

April 2022

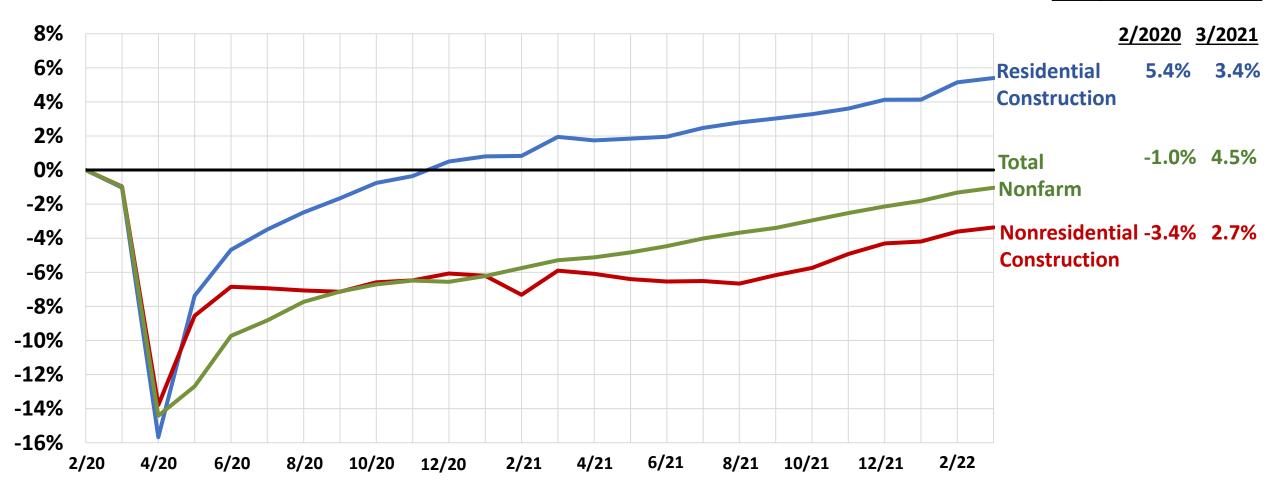
U.S. Construction Outlook: Workforce Worries, Cost Challenges, Project Prospects

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Total Nonfarm & Construction Employment, Feb. 2020-March 2022 cumulative change (seasonally adjusted)



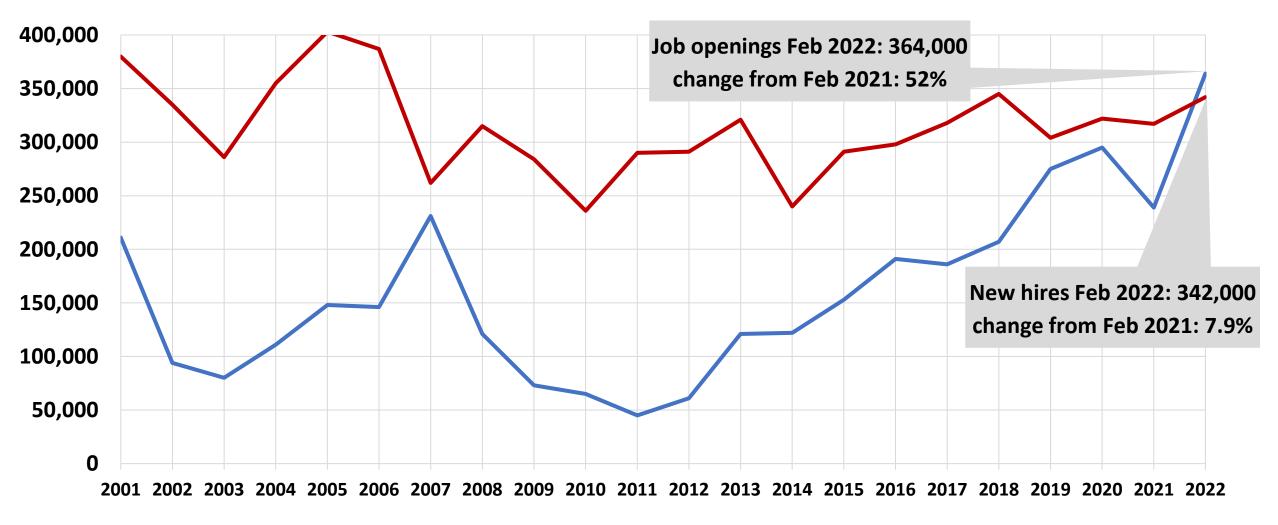
Change to 3/2022 from:



Construction job openings exceed hires, set record high for Feb.



