2018 Workforce Survey Results
Open Shop Results

Total responses: 1,371, 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:

- Yes, for expansion
- Yes, for replacement only
- No

<table>
<thead>
<tr>
<th>Position</th>
<th>Yes, for expansion</th>
<th>Yes, for replacement only</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hourly craft personnel</td>
<td>79%</td>
<td>21%</td>
<td>4%</td>
</tr>
<tr>
<td>Hourly office personnel</td>
<td>34%</td>
<td>38%</td>
<td>17%</td>
</tr>
<tr>
<td>Salaried field personnel</td>
<td>58%</td>
<td>16%</td>
<td>26%</td>
</tr>
<tr>
<td>Salaried office personnel</td>
<td>47%</td>
<td>20%</td>
<td>34%</td>
</tr>
</tbody>
</table>

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

- We have no openings for positions: 6% Craft, 34% Salaried
- We are having no difficulty filling any positions: 13% Craft, 6% Salaried
- We are having a hard time filling some or all positions: 53% Craft, 88% Salaried
3. What has been your firm’s experience this year in filling the following types of salaried positions?

- Project managers/supervisors (1125 firms): 46% more difficult, 11% the same, 7% less difficult, 35% hired without difficulty.
- Engineers (348 firms): 34% more difficult, 14% the same, 11% less difficult, 41% hired without difficulty.
- Estimating personnel (1083 firms): 32% more difficult, 9% the same, 6% less difficult, 52% hired without difficulty.
- Quality control personnel (640 firms): 31% more difficult, 9% the same, 6% less difficult, 53% hired without difficulty.
- Architects (69 firms): 23% more difficult, 7% the same, 6% less difficult, 49% hired without difficulty.
- BIM personnel (211 firms): 21% more difficult, 15% the same, 12% less difficult, 49% hired without difficulty.
- Safety personnel (869 firms): 19% more difficult, 9% the same, 12% less difficult, 60% hired without difficulty.
- Environmental compliance professionals (233 firms): 16% more difficult, 6% the same, 9% less difficult, 69% hired without difficulty.
- IT personnel (459 firms): 12% more difficult, 11% the same, 17% less difficult, 60% hired without difficulty.
- Software/database personnel (276 firms): 11% more difficult, 11% the same, 67% hired without difficulty.
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, 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>Pipelayers (275 firms)</td>
<td>74%</td>
<td>11%</td>
<td>6%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Cement masons (267 firms)</td>
<td>72%</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Sheet metal workers (148 firms)</td>
<td>71%</td>
<td>11%</td>
<td>7%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Concrete workers (543 firms)</td>
<td>70%</td>
<td>11%</td>
<td>7%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Carpenters (570 firms)</td>
<td>70%</td>
<td>12%</td>
<td>8%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Bricklayers (127 firms)</td>
<td>69%</td>
<td>10%</td>
<td>6%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Roofer (86 firms)</td>
<td>67%</td>
<td>16%</td>
<td>9%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Equipment operators-cranes, heavy</td>
<td>67%</td>
<td>11%</td>
<td>7%</td>
<td>14%</td>
<td></td>
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<tr>
<td>equipment (700 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Installers-other (256 firms)</td>
<td>67%</td>
<td>13%</td>
<td>6%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Pipefitters/Welders (275 firms)</td>
<td>67%</td>
<td>12%</td>
<td>8%</td>
<td>12%</td>
<td></td>
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<tr>
<td>Iron workers (232 firms)</td>
<td>66%</td>
<td>14%</td>
<td>7%</td>
<td>11%</td>
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<tr>
<td>Truck drivers (640 firms)</td>
<td>64%</td>
<td>12%</td>
<td>7%</td>
<td>17%</td>
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<tr>
<td>Installers-drywall (162 firms)</td>
<td>64%</td>
<td>11%</td>
<td>9%</td>
<td>14%</td>
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<tr>
<td>Plumbers (135 firms)</td>
<td>62%</td>
<td>15%</td>
<td>10%</td>
<td>10%</td>
<td></td>
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<tr>
<td>Laborers (1063 firms)</td>
<td>62%</td>
<td>17%</td>
<td>15%</td>
<td>5%</td>
<td></td>
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<tr>
<td>Electricians (216 firms)</td>
<td>62%</td>
<td>13%</td>
<td>12%</td>
<td>12%</td>
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<tr>
<td>Millwrights (115 firms)</td>
<td>58%</td>
<td>16%</td>
<td>10%</td>
<td>13%</td>
<td></td>
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<tr>
<td>Mechanics (529 firms)</td>
<td>57%</td>
<td>8%</td>
<td>7%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>Painters (142 firms)</td>
<td>56%</td>
<td>15%</td>
<td>10%</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Traffic control personnel (265 firms)</td>
<td>49%</td>
<td>14%</td>
<td>15%</td>
<td>22%</td>
<td></td>
</tr>
</tbody>
</table>
5. Do you expect any changes in the availability of hourly craft or salaried personnel over the coming 12 months?

