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

- Higher education: 48%
- Private office: 48%
- Highway: 47%
- Hospital: 47%
- Retail, warehouse, lodging: 45%
- Public building: 44%
- K-12 School: 39%
- Federal (e.g., VA, GSA, USACE, NAVFAC): 38%
- Manufacturing: 32%
- Other transportation (e.g., transit, airport): 32%
- Water/sewer: 32%
- Multifamily residential: 25%
- Power: 24%
2. What types of employees does your firm employ (mark all that apply)?

- Project managers/supervisors: 83%
- Estimating personnel: 79%
- Laborers: 71%
- Safety personnel: 65%
- Tax/accounting/finance personnel: 59%
- Superintendents: 55%
- Carpenters: 53%
- Truck Drivers: 53%
- HR/training personnel: 52%
- Engineers: 45%
- IT personnel: 44%
- Equipment operators-crane, heavy...: 43%
- Business development/sales personnel: 42%
- Concrete workers: 36%
- Mechanics: 36%
- Quality control personnel: 35%
- Iron workers: 24%
- Traffic control personnel: 24%
- BIM personnel: 21%
- Cement masons: 21%
- Electricians: 18%
- Installers-drywall: 13%
- Pipelayers: 13%
- Pipefitters/welders: 11%
- Installers-other: 8%
- Millwrights: 6%
- Bricklayers: 5%
- Painters: 4%
- Roofers: 4%
- Plumbers: 3%
- Sheet metal workers: 3%
- Business development/sales personnel: 42%
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

4. How would you describe your current recruitment situation?

- We are having a hard time filling some salaried office positions: 45%
- We are having a hard time filling some salaried field positions: 43%
- We are having a hard time filling some hourly office positions: 17%
- We are having a hard time filling some hourly craft positions: 63%
- We are having no trouble filling any positions: 9%
- We do not have any openings to fill: 2%
- 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):

- Project managers/supervisors: 63%
- Estimating personnel: 37%
- Engineers: 33%
- Safety personnel: 11%
- Tax/accounting/finance personnel: 11%
- BIM personnel: 10%
- Quality control personnel: 9%
- Business development/sales personnel: 5%
- IT personnel: 2%
- HR/training personnel: 0%
- No trouble filling: 21%

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):

- Carpenters: 59%
- Electricians: 53%
- Laborers: 51%
- Superintendents: 49%
- Equipment operators-cranes, heavy equipment: 46%
- Installers-drywall: 42%
- Cement masons: 35%
- Pipelayers: 33%
- Truck drivers: 27%
- Pipefitters/welders: 27%
- Concrete workers: 26%
- Mechanics: 26%
- Iron workers: 22%
- Traffic control personnel: 9%
- No trouble filling: 11%
7. Do you expect any changes in the availability of hourly craft or salaried personnel over the coming 12 months?

<table>
<thead>
<tr>
<th>Availability</th>
<th>Hourly Craft</th>
<th>Salaried</th>
</tr>
</thead>
<tbody>
<tr>
<td>It will continue to be hard to hire</td>
<td>34%</td>
<td>24%</td>
</tr>
<tr>
<td>It will become harder to hire</td>
<td>17%</td>
<td>24%</td>
</tr>
<tr>
<td>No change</td>
<td>30%</td>
<td>38%</td>
</tr>
<tr>
<td>It will become easier to hire</td>
<td>6%</td>
<td>11%</td>
</tr>
<tr>
<td>Don't know</td>
<td>6%</td>
<td>11%</td>
</tr>
</tbody>
</table>

8. How would you rate the adequacy of the local pipeline for supplying well-trained craft personnel?

<table>
<thead>
<tr>
<th>Adequacy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>22%</td>
</tr>
<tr>
<td>Fair</td>
<td>44%</td>
</tr>
<tr>
<td>Good</td>
<td>29%</td>
</tr>
<tr>
<td>Excellent</td>
<td>1%</td>
</tr>
<tr>
<td>Don't know</td>
<td>4%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Adequacy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well trained/skilled</td>
<td></td>
</tr>
<tr>
<td>Able to pass drug tests</td>
<td></td>
</tr>
<tr>
<td>Able to pass background checks</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>13%</td>
</tr>
<tr>
<td>Fair</td>
<td>38%</td>
</tr>
<tr>
<td>Good</td>
<td>39%</td>
</tr>
<tr>
<td>Excellent</td>
<td>7%</td>
</tr>
<tr>
<td>Don't know</td>
<td>6%</td>
</tr>
</tbody>
</table>
10. Which, if any, of these categories of workers does your firm make special efforts to recruit and/or retain (mark all that apply)?

