Results

Ken Simonson
Chief Economist
AGC Workforce Survey: hardest positions to fill

% of firms that employ a position and report difficulty filling:

<table>
<thead>
<tr>
<th>Position</th>
<th>Hourly craft (80% having trouble filling)</th>
<th>Salaried (56% having trouble filling)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipelayers</td>
<td>72% (84%)</td>
<td>49% (61%)</td>
</tr>
<tr>
<td>Sheet metal workers</td>
<td>68% (81%)</td>
<td>38% (54%)</td>
</tr>
<tr>
<td>Carpenters</td>
<td>67% (80%)</td>
<td>36% (48%)</td>
</tr>
<tr>
<td>Concrete workers</td>
<td>67% (79%)</td>
<td>31% (41%)</td>
</tr>
<tr>
<td>Pipefitters/Welders</td>
<td>66% (78%)</td>
<td>25% (39%)</td>
</tr>
<tr>
<td>BIM personnel</td>
<td></td>
<td>25% (39%)</td>
</tr>
<tr>
<td>Project mngs/supervisors</td>
<td></td>
<td>61% (49%)</td>
</tr>
<tr>
<td>Engineers</td>
<td></td>
<td>38% (54%)</td>
</tr>
<tr>
<td>Estimating personnel</td>
<td></td>
<td>36% (48%)</td>
</tr>
<tr>
<td>Quality control personnel</td>
<td></td>
<td>31% (41%)</td>
</tr>
</tbody>
</table>

Source: AGC Workforce Survey, Aug. 2018
How firms are coping with workforce shortages

- Increased base pay: 62% (Hourly craft), 56% (Salaried)
- Engaged with career-building program: 48% (Hourly craft), 32% (Salaried)
- Initiated/increased in-house training: 33% (Hourly craft), 33% (Salaried)
- Interns: 33% (Hourly craft), 29% (Salaried)
- Craft staffing, exec search/PEO firm: 32% (Hourly craft), 29% (Salaried)

Source: AGC Workforce Survey, Aug. 2018
Impact on project costs and completion times

- Higher bid prices to perform construction: 47%
- Longer completion times than contractor expected: 45%
- Higher cost than contractor expected: 44%
- Longer completion times put into new bids: 27%
- Lower costs or completion times than expected: 3%
- No impact: 16%

Source: AGC Workforce Survey, Aug. 2018
Construction workforce indicators (not seasonally adjusted)

Source: Bureau of Labor Statistics
## 2017 summary, 2018 and 2019 forecast

<table>
<thead>
<tr>
<th></th>
<th>2017 actual</th>
<th>7/17–7/18</th>
<th>2018 forecast</th>
<th>2019 forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total spending</td>
<td>4%</td>
<td>6%</td>
<td>4-7%</td>
<td>5-8%</td>
</tr>
<tr>
<td>Private – residential</td>
<td>12%</td>
<td>7%</td>
<td>6-9%</td>
<td>7-10%</td>
</tr>
<tr>
<td>– nonresidential</td>
<td>1%</td>
<td>3%</td>
<td>2-5%</td>
<td>3-6%</td>
</tr>
<tr>
<td>Public</td>
<td>-3%</td>
<td>8%</td>
<td>2-5%</td>
<td>1-4%</td>
</tr>
<tr>
<td>Goods &amp; services inputs PPI</td>
<td>4%</td>
<td>8%</td>
<td>4.5-5.5%</td>
<td>4-6%</td>
</tr>
<tr>
<td>Employment cost index</td>
<td>2.7%</td>
<td>3.0%*</td>
<td>3-4%</td>
<td>4-5%</td>
</tr>
</tbody>
</table>

* 2018Q2/2017Q2
Source: actuals: Census, BLS; forecasts: Author’s estimates
Workforce Development Plan 2.0

Jim Young
Senior Director, Congressional Relations for Labor, HR and Safety
• Ways the Federal Government Can Better Support Workforce Development
  – Ensure Adequate Federal Funding
  – Reform Higher Education to Better Prepare the Workforce
  – Measure Student Outcomes to Ensure Quality
  – Enact Comprehensive Immigration Reform
  – Increase Apprenticeship Opportunities
Federal Funding for Major Workforce and Education Programs

Federal Career & Technical Education Funding 2004-2018

Fiscal Year

$ thousands

$1,000
$1,050
$1,100
$1,150
$1,200
$1,250
$1,300
$1,350

Federal Workforce Funding 2004-2018

Fiscal Year

$ thousands

$0
$500,000
$1,000,000
$1,500,000
$2,000,000
$2,500,000
$3,000,000
$3,500,000

WIA

WIOA

Dislocated worker employment and training activities
Youth activities
Adult employment and training activities
Federal Funding for Workforce v. Education

Where the Money Goes

Federal funding for postsecondary education & training

- HEA Title IV Pell Grants and loans for traditional college: $120.1 billion
- Perkins CTE: $1.1 billion
- WIOA Training: $406 million
- Trade Adjustment Assistance training: $391 million
- Post 9/11 GI Bill: $11.6 billion

Total spending: $139.2 billion

Total workforce education: $19.1 billion

Community Colleges vs. the Workforce System

Participation in Postsecondary Programs Offering Workforce Education

- Coding Boot Camps
- Workforce System Training
- Apprenticeship
- Community College

12.2 million
5.000,000
7.200,000
18,000
161,000
505,000
AGC of America

Mike Stark
Vice President, Knowledge Programs and Building Markets
Construction Firms and AGC Chapters
Addressing Workforce Shortages
Autodesk Technology

Sarah Hodges
Senior Director, Construction Business Line
Technology Trends in Construction

- Digital Collaboration
- Drones
- Building Information Modeling (BIM)
- Robotics
- Industrialized Construction
Q&A

• We would like to hear any of your questions or comments

• And visit agc.org/workforce for our plan to create the next generation of construction workers