ABC 2022 Workforce Development Survey

Released May 2022

fmiconsulting.com

Associated Builders and Contractors
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Management Summary

Section 1
Methodology

- ABC distributed the survey to the ABC contractor membership list beginning on Jan. 4, 2022, and the survey was closed on Feb. 18, 2022.
- After removing duplicate and incomplete responses, the sample response rate was 8% of all ABC contractor members. The large sample size and the distribution of responses across categories gave FMI confidence to model the total investment of ABC contractor members.
- FMI's model of total workforce development and education investment was built from 21 distinct categories based on contractor type and annual revenue. Using survey data on total workforce development and education budgets, FMI cleaned and corrected data related to per-person spending within each education type. FMI assigned each contractor category a typical number of course attendees educated and per-person investment for each education type (leadership, safety, craft/trade).
- FMI multiplied the number of course attendees educated by the amount spent per course attendee to calculate the investment per firm in each category. The amount per firm was multiplied by the number of ABC member contractors in each of those categories, based on ABC and survey data.
- The final sum ($1.6 billion) is intended as a conservative estimate of total workforce education investment made by ABC member contractors, as the largest ABC member contractors were assumed to have revenues no greater than $2 billion.
- The results of the survey are contained in the subsequent report.¹

¹All charts and graphs are rounded to the nearest whole number.
Highlights from the ABC 2022 Workforce Development Survey

Management Summary
Source(s): ABC, FMI

- ABC member contractors invested $1.6 billion in workforce development in 2021 to educate more than 1.3 million course attendees.

- ABC contractors invested an average of 7.4% of payroll on workforce development in 2021, down slightly from 8.4% in 2020.

- Safety education accounts for the greatest share (56%) of total workforce investment, though investment in craft/trade education increased significantly from 2020, up from 22% to 34% in 2021.

- All three education areas received similar levels of investment from ABC member firms in 2021, showing an increase in focus on leadership and craft/trade education from the prior year.

- Compared to 2020, general and construction management contractors have increased their share of the total workforce development investment, growing to 65% in 2021 from 58% in 2020.

- Women in management/supervisory roles ticked up to 19% in 2021 from 17% in 2020, and women in craft/trade roles increased from 14% to 15% year over year.
ABC member contractors invested an average of $112,412 on workforce development and education.

### Model Summary
Source(s): ABC, FMI

<table>
<thead>
<tr>
<th></th>
<th>General contractor/construction managers</th>
<th>Trade or specialty</th>
<th>Heavy/civil/utility</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC members by type (number of firms)</td>
<td>3,621</td>
<td>10,253</td>
<td>772</td>
<td>14,646</td>
</tr>
<tr>
<td>Total education investment ($)</td>
<td>$1,072,927,828</td>
<td>$545,604,739</td>
<td>$27,849,454</td>
<td>$1,646,382,021</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student distribution by role</td>
<td>Senior leader: 8%</td>
<td>Project manager: 12%</td>
<td>Field manager: 15%</td>
<td>Craft/trade: 65%</td>
<td>Senior leader: 9%</td>
<td>Project manager: 10%</td>
<td>Field manager: 19%</td>
<td>Craft/trade: 62%</td>
<td>Senior leader: 5%</td>
<td>Project manager: 15%</td>
<td>Field manager: 21%</td>
<td>Craft/trade: 59%</td>
</tr>
</tbody>
</table>
The number of course attendees educated by ABC member contractors rebounded significantly in 2021 to 1.3 million, eclipsing the pre-pandemic figure of 1.1 million.

