2018 Construction Outlook Survey Results
Oklahoma Results

Total Responses: 23. Responses varied for some questions. Percentages are based on responses to each question and may not sum to 100 due to rounding.

1. What best describes your firm:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General contractor/construction manager</td>
<td>48%</td>
</tr>
<tr>
<td>Specialty or subcontractor</td>
<td>26%</td>
</tr>
<tr>
<td>Supplier/service provider</td>
<td>13%</td>
</tr>
<tr>
<td>Architect/engineer/designer</td>
<td>4%</td>
</tr>
<tr>
<td>Owner/developer</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
</tr>
</tbody>
</table>

2. Does your firm employ union workers, or is your firm primarily open shop?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>We employ union workers for all of our projects</td>
<td>4%</td>
</tr>
<tr>
<td>We employ union workers for most of our projects</td>
<td>4%</td>
</tr>
<tr>
<td>We are primarily an open shop contractor, but occasionally employ union workers</td>
<td>0%</td>
</tr>
<tr>
<td>We are exclusively open shop</td>
<td>91%</td>
</tr>
</tbody>
</table>

3. Estimate the total dollar amount of work your firm performed in 2017.

<table>
<thead>
<tr>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10 million or less</td>
<td>22%</td>
</tr>
<tr>
<td>$10.1 million-$50 million</td>
<td>26%</td>
</tr>
<tr>
<td>$50.1 million-$100 million</td>
<td>22%</td>
</tr>
<tr>
<td>$100.1 million-$500 million</td>
<td>9%</td>
</tr>
<tr>
<td>Over $500 million</td>
<td>22%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-19</td>
<td>9%</td>
</tr>
<tr>
<td>20-99</td>
<td>35%</td>
</tr>
<tr>
<td>100-499</td>
<td>30%</td>
</tr>
<tr>
<td>500 or more</td>
<td>26%</td>
</tr>
</tbody>
</table>
5. Compared to 2017, do you expect the available dollar volume of projects you compete for in 2018 to be:

<table>
<thead>
<tr>
<th>Market</th>
<th>Higher</th>
<th>Lower</th>
<th>Same</th>
<th>Net*</th>
</tr>
</thead>
<tbody>
<tr>
<td>All projects</td>
<td>56%</td>
<td>0%</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Highway</td>
<td>47%</td>
<td>6%</td>
<td>47%</td>
<td>41%</td>
</tr>
<tr>
<td>Private Office</td>
<td>33%</td>
<td>6%</td>
<td>61%</td>
<td>28%</td>
</tr>
<tr>
<td>Water/Sewer</td>
<td>27%</td>
<td>7%</td>
<td>67%</td>
<td>20%</td>
</tr>
<tr>
<td>Transportation (e.g., transit, rail, airport)</td>
<td>25%</td>
<td>6%</td>
<td>69%</td>
<td>19%</td>
</tr>
<tr>
<td>Federal (e.g., VA, GSA, USACE, NAVFAC)</td>
<td>17%</td>
<td>0%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>Hospital</td>
<td>26%</td>
<td>11%</td>
<td>63%</td>
<td>16%</td>
</tr>
<tr>
<td>Retail, Warehouse, Lodging</td>
<td>26%</td>
<td>11%</td>
<td>63%</td>
<td>16%</td>
</tr>
<tr>
<td>Power</td>
<td>13%</td>
<td>0%</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>Multifamily Residential</td>
<td>19%</td>
<td>6%</td>
<td>75%</td>
<td>13%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>22%</td>
<td>11%</td>
<td>67%</td>
<td>11%</td>
</tr>
<tr>
<td>Public Building</td>
<td>17%</td>
<td>6%</td>
<td>78%</td>
<td>11%</td>
</tr>
<tr>
<td>K-12 School</td>
<td>21%</td>
<td>11%</td>
<td>68%</td>
<td>11%</td>
</tr>
<tr>
<td>Higher Education</td>
<td>11%</td>
<td>26%</td>
<td>63%</td>
<td>-16%</td>
</tr>
</tbody>
</table>

*Net equals difference between number of “Higher” and “Lower” responses as percent of total.

