2019 Workforce Survey Results

Tennessee Results

Total responses: 35, 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:

   - **Hourly craft personnel**
     - Yes, for expansion: 3%
     - Yes, for replacement only: 18%
     - No: 79%

   - **Hourly office personnel**
     - Yes, for expansion: 40%
     - Yes, for replacement only: 13%
     - No: 47%

   - **Salaried field personnel**
     - Yes, for expansion: 25%
     - Yes, for replacement only: 16%
     - No: 59%

   - **Salaried office personnel**
     - Yes, for expansion: 39%
     - Yes, for replacement only: 21%
     - No: 39%

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

   - **We are having a hard time filling some or all positions**
     - Salaried: 54%
     - Craft: 89%

   - **We are having no difficulty filling any positions**
     - Salaried: 9%
     - Craft: 3%

   - **We have no openings for positions**
     - Salaried: 37%
     - Craft: 9%
3. What has been your firm’s experience this year in filling the following types of salaried positions?

- Project managers/supervisors (28 firms)
  - Compared to one year ago, filling position is more difficult: 54%
  - Employed without difficulty: 14%
  - Estimating personnel: 0%
  - Safety personnel: 0%
  - Hired without difficulty: 25%

- BIM personnel (3 firms)
  - Compared to one year ago, filling position is the same: 33%
  - Compared to one year ago, filling position is less difficult: 33%
  - Employed without difficulty: 33%

- Quality control personnel (14 firms)
  - Compared to one year ago, filling position is more difficult: 29%
  - Compared to one year ago, filling position is the same: 14%
  - Safety personnel: 0%
  - Hired without difficulty: 50%

- Environmental compliance professionals (7 firms)
  - Compared to one year ago, filling position is more difficult: 29%
  - Compared to one year ago, filling position is the same: 0%
  - Safety personnel: 0%
  - Hired without difficulty: 43%

- Estimating personnel (28 firms)
  - Compared to one year ago, filling position is more difficult: 29%
  - Compared to one year ago, filling position is the same: 7%
  - Safety personnel: 0%
  - Hired without difficulty: 14%

- Safety personnel (20 firms)
  - Compared to one year ago, filling position is more difficult: 20%
  - Compared to one year ago, filling position is the same: 50%
  - Safety personnel: 10%
  - Hired without difficulty: 65%

- Software/database personnel (7 firms)
  - Compared to one year ago, filling position is more difficult: 14%
  - Compared to one year ago, filling position is the same: 0%
  - Safety personnel: 14%
  - Hired without difficulty: 71%

- IT personnel (9 firms)
  - Compared to one year ago, filling position is more difficult: 11%
  - Compared to one year ago, filling position is the same: 11%
  - Safety personnel: 0%
  - Hired without difficulty: 67%

- Engineers (11 firms)
  - Compared to one year ago, filling position is more difficult: 9%
  - Compared to one year ago, filling position is the same: 36%
  - Safety personnel: 0%
  - Hired without difficulty: 18%

- Architects (1 firms)
  - Compared to one year ago, filling position is more difficult: 0%
  - Compared to one year ago, filling position is the same: 100%
  - Safety personnel: 0%
  - Hired without difficulty: 0%
4. What has been your firm’s experience this year in filling the following types of hourly craft positions?

<table>
<thead>
<tr>
<th>Position</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roofers (2 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plumbers (3 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipelayers (7 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millwrights (3 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installers-drywall (4 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete workers (9 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cement masons (2 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpenters (10 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bricklayers (2 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment operators-cranes, heavy equipment (15 firms)</td>
<td>87%</td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
<td>10%</td>
<td>14%</td>
<td>20%</td>
<td>20%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Sheet metal workers (5 firms)</td>
<td></td>
<td>0%</td>
<td></td>
<td></td>
<td>80%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Iron workers (5 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>80%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Laborers (29 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>69%</td>
<td></td>
<td>14%</td>
<td>3%</td>
<td>3%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>Traffic control personnel (3 firms)</td>
<td>67%</td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
<td>33%</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipefitters/Welders (6 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>67%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33%</td>
</tr>
<tr>
<td>Mechanics (15 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>67%</td>
<td></td>
<td>7%</td>
<td>27%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truck drivers (16 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
<td>25%</td>
<td>5%</td>
<td>25%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installers-other (6 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Electricians (4 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
<td>25%</td>
<td>5%</td>
<td>25%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Painters (5 firms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40%</td>
<td>40%</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Red**: Compared to one year ago, filling position is more difficult
- **Blue**: Compared to one year ago, filling position is the same
- **Green**: Hired without difficulty
- **Purple**: 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?

