CIRT Sentiment Index
Second Quarter Report
EXECUTIVE SUMMARY

The Second Quarter 2018 CIRT Sentiment Index Report saw a decrease in both the Sentiment and Design indexes from first quarter, but still carried a sense of optimism when compared with 2017. The Sentiment Index fell slightly from 76.85 to 74.98, and the Design Index fell from 85.36 to 78.30.

This quarter's current issues questions revolved around two topics: apprenticeship-like training and the permit approval process. The majority of CIRT members conduct some type of apprenticeship-like training, but it is done in-house less than 50% of the time. Of the training that is done in-house, the vast majority is “on-the-job” training as opposed to “classroom instruction,” and it is generally continuous in nature versus a minimal amount of retraining. Of the respondents who utilize external resources for their apprenticeship-like training, online courses represent the top resource, with community colleges and NCCER representing the next two most-popular options. Of all the different methods of training present among CIRT member organizations, more than 60% of respondents indicate that less than half of the training that their employees undergo is considered to be a “portable credit.”

With respect to the permit approval process and how it could be improved or streamlined, 81% of respondents said that they experience fewer delays on private sector projects versus public sector projects, with the greatest delays occurring at the federal level. When considering which factors would be most influential in reducing delays in the approval process, “shortening the lengthy environmental review process” and “establishing a one agency, one decision” were cited the most often.

Among the industries represented by CIRT’s member base, the transportation, public works and health care industries are perceived to experience the most amount of moderate improvement for next quarter within the construction sector, and the transportation, industrial, heavy/civil, consulting planning and health care industries are viewed to experience the most positive change within the design sector.
CIRT SENTIMENT AND DESIGN INDEX SCORES FROM Q1 2016 TO Q1 2018

CONSTRUCTION INPUT PREDICTIONS FOR NEXT QUARTER
**LOCAL AND NATIONAL ECONOMIC PREDICTIONS FOR NEXT QUARTER**

- Significantly improve over last quarter: 3.39%
- Moderately improve over last quarter: 46.61%
- No change over last quarter: 49.15%
- Moderately worsen compared with last quarter: 0.85%
- Significantly worsen compared with last quarter: 0.0%

**EXPECTATIONS FOR THE NONRESIDENTIAL BUILDING MARKET FOR NEXT QUARTER**

- Significantly improve over last quarter: 0%
- Moderately improve over last quarter: 45.76%
- No change over last quarter: 47.46%
- Moderately worsen compared with last quarter: 0%
- Significantly worsen compared with last quarter: 0%
- I don't do business in the residential construction market: 6.78%
EXPECTATIONS FOR THE RESIDENTIAL BUILDING MARKET FOR NEXT QUARTER

- Significantly improve over last quarter: 1.69%
- Moderately improve over last quarter: 25.42%
- No change over last quarter: 27.12%
- Moderately worsen compared with last quarter: 11.86%
- Significantly worsen compared with last quarter: 0%
- I don't do business in the nonresidential construction market: 33.90%

MEMBER PROFILE: NUMBER OF CIRT MEMBER COMPANIES IN EACH SECTOR

<table>
<thead>
<tr>
<th>Sector</th>
<th>Construction</th>
<th>Design</th>
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<tbody>
<tr>
<td>Commercial</td>
<td>22</td>
<td>20</td>
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<tr>
<td>Education</td>
<td>27</td>
<td>19</td>
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<tr>
<td>Health Care</td>
<td>30</td>
<td>17</td>
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<tr>
<td>Industrial</td>
<td>24</td>
<td>17</td>
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<tr>
<td>International</td>
<td>28</td>
<td>19</td>
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<tr>
<td>Lodging</td>
<td>27</td>
<td>21</td>
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<tr>
<td>Manufacturing</td>
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<td>14</td>
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<tr>
<td>Office</td>
<td>12</td>
<td>10</td>
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<tr>
<td>Public Works</td>
<td>11</td>
<td>12</td>
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<tr>
<td>Transportation</td>
<td>10</td>
<td>10</td>
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</tbody>
</table>
### Perceptions of Change for Next Quarter: Construction

