

July 2022

U.S. Construction Outlook: Workforce Worries, Cost Challenges, Project Prospects

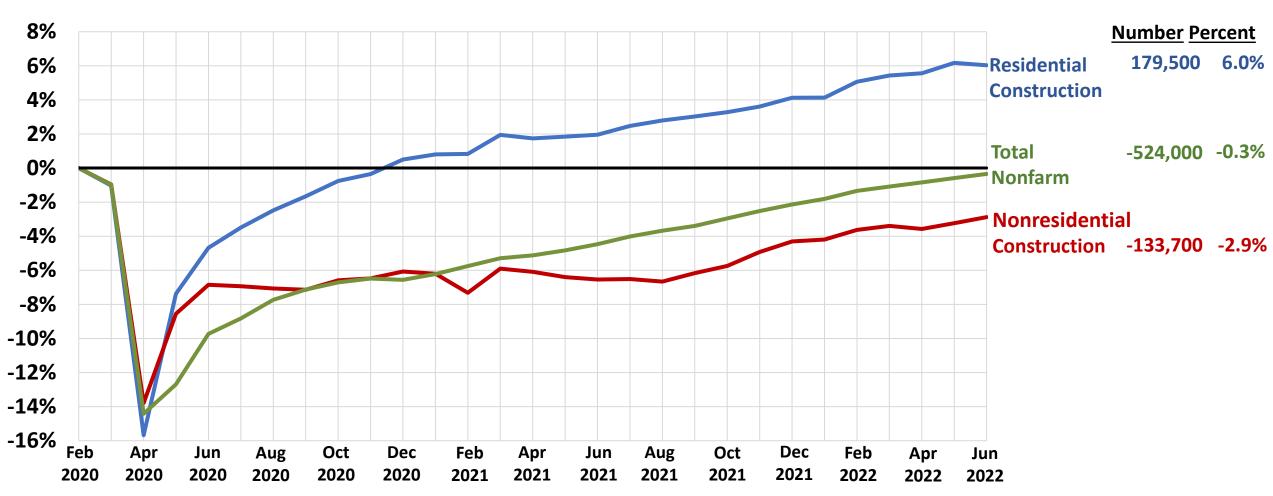
Ken Simonson
Chief Economist, AGC of America ken.simonson@agc.org

Total Nonfarm & Construction Employment, Feb. 2020-Jun. 2022

cumulative change (seasonally adjusted)



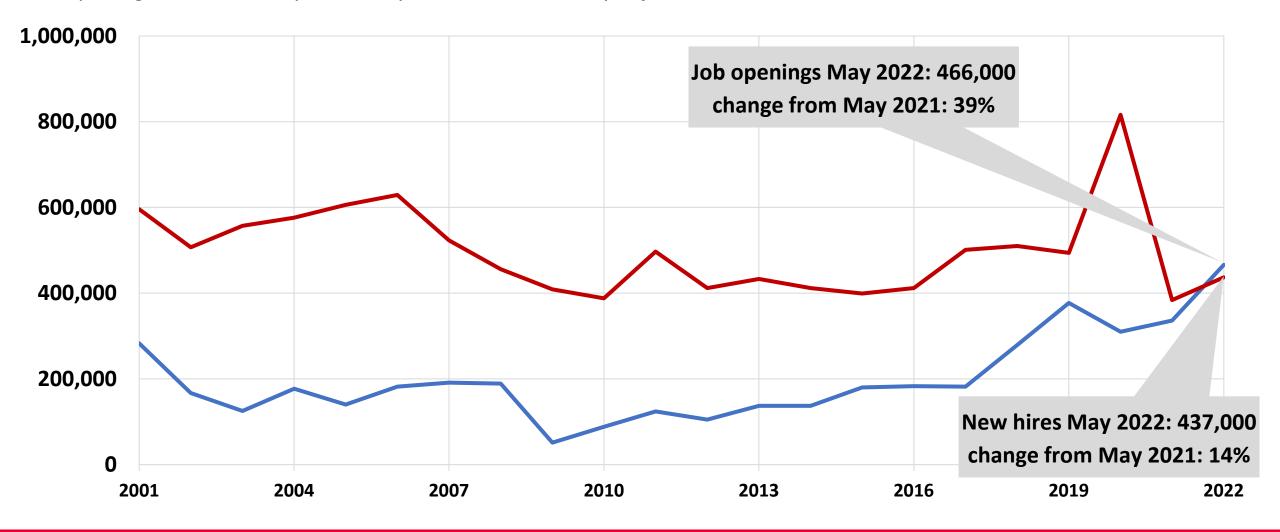
Change since Feb. 2020:



Construction job openings exceed hires, set record high for May



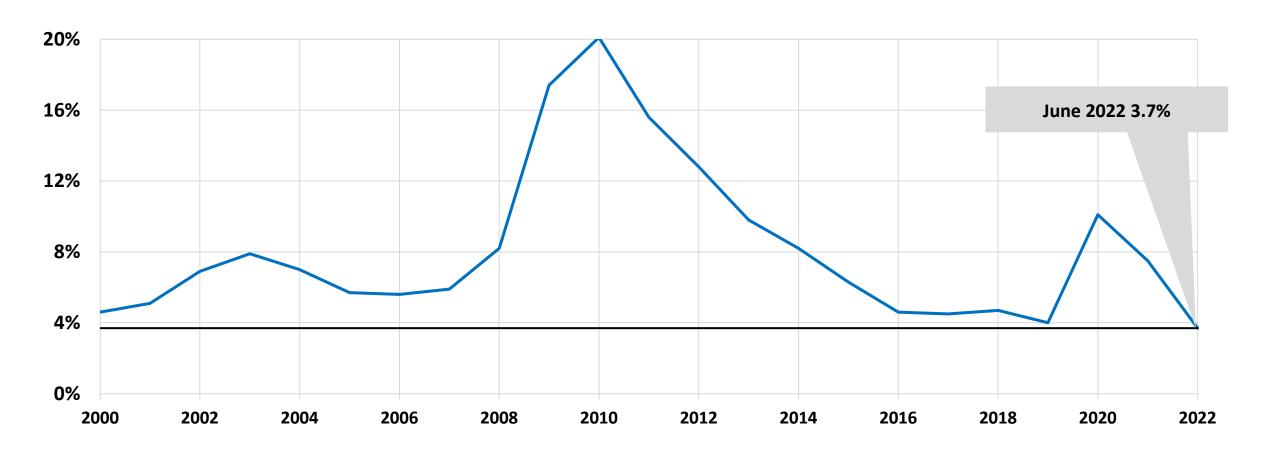
Job openings and hires, May 2001-May 2022, not seasonally adjusted



Rate of construction unemployment

June 2000-June 2022, not seasonally adjusted





State construction employment change, Feb. 2020-May 2022

31 states up, 2 flat, 17 states and DC down (U.S.: 0.5%)

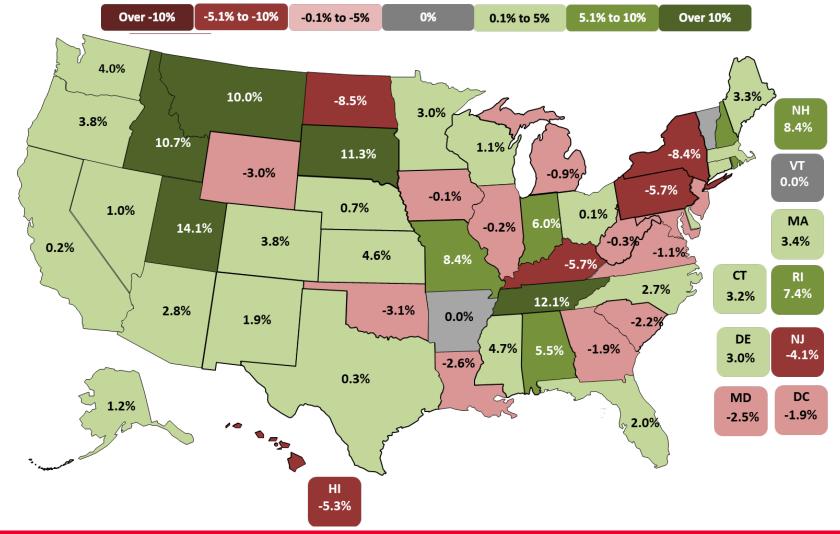


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Utah	14.1%
Tennessee	12.1%
South Dakota	11.3%
Idaho	10.7%
Montana	10.0%

