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**June 2022**

# **U.S. & N.C. Construction Outlook: Workforce Worries, Cost Challenges, Project Prospects**

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# Total Nonfarm & Construction Employment, Feb. 2020–May 2022

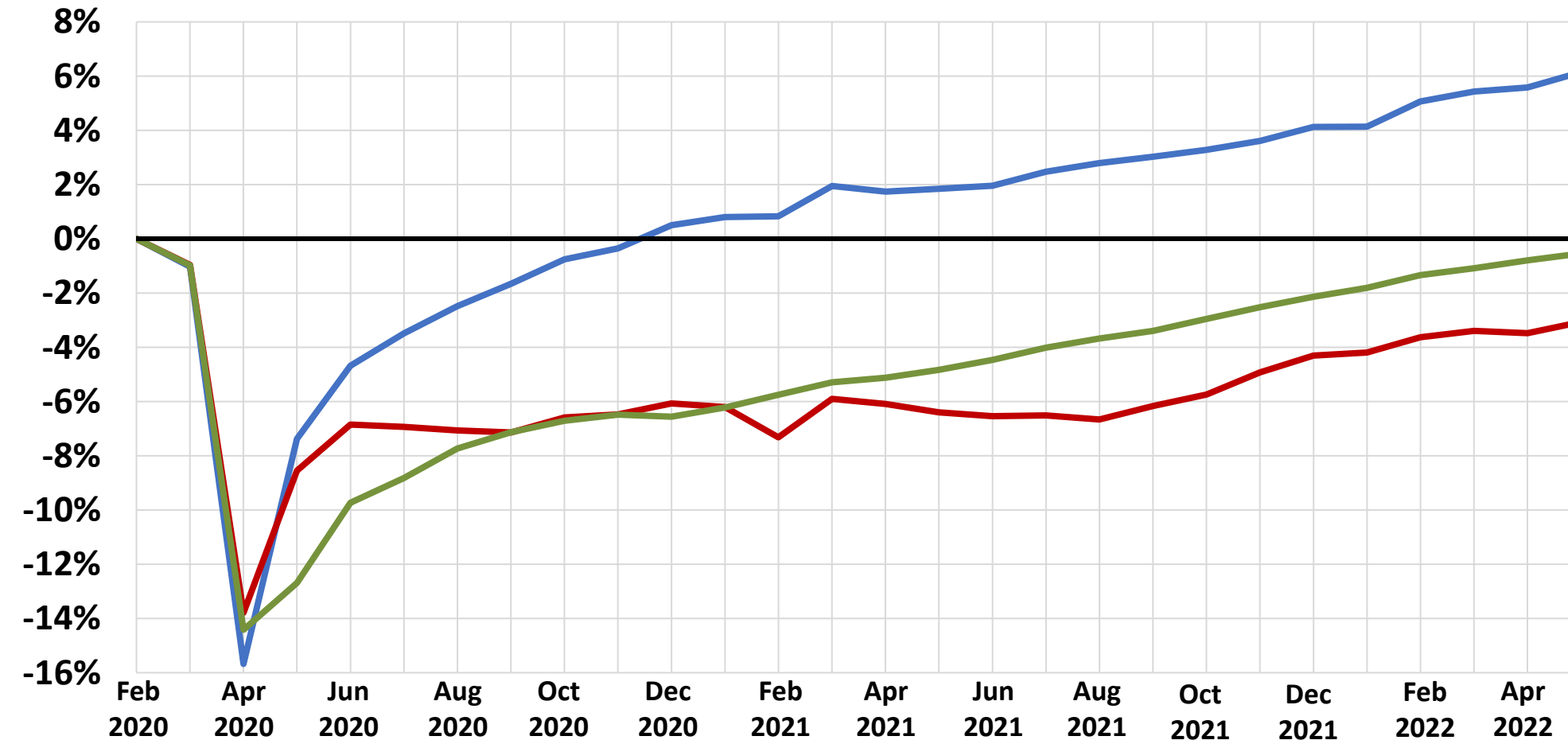
cumulative change (seasonally adjusted)



**Change since Feb. 2020:**

**Number Percent**

<b>Residential Construction</b>	<b>182,800</b>	<b>6.1%</b>
<b>Total Nonfarm</b>	<b>-822,000</b>	<b>-0.5%</b>
<b>Nonresidential Construction</b>	<b>-142,500</b>	<b>-3.1%</b>

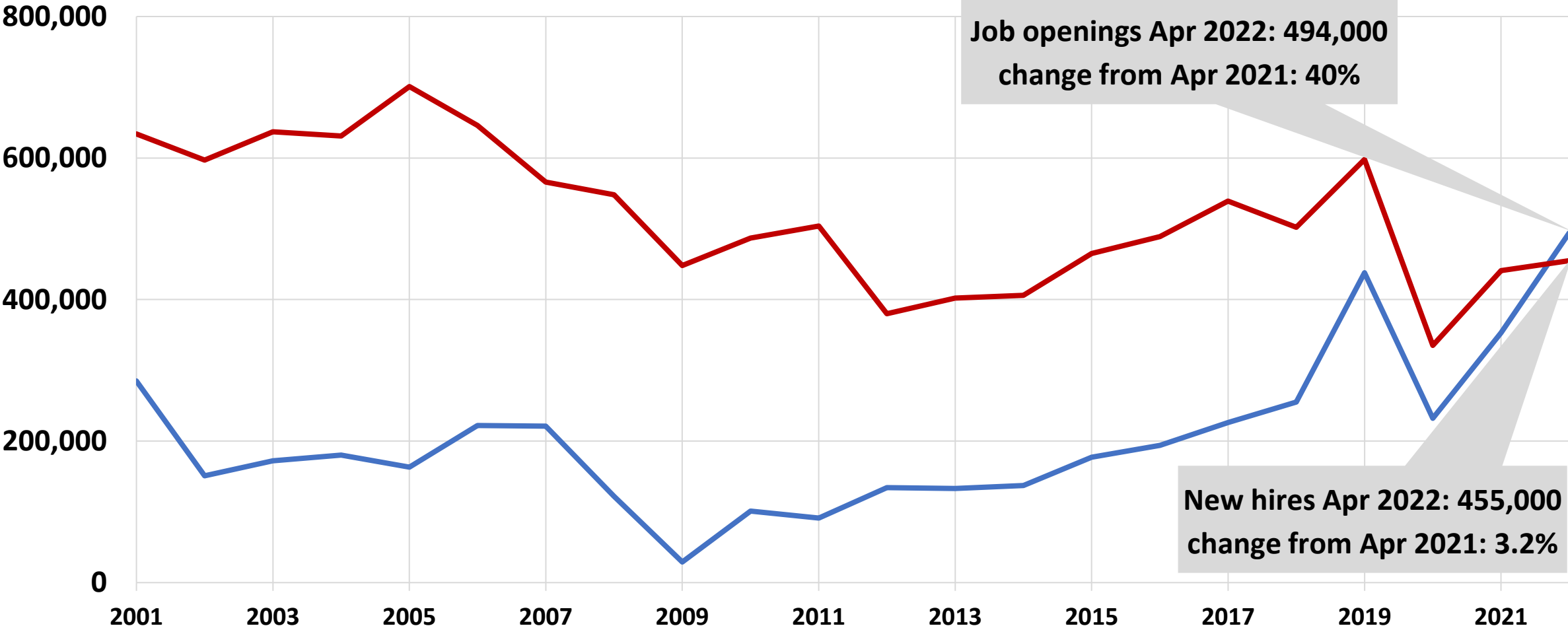


# Construction job openings exceed hires, set record high for Apr.



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

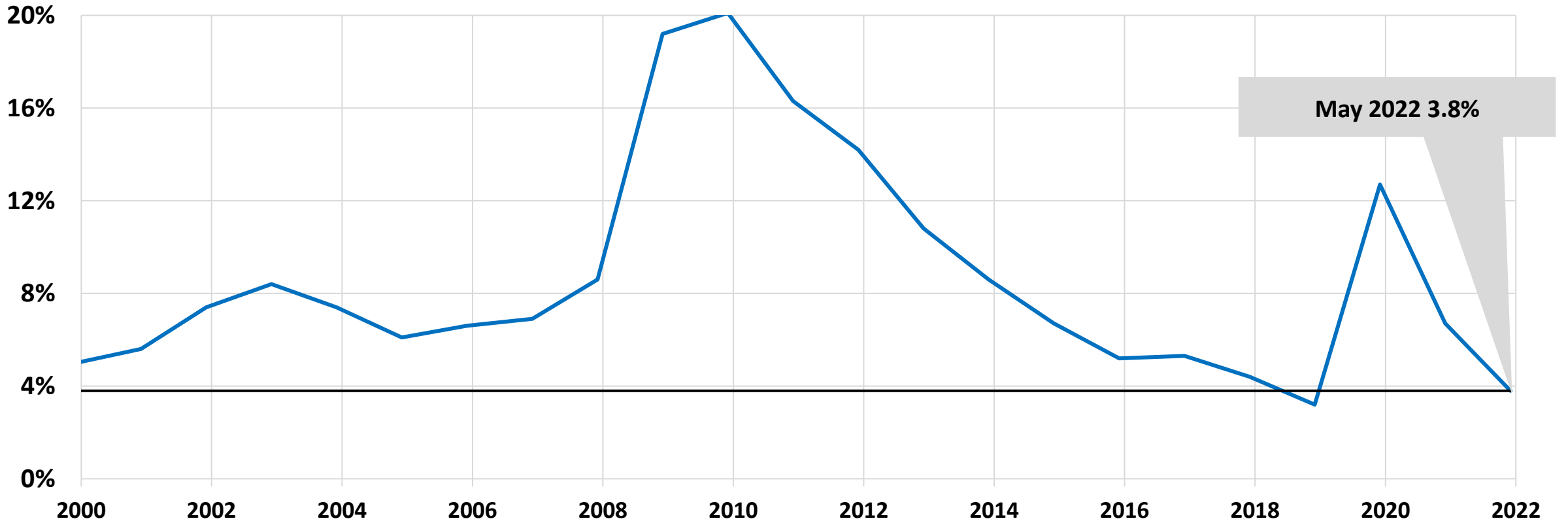


**Job openings Apr 2022: 494,000**  
**change from Apr 2021: 40%**

**New hires Apr 2022: 455,000**  
**change from Apr 2021: 3.2%**

# Rate of construction unemployment

May 2000–May 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%)

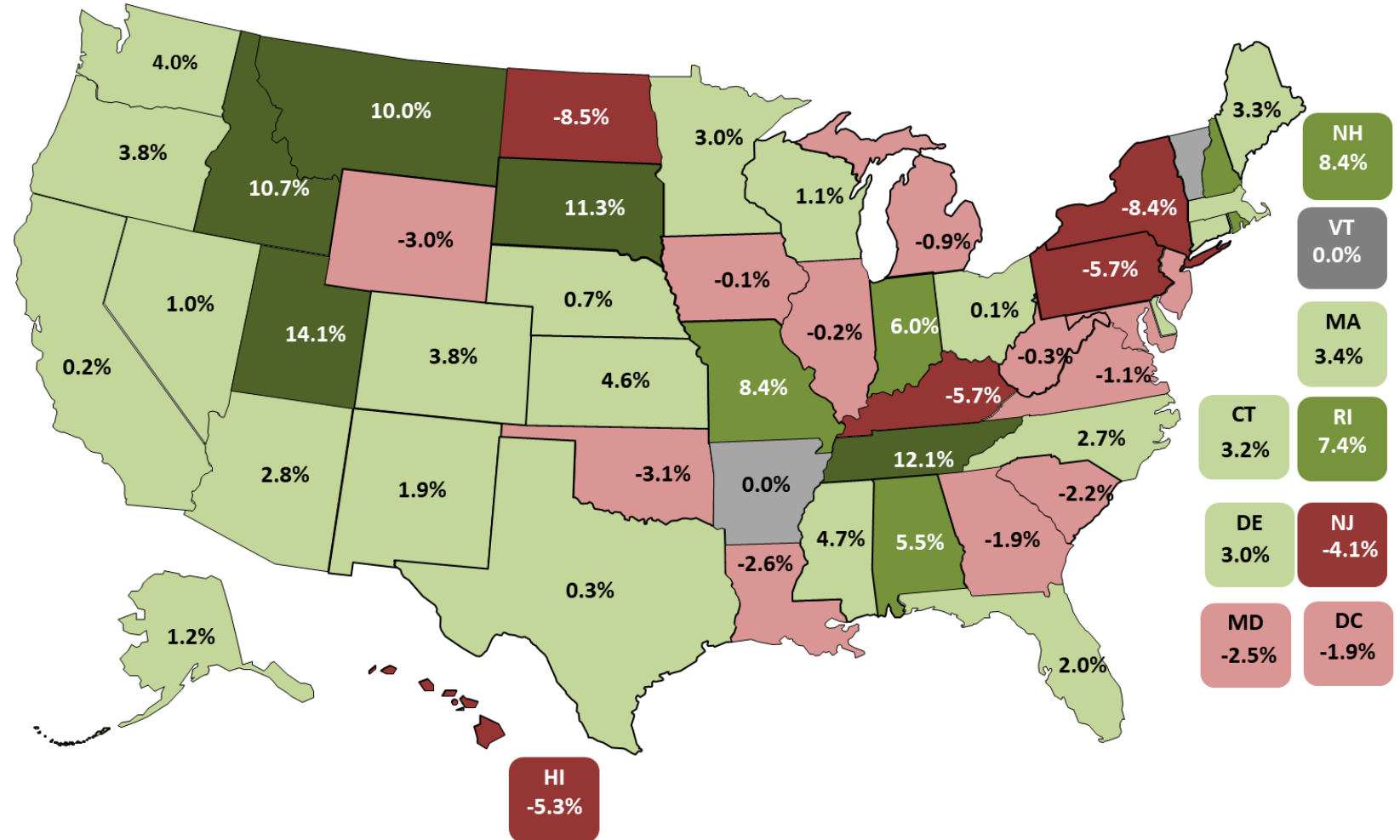


## Top 5

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%

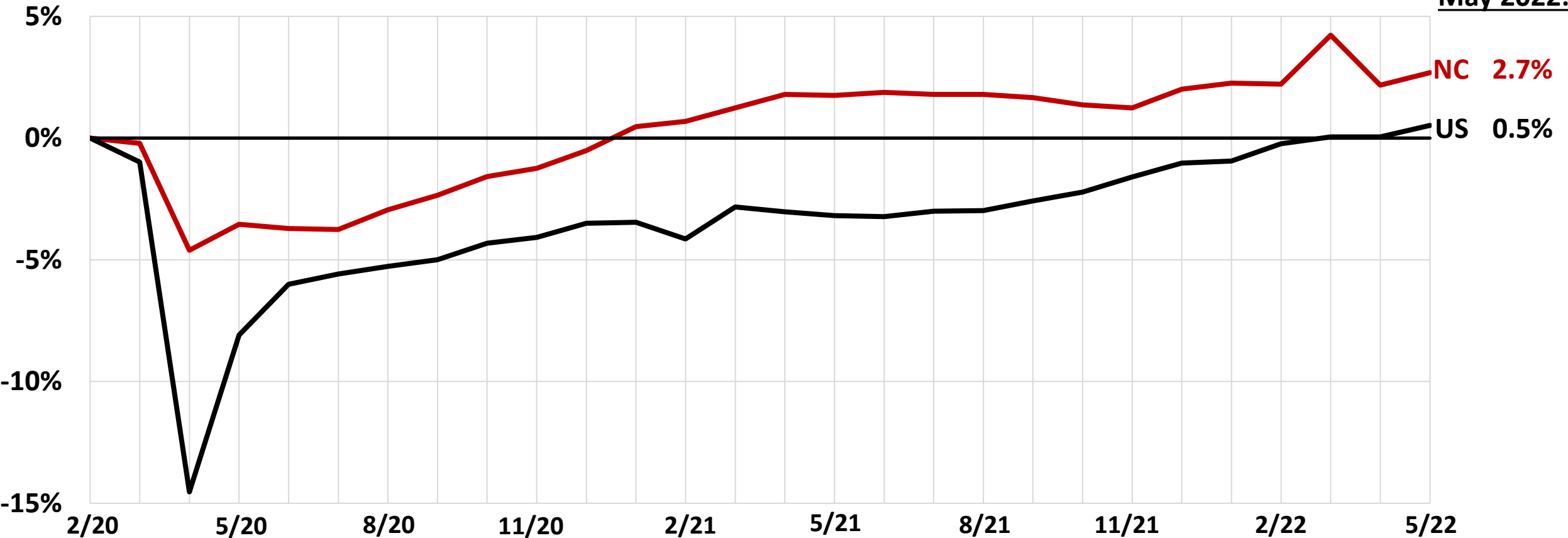


# US & NC Construction Employment

Cumulative change, Feb 2020-May 2022, seasonally adjusted



% change  
Feb 2020-  
May 2022:



# North Carolina Metro Construction Employment

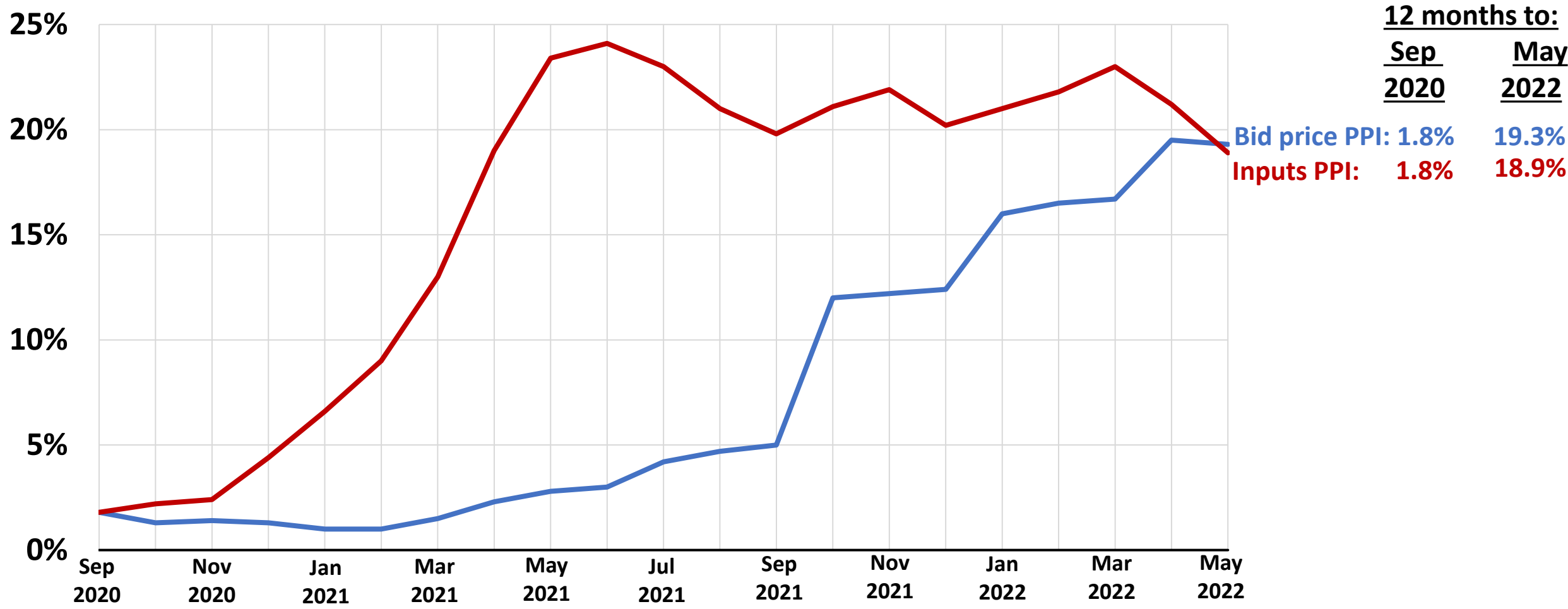
May 2022 vs. 2019–2021 (not seasonally adjusted)



	<u>May.</u> <u>2022</u>	<u>Change from:</u>		
		<u>May</u> <u>2021</u>	<u>May</u> <u>2020</u>	<u>May</u> <u>2019</u>
Charlotte-Concord-Gastonia, NC-SC*	72,600	2%	7%	8%
Raleigh, NC*	46,200	5%	12%	14%
Greensboro-High Point, NC*	16,900	-1%	8%	7%
Winston-Salem, NC*	12,300	2%	5%	8%
Asheville, NC*	10,500	7%	14%	3%
Wilmington, NC*	9,800	0%	4%	7%
Durham-Chapel Hill, NC*	9,500	1%	6%	7%
Fayetteville, NC*	5,500	6%	10%	-10%
Hickory-Lenoir-Morganton, NC*	5,200	4%	13%	16%

# Costs vs. bid prices for new nonresidential construction

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



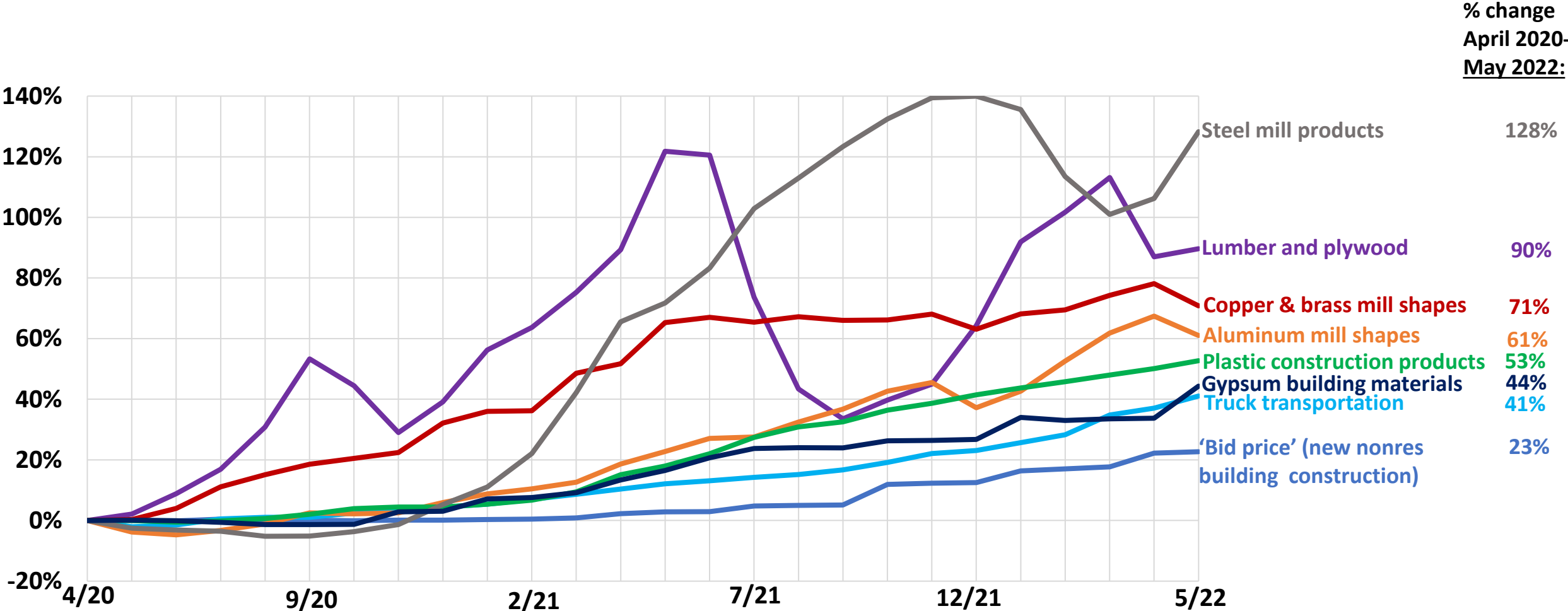
8 | Source: Bureau of Labor Statistics, producer price indexes, [www.bls.gov/ppi](http://www.bls.gov/ppi)

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# PPIs for construction bid prices and selected inputs

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

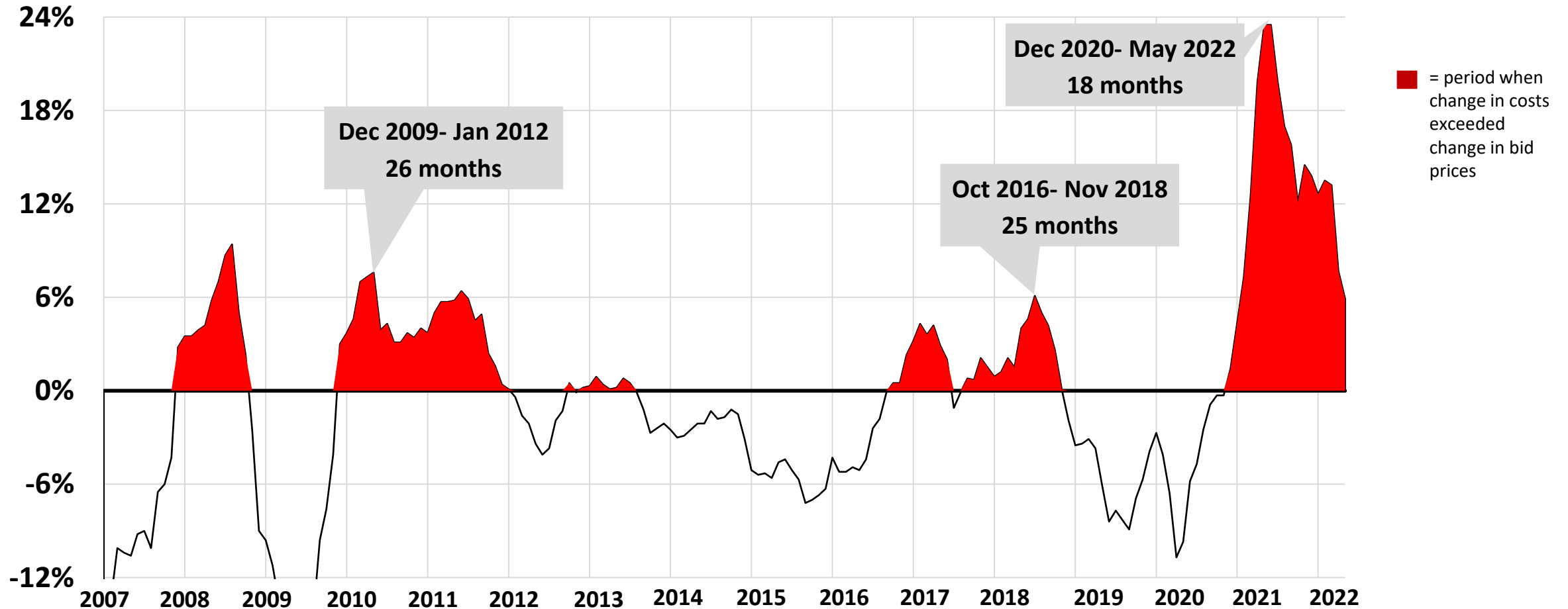


# Cost squeeze on contractors can last two years or more

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



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Source: 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 school building construction (bid prices)

# Change in construction spending: Jan–April 2022 vs. 2021

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



- Total 12%; private residential 19% (single-family 20%; multi 5%); private nonres 9%; public 0.8%

Largest segments (in descending order of 2021 spending)

- Power 1% (electric 0.4%; oil/gas fields & pipelines 4%)
- Commercial 20% (warehouse 22%; retail 21%; farm 2%)
- Education -3% (primary/secondary -7%; higher ed 2%)
- Mfg. 34% (chemical -3%; computer/electronic 244%; