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

- Highway: 51%
- Public building: 46%
- Water/Sewer: 44%
- Private office: 41%
- Hospital: 38%
- Retail, warehouse, lodging: 38%
- K-12 School: 33%
- Federal (e.g. VA, GSA, USACE, NAVFAC): 31%
- Higher education: 31%
- Manufacturing: 31%
- Other transportation (e.g. transit, airport): 31%
- Multifamily residential: 26%
- Power: 23%
2. What types of employees does your firm employ (mark all that apply)?

<table>
<thead>
<tr>
<th>Employee Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project managers/supervisors</td>
<td>87%</td>
</tr>
<tr>
<td>Estimating personnel</td>
<td>85%</td>
</tr>
<tr>
<td>Safety personnel</td>
<td>79%</td>
</tr>
<tr>
<td>Equipment operators-crane, heavy</td>
<td>74%</td>
</tr>
<tr>
<td>Laborers</td>
<td>69%</td>
</tr>
<tr>
<td>HR/training personnel</td>
<td>67%</td>
</tr>
<tr>
<td>Engineers</td>
<td>64%</td>
</tr>
<tr>
<td>Tax/accounting/finance personnel</td>
<td>59%</td>
</tr>
<tr>
<td>Superintendent</td>
<td>59%</td>
</tr>
<tr>
<td>Business development/sales personnel</td>
<td>51%</td>
</tr>
<tr>
<td>Mechanics</td>
<td>49%</td>
</tr>
<tr>
<td>Quality control personnel</td>
<td>46%</td>
</tr>
<tr>
<td>IT personnel</td>
<td>44%</td>
</tr>
<tr>
<td>Truck drivers</td>
<td>44%</td>
</tr>
<tr>
<td>BIM personnel</td>
<td>33%</td>
</tr>
<tr>
<td>Regional/Divisional managers</td>
<td>33%</td>
</tr>
<tr>
<td>Concrete workers</td>
<td>33%</td>
</tr>
<tr>
<td>Carpenters</td>
<td>31%</td>
</tr>
<tr>
<td>Pipelayers</td>
<td>28%</td>
</tr>
<tr>
<td>Cement masons</td>
<td>23%</td>
</tr>
<tr>
<td>Pipefitters/welders</td>
<td>18%</td>
</tr>
<tr>
<td>Traffic control personnel</td>
<td>13%</td>
</tr>
<tr>
<td>Bricklayers</td>
<td>10%</td>
</tr>
<tr>
<td>Electricians</td>
<td>10%</td>
</tr>
<tr>
<td>Iron workers</td>
<td>10%</td>
</tr>
<tr>
<td>Millwrights</td>
<td>8%</td>
</tr>
<tr>
<td>Plumbers</td>
<td>8%</td>
</tr>
<tr>
<td>Plumbers</td>
<td>8%</td>
</tr>
<tr>
<td>Installers-other</td>
<td>5%</td>
</tr>
<tr>
<td>Linemen</td>
<td>5%</td>
</tr>
<tr>
<td>Installers-drywall</td>
<td>3%</td>
</tr>
<tr>
<td>Installers-sheet metal</td>
<td>3%</td>
</tr>
<tr>
<td>Painters</td>
<td>0%</td>
</tr>
<tr>
<td>Roofers</td>
<td>0%</td>
</tr>
</tbody>
</table>

3. In the next 12 months, do you expect your firm will hire additional or replacement:
4. How would you describe your current recruitment challenges?

- We are having a hard time filling some salaried office positions: 38%
- We are having a hard time filling some salaried field positions: 31%
- We are having a hard time filling some hourly office positions: 18%
- We are having a hard time filling some hourly craft positions: 74%
- We are having no trouble filling any positions: 13%
- We do not have any openings to fill: 5%
- Don't know: 3%

5. If your firm is having trouble filling salaried positions, please indicate the position types you are having trouble filling:

- Project managers/supervisors: 47%
- BIM personnel: 38%
- Estimating personnel: 33%
- Engineers: 24%
- No trouble filling: 25%
6. If your firm is having trouble filling craft professional positions, please indicate the position types you are having trouble filling:

- Carpenters: 75%
- Equipment operators-crane, heavy equipment: 48%
- Laborers: 48%
- Pipelayers: 45%
- Concrete workers: 38%
- Mechanics: 37%
- Superintendent: 35%
- No trouble filling: 3%

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

- It will continue to be hard to hire: 50%
- It will become harder to hire: 29%
- It will continue to be easy to hire: 5%
- It will become easier to hire: 5%
- Don't know: 11%

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

- Poor: 21%
- Fair: 46%
- Good: 23%
- Excellent: 3%
- Don't know: 8%

9. Is your firm losing hourly craft or salaried personnel to other employers (mark all that apply)?

- Yes, to other construction firms in our area: 41%
- Yes, to other construction firms outside of our area: 32%
- Yes, to other industries in our area: 14%
- Yes, to other industries outside of our area: 8%
- No: 38%
- Don't know: 8%
10. 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
- Yes, our firm provided incentives/bonuses
- Yes, our firm increased our portion of benefit contributions and/or improved employee benefits
- No, but we are considering increases in pay and/or benefits in the near future
- No, and we are not considering increases in pay and/or benefits
- Don’t know
- We do not employ or recruit

11. 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
- Interns
- Unions
- Overtime hours
- Engage with career-building program (e.g. highschool, college, career & technical education)
- Executive search firms
- Staffing firms and professional employer organizations (noncraft)
- Subcontractors
- Labor suppliers (craft)
- Labor-saving equipment, tools, machinery (e.g.) drones, robots, GPS or laser-guided machinery
- Lean Construction
- Offsite prefabrication
- Virtual construction methods (e.g. BIM)
12. 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**: 10%
- **Increased number of jobsite hazards (physical and/or behavioral) identified in inspection reports**: 3%
- **Increased number of workers compensation claims**: 13%
- **No change**: 69%
- **Decreased number of reportable injuries and illnesses**: 10%
- **Decreased number of jobsite hazards (physical and/or behavioral) identified in inspection reports**: 5%
- **Decreased number of workers compensation claims**: 3%

13. When you self-perform construction work, do you operate as a union contractor or an open shop?

- **We always operate as a union contractor**: 67%
- **We primarily operate as a union contractor but not always**: 5%
- **We primarily operate as an open-shop contractor but not always**: 3%
- **We always operate as an open-shop contractor**: 15%
- **We do not self-perform or directly hire craft personnel**: 10%

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

- **Yes**: 74%
- **No**: 8%
- **N/A**: 13%
15. How many total employees does your firm employ at all of its locations?

1,000 or more: 15%
1-49: 18%
250-499: 18%
50-249: 46%
500-999: 3%

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

$10 million or less: 8%
Over $500 million: 8%
$50.1 million-$100 million: 18%
$30.1 million-$50 million: 21%
$100.1 million-$500 million: 21%
$10.1 million-$30 million: 26%
Over $500 million: 8%