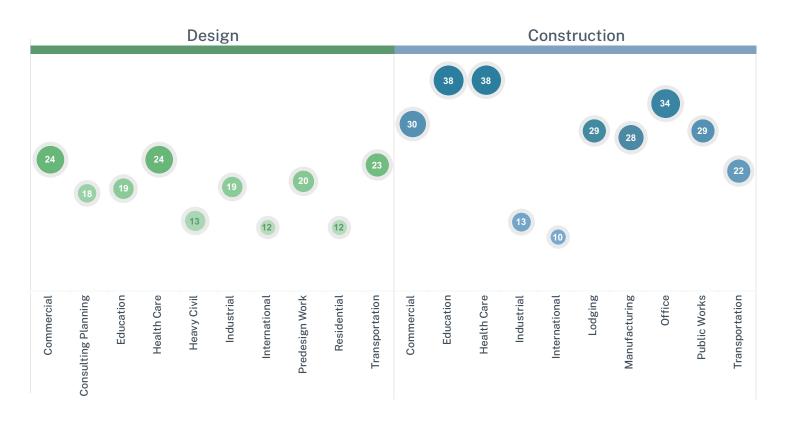


Construction Input Predictions for Next Quarter

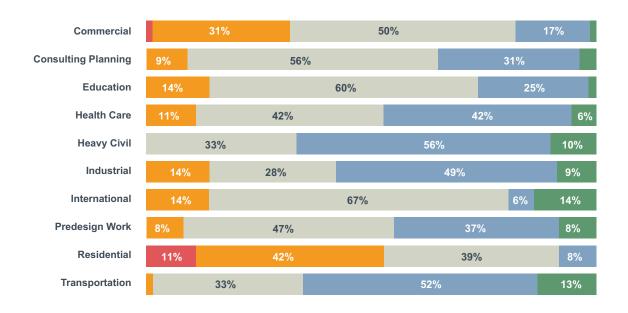




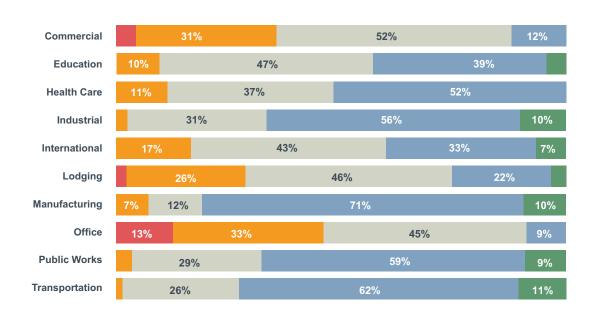
Member Profile: Number of CIRT Member Companies in Each Sector



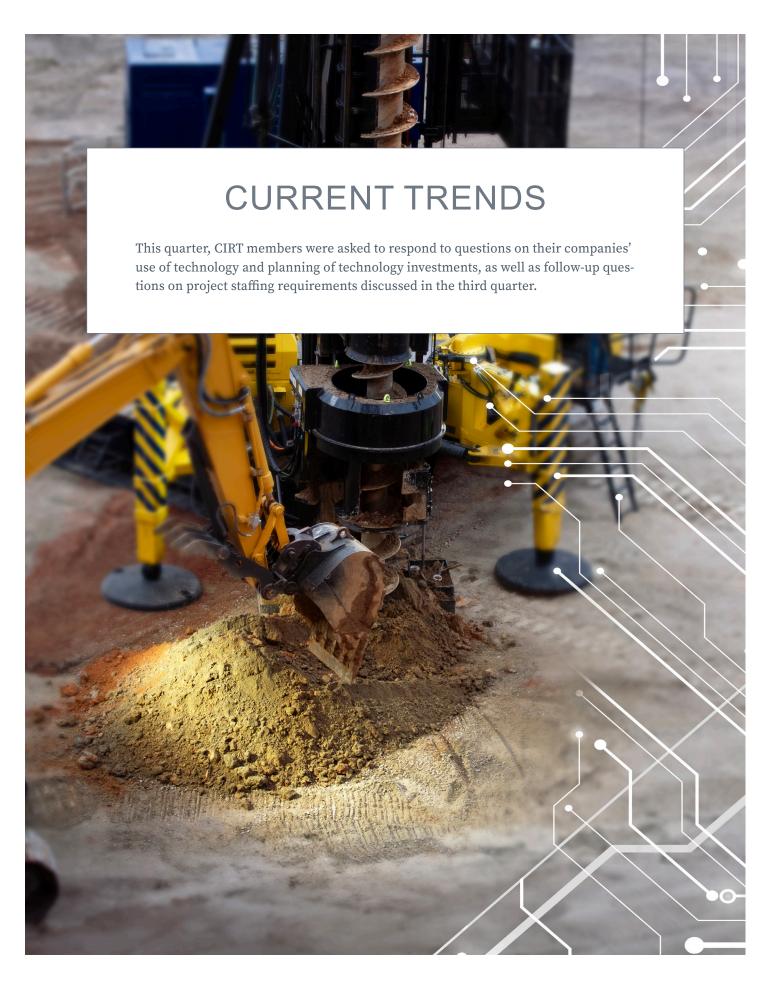
Perception of Change for Next Quarter: Design