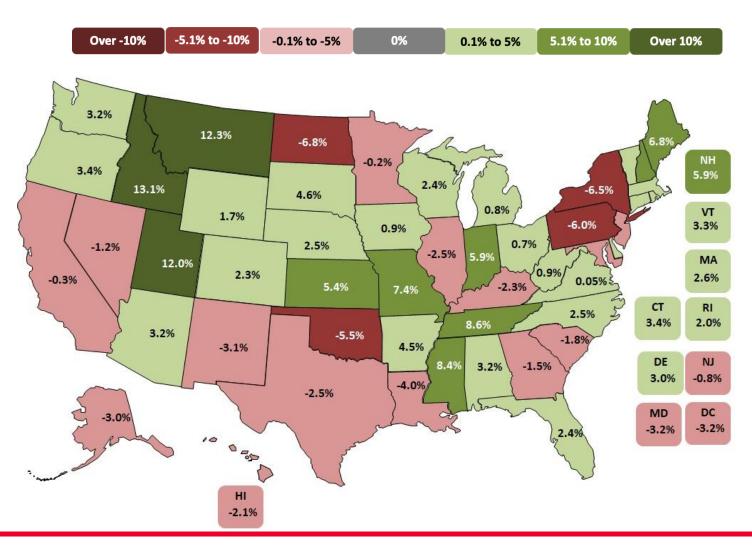
Job openings and hires, Feb 2001-Feb 2022, not seasonally adjusted



State construction employment change, Feb. 2020-Feb. 2022 32 states up, 18 states and DC down (U.S.: -0.1%)



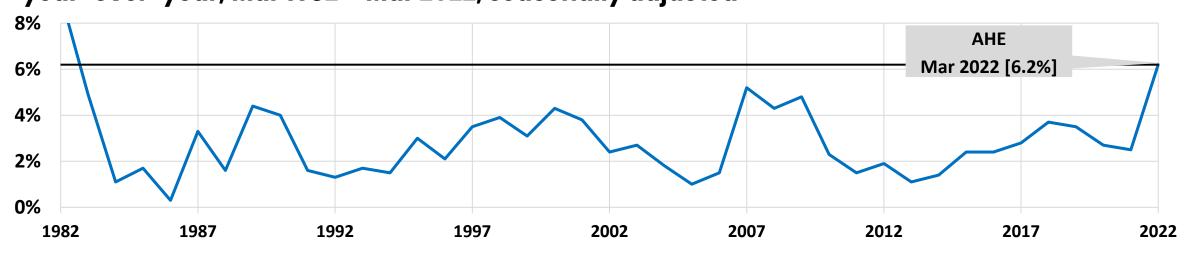
Тор 5				
Idaho	13.1%			
Montana	12.3%			
Utah	12.0%			
Tennessee	8.6%			
Mississippi	8.4%			
Bottom 5				
Bottom 5				
Bottom 5 North Dakota	-6.8%			
	-6.8% -6.5%			
North Dakota				
North Dakota New York	-6.5%			
North Dakota New York Pennsylvania	-6.5% -6.0%			



Craft wages are rising at the fastest rate since 1982

Average hourly earnings of production & nonsupervisory employees year-over-year, Mar 1982 – Mar 2022, seasonally adjusted

