2019 Workforce Survey Results

Firms Performing $50.1 Million-$500 Million in Work Results

Total responses: 389, but number varies by question. Percentages are based on responses other than “Don’t know” for each question.

1. In the next 12 months, do you expect your firm will hire additional or replacement:

   ![Bar Chart]

2. How would you describe your current situation in filling salaried and hourly craft positions?

   ![Bar Chart]
3. What has been your firm’s experience this year in filling the following types of salaried positions?

<table>
<thead>
<tr>
<th>Position</th>
<th>Compared to one year ago, filling position is more difficult</th>
<th>Compared to one year ago, filling position is the same</th>
<th>Compared to one year ago, filling position is less difficult</th>
<th>Hired without difficulty</th>
<th>Employ but didn’t try to hire this year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project managers/supervisors (378 firms)</td>
<td>57%</td>
<td>23%</td>
<td>1%</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Estimating personnel (385 firms)</td>
<td>38%</td>
<td>23%</td>
<td>0%</td>
<td>9%</td>
<td>31%</td>
</tr>
<tr>
<td>Engineers (196 firms)</td>
<td>36%</td>
<td>24%</td>
<td>1%</td>
<td>14%</td>
<td>25%</td>
</tr>
<tr>
<td>Quality control personnel (245 firms)</td>
<td>31%</td>
<td>15%</td>
<td>1%</td>
<td>3%</td>
<td>45%</td>
</tr>
<tr>
<td>BIM personnel (130 firms)</td>
<td>23%</td>
<td>18%</td>
<td>2%</td>
<td>7%</td>
<td>51%</td>
</tr>
<tr>
<td>Safety personnel (339 firms)</td>
<td>23%</td>
<td>14%</td>
<td>1%</td>
<td>14%</td>
<td>48%</td>
</tr>
<tr>
<td>Software/database personnel (155 firms)</td>
<td>14%</td>
<td>8%</td>
<td>3%</td>
<td>10%</td>
<td>66%</td>
</tr>
<tr>
<td>Environmental compliance professionals (105 firms)</td>
<td>12%</td>
<td>8%</td>
<td>10%</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>IT personnel (252 firms)</td>
<td>12%</td>
<td>12%</td>
<td>1%</td>
<td>15%</td>
<td>61%</td>
</tr>
<tr>
<td>Architects (28 firms)</td>
<td>11%</td>
<td>18%</td>
<td>4%</td>
<td>68%</td>
<td></td>
</tr>
</tbody>
</table>
4. What has been your firm’s experience this year in filling the following types of hourly craft positions?

<table>
<thead>
<tr>
<th>Craft Position</th>
<th>Compared to One Year Ago</th>
<th>Compared to One Year Ago, Same</th>
<th>Compared to One Year Ago, Less Difficult</th>
<th>Hired Without Difficulty</th>
<th>Employ But Didn’t Try to Hire This Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipelayers (83 firms)</td>
<td>73%</td>
<td>12%</td>
<td>7%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Equipment operators-cranes, heavy equipment (233 firms)</td>
<td>71%</td>
<td>17%</td>
<td>6%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Installers-drywall (55 firms)</td>
<td>71%</td>
<td>15%</td>
<td>2%</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td>Cement Masons (112 firms)</td>
<td>71%</td>
<td>18%</td>
<td>6%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Plumbers (46 firms)</td>
<td>70%</td>
<td>15%</td>
<td>2%</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td>Concrete workers (190 firms)</td>
<td>69%</td>
<td>19%</td>
<td>6%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Roofers (19 firms)</td>
<td>68%</td>
<td>11%</td>
<td>16%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Installers-other (64 firms)</td>
<td>67%</td>
<td>22%</td>
<td>6%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Sheet metal workers (45 firms)</td>
<td>67%</td>
<td>11%</td>
<td>2%</td>
<td>16%</td>
<td>4%</td>
</tr>
<tr>
<td>Bricklayers (31 firms)</td>
<td>65%</td>
<td>13%</td>
<td>10%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Carpenters (243 firms)</td>
<td>64%</td>
<td>19%</td>
<td>10%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Millwrights (49 firms)</td>
<td>63%</td>
<td>18%</td>
<td>6%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Mechanics (195 firms)</td>
<td>63%</td>
<td>14%</td>
<td>16%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Iron workers (82 firms)</td>
<td>62%</td>
<td>23%</td>
<td>11%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Truck drivers (219 firms)</td>
<td>57%</td>
<td>21%</td>
<td>7%</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Laborers (325 firms)</td>
<td>55%</td>
<td>24%</td>
<td>18%</td>
<td>13%</td>
<td>2%</td>
</tr>
<tr>
<td>Pipefitters/Welders (87 firms)</td>
<td>55%</td>
<td>17%</td>
<td>3%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Electricians (71 firms)</td>
<td>55%</td>
<td>21%</td>
<td>14%</td>
<td>7%</td>
<td>15%</td>
</tr>
<tr>
<td>Painters (30 firms)</td>
<td>53%</td>
<td>13%</td>
<td>20%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Traffic control personnel (103 firms)</td>
<td>52%</td>
<td>20%</td>
<td>1%</td>
<td>10%</td>
<td>17%</td>
</tr>
</tbody>
</table>

- **Compared to one year ago, filling position is more difficult**
- **Compared to one year ago, filling position is the same**
- **Compared to one year ago, filling position is less difficult**
- **Hired without difficulty**
- **Employ but didn’t try to hire this year**
5. Do you expect any changes in the availability of hourly craft or salaried personnel over the coming 12 months?