Perception of Change for Next Quarter: Construction



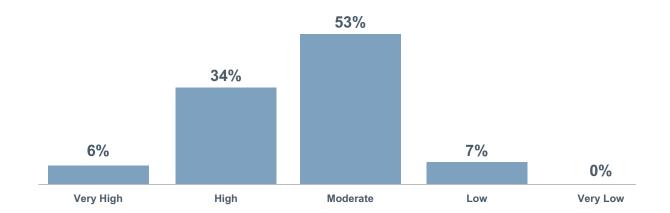






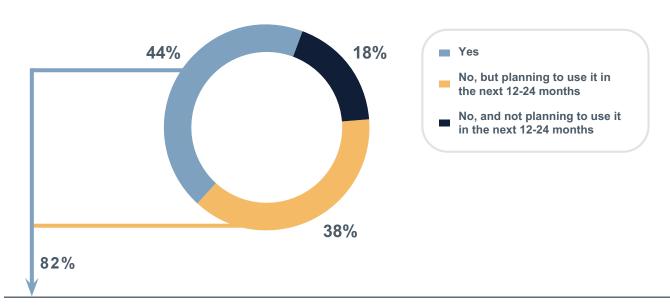
Technology and Artificial Intelligence Investment

How would you rate your company's current level of technological advancement?

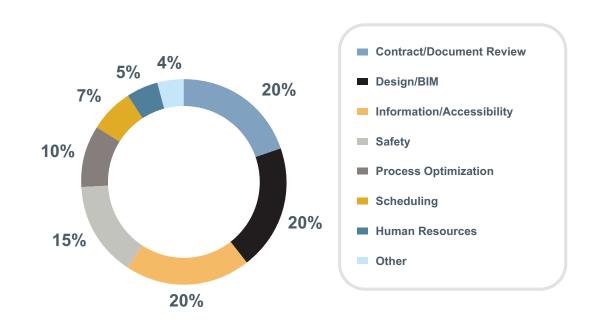


Approximately 40% of CIRT members consider their companies above average when it comes to technological advancement. Similarly, just under half of respondents, or 44%, are currently using artificial intelligence and/or machine learning in their operations, with another 38% planning to start using these tools in the next 12 to 24 months. Those that are using or plan to use AI or machine learning are mostly focused on contract, estimating and document review; design and BIM; information accessibility and safety applications.



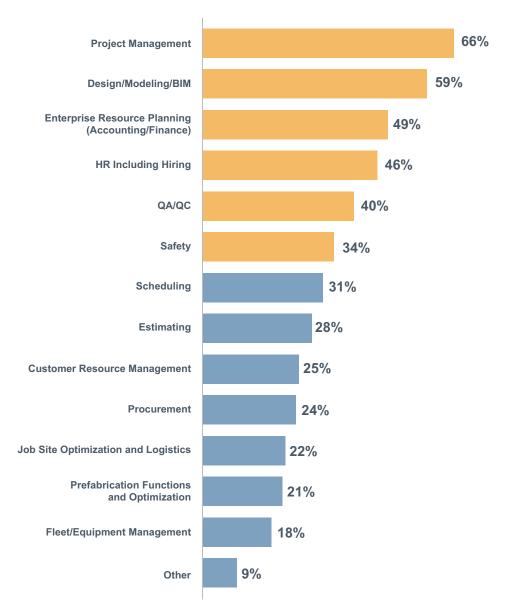


Please specify either how you currently use or are planning to use AI or machine learning.