Bottom 5

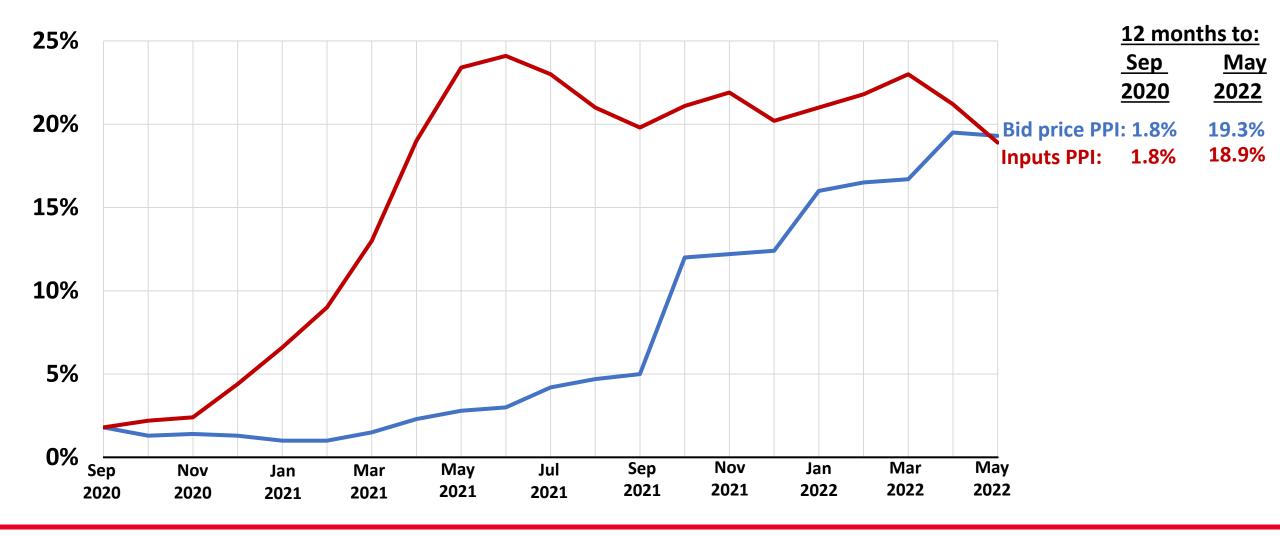
North Dakota	-8.5%
New York	-8.4%
Pennsylvania	-5.7%
Kentucky	-5.7%
Hawaii	-5.3%



Costs vs. bid prices for new nonresidential construction

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



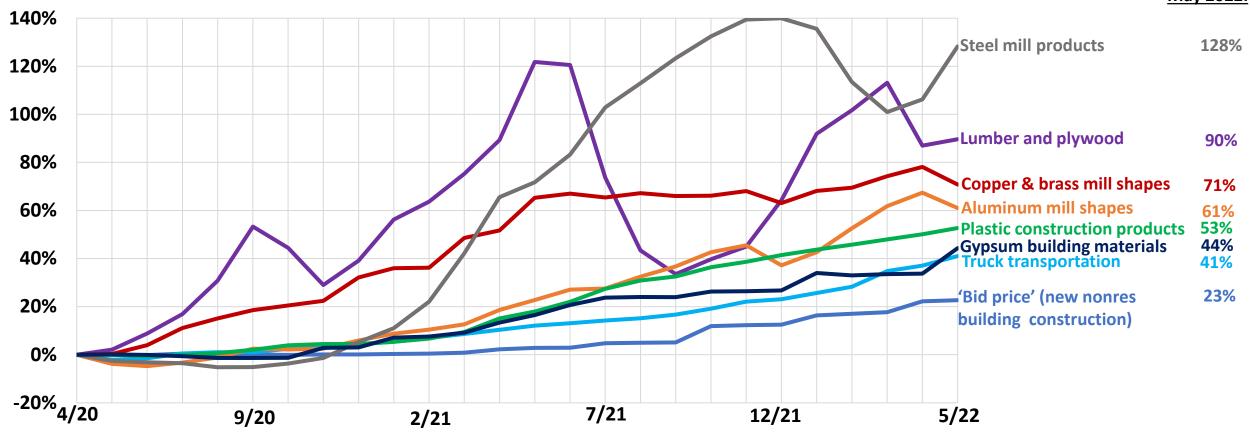


PPIs for construction bid prices and selected inputs

cumulative change in PPIs, April 2020-May 2022 (not seasonally adjusted)