<table>
<thead>
<tr>
<th>Industry</th>
<th>Significantly Worsen</th>
<th>Moderately Worsen</th>
<th>No Change</th>
<th>Moderately Improve</th>
<th>Significantly Improve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td></td>
<td>53%</td>
<td>41%</td>
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</tr>
<tr>
<td>Education</td>
<td>4%</td>
<td>49%</td>
<td>42%</td>
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<td>7%</td>
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<tr>
<td>Health Care</td>
<td>4%</td>
<td>34%</td>
<td>56%</td>
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<td>6%</td>
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<tr>
<td>Industrial</td>
<td>4%</td>
<td>42%</td>
<td>47%</td>
<td></td>
<td>7%</td>
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<tr>
<td>International</td>
<td></td>
<td>56%</td>
<td>40%</td>
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<td>4%</td>
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<tr>
<td>Lodging</td>
<td>18%</td>
<td>63%</td>
<td>18%</td>
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<tr>
<td>Manufacturing</td>
<td>4%</td>
<td>39%</td>
<td>54%</td>
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<td>4%</td>
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<tr>
<td>Office</td>
<td>6%</td>
<td>57%</td>
<td>32%</td>
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<td>5%</td>
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<tr>
<td>Public Works</td>
<td>3%</td>
<td>35%</td>
<td>59%</td>
<td></td>
<td>4%</td>
</tr>
<tr>
<td>Transportation</td>
<td>5%</td>
<td>29%</td>
<td>59%</td>
<td></td>
<td>8%</td>
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</tbody>
</table>

**Legend:**
- Red: Significantly worsen
- Orange: Moderately worsen
- Gray: No change
- Blue: Moderately improve
- Dark blue: Significantly improve
PERCEPTION OF CHANGE FOR NEXT QUARTER: DESIGN

- **Commercial**
  - Significantly worsen: 8%
  - Moderately worsen: 43%
  - No change: 45%
  - Significantly improve: 7%

- **Consulting Planning**
  - Significantly worsen: 33%
  - Moderately worsen: 58%
  - No change: 45%
  - Significantly improve: 7%

- **Education**
  - Significantly worsen: 4%
  - Moderately worsen: 45%
  - No change: 45%
  - Significantly improve: 6%

- **Health Care**
  - Significantly worsen: 4%
  - Moderately worsen: 31%
  - No change: 51%
  - Significantly improve: 14%

- **Heavy/Civil**
  - Significantly worsen: 35%
  - Moderately worsen: 60%
  - No change: 5%
  - Significantly improve: 5%

- **International**
  - Significantly worsen: 33%
  - Moderately worsen: 49%
  - No change: 49%
  - Significantly improve: 17%

- **Industrial**
  - Significantly worsen: 43%
  - Moderately worsen: 45%
  - No change: 45%
  - Significantly improve: 10%

- **Pre-design Work**
  - Significantly worsen: 4%
  - Moderately worsen: 32%
  - No change: 54%
  - Significantly improve: 10%

- **Residential**
  - Significantly worsen: 7%
  - Moderately worsen: 13%
  - No change: 40%
  - Significantly improve: 37%
  - Significantly improve: 3%

- **Transportation**
  - Significantly worsen: 30%
  - Moderately worsen: 52%
  - No change: 52%
  - Significantly improve: 17%
CURRENT TRENDS

This quarter’s current issues topics focused on two things: the practice of apprenticeship-like training and the CIRT member experience with the permit approval process. Approximately 46% of CIRT members conduct some form of apprenticeship-like training, while 28% say they conduct apprenticeship-like training sometimes and 26% say they don’t conduct apprenticeship-like training at all.

Within the companies that do participate in apprenticeship-like training, the distribution of responses indicates that the majority of companies do 50% or less of their apprenticeship-like training in-house.

**DOES YOUR FIRM CONDUCT APPRENTICESHIP-LIKE TRAINING FOR YOUR WORKFORCE?**

- **Yes** 45.88%
- **Sometimes** 28.24%
- **No** 25.88%

**WHAT PERCENTAGE OF YOUR APPRENTICESHIP-LIKE TRAINING IS IN HOUSE?**

- **0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%**
- **Count of responses**
Of the companies who do apprenticeship-like training, companies within the construction sphere indicate that 59% of their training takes place “on-the-job” and 38% takes place in “classroom instruction,” with design companies indicating a similar split – 60% of training is “on-the-job” and 33% is “classroom instruction.”

When conducting training out-of-house, CIRT members cite online courses as their top resource (25%) with community colleges and NCCER as the second (18.6%) and third-most (17.2%) utilized resources, respectively, and unions as a close fourth (16.5%).

### WHAT PERCENTAGE OF YOUR TRAINING IS ON-THE-JOB VS. CLASSROOM INSTRUCTION?

**Construction**
- On-the-Job: 60.07%
- Classroom Instruction: 37.38%

**Design**
- On-the-Job: 33.46%
- Classroom Instruction: 58.53%
In addition to questions about internal and external training resources, CIRT members were asked about the nature of their employees’ training, such as whether the training is continuous or mostly retraining, and what percentage of their training is considered to be a “portable credit.”