6. What numerical change do you expect in your headcount in 2018?

- More than 25: 35%
- 11-25: 15%
- 1-10: 30%
- No change: 20%
- Decrease: 0%

7. What percentage change do you expect in your headcount in 2018?

- More than 25%: 5%
- 11-25%: 15%
- 1-10%: 60%
- No change: 20%
- Decrease: 0%

8. How would you describe your firm’s current conditions for filling key salaried positions (project manager/supervisor, estimator, etc.) and hourly craft positions (carpenter, laborer, equipment operator, etc.)? My firm is:

- Having a hard time filling both salaried and craft worker positions: 45%
- Having a hard time filling some salaried positions, but no trouble filling craft worker positions: 30%
- Having a hard time filling some craft worker positions, but no trouble filling salaried positions: 5%
- Having no trouble filling any positions: 15%
- Not doing any hiring: 0%
9. Do you expect any changes in the availability of salaried/hourly craft construction professionals over the coming 12 months? Finding and hiring qualified construction professionals will:

- Continue to be easy: 0%
- Become easier: 5%
- Become harder: 25%
- Continue to be hard: 45%
- Unsure: 25%

10. Did your firm increase pay or benefits in 2017 to retain or recruit salaried/hourly craft professionals?

- Increased base pay: 60%
- Paid more overtime: 15%
- Provided incentives/bonuses: 30%
- Increased contributions and/or improve employee benefits: 30%
- No, but we are considering increases in pay and/or benefits in the near future: 5%
- No, and we are not considering increases in pay and/or benefits: 5%
- Unsure: 5%
- We did not seek to hire any salaried/hourly craft professionals in 2017: 5%

11. Compared to 2017, how will your firm’s 2018 investment in training and development change?

- Increase: 65%
- Decrease: 0%
- Stay the same: 30%
- Unsure: 5%
12. Which of the following issues is the biggest concern to your firm out of the following list?

- Worker shortages: 56%
- Increased competition for projects: 45%
- Growth in federal regulations: 43%
- Not enough private sector work: 33%
- Safety: 25%
- Worker quality: 25%
- Lack of infrastructure investments: 17%
- Growth in state and local regulations: 0%
- Internal company process inefficiencies: 0%
- Lack of public non-infrastructure work: 0%
- Relations with external process inefficiencies (such as collaboration with owners, subs and/or vendors): 0%
- Rising direct labor costs (pay, benefits, employer taxes): 0%
- Rising indirect labor costs (recruitment, training): 0%
- Rising materials costs: 0%
- Rising subcontractor costs: 0%
- Subcontractor defaults: 0%

13. What challenges, if any, do you see regarding the safety and health of your firm’s workers?

- Inexperienced skilled labor/workforce shortage: 53%
- Lack of cooperation from federal agencies or regulators: 41%
- Low quality of available safety and health training: 47%
- Poor subcontractor safety and health performance: 56%
14. What change do you expect in 2018 in the number of your firm’s projects that involve Building Information Modeling (BIM)?

- Increase: 6%
- Stay the same (+/-10%): 56%
- Decrease: 0%
- We do not expect to use BIM on any projects in 2018: 22%
- Unsure: 17%

15. What is your firm using BIM for?

- 3D model-based takeoff for cost estimating: 50%
- Scheduling and workforce planning: 50%
- Clash detection: 42%
- Design of 3D model: 42%
- Constructability input into the design process: 33%
- Safety (identify safety issues, safety by design, safety training, etc.): 33%
- Visually communicate project scope to clients: 17%

16. Does your firm utilize lean construction principles on its projects and/or in its operation?

- Yes: 67%
- No: 6%
- Unsure: 28%

17. Does your firm use any of the following collaborative project delivery methods?

- Design-assist: 56%
- Design-build: 56%
- Public-private partnerships: 28%
- Integrated project delivery (IPD): 11%
- None: 22%
- Unsure: 6%
18. Does your firm use any of the following to collaborate with project partners?

- File-sharing sites such as Dropbox: 75%
- BIM: 44%
- Online project collaboration software: 44%
- Home-grown project website: 19%
- None: 1%
- Unsure: 1%

19. What business of IT functions does your firm outsource or plan to outsource to a technology provider?

- Accounts payable automation: Currently outsource 7%, Plan to outsource 7%
- Accounts receivable payment automation: None
- Inventory: None
- Lien waiver processing: None
- Payroll: Currently outsource 7%, Plan to outsource 7%
- Prequalification: Currently outsource 0%, Plan to outsource 14%
- Subcontractor insurance processing: Currently outsource 0%, Plan to outsource 21%
- Backup and disaster recovery: Currently outsource 0%, Plan to outsource 21%
- Desktop (light maintenance): Currently outsource 0%, Plan to outsource 14%
- Network management: Currently outsource 7%, Plan to outsource 36%
- Voice over IP (phone service over the internet): Currently outsource 0%, Plan to outsource 21%
- Our firm doesn't currently outsource or plan to outsource: Currently outsource 0%, Plan to outsource 36%
20. Approximately what percent of your firm’s gross annual revenue is spent on IT?