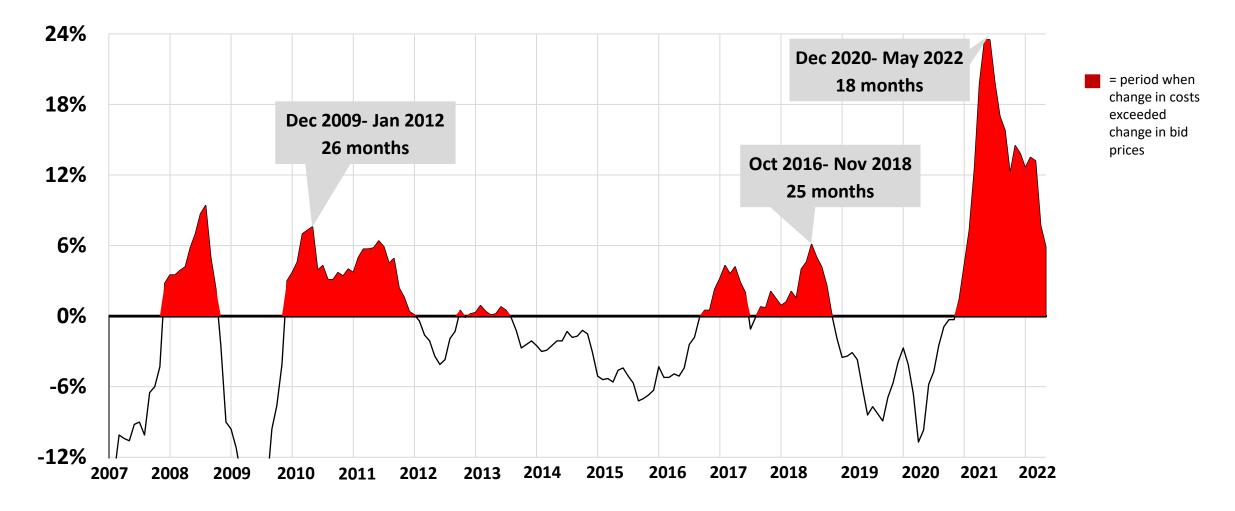
% change April 2020-May 2022:



Cost squeeze on contractors can last two years or more

Difference between year-over-year change in materials costs vs. bid prices, Jan 2007-May 2022





Change in construction spending: May 2022 vs. 2021

current (not inflation-adjusted) dollars, seasonally adjusted



- Total 10%; private residential 19% (single-family 15%; multi -4%); private nonres 4%; public -3% Largest segments (in descending order of 2021 spending)
- Power -6% (electric -7%; oil/gas fields & pipelines 0.5%)
- Commercial 10% (warehouse 15%; retail 6%; farm 7%)
- Highway and street -6%
- Education -3% (primary/secondary 2%; higher ed -7%)
- Mfg. 34% (chemical 0%; computer/electronic 256%; food/beverage/tobacco -2%; transp. equip. -27%)
- Office -2%
- Transportation -4% (air -14%; freight rail/trucking 5%; mass transit 2%)
- Health care 5% (hospital 8%; medical building 6%; special care -3%)
- Lodging -12%

Forward-looking indicators



Indicator	Latest date	Current value	Year-ago value
Architecture Billings Index (ABI)	May	53.5	58.6
Dodge Momentum Index (DMI)	June	174	165
Multifamily permits not yet started	May	127,000	98,000