6. How would you rate the adequacy of the local pipeline for supplying craft personnel who are:
7. Is your firm losing hourly craft or salaried personnel to other employers? (Totals may add to more than 100%, as respondents could mark more than one answer.)

- Yes, to other construction firms in our area: 47% (Hourly), 30% (Salaried)
- Yes, to other construction firms outside of our area: 18% (Hourly), 7% (Salaried)
- Yes, to other industries in our area: 19% (Hourly), 10% (Salaried)
- Yes, to other industries outside of our area: 30% (Hourly), 36% (Salaried)
- No: 36% (Hourly), 36% (Salaried)

8. Has your firm increased pay and/or benefits for hourly craft or salaried personnel in the last year because of difficulty in filling positions? (Totals may add to more than 100%, as respondents could mark more than one answer.)

- Yes, our firm increased base pay rates: 69% (Hourly), 70% (Salaried)
- Yes, our firm provided incentives/bonuses: 31% (Hourly), 43% (Salaried)
- Yes, our firm increased our portion of benefit contributions and/or improved employee benefits: 28% (Hourly), 25% (Salaried)
- No, but we are considering increases in pay and/or benefits in the near future: 9% (Hourly), 10% (Salaried)
- No, and we are not considering increases in pay and/or benefits: 10% (Hourly), 9% (Salaried)
- We did not seek to fill any positions: 3% (Hourly), 3% (Salaried)
9. Has your firm added or increased use of the following to provide workers in the past year? (Totals may add to more than 100%, as respondents could mark more than one answer.)

- Engaged with career-building program (e.g., high school, college, career & technical education) - 70%
- Executive and non-craft worker search firm or professional employer organization - 47%
- Implemented software to distribute job postings and manage applicants - 38%
- Engaged with government workforce development or unemployment agency - 37%
- Staffing firm (craft) - 34%
- Sub- or specialty contractors - 31%
- Unions - 29%
- Applied for employee-based visas (e.g., H-1B, H-2B) - 10%
- Other - 4%
- No changes - 9%

10. Has your firm made changes in hiring, training or scheduling to address worker or skill shortages in the past year? (Totals may add to more than 100%, as respondents could mark more than one answer.)

- Initiated or increased in-house training - 57%
- Interns - 54%
- Overtime - 34%
- Changed hiring standards (e.g., education, training, employment or arrest record) - 27%
- Offered online or mobile training options - 23%
- Augmented/mixed/virtual reality training devices - 11%
- Other - 2%
- No changes - 21%
11. Has your firm adopted or increased use of the following to replace workers or skills? (Totals may add to more than 100%, as respondents could mark more than one answer.)

- Invest in technology to automate processes to supplement worker duties: 40%
- Labor-saving equipment (e.g., drones, robots, 3-D printers, laser- or GPS-guided equipment) (please specify): 37%
- Methods to reduce onsite worktime (e.g., lean construction, virtual construction such as BIM, offsite fabrication) (please specify): 34%
- Added specialists (e.g., architects, BIM or lean construction personnel, drone or other equipment operators, data or IT personnel) (please specify): 20%
- Other (please specify): 4%
- No changes: 37%

12. If your firm is experiencing staffing challenges, how would you describe the impact on your projects? (Totals may add to more than 100%, as respondents could mark more than one answer.)

- We have put higher prices into our bids or contracts: 49%
- Costs have been higher than we anticipated: 47%
- Projects have taken longer than we anticipated: 44%
- We have put longer completion times into our bids or contracts: 33%
- Completion times or costs have been lower than we anticipated: 4%
- Other (please specify): 6%
- No impact: 15%
13. If your firm is experiencing staffing challenges, how would you describe the impact on your company's safety and health program or performance? (Totals may add to more than 100%, as respondents could mark more than one answer.)

- Increased number of reportable injuries and illnesses: 25%
- Increased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 27%
- Increased number of workers compensation claims: 18%
- No change: 59%
- Decreased number of reportable injuries and illnesses: 4%
- Decreased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 2%
- Decreased number of workers compensation claims: 4%

14. Please indicate which of the following types of construction projects your firm performs: (Totals may add to more than 100%, as respondents could mark more than one answer.)

- Building construction: 69%
- Highway and transportation: 40%
- Federal and heavy: 36%
- Utility infrastructure: 31%
- Other (please specify): 6%
15. When you self-perform construction work, do you operate as a union contractor or an open-shop contractor?

- We always operate as an open-shop contractor: 49%
- We primarily operate as an open-shop contractor, but not always: 8%
- We always operate as a union contractor: 26%
- We primarily operate as a union contractor, but not always: 10%
- We do not self-perform or directly hire craft personnel: 7%

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

- 1-49: 4%
- 50-249: 42%
- 250-499: 32%
- 500 or more: 22%

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

- $10 million or less: 0%
- $10.1 million-$50 million: 0%
- $50.1 million-$500 million: 100%
- Over $500 million: 0%