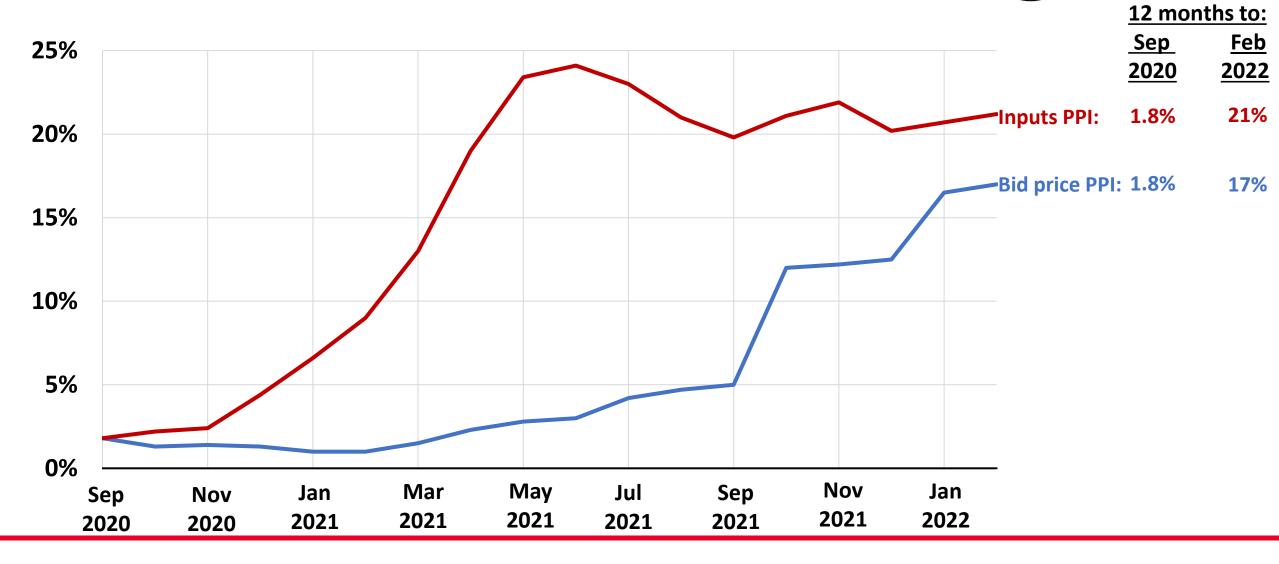






Change in prices for inputs to new nonresidential construction Year-over-year change in PPIs, Sep 2020 – Feb 2022, not seasonally adjusted





6 | Source: Bureau of Labor Statistics, producer price indexes, <u>www.bls.gov/ppi</u>

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ISTRUCTION ASSOCIATION % change Apr 2020-Feb 2022: 260% **Diesel fuel** 237% 220% 180% 140% **Steel mill products** 113% 100% Lumber and plywood 101% **Copper and brass mill** 70% shapes 60% **Aluminum mill shapes 52% Plastic construction products** 45% **Gypsum products** 29% 20% 'Bid price' (new nonres 18% building construction) -20% 4/20 6/20 10/20 2/21 4/21 6/21 8/21 8/20 12/20 10/21 12/21 2/22

PPIs for construction bid prices and selected inputs

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

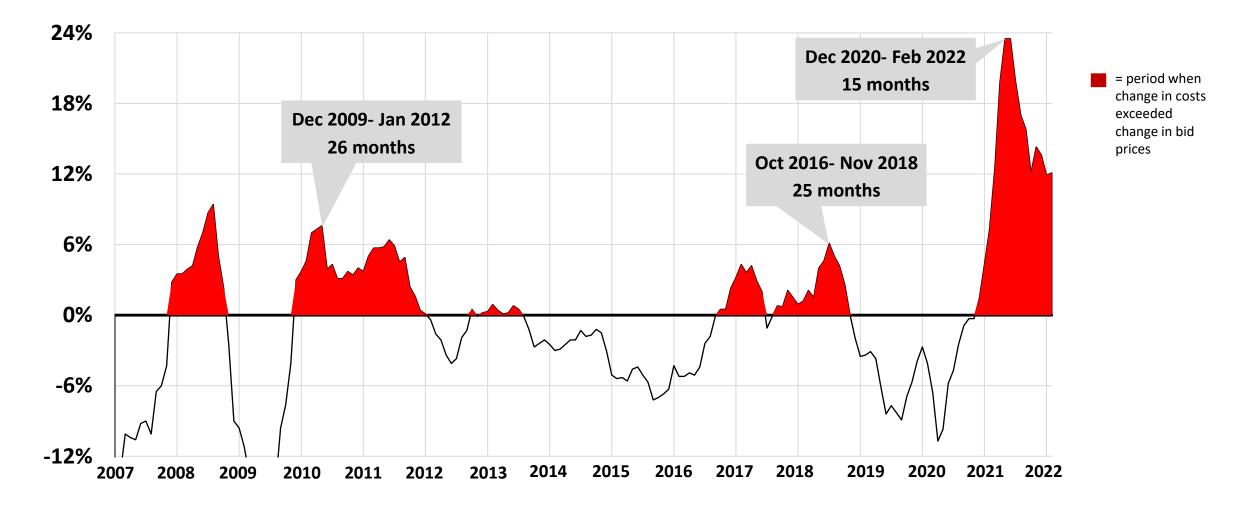
7 | Source: Bureau of Labor Statistics, producer price indexes, <u>www.bls.gov/ppi</u>

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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-Feb 2022





Source: Source: Bureau of Labor Statistics, <u>www.bls.gov/ppi</u>, producer price indexes for goods inputs to nonresidential construction

8 (material costs) and new school building construction (bid prices)

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Change in construction spending: February 2022 vs. 2021

current (not inflation-adjusted) dollars, seasonally adjusted annual rate



• Total 11%; private residential 17% (single-family 20%; multi 8%); private nonres 10%; public 1%

Largest segments (in descending order of 2021 spending)

- Power -0.3% (electric 4%; oil/gas fields & pipelines -0.3%)
- Highway and street 9%
- Commercial 19% (warehouse 22%; retail 19%)
- Education -4% (primary/secondary -8%; higher ed -0.8%)
- Mfg. 35% (chemical 0.7%; computer/electronic 229%; food/beverage/tobacco 26%; transp. equip. -2%)
- Office 7%
- Transportation -0.4% (air -4%; freight rail/trucking 2%; mass transit -6%)
- Health care 11% (hospital 8%; medical building 20%; special care -11%)
- Lodging -27%