Medium-term impacts as recovery begins



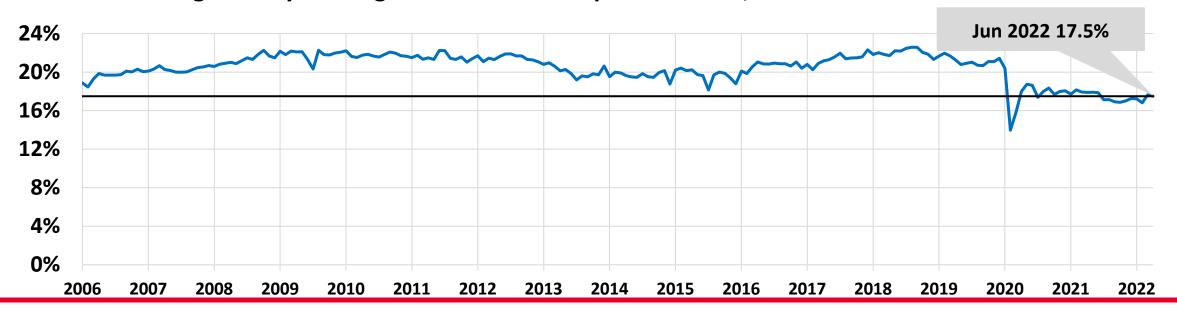
- Economic recovery should continue but invasion of Ukraine and Western sanctions add to cost and supply-chain pressures
- Slower rebound than for other sectors as owners, investors/lenders, institutions, and public agencies face uncertainty about future demand, costs, and completion times
- Continuing 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 "shortages"
- Best current prospects: manufacturing, data centers, renewable energy
- At risk of slowdown: warehouse, multifamily

Wage premium for construction has shrunk



- "Premium" for construction wages relative to total private sector has shrunk from 20-23% pre-pandemic to 17.5% for production & nonsupervisory employees as other sectors boost pay, benefits and offer flexible hours and locations
- Implications: Contractors will have raise pay still more, pay more overtime, invest more in labor-saving software and equipment

Average hourly earnings in excess of total private sector, Mar 2006-June 2022



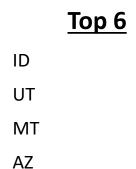
Long-run construction outlook (post-pandemic)



- Finding workers will be a challenge for much longer than materials costs or supply
- Slower population growth means slower demand growth for most construction
- Slowing demand for K-12, decline for higher ed 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
- Not clear if offices will decentralize or remain in less demand
- Not clear if recent urban/rural or state-to-state migration will remain or reverse

Population change by state, July 2020-July 2021 (U.S.: 0.12%)





SC, DE

2.9%

1.7%

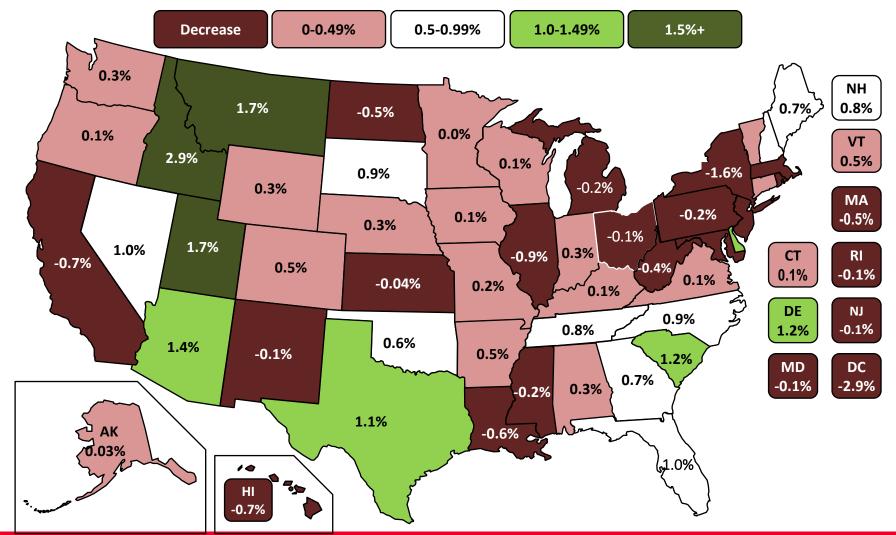
1.7%

1.4%

1.2%

Bottom 5

DC -2.9%
NY -1.6%
IL -0.9%
HI -0.7%
CA -0.7%



AGC economic resources

(email <u>ken.simonson@agc.org</u>)

- The Data DIGest: weekly 1-page email (subscribe at http://store.agc.org)
- Construction Inflation <u>Alert</u>:

https://www.agc.org/learn/construction-data/agc-construction-inflation-alert

- ConsensusDocs Price Escalation Resource <u>Center</u>: 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