<table>
<thead>
<tr>
<th>Number of course attendees educated</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>144,459</td>
<td>57,303</td>
<td>106,024</td>
</tr>
<tr>
<td>Safety</td>
<td>752,139</td>
<td>320,758</td>
<td>645,474</td>
</tr>
<tr>
<td>Craft/trade</td>
<td>448,114</td>
<td>138,956</td>
<td>337,623</td>
</tr>
<tr>
<td>Total</td>
<td>1,344,712</td>
<td>517,017</td>
<td>1,089,121</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average investment per attendee</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>$2,226</td>
<td>$1,405</td>
<td>$1,432</td>
</tr>
<tr>
<td>Safety</td>
<td>$2,200</td>
<td>$2,369</td>
<td>$1,104</td>
</tr>
<tr>
<td>Craft/trade</td>
<td>$2,227</td>
<td>$1,779</td>
<td>$1,904</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total investment by contractor type</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC/CM</td>
<td>$1,072,927,828</td>
<td>$789,969,546</td>
<td>$320,529,891</td>
</tr>
<tr>
<td>Heavy/civil/utility</td>
<td>$27,849,454</td>
<td>$57,180,520</td>
<td>$125,384,271</td>
</tr>
<tr>
<td>Trade or specialty</td>
<td>$545,604,739</td>
<td>$511,523,548</td>
<td>$1,061,632,836</td>
</tr>
<tr>
<td>Total</td>
<td>$1,646,382,021</td>
<td>$1,358,673,614</td>
<td>$1,507,546,997</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average investment by contractor type</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC/CM</td>
<td>$296,327</td>
<td>$228,183</td>
<td>$126,492</td>
</tr>
<tr>
<td>Heavy/civil/utility</td>
<td>$36,085</td>
<td>$84,089</td>
<td>$172,231</td>
</tr>
<tr>
<td>Trade or specialty</td>
<td>$53,212</td>
<td>$52,378</td>
<td>$101,611</td>
</tr>
</tbody>
</table>
General contractors and construction managers invested more in workforce development and education than in 2020.

**Management Summary**
Source(s): ABC, FMI

**Estimated ABC membership by contractor type**
All respondents, percent of total

- Heavy/civil/utility: 5%
- GC/CM: 25%
- Trade/specialty: 70%

**Total educating investment by contractor type**
All respondents, percent of total

- Heavy/civil/utility: 2%
- Trade/specialty: 33%
- GC/CM: 65%
Safety education accounted for the greatest share (56%) of total workforce investment.

**Education investment by education type**
All respondents, percent of total

- Safety education: 56%
- Craft/trade education: 33%
- Leadership education: 11%

**Education investment by education type**
All respondents

- Safety education: $2,200
- Leadership education: $2,226
- Craft/trade education: $2,227
In 2021, ABC member contractors provided safety education to more than 750,000 course attendees.

Management Summary
Source(s): ABC, FMI

Personnel educated by role
All respondents, percent of total

- Craft/trade personnel: 64%
- Field managers/superintendents: 17%
- Project managers: 10%
- Senior executives: 9%

Personnel educated by educating type
All respondents

- Safety education: 752,139
- Craft/trade education: 448,114
- Leadership education: 144,459
Women in management/supervisory roles increased to 19% in 2021 from 17% in 2020, and women in craft/trade roles increased from 14% to 15% year over year.

Management Summary
Source(s): ABC, FMI

In your company, what percentage of each type of course attendee are represented by women?
All respondents, average percentage

![Bar chart showing percentages of women in management/supervisory roles and craft/trade roles. 19% of women are in management/supervisory roles, and 15% in craft/trade roles.]
Key Findings

Section 2
ABC member contractors invested an average of $112,412 on workforce development in 2021, compared to $94,495 in 2020.