Respondents in both construction and design indicated that training is continuous 48-52% of the time and that retraining only represents 27-33% of apprenticeship-like training conducted. Additionally, the distribution of responses illustrates that more than 60% of respondents believe that less than 50% of their training represents a “portable credit” for their employees.
WHAT PERCENTAGE OF YOUR APPRENTICESHIP-LIKE TRAINING IS CONTINUOUS VS. RETRAINING?

Construction

- Continuous: 52.03%
- Retraining: 27.15%

Design

- Continuous: 48.50%
- Retraining: 32.64%

WHAT PERCENTAGE OF YOUR TRAINING IS A “PORTABLE CREDIT”?

Percentage of training that’s “portable”

Count of responses

- 0% - 10%: 4
- 20% - 30%: 8
- 40% - 50%: 16
- 60% - 70%: 12
- 80% - 90%: 8
- 100%: 4
The second current issues topic revolved around the permit approval process. Respondents were asked about their experience with delays on private and public sector projects, as well as their thoughts on regulatory reform.

Predictably, 81% of respondents said that they experience fewer delays on private sector projects versus public sector projects. Respondents across both construction and design conveyed that 42% of delays occur at the federal level, 31% occur at the state level, and 27% occur at the local level.

When asked if it was possible to reduce public sector project completion time to two years, 41% of respondents said “maybe” and 39% said “yes,” while the remaining 20% said “no.” In the following question, when they were asked how long it would take to get a permit approved if the approval process was more streamlined, an equal 45% of respondents believe that the permit approval process would most likely take “2-3 years” or “3-4 years.”

Respondents had an opportunity to clarify their reasoning in the next question, when they were asked which factors influence the permit approval time the most. The two choices that received the most scores for “greatly decrease approval time” were “shortening the lengthy environmental review process” and “establishing a one agency, one decision.” The option with the most neutrality was “establishing capital or multiyear funding,” indicating that most respondents believe this option to be the least impactful of the choices given.
**DO YOU BELIEVE IT’S POSSIBLE TO REDUCE PUBLIC SECTOR PROJECT COMPLETION TIME TO TWO YEARS?**

- Yes: 39.02%
- Maybe: 41.46%
- No: 19.51%

**ONCE THE APPROVAL PROCESS IS STREAMLINED, HOW LONG DO YOU THINK IT WILL TAKE TO GET A PERMIT APPROVED**

- 2-3 Years: 44.74%
- 3-4 Years: 44.74%
- 4-5 Years: 10.53%
### AT WHAT LEVEL JURISDICTION DO YOU ENCOUNTER THE MOST DELAYS?

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<thead>
<tr>
<th>Jurisdiction</th>
<th>30.96%</th>
<th>26.55%</th>
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<tbody>
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<td>Federal</td>
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### WHAT’S THE POTENTIAL FOR EACH OF THESE REGULATORY ACTIONS TO DECREASE THE PERMIT APPROVAL TIME?

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<thead>
<tr>
<th>Action</th>
<th>29.11%</th>
<th>62.03%</th>
<th>17.72%</th>
<th>30.38%</th>
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<tr>
<td>Shortening the lengthy environmental review process</td>
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<td>Establishing a one agency, one decision</td>
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<td>Eliminating certain redundant and inefficient provisions in environmental laws</td>
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<td>Limiting the period for filing lawsuits</td>
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<td>Changing the procurement system</td>
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<tr>
<td>Establishing capital or multiyear funding</td>
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</table>
This quarter respondents were asked to comment on how the construction sector 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 percentage is a reflection of the change in score in comparison to the starting average score of the “next quarter” period. Please refer to the “Predictions of the Construction Sector Business Outlook by Industry” chart to see a visual representation of the scores. Below are the predominant perceptions of CIRT's members:

**COMMERCIAL**

The commercial industry’s scores were on the lower end, with a starting average score of 3.36 for next quarter. This score stays flat for six months from now and decreases by -1.35% over the starting score for one year from now.

**EDUCATION**

The education industry is expected to experience a slightly better version of the growth curve than the commercial industry is expected to experience. The starting average score was 3.52 for next quarter, with a 2.1% positive increase in average score six months from now and a 1.05% increase over the starting value for one year from now.
HEALTH CARE
The health care industry is expected to undergo mostly flat growth, resulting in a contraction one year from now. The average score is 3.63 for next quarter and 3.67 for six months from now and decreases by -1.83% one year from now.