- African Americans: 76%
- Women: 72%
- Veterans: 66%
- Native Americans/Indigenous Groups: 40%
- Asians: 37%
- People with disabilities: 24%
- Formerly incarcerated individuals: 12%

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

- Outreach to local colleges/universities/vocational schools: 53%
- Internships: 51%
- Targeted job fairs: 50%
- Outreach to community/industry groups: 49%
- Outreach to local high schools: 29%

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

- Mentorship or sponsorship programs: 57%
- Defined career progression: 50%
- Customized learning & development programs: 46%
- Flexible work practices: 40%
- Diversity & inclusion training: 28%
- Equity and diversity policy: 25%
- Formal initiatives/Employee resource groups: 25%
13. Is your firm losing hourly craft or salaried personnel to other employers (mark all that apply)?

- Yes, to other construction firms in our area
  - Hourly craft: 33%
  - Salaried: 30%
- Yes, to other construction firms outside of our area
  - Hourly craft: 4%
  - Salaried: 9%
- Yes, to other industries in our area
  - Hourly craft: 17%
  - Salaried: 11%
- Yes, to other industries outside of our area
  - Hourly craft: 4%
  - Salaried: 5%
- No
  - Hourly craft: 13%
  - Salaried: 49%
- Don't know
  - Hourly craft: 11%
  - Salaried: 11%

14. Has your firm increased pay and/or benefits for hourly craft or salaried personnel in the last year because of difficulty in filling positions (mark all that apply)?

- Yes, our firm increased base pay rates
  - Hourly craft: 31%
  - Salaried: 42%
- Yes, our firm provided incentives/bonuses
  - Hourly craft: 25%
  - Salaried: 35%
- Yes, our firm increased our portion of benefit contributions and/or improved employee benefits
  - Hourly craft: 16%
  - Salaried: 21%
- No, but we are considering increases in pay and/or benefits in the near future
  - Hourly craft: 13%
  - Salaried: 9%
- No, and we are not considering increases in pay and/or benefits
  - Hourly craft: 17%
  - Salaried: 11%
- Don't know
  - Hourly craft: 17%
  - Salaried: 13%
- We do not employ or recruit
  - Hourly craft: 2%
  - Salaried: 1%
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)?

- Interns: 49%
- In-house training: 46%
- Overtime hours: 44%
- Unions: 34%
- Engage with career-building program (e.g., high school, college, career & technical education): 32%
- Subcontractors: 31%
- Executive search firms: 27%
- Labor-saving equipment, tools, machinery (e.g., drones, robots, GPS or laser-guided machinery): 22%
- Labor suppliers (craft): 19%
- Lean Construction: 17%
- Staffing firms and professional employer organizations (noncraft): 17%
- Shift work: 13%
- Offsite prefabrication: 8%
- Virtual construction methods (e.g., BIM): 6%
- 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: 16%
- Increased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 5%
- Increased number of workers compensation claims: 8%
- No change: 70%
- Decreased number of reportable injuries and illnesses: 9%
- Decreased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 5%
- 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: 40%
- We primarily operate as a union contractor, but not always: 11%
- We primarily operate as an open-shop contractor, but not always: 9%
- We always operate as an open-shop contractor: 30%
- We do not self-perform or directly hire craft personnel: 9%

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

- Yes: 70%
- No: 18%
- N/A: 8%

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

- 1-49: 24%
- 50-249: 48%
- 250-499: 11%
- 500-999: 5%
- 1,000 or more: 11%

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

- $10 million or less: 18%
- $10.1 million-$30 million: 27%
- $30.1 million-$50 million: 13%
- $50.1 million-$100 million: 18%
- $100.1 million-$500 million: 17%
- Over $500 million: 8%