Over the next three years, more than half of survey respondents plan to invest in software for project management and design, modeling or BIM. Additionally, between one-third to one-half of participants are planning to invest in software for enterprise resource planning, human resources, quality assurance/quality control and/or safety.

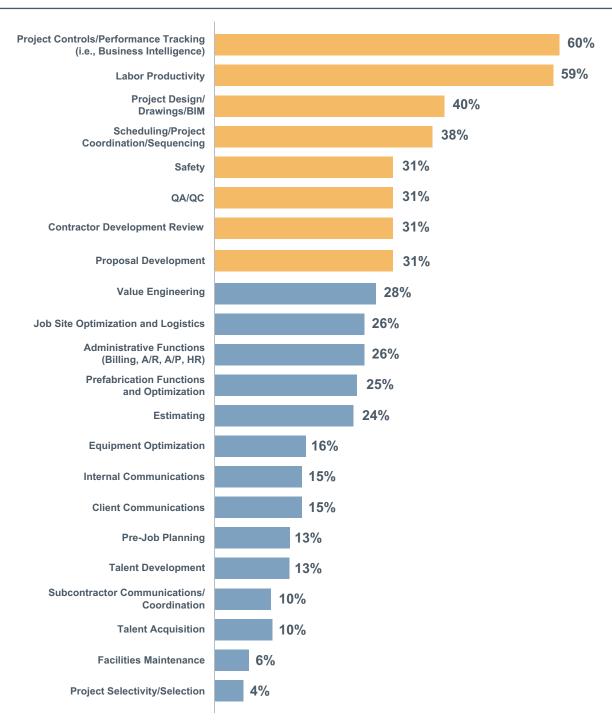
What areas do you plan to invest in software in the next three years?



Respondents were asked to select all that apply.

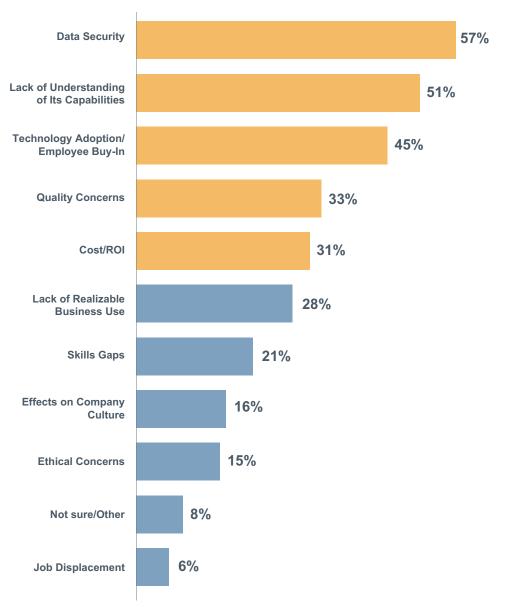
When asked about the benefits of technology investment, most CIRT members said it would advance project controls and performance tracking (60%) as well as labor productivity (59%). Between 30% and 40% of respondents expect advantages across design, scheduling and sequencing, safety, quality assurance/quality control, contract development, and review and proposal development.

What areas do you believe would benefit most from technological innovation (including Al) across your business?



Members' challenges and concerns around integrating technology include data security (57%) and lack of understanding of its capabilities (51%). Further, many agree that adoption and buy-in, quality concerns, and cost or return on investment are significant hurdles to integrating technology into their business processes.

What are your primary concerns/challenges regarding the integration of technological innovation (including AI) into your business processes?



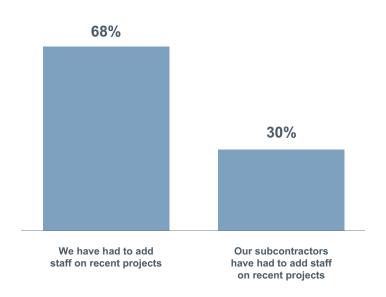
Respondents were asked to select no more than five.



Project Staffing Requirements

In the third quarter, a significant portion of responding members, or 94%, reported that they needed to add staff to deliver projects on time and safely. This quarter, as follow up, members were asked to identify the sources of this additional labor support. More than two-thirds of fourth-quarter survey respondents said they need to add staff to their projects recently. In those cases, more than half met their labor needs by hiring people permanently, followed by 16% that transitioned people from projects reaching or nearing completion. Additionally, of the 30% of respondents who reported that their subcontractors needed to add staff, labor sourcing was more diverse, with 34% coming from permanent hires, 31% pulled from other active projects and 20% temporary hires.