Forward-looking indicators



Indicator	Latest date	Current value	Year-ago value
Architecture Billings Index (ABI)	Feb	51.3	52.7
Dodge Momentum Index (DMI)	Feb	158	143
Multifamily permits not yet started	Feb	117,000	92,000

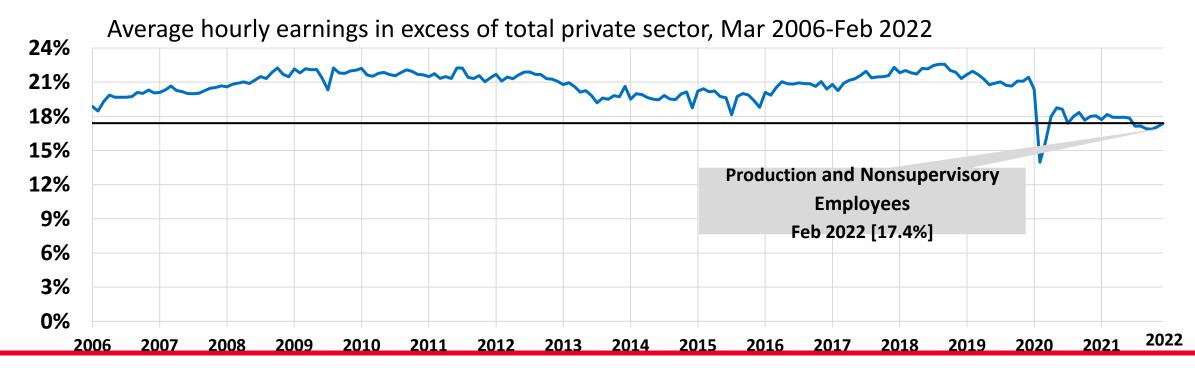
Medium-term impacts as recovery begins



- Economic recovery should continue but invasion of Ukraine adds and Western countermeasures 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, distribution, data centers, renewable energy

Challenges regarding construction worker supply

- Low vaccination rate: 46% for construction workers, 82% 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 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





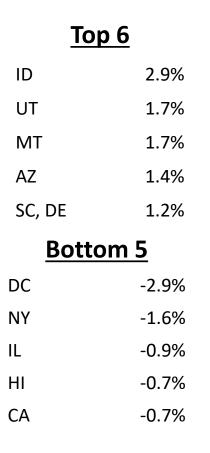
Long-run construction outlook (post-pandemic)

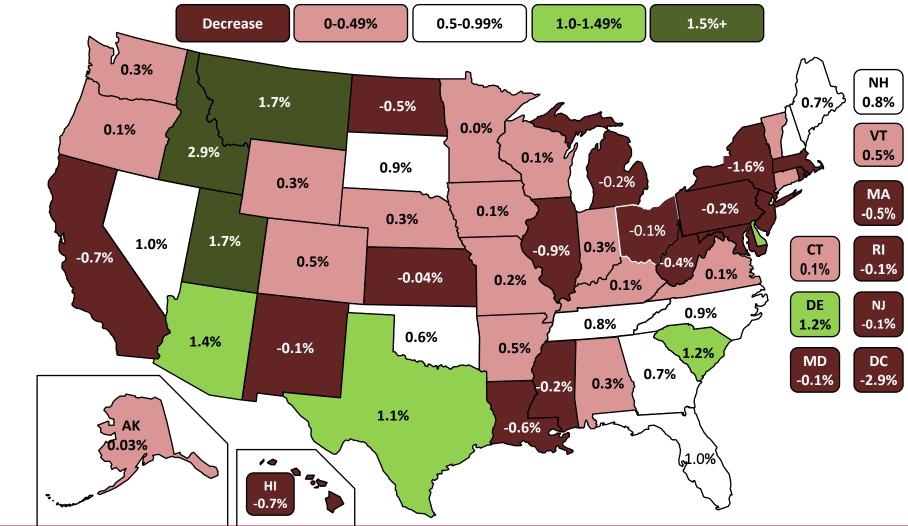


- Slower population growth means slower demand growth for most construction
- Slowing demand for K-12, decline for higher ed construction
- Permanent shift from retail to e-commerce/distribution structures
- More specialized and online healthcare facilities; fewer hospitals, nursing homes
- More wind, 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%)







AGC economic resources

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

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

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

- ConsensusDocs Price Escalation Resource <u>Center</u>: <u>https://www.consensusdocs.org/price-escalation-clause/</u>
- Surveys, state and metro data, fact sheets: <u>www.agc.org/learn/construction-data</u>
- Monthly press releases: construction spending; producer price indexes; national, state, metro employment with rankings: <u>https://www.agc.org/newsroom</u>