- It will become harder to hire: 18% Hourly, 32% Salaried
- It will continue to be hard to hire: 35% Hourly, 50% Salaried
- No change: 12% Hourly, 41% Salaried
- It will continue to be easy to hire: 6% Hourly, 3% Salaried
- It will become easier to hire: 0% Hourly, 3% Salaried

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

- Well trained/skilled: 50% Poor, 38% Fair, 12% Good, 0% Excellent
- Able to pass drug tests: 39% Poor, 48% Fair, 9% Good, 3% Excellent
- Able to pass background checks: 25% Poor, 63% Fair, 13% Good, 0% 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.)

- Yes, to other construction firms in our area: 43% (Hourly craft), 37% (Salaried)
- Yes, to other construction firms outside of our area: 20% (Hourly craft), 11% (Salaried)
- Yes, to other industries in our area: 29% (Hourly craft), 20% (Salaried)
- Yes, to other industries outside of our area: 17% (Hourly craft), 9% (Salaried)
- No: 57% (Hourly craft), 57% (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: 83% (Hourly craft), 68% (Salaried)
- Yes, our firm provided incentives/bonuses: 40% (Hourly craft), 44% (Salaried)
- Yes, our firm increased our portion of benefit contributions and/or improved employee benefits: 37% (Hourly craft), 44% (Salaried)
- No, but we are considering increases in pay and/or benefits in the near future: 3% (Hourly craft), 6% (Salaried)
- No, and we are not considering increases in pay and/or benefits: 3% (Hourly craft), 3% (Salaried)
- We did not seek to fill any positions: 9% (Hourly craft), 9% (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) 37%
- Staffing firm (craft) 34%
- Sub- or specialty contractors 31%
- Executive and non-craft worker search firm or professional employer organization 29%
- Implemented software to distribute job postings and manage applicants 29%
- Engaged with government workforce development or unemployment agency 23%
- Applied for employee-based visas (e.g., H-1B, H-2B) 6%
- Unions 0%
- Other 9%
- No changes 20%

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 37%
- Interns 26%
- Overtime 20%
- Changed hiring standards (e.g., education, training, employment or arrest record) 20%
- Offered online or mobile training options 14%
- Augmented/mixed/virtual reality training devices 6%
- Other 0%
- No changes 37%
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: 34%
- Labor-saving equipment (e.g., drones, robots, 3-D printers, laser- or GPS-guided equipment) (please specify): 23%
- Methods to reduce onsite worktime (e.g., lean construction, virtual construction such as BIM, offsite fabrication) (please specify): 20%
- Added specialists (e.g., architects, BIM or lean construction personnel, drone or other equipment operators, data or IT personnel) (please specify): 14%
- Other (please specify): 0%
- No changes: 49%

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: 54%
- Projects have taken longer than we anticipated: 49%
- We have put longer completion times into our bids or contracts: 49%
- We have put higher prices into our bids or contracts: 43%
- Completion times or costs have been lower than we anticipated: 3%
- Other (please specify): 0%
- No impact: 11%
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.)

<table>
<thead>
<tr>
<th>Impact Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased number of reportable injuries and illnesses</td>
<td>20%</td>
</tr>
<tr>
<td>Increased number of jobsite hazards (physical and/or behavioral) identified in inspection reports</td>
<td>17%</td>
</tr>
<tr>
<td>Increased number of workers compensation claims</td>
<td>17%</td>
</tr>
<tr>
<td>No change</td>
<td>57%</td>
</tr>
<tr>
<td>Decreased number of reportable injuries and illnesses</td>
<td>11%</td>
</tr>
<tr>
<td>Decreased number of jobsite hazards (physical and/or behavioral) identified in inspection reports</td>
<td>3%</td>
</tr>
<tr>
<td>Decreased number of workers compensation claims</td>
<td>11%</td>
</tr>
</tbody>
</table>

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.)

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building construction</td>
<td>77%</td>
</tr>
<tr>
<td>Highway and transportation</td>
<td>14%</td>
</tr>
<tr>
<td>Federal and heavy</td>
<td>29%</td>
</tr>
<tr>
<td>Utility infrastructure</td>
<td>31%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>11%</td>
</tr>
</tbody>
</table>
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: 89%
- We primarily operate as an open-shop contractor, but not always: 3%
- We always operate as a union contractor: 6%
- We primarily operate as a union contractor, but not always: 0%
- We do not self-perform or directly hire craft personnel: 3%

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

- 1-49: 49%
- 50-249: 40%
- 250-499: 9%
- 500 or more: 3%

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

- $10 million or less: 60%
- $10.1 million-$50 million: 23%
- $50.1 million-$500 million: 17%
- Over $500 million: 0%