### What percentage of your company's payroll is spent on education?
All respondents

<table>
<thead>
<tr>
<th>Percent of payroll spent on educating</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤5%</td>
<td>250</td>
</tr>
<tr>
<td>6%-10%</td>
<td>57</td>
</tr>
<tr>
<td>11%-15%</td>
<td>26</td>
</tr>
<tr>
<td>15%-20%</td>
<td>9</td>
</tr>
<tr>
<td>20%-25%</td>
<td>3</td>
</tr>
<tr>
<td>&gt;25%</td>
<td>3</td>
</tr>
</tbody>
</table>

Average: 7.4%

### What is your total investment for educating personnel (in dollars)?
All respondents

<table>
<thead>
<tr>
<th>Total training investment (Thousands of dollars)</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤25</td>
<td>61%</td>
</tr>
<tr>
<td>26-50</td>
<td>13%</td>
</tr>
<tr>
<td>51-75</td>
<td>5%</td>
</tr>
<tr>
<td>76-100</td>
<td>6%</td>
</tr>
<tr>
<td>101-125</td>
<td>1%</td>
</tr>
<tr>
<td>126-150</td>
<td>2%</td>
</tr>
<tr>
<td>&gt;150</td>
<td>12%</td>
</tr>
</tbody>
</table>

Average: $112,412
ABC member contractors educated almost four times as many craft/trade personnel than the next highest position group (field managers/superintendents).

How many personnel in each of the following groups receive education in a year?
All respondents

- Craft/trade personnel: 80
- Field managers/superintendents: 21
- Project managers: 11
- Senior executives: 8
In 2021, ABC member firms invested in safety education for 51 course attendees, on average.
Over half of respondents (61%) reported a labor shortage that is severe or higher, citing an exodus of baby boomers as the top contributor.

**How severe is the skilled labor shortage facing your company or organization?**
All respondents, percent of total

- Very severe: 24%
- Severe: 37%
- Moderate: 30%
- Minimal: 7%
- Non-existent: 2%

**Which of the following factors have increased the severity of the skilled labor shortage facing your company or organization? Choose up to three.**
All respondents, percent of total

- Exodus of baby boomers: 45%
- Difficulty finding candidates who can pass a drug test: 34%
- Higher compensation in other industries: 32%
- Perception of the industry as technologically unsophisticated: 29%
- Higher compensation in other areas of the United States: 18%
- Immigration requirements: 16%
- Perception of the industry as unsafe: 12%

*Other includes uninterested younger generation, lack of skilled workers and the COVID-19 pandemic.*
Just over half of respondents (51%) employed reentering or second chance citizens.
Most respondents in the survey targeted high school students, graduates and/or people with a GED diploma for recruitment.

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school students, graduates and/or people with a GED diploma</td>
<td>75%</td>
</tr>
<tr>
<td>Community college students and graduates</td>
<td>61%</td>
</tr>
<tr>
<td>Active military personnel or veterans of armed forces</td>
<td>55%</td>
</tr>
<tr>
<td>People reentering the workforce/switching careers to work in construction</td>
<td>52%</td>
</tr>
<tr>
<td>Women</td>
<td>46%</td>
</tr>
<tr>
<td>Racial minorities</td>
<td>43%</td>
</tr>
<tr>
<td>Higher education/university students and/or graduates</td>
<td>42%</td>
</tr>
<tr>
<td>People without a high school diploma</td>
<td>30%</td>
</tr>
<tr>
<td>Reentering citizens or people who had previously been convicted of a felony</td>
<td>20%</td>
</tr>
<tr>
<td>LGBTQ+</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
</tr>
</tbody>
</table>

Other includes skilled tradespeople, minorities, licensed plumbers and college graduates.
Over two-thirds of respondents had a registered apprenticeship program validated by the state or federal Department of Labor.

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**Does your company have a registered apprenticeship program that is validated by the state or federal Department of Labor? Select all that apply.**

All respondents, percent of total

- Yes, an independent registered apprenticeship program: 48%
- Yes, an ABC chapter-affiliated registered apprenticeship program: 48%
- No registered apprenticeship program: 35%

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**Does your company have a nonregistered apprenticeship or craft education program? Select all that apply.**

All respondents, percent of total

- Yes, an independent nonregistered apprenticeship or craft education program: 16%
- Yes, an ABC chapter-affiliated nonregistered apprenticeship or craft education program: 16%
- No nonregistered apprenticeship or craft education program: 68%
ABC member firms partnered with college/universities and high schools/career and technical education programs most frequently for internship programs.

