March 3, 2022


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cumulative change (seasonally adjusted)

Change to 1/22 from:

<table>
<thead>
<tr>
<th></th>
<th>2/20</th>
<th>1/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Construction</td>
<td>3.8%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Total Nonfarm</td>
<td>-1.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Nonresidential Construction</td>
<td>-4.6%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Source: BLS current employment statistics, https://www.bls.gov/ces/
Construction job openings and hires
Dec 2001-Dec 2021, not seasonally adjusted

Job openings Dec 2021: 273,000
change from Dec 2020: 29%

New hires Dec 2021: 220,000
change from Dec 2020: -10%

State construction employment change, Feb. 2020–December 2021
23 states and DC up, 1 state flat, 26 states down (U.S.: -1.3%)

Top 5
South Dakota 10.5%
Utah 8.8%
Idaho 8.2%
Delaware 6.4%
District of Columbia 4.5%

Bottom 5
Louisiana -12.6%
Wyoming -10.9%
New York -10.3%
Nevada -8.1%
Pennsylvania -7.8%

Note: Shading based on unrounded numbers
Source: BLS state and area employment, www.bls.gov/sae
US & NC Construction Employment
Cumulative change, Feb 2020-Dec 2021, seasonally adjusted

% change
Feb 2020-Dec 2021:

NC 3.4%
US -1.3%

Source: BLS

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## North Carolina Metro Construction Employment

Dec. 2021 vs. 2020 & 2019 (not seasonally adjusted)

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Dec. 2021</th>
<th>Change from:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Dec. 2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Asheville*</td>
<td>10,100</td>
<td>6.3%</td>
</tr>
<tr>
<td>Burlington*</td>
<td>3,300</td>
<td>3.1%</td>
</tr>
<tr>
<td>Charlotte-Concord-Gastonia, NC-SC*</td>
<td>69,100</td>
<td>0.6%</td>
</tr>
<tr>
<td>Durham-Chapel Hill*</td>
<td>9,800</td>
<td>3.2%</td>
</tr>
<tr>
<td>Fayetteville*</td>
<td>5,200</td>
<td>8.3%</td>
</tr>
<tr>
<td>Greensboro-High Point*</td>
<td>16,700</td>
<td>6.4%</td>
</tr>
<tr>
<td>Greenville*</td>
<td>3,200</td>
<td>3.2%</td>
</tr>
<tr>
<td>Hickory-Lenoir-Morganton*</td>
<td>5,200</td>
<td>8.3%</td>
</tr>
<tr>
<td>Raleigh*</td>
<td>44,500</td>
<td>5.2%</td>
</tr>
<tr>
<td>Rocky Mount*</td>
<td>2,600</td>
<td>4.0%</td>
</tr>
<tr>
<td>Wilmington*</td>
<td>9,800</td>
<td>6.5%</td>
</tr>
<tr>
<td>Winston-Salem*</td>
<td>11,900</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: BLS *The Bureau of Labor Statistics reports employment for construction, mining and logging combined for metro areas in which mining and logging have few employers. Construction-only employment change is shown for a metro if BLS posts that data.
2022 AGC Hiring & Outlook Survey: Firms’ expectations regarding headcount and hiring over next 12 months

(Total Responses: US 1,019; NC 28)

Expect headcount to:

- Increase: 74%/82%
- Decrease: 9%/4%

It will become/continue to be:

- Easier to hire: 7%/14%
- Harder to hire: 75%/68%

Source: AGC 2022 Outlook Survey; 1,019 total respondents
Construction spending: 2021 totals vs. 2020

- Total 8%; private residential 23% (single-family 33%; multi 16%); private nonres -2%; public -4%

Largest segments (in descending order of 2021 spending)
- Power -0.1% (electric 1%; oil/gas fields & pipelines -5%)
- Highway and street 0.3%
- Education -9% (primary/secondary -7%; higher ed -14%)
- Commercial 4% (warehouse 16%; retail -8%)
- Office -6%
- Mfg. 9% (chemical 7%; computer/electronic 27%; transp. equip. -0.5%; food/beverage/tobacco 31%)
- Transportation -6% (air -10%; freight rail/trucking -6%; mass transit -0.7%)
- Health care 2% (hospital 5%; medical building 0.8%; special care -6%)
- Lodging -32%
AGC Outlook Survey: Net* % who expect 2022 value of projects to be higher/lower than 2021

(Total Responses: US 1,019; NC 28)

<table>
<thead>
<tr>
<th>Category</th>
<th>US/NC</th>
<th>Source: AGC 2022 Outlook Survey; 1,019 total respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge/Highway</td>
<td>57%/63%</td>
<td></td>
</tr>
<tr>
<td>Transportation (e.g., transit, rail, airport)</td>
<td>51%/67%</td>
<td></td>
</tr>
<tr>
<td>Water/Sewer</td>
<td>50%/72%</td>
<td></td>
</tr>
<tr>
<td>Other Healthcare (e.g., clinic, testing or screening facility, medical lab)</td>
<td>41%/44%</td>
<td></td>
</tr>
<tr>
<td>Warehouse</td>
<td>41%/41%</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>38%/45%</td>
<td></td>
</tr>
<tr>
<td>Federal (e.g., VA, GSA, USACE, NAVFAC)</td>
<td>37%/45%</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>35%/33%</td>
<td></td>
</tr>
<tr>
<td>Multifamily Residential</td>
<td>32%/33%</td>
<td></td>
</tr>
<tr>
<td>Data Center</td>
<td>31%/31%</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>27%/17%</td>
<td></td>
</tr>
<tr>
<td>Public Building</td>
<td>20%/39%</td>
<td></td>
</tr>
<tr>
<td>K-12 School</td>
<td>19%/26%</td>
<td></td>
</tr>
<tr>
<td>Higher Education</td>
<td>16%/22%</td>
<td></td>
</tr>
<tr>
<td>Lodging</td>
<td>6%/8%</td>
<td></td>
</tr>
<tr>
<td>Private Office</td>
<td>-8%/-17%</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>-8%/-12%</td>
<td></td>
</tr>
</tbody>
</table>