INDUSTRIAL
The industrial industry was once again a frontrunner for growth. With a starting average score of 3.32 for next quarter, average scores positively increase by 9.52% from the starting score for six months from now and 14.29% for one year from now.

INTERNATIONAL
The international industry is expected to contract in the midterm, with a growth potential during the one-year period. The starting average score was 3.50 for next quarter, with a score decrease of -3.57% for six months from now and a rebound of 1.79% from the average starting value for the one-year period.

LODGING
The lodging industry had the lowest starting average score of any of the industries measured. The score for next quarter was 3.08, decreasing by -2.70% six months from now and decreasing over the starting score again by -8.11% one year from now.

MANUFACTURING
In a complete departure from last quarter’s scores, the manufacturing industry is expected to stay flat into the midterm and contract in the long term. The starting average score was 3.64 and stayed at 3.64 for six months from now and is expected to decrease by -5.88% one year from now.

OFFICE
The office industry is expected to experience growth in the midterm, with an average starting score of 3.33. The score increases by 2.2% for the six-month period and then falls back to a score of 3.33 for the long term.

PUBLIC WORKS
The public works industry is expected to experience healthy growth six months from now and one year from now. The starting average score was 3.4, increasing over the starting value by 7.06% for six months from now and 14.12% for one year from now.

TRANSPORTATION
The transportation industry is perceived to experience moderate and steady growth. The average score for next quarter was 3.62, with respondents predicting 2.86% growth six months from now and 3.81% growth one year from now.
As with the construction sector, respondents were asked to comment on how the design sector 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 percentage is a reflection of the change in score in comparison to the starting average score of the “next quarter” period. Please refer to the “Predictions of the Design Sector Project Growth by Industry” chart to see a visual representation of the scores. Below are the predominant perceptions of CIRT’s members:

**COMMERCIAL**

The commercial industry tied with education for the second-lowest starting average score of 3.35. For six months from now, the score increases by 2.99%, and for one year from now, the score decreases by -1.49% over the starting average score.

**CONSULTING**

The consulting industry is expected to experience a positive bump in growth followed by a return to the starting average. The average score was 3.68 for next quarter, 3.74 for six months from now, and 3.68 again for one year from now.
EDUCATION
The education industry's starting average score was 3.35, with 8.77% expected growth six months from now and 7.02% growth over the starting score for one year from now.

HEALTH CARE
The health care industry is expected to see moderate growth six months from now and very slight growth one year from now. The average starting score for next quarter was 3.65, which increases by 4.84% six months from now and 3.23% one year from now.

HEAVY/CIVIL
The heavy/civil industry's starting average score was 3.63, with 0% growth expected six months from now and 5.80% growth expected one year from now.

INDUSTRIAL
The industrial industry showed the second-highest long-term growth rate. The average starting score was 3.62, which increased by 10.53% six months from now and 7.89% one year from now.

INTERNATIONAL
The international industry is expected to experience consistent positive growth over all measured periods. The starting score for next quarter was 3.50, increasing by 6.12% six months from now and 4.08% one year from now.

PRE-DESIGN
The pre-design industry's starting average score was 3.52 for next quarter. This number increases by 9.47% for six months from now and 6.32% one year from now.

RESIDENTIAL
The residential industry had the worst starting average score of 3.10, and the respondents who work in this industry expect it to briefly grow by 6.45% six months from now and then return to 3.10 one year from now.

TRANSPORTATION
The transportation industry is expected to experience consistent growth over the midterm and long term. The average score was 3.71 for next quarter, which increases by 4.81% six months from now and 5.77% one year from now.
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 Research, Raleigh, North Carolina. 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.
About FMI

For over 65 years, FMI has been the leading management consulting and investment banking firm dedicated exclusively to engineering and construction, infrastructure and the built environment.

FMI serves all sectors of the industry as a trusted advisor. More than six decades of context, connections and insights lead to transformational outcomes for our clients and the industry.

Sector Expertise

- A/E and Environmental
- General Contractors/CM
- Heavy Civil
- Industrial
- Specialty Trades
- Utility T&D
- Cleantech and Energy Services
- Construction Materials
- Building Products
- Oil and Gas
- Private Equity
- Owners

FMI Client Highlights

73% of the ENR Top-400 Largest Contractors

65% of the ENR Top-200 Specialty Contractors

57% of the ENR Top-100 Design Firms

56% of the ENR Top-200 Environmental Firms

58% of the ENR Top-100 CM for Fee Firms