![Bar chart showing the distribution of respondents who spend less than 1%, 1 to 1.9%, 2 to 2.9%, and 3% or more on IT.]

21. Compared to 2017, how will your firm’s 2018 investment in IT change?

![Bar chart showing the distribution of respondents who expect an increase, decrease, stay the same, or are unsure about their investment change.]

22. Compared to 2017, how will your firm’s 2018 investment in the following technologies change?

<table>
<thead>
<tr>
<th>Technologies</th>
<th>Increase</th>
<th>Stay the same</th>
<th>Decrease</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting software</td>
<td>25%</td>
<td>69%</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>Building Information Modeling</td>
<td>24%</td>
<td>41%</td>
<td>0%</td>
<td>35%</td>
</tr>
<tr>
<td>Client relationship management software</td>
<td>29%</td>
<td>41%</td>
<td>0%</td>
<td>29%</td>
</tr>
<tr>
<td>Document management software</td>
<td>35%</td>
<td>53%</td>
<td>0%</td>
<td>12%</td>
</tr>
<tr>
<td>Estimating software</td>
<td>12%</td>
<td>76%</td>
<td>0%</td>
<td>12%</td>
</tr>
<tr>
<td>Fleet tracking/management software</td>
<td>29%</td>
<td>47%</td>
<td>0%</td>
<td>24%</td>
</tr>
<tr>
<td>Human resources software</td>
<td>18%</td>
<td>82%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Payroll software</td>
<td>6%</td>
<td>94%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Prequalification software</td>
<td>6%</td>
<td>82%</td>
<td>0%</td>
<td>12%</td>
</tr>
<tr>
<td>Project collaboration software</td>
<td>18%</td>
<td>76%</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>Project management software</td>
<td>35%</td>
<td>59%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Scheduling software</td>
<td>18%</td>
<td>82%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Service management software</td>
<td>6%</td>
<td>82%</td>
<td>0%</td>
<td>12%</td>
</tr>
<tr>
<td>Subcontractor bid management/ITB software</td>
<td>12%</td>
<td>76%</td>
<td>0%</td>
<td>12%</td>
</tr>
</tbody>
</table>

23. How comfortable is your firm with moving its data to the cloud?

![Bar chart showing the distribution of respondents who are very comfortable, moderately comfortable, not comfortable, or have no opinion.]

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very comfortable</td>
<td>19%</td>
</tr>
<tr>
<td>Moderately comfortable</td>
<td>56%</td>
</tr>
<tr>
<td>Not comfortable</td>
<td>13%</td>
</tr>
<tr>
<td>No opinion</td>
<td>13%</td>
</tr>
</tbody>
</table>
24. How does your firm plan to use mobile software technology?

- Daily field reports: 81%
- Access to customer and job information from the field: 75%
- Employee time tracking and approval: 75%
- Sharing of drawings, photos, and documents: 69%
- Equipment tracking: 63%
- Access to job cost and project reports from the field: 56%
- GPS tracking (e.g., fleet tracking): 56%
- Submittals and commitments: 56%
- Punch lists: 50%
- Scheduling: 44%
- Change management: 31%
- RFI/issue tracking: 31%
- Building Information Modeling: 25%
- Processing service work orders in the field: 25%
- Estimating: 19%
- Inventory tracking: 13%
- Material acceptance at the job site: 6%
- Processing payments in the field: 0%
- No plan to use mobile technology software: 0%

25. Which of the following cloud service models does your firm plan to use?

- Cloud hosting: we outsource our servers and networking components to a cloud service provider’s data center: 36%
- Hybrid cloud: our software and data is on a private network but can be securely accessed with a web browser: 82%
- SaaS: we use software-as-a-service (SaaS) applications that are fully cloud-based: 9%
26. Does your firm currently have a mobile security plan in place?

- Yes: 56%
- No: 31%
- Unsure: 13%

27. Does your firm currently have a formal IT plan that support your business objectives?

- Yes: 56%
- No: 19%
- No, but plan to do so in 2018: 13%
- Unsure: 13%

28. What are your firm’s biggest IT challenges?

- Communication between field and office: 56%
- Connectivity to remote job sites: 50%
- Employee resistance to technology: 50%
- Integration with software used by project partners outside our company: 38%
- Keeping company data secure from hackers: 38%
- Integration between software used inside of our company: 25%
- Outdated company software and systems: 25%
- Keeping hardware current: 19%
- Keeping software current: 19%
- Time needed to implement and train on new technology: 19%
- Management resistance to technology: 0%
- None: 0%