> Please identify if you've had a recent project experience that needed to add staff in order to deliver safely and on time (check all that apply). In the questions following please also identify how the additional labor was sourced.



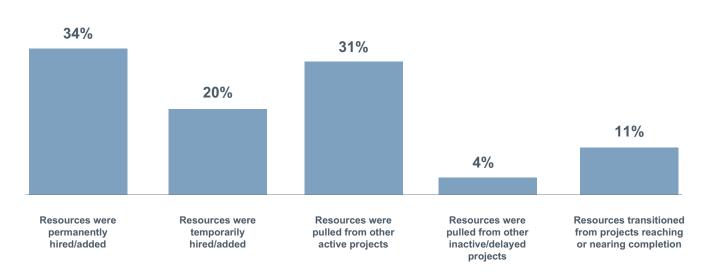


Identify how the additional labor was sourced by estimating share based on the quantity of labor each strategy added.

How did your company source the additional labor? 54% 16% 12% 10% 7% Resources were Resources were Resouceds were Resources were Resources transitioned permanently pulled from other pulled from other temporarily from projects reaching hired/added hired/added active projects inactive/delayed or nearing completion

How did your subcontractors source the additional labor?

projects



[&]quot;Unsure" responses were removed from both groups within this comparison

DESIGN OUTLOOK

Industry	Next Quarter	Six Months From Now	One Year From Now
Commercial	2.75	2.79	3.04
Consulting Planning	3.28	3.33	3.28
Education	3.05	3.21	3.16
Health Care	3.46	3.38	3.42
Heavy/Civil	3.54	3.92	3.85
Industrial	3.58	3.53	3.47
International	3.25	3.25	3.08
Predesign Work	3.45	3.45	3.45
Residential	2.25	2.50	2.58
Transportation	3.78	3.83	3.70

CONSTRUCTION OUTLOOK

Industry	Next Quarter	Six Months From Now	One Year From Now
Commercial	2.57	2.70	2.90
Education	3.29	3.39	3.45
Health Care	3.18	3.47	3.55
Industrial	3.77	3.69	3.77
International	3.10	3.30	3.50
Lodging	3.00	2.93	3.00
Manufacturing	3.82	3.86	3.82
Office	2.44	2.53	2.53
Public Works	3.72	3.69	3.79
Transportation	3.82	3.77	3.86

Darker shades indicate higher optimism.

This quarter respondents were asked how the design and construction sectors will change next quarter, six months from now and one year from now. Each industry score is on a scale of 1 to 5, with 1 being the worst and 5 being the best. Each response reflects the change in score in comparison to the starting average score of the next quarter. Darker colors indicate higher optimism.



ABOUT THE CONSTRUCTION INDUSTRY ROUND TABLE (CIRT)

The Construction Industry Round Table (CIRT) is composed exclusively of approximately 115-120 CEOs from the leading architectural, engineering and construction firms doing business in the United States.

CIRT is the only organization that is uniquely situated as a single voice representing the richly diverse and dynamic design/construction community. First organized in 1987 as the Construction Industry Presidents' Forum, the Forum has since been incorporated as a not-for-profit association with the mission "to be a leading force for positive change in the design/construction industry while helping members improve the overall performance of their individual companies."

The Round Table strives to create one voice to meet the interests and needs of the design/construction community. CIRT supports its members by actively representing the industry on public policy issues, by improving the image and presence of its leading members, and by providing a forum for enhancing and developing strong management approaches through networking and peer interaction.

The Round Table's member CEOs serve as prime sources of information, news and background on the design/construction industry and its activities. If you are interested in obtaining more information about the Construction Industry Round Table, please call **202-466-6777** or contact us by email at **cirt@cirt.org**.

CIRT SENTIMENT INDEX

The CIRT Sentiment Index is a survey of members of the Construction Industry Round Table conducted quarterly by FMI. For press contact or questions about the CIRT Sentiment Index, contact Mark Casso at mcasso@cirt.org.

CONFIDENTIALITY

All individual responses to this survey will be confidential and shared outside of FMI only in the aggregate. All names of individuals responding to this survey will remain confidential to FMI.



FMI is a leading consulting and investment banking firm dedicated to serving companies working within the built environment. Our professionals are industry insiders who understand your operating environment, challenges and opportunities. FMI's sector expertise and broad range of solutions help our clients discover value drivers, build resilient teams, streamline operations, grow with confidence and sell with optimal results.

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