Does your organization participate in internships programs in the United States?
All respondents, percent of total

Yes 34%
No 66%

What types of entities do you partner with for your internship program?
Select all that apply.
All respondents, percent of total

- College/university: 77%
- High school/CTE: 56%
- Job education center: 26%
- Military/veteran organization: 19%
- Other: 3%

Other includes school-to-work programs and internally created programs.
85% of internships were paid, with most internships dedicated to craft/trade and project management positions.
70% of respondents reported that the biggest obstacle to delivering education is busy schedules.

Which of the following obstacles are limiting your ability to deliver education and/or participate in outreach (career fairs, awareness events, education boards, etc.)? Select up to three.

All respondents

- Busy schedules: 70%
- Lack of interest from personnel in receiving training: 45%
- Uncertainty about quality of various training methods: 26%
- High cost: 25%
- Other: 15%

Other includes traveling, working across multiple states, unknown training schedules, the COVID-19 pandemic and specific certification requirements.
Face-to-face, instructor-led, outside providers and on-the-job training were the most utilized methods to educate personnel.

Which of the following education methods do you use to educate personnel? Select all that apply.

All respondents, percent of total

- Face-to-face, instructor-led, outside provider
- On-the-job training
- Face-to-face, instructor-led, internal provider
- Online, instructor-led
- Online, self-paced (no instructor)
- Through a trade association
- Through colleges/universities/vocational programs
- Virtual reality or augmented reality
Almost 90% of respondents have used virtual reality or augmented reality for safety education.

Which of the following types of virtual reality or augmented reality have you used for education? Select all that apply.

All respondents, percent of total

- Safety education: 87%
- Upskilling: 47%
- Operation of equipment: 40%
- Knowledge education: 33%
Challenging, engaging and effective were the most commonly used words to describe respondents’ experiences with virtual or augmented reality.

Which two or three words would you use to describe your experience with virtual reality or augmented reality for education?

All respondents
In the past year, the highest percentage of personnel education was for those who lacked a high school diploma, at 11%.
Specialty trade, electrical and general contractors comprised the majority of respondent company types, and 51% of respondents were presidents/CEOs.

**Which of the following best describes your company?**

- Specialty trade contractor: 29%
- Electrical contractor: 24%
- General contractor: 22%
- Mechanical contractor: 10%
- Heavy/highway/utility: 6%
- Other: 5%
- Plumbing contractor: 2%
- Construction manager: 2%
- Engineering firm: 1%

**Which of the following best describes your role?**

- President/CEO: 51%
- Other: 17%
- Vice president: 9%
- General manager: 6%
- Chief financial officer: 4%
- Human resources director: 4%
- Project manager/superintendent: 3%
- Training director: 3%
- Chief operating officer: 2%
More than half of respondents reported annual revenue of less than $10 million or employing fewer than 50 people.
Most craft/trade course attendees were identified to be of White or Hispanic origin.

In your company, what percentage (%) of craft/trade course attendees are of the following race/ethnic groups?
All respondents, average percentage

- White, not of Hispanic origin: 67%
- Hispanic or Latino: 21%
- African American or Black: 8%
- Asian or Pacific Islander: 2%
- Other: 1%
- Native American: 1%
Employees ages 30 to 39 comprise the largest share of member workforces.

In your company, what percentage (%) of your company's workforce falls into the following age groups?
All respondents, average percentage:

- 18-29: 22%
- 30-39: 28%
- 40-49: 23%
- 50-59: 18%
- 60+: 9%
FMI is a leading consulting and investment banking firm dedicated exclusively to the built environment. We serve as the industry’s trusted advisor, providing current market insights, deep industry research and key relationships that deliver tangible results for our clients.