1. Please indicate which of the following types of construction projects your firm performs (mark all that apply)?

- Highway: 57%
- Public building: 55%
- Retail, warehouse, lodging: 50%
- Multifamily residential: 48%
- Private office: 48%
- Hospital: 43%
- Water/sewer: 43%
- K-12 School: 40%
- Manufacturing: 40%
- Higher education: 38%
- Other transportation (e.g., transit, airport): 38%
- Power: 30%
- Federal (e.g., VA, GSA, USACE, NAVFAC): 28%
2. What types of employees does your firm employ (mark all that apply)?

- Project managers/supervisors: 93%
- Estimating personnel: 83%
- Safety personnel: 78%
- Tax/accounting/finance personnel: 63%
- Laborers: 63%
- HR/training personnel: 60%
- Engineers: 53%
- Equipment operators-cranes, heavy equipment: 53%
- Superintendents: 53%
- Business development/sales personnel: 50%
- Truck Drivers: 50%
- Mechanics: 50%
- IT personnel: 48%
- Carpenters: 40%
- Quality control personnel: 38%
- Concrete workers: 33%
- BIM personnel: 23%
- Cement masons: 23%
- Traffic control personnel: 20%
- Electricians: 13%
- Pipelayers: 13%
- Installers-drywall: 10%
- Iron workers: 10%
- Millwrights: 10%
- Pipefitters/welders: 10%
- Bricklayers: 8%
- Plumbers: 8%
- Painters: 5%
- Sheet metal workers: 5%
- Installers-other: 3%
- Roofers: 0%
3. In the next 12 months, do you expect your firm will hire additional or replacement:

- Hourly office personnel
- Hourly craft personnel
- Salaried office personnel
- Salaried field personnel

![Bar chart showing the percentage of firms expecting to hire additional or replacement personnel for different types of positions.]

4. How would you describe your current recruitment situation?

- We are having a hard time filling some salaried office positions: 43%
- We are having a hard time filling some salaried field positions: 33%
- We are having a hard time filling some hourly office positions: 18%
- We are having a hard time filling some hourly craft positions: 78%
- We are having no trouble filling any positions: 10%
- We do not have any openings to fill: 3%
- Don't know: 3%
5. If your firm is having trouble filling salaried positions, please indicate the position types you are having trouble filling (responses shown for positions types employed by 10 or more respondents):

<table>
<thead>
<tr>
<th>Position Types</th>
<th>Salaried</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project managers/supervisors</td>
<td>46%</td>
</tr>
<tr>
<td>Engineers</td>
<td>43%</td>
</tr>
<tr>
<td>Estimating personnel</td>
<td>36%</td>
</tr>
<tr>
<td>Business development/sales personnel</td>
<td>15%</td>
</tr>
<tr>
<td>Quality control personnel</td>
<td>13%</td>
</tr>
<tr>
<td>IT personnel</td>
<td>11%</td>
</tr>
<tr>
<td>Safety personnel</td>
<td>6%</td>
</tr>
<tr>
<td>HR/training personnel</td>
<td>0%</td>
</tr>
<tr>
<td>Tax/accounting/finance personnel</td>
<td>0%</td>
</tr>
</tbody>
</table>

6. If your firm is having trouble filling craft professional positions, please indicate the position types you are having trouble filling (responses shown for positions types employed by 10 or more respondents):

<table>
<thead>
<tr>
<th>Craft Positions</th>
<th>0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpenters</td>
<td>63%</td>
</tr>
<tr>
<td>Equipment operators-crane, heavy equipment</td>
<td>57%</td>
</tr>
<tr>
<td>Concrete workers</td>
<td>46%</td>
</tr>
<tr>
<td>Laborers</td>
<td>44%</td>
</tr>
<tr>
<td>Superintendents</td>
<td>43%</td>
</tr>
<tr>
<td>Truck drivers</td>
<td>40%</td>
</tr>
<tr>
<td>Mechanics</td>
<td>35%</td>
</tr>
</tbody>
</table>

7. Do you expect any changes in the availability of hourly craft or salaried personnel over the coming 12 months?

<table>
<thead>
<tr>
<th>Change</th>
<th>Hourly craft</th>
<th>Salaried</th>
</tr>
</thead>
<tbody>
<tr>
<td>It will continue to be hard to hire</td>
<td>53%</td>
<td>32%</td>
</tr>
<tr>
<td>It will become harder to hire</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>No change</td>
<td>18%</td>
<td>32%</td>
</tr>
<tr>
<td>It will continue to be easy to hire</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>It will become easier to hire</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Don't know</td>
<td>3%</td>
<td>11%</td>
</tr>
</tbody>
</table>
8. How would you rate the adequacy of the local pipeline for supplying well-trained craft personnel?

9. How would you rate the adequacy of the local pipeline for supplying craft personnel who are:

10. Which, if any, of these categories of workers does your firm make special efforts to recruit and/or retain (mark all that apply)?

11. What methods does your firm use to recruit these categories of workers (mark all that apply)?
12. What methods does your firm use to retain these categories of workers (mark all that apply)?

- Customized learning & development programs: 47%
- Mentorship or sponsorship programs: 47%
- Defined career progression: 43%
- Equity and diversity policy: 43%
- Diversity & inclusion training: 33%
- Flexible work practices: 30%
- Formal initiatives/Employee resource groups: 13%
15. Have you increased your use of any of the following during the past year because of difficulty in filling positions (mark all that apply)?

- In-house training: 55%
- Interns: 43%
- Labor-saving equipment, tools, machinery (e.g., drones, robots, GPS or laser-guided machinery): 43%
- Engage with career-building program (e.g., high school, college, career & technical education): 38%
- Executive search firms: 38%
- Unions: 38%
- Overtime hours: 35%
- Subcontractors: 35%
- Labor suppliers (craft): 25%
- Staffing firms and professional employer organizations (noncraft): 25%
- Lean Construction: 23%
- Shift work: 15%
- Offsite prefabrication: 10%
- Virtual construction methods (e.g., BIM): 5%
- Employee-based (non-immigrant) visas: 3%

16. If your firm is experiencing staffing challenges, how would you describe the impact on your company’s safety and health program or performance?

- Increased number of reportable injuries and illnesses: 18%
- Increased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 18%
- Increased number of workers compensation claims: 5%
- No change: 70%
- Decreased number of reportable injuries and illnesses: 3%
- Decreased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 3%
- Decreased number of workers compensation claims: 3%
17. When you self-perform construction work, do you operate as a union contractor or an open-shop?

- We always operate as a union contractor: 63%
- We primarily operate as a union contractor, but not always: 10%
- We primarily operate as an open-shop contractor, but not always: 0%
- We always operate as an open-shop contractor: 20%
- We do not self-perform or directly hire craft personnel: 8%

18. Would/ do you encourage your children to pursue careers in construction?

- Yes: 65%
- No: 23%
- N/A: 5%

19. How many total employees does your firm employ at all of its locations?

- 1-49: 15%
- 50-249: 45%
- 250-499: 18%
- 500-999: 15%
- 1,000 or more: 8%

20. Estimate the total dollar amount of work your firm performed during the past 12 months.

- $10 million or less: 10%
- $10.1 million-$30 million: 18%
- $30.1 million-$50 million: 18%
- $50.1 million-$100 million: 23%
- $100.1 million-$500 million: 28%
- Over $500 million: 5%