* Net = % of respondents who expect dollar value to increase minus % who expect decrease in 2022 compared to 2021
Change in prices for inputs to new nonresidential construction

Year-over-year change in PPIs, Sep 2020 – Jan 2022, not seasonally adjusted

12 months to:
- Sep 2020: Inputs PPI: 1.8%
- Jan 2022: Inputs PPI: 20.3%
- Sep 2020: Bid price PPI: 1.8%
- Jan 2022: Bid price PPI: 16.5%

PPIs for construction bid prices and selected inputs

cumulative change in PPIs, April 2020 – January 2022 (not seasonally adjusted)

% change
Apr 2020-Jan 2022:

Lumber and plywood 89%
Copper and brass mill shapes 70%
Aluminum mill shapes 44%
Plastic construction products 42%
Gypsum products 30%
‘Bid price’ (new nonres building construction) 17%

AGC 2022 Outlook Survey: Firms cite pandemic impact as cause for higher cost and delays

(Total Responses: US 1,019; NC 28)

- Costs have been higher than we anticipated: 84% (US), 89% (NC)
- Projects have taken longer than we anticipated: 72% (US), 71% (NC)
- We have put higher prices into our bids or contracts: 69% (US), 75% (NC)
- We have put longer completion times into our bids or contracts: 44% (US), 32% (NC)
- We have won new projects or add-ons to existing projects: 29% (US), 18% (NC)
- No impact: 3% (US), 0% (NC)

Source: AGC 2022 Outlook Survey; 1,019 total respondents

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Cost squeeze on contractors can last two years or more

Difference between year-over-year change in materials costs vs. bid prices, Jan 2006-Jan 2022

Source: Bureau of Labor Statistics, [www.bls.gov/ppi](http://www.bls.gov/ppi), producer price indexes for goods inputs to nonresidential construction (material costs) and new warehouse construction (bid prices)
AGC Outlook Survey: Net* % who expect 2022 value of projects to be higher/lower than 2021

-20% -10% 0% 10% 20% 30% 40% 50% 60% 70%

Bridge/Highway 57%
Transportation (e.g., airport, rail, trucking, transit) 51%
Water/Sewer 50%
Other Healthcare (e.g., clinic, testing or screening facility, medical lab) 41%
Warehouse 41%
Hospital 38%
Federal (e.g., VA, GSA, USACE, NAVFAC) 37%
Power 35%
Multifamily Residential 32%
Manufacturing 27%
Public Building 20%
K-12 School 19%
Higher Education 19%
Lodging 6%
Private Office -8%
Retail -8%

*Net = % of respondents who expect dollar value to increase minus % who expect decrease in 2022 compared to 2021

Source: AGC 2022 Outlook Survey; 1,019 total respondents
Medium-term impacts as recovery begins

- Economic recovery looks more certain but virus risks remain, especially for construction: low worker vaccination rate; possible pullback by owners on project starts
- Slower rebound than for other sectors as owners, investors/lenders, institutions, and public agencies face uncertainty about future demand, project costs, and completion times
- Continuing cost and supply challenges may lead to more project deferrals
- Infrastructure funds will take time to distribute and award to individual projects, muting the medium-term impact on labor and materials supply
- Best prospects: manufacturing, distribution, data centers, renewable energy

Source: Author
2 concerns about construction worker supply

• Low vaccination rate: 56% for construction workers, 83% for other occupations
• “Premium” for construction wages relative to total private sector has shrunk from 20-23% pre-pandemic to 17% for production & nonsupervisory employees
Long-run construction outlook (post-pandemic)

- Slower population growth means slower demand growth for most construction
- Permanent shift from retail to e-commerce/distribution structures
- More specialized and online healthcare facilities; fewer hospitals, nursing homes
- More wind, solar, battery storage and charging facilities, and related manufacturing
- Less oil drilling and pipeline construction
- Continuing demand for K-12 but much less for higher ed construction
- Not clear if offices will decentralize or remain in less demand
- Not clear yet if urban/rural or state-to-state trends will change
Population change by state, July 2020–July 2021
(U.S.: 0.12%)

**Top 6**
- ID: 2.9%
- UT: 1.7%
- MT: 1.7%
- AZ: 1.4%
- SC, DE: 1.2%

**Bottom 5**
- DC: -2.9%
- NY: -1.6%
- IL: -0.9%
- HI: -0.7%
- CA: -0.7%

AGC economic resources
(email ken.simonson@agc.org)

- The Data DIGest: weekly 1-page email (subscribe at http://store.agc.org)
- ConsensusDocs Price Escalation Resource Center: https://www.consensusdocs.org/price-escalation-clause/
- Surveys, state and metro data, fact sheets: www.agc.org/learn/construction-data
- Monthly press releases: construction spending; producer price indexes; national, state, metro employment with rankings: https://www.agc.org/newsroom

Source: Author
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