There were a total of 321 responses; not all respondents answered every question.

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

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Response Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private office</td>
<td>61%</td>
</tr>
<tr>
<td>Hospital</td>
<td>58%</td>
</tr>
<tr>
<td>Retail, warehouse, lodging</td>
<td>57%</td>
</tr>
<tr>
<td>Higher education</td>
<td>54%</td>
</tr>
<tr>
<td>Public building</td>
<td>54%</td>
</tr>
<tr>
<td>K-12 School</td>
<td>53%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>50%</td>
</tr>
<tr>
<td>Highway</td>
<td>36%</td>
</tr>
<tr>
<td>Federal (e.g. VA, GSA, USACE, NAVFAC)</td>
<td>32%</td>
</tr>
<tr>
<td>Water/Sewer</td>
<td>32%</td>
</tr>
<tr>
<td>Multifamily residential</td>
<td>30%</td>
</tr>
<tr>
<td>Other transportation (e.g. transit, airport)</td>
<td>26%</td>
</tr>
<tr>
<td>Power</td>
<td>24%</td>
</tr>
</tbody>
</table>
2. What types of employees does your firm employ (mark all that apply)?

- Project managers/supervisors: 88%
- Estimating personnel: 85%
- Laborers: 75%
- Safety personnel: 74%
- Superintendent: 69%
- Tax/accounting/finance personnel: 62%
- HR/training personnel: 56%
- Carpenters: 54%
- Equipment operators-crane, heavy: 52%
- Truck drivers: 50%
- Concrete workers: 47%
- Engineers: 45%
- IT personnel: 45%
- Business development/sales personnel: 44%
- Quality control personnel: 38%
- Mechanics: 37%
- Regional/divisional managers: 29%
- Cement masons: 29%
- BIM personnel: 26%
- Iron workers: 21%
- Pipefitters/welders: 17%
- Traffic control personnel: 15%
- Installers-drywall: 14%
- Bricklayers: 13%
- Millwrights: 13%
- Pipelayers: 12%
- Plumbers: 11%
- Electricians: 10%
- Installers-sheet metal: 8%
- Installers-other: 8%
- Painters: 8%
- Roofers: 3%
- Linemen: 1%
3. In the next 12 months, do you expect your firm will hire additional or replacement:

- Yes, for expansion
  - Hourly office personnel: 30%
  - Hourly craft personnel: 41%
  - Salaried office personnel: 66%
  - Salaried field personnel: 46%

- Yes, for replacement only
  - Hourly office personnel: 18%
  - Hourly craft personnel: 22%
  - Salaried office personnel: 24%
  - Salaried field personnel: 18%

- No
  - Hourly office personnel: 5%
  - Hourly craft personnel: 26%
  - Salaried office personnel: 27%
  - Salaried field personnel: 22%

- Don't know
  - Hourly office personnel: 7%
  - Hourly craft personnel: 9%
  - Salaried office personnel: 9%
  - Salaried field personnel: 9%

4. How would you describe your current recruitment challenges?

- We are having a hard time filling some salaried office positions: 40%
- We are having a hard time filling some salaried field positions: 37%
- We are having a hard time filling some hourly office positions: 16%
- We are having a hard time filling some hourly craft positions: 77%
- We are having no trouble filling any positions: 9%
- We do not have any openings to fill: 6%
- Don't know: 2%
5. If your firm is having trouble filling salaried positions, please indicate the position types you are having trouble filling:

- Project managers/supervisors: 54%
- Estimating personnel: 32%
- Engineers: 28%
- BIM personnel: 19%
- Business development/sales personnel: 11%
- Quality control personnel: 11%
- Regional/divisional manager: 10%
- Safety personnel: 9%
- Tax/accounting/finance personnel: 6%
- IT personnel: 3%
- HR/training personnel: 2%
- No trouble filling: 29%

6. If your firm is having trouble filling craft professional positions, please indicate the position types you are having trouble filling:

- Carpenters: 68%
- Concrete workers: 54%
- Bricklayers: 53%
- Installers-drywall: 53%
- Laborers: 50%
- Electricians: 48%
- Installers-other: 48%
- Iron workers: 46%
- Pipefitters/welders: 45%
- Cement masons: 44%
- Installers-sheet metal: 44%
- Pipelayers: 43%
- Equipment operators-cranes, heavy...: 42%
- Plumbers: 41%
- Roofers: 40%
- Superintendent: 38%
- Truck drivers: 36%
- Mechanics: 34%
- Painters: 31%
- Millwrights: 28%
- Linemen: 25%
- Traffic control personnel: 23%
- No trouble filling: 4%
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
- It will become harder to hire
- It will continue to be easy to hire
- It will become easier to hire
- Don’t know

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

- Poor
- Fair
- Good
- Excellent
- Don’t know

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
- Yes, to other construction firms outside of our area
- Yes, to other industries in our area
- Yes, to other industries outside of our area
- No
- Don’t know
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
- Overtime hours
- Engage with career-building program (e.g. highschool, college, career & technical education)
- Interns
- Subcontractors
- Unions
- Executive search firms
- Labor suppliers (craft)
- Staffing firms and professional employer organizations (noncraft)
- 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: 12%
- Increased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 8%
- Increased number of workers compensation claims: 11%
- No change: 70%
- Decreased number of reportable injuries and illnesses: 8%
- Decreased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 2%
- 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: 48%
- We primarily operate as a union contractor but not always: 8%
- We primarily operate as an open-shop contractor but not always: 2%
- We always operate as an open-shop contractor: 38%
- We do not self-perform or directly hire craft personnel: 4%

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

- Yes: 69%
- No: 18%
- N/A: 11%
15. How many total employees does your firm employ at all of its locations?

- 1,000 or more: 7%
- 500-999: 8%
- 250-499: 15%
- 1-49: 28%
- 50-249: 42%

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

- $10.1 million - $30 million: 24%
- $30.1 million - $50 million: 13%
- $50.1 million - $100 million: 17%
- $10 million or less: 19%
- $100.1 million - $500 million: 20%
- Over $500 million: 6%