- It will become harder to hire: 50% (Hourly craft), 41% (Salaried)
- It will continue to be hard to hire: 35% (Hourly craft), 27% (Salaried)
- No change: 14% (Hourly craft), 31% (Salaried)
- It will continue to be easy to hire: 1% (Hourly craft), 1% (Salaried)
- It will become easier to hire: 1% (Hourly craft), 1% (Salaried)

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

- Well trained/skilled: 58% Poor, 34% Fair, 7% Good, 7% Excellent
- Able to pass drug tests: 28% Poor, 48% Fair, 21% Good, 1% Excellent
- Able to pass background checks: 20% Poor, 51% Fair, 26% Good, 3% Excellent
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.)

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.)
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) - 50%
- Staffing firm (craft) - 42%
- Engaged with government workforce development or unemployment agency - 32%
- Sub- or specialty contractors - 32%
- Executive and non-craft worker search firm or professional employer organization - 26%
- Applied for employee-based visas (e.g., H-1B, H-2B) - 6%
- Unions - 1%
- No changes - 22%

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 - 47%
- Overtime - 34%
- Changed hiring standards (e.g., education, training, employment or arrest record) - 30%
- Interns - 27%
- Augmented/mixed/virtual reality training devices - 8%
- No changes - 30%
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.)

- Labor-saving equipment (e.g., drones, robots, 3-D printers, laser- or GPS-guided equipment) - 25%
- Methods to reduce onsite worktime (e.g., lean construction, virtual construction such as BIM, offsite fabrication) - 23%
- Added specialists (e.g., architects, BIM or lean construction personnel, drone or other equipment operators, data or IT personnel) - 10%
- No changes - 60%

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.)

- Costs have been higher than we anticipated - 46%
- We have put longer completion times into our bids or contracts - 53%
- Projects have taken longer than we anticipated - 50%
- We have put higher prices into our bids or contracts - 31%
- Completion times or costs have been lower than we anticipated - 3%
- No impact - 14%
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: 14%
- Increased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 13%
- Increased number of workers compensation claims: 9%
- No change: 72%
- Decreased number of reportable injuries and illnesses: 6%
- Decreased number of jobsite hazards (physical and/or behavioral) identified in inspection reports: 3%
- 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: 64%
- Highway and transportation: 29%
- Federal and heavy: 19%
- Utility infrastructure: 20%
- Other: 14%
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: 100%
- We primarily operate as an open-shop contractor, but not always: 0%
- We primarily operate as a union contractor, but not always: 0%
- We always operate as a union contractor: 0%
- We do not self-perform or directly hire craft personnel: 0%

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

- 1-49 employees: 41%
- 50-249 employees: 39%
- 250-499 employees: 11%
- 500-999 employees: 5%
- 1,000 or more employees: 5%

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

- $10 million or less: 36%
- $10.1 million-$50 million: 35%
- $50.1 million-$100 million: 15%
- $100.1 million-$500 million: 10%
- Over $500 million: 5%
18. What percent of your employees are in each of these categories?

- **Women**: 7% (0%), 86% (1-25%), 7% (26-50%), 8% (51-75%), 1% (76-99%), 0% (100%)
- **Veterans**: 19% (0%), 72% (1-25%), 8% (26-50%), 1% (51-75%), 1% (76-99%), 0% (100%)
- **People with Disabilities**: 62% (0%), 37% (1-25%), 7% (26-50%), 1% (51-75%), 0% (76-99%), 0% (100%)
- **Formerly incarcerated individuals**: 32% (0%), 58% (1-25%), 7% (26-50%), 1% (51-75%), 0% (76-99%), 0% (100%)
- **White, non-Hispanic**: 2% (0%), 24% (1-25%), 28% (26-50%), 22% (51-75%), 5% (76-99%), 0% (100%)
- **African American**: 27% (0%), 66% (1-25%), 6% (26-50%), 0% (51-75%), 0% (76-99%), 0% (100%)
- **Hispanic**: 16% (0%), 38% (1-25%), 20% (26-50%), 16% (51-75%), 9% (76-99%), 0% (100%)
- **Asian**: 69% (0%), 31% (1-25%), 0% (26-50%), 0% (51-75%), 0% (76-99%), 0% (100%)
- **Native Americans/indigenous groups**: 60% (0%), 38% (1-25%), 0% (26-50%), 0% (51-75%), 0% (76-99%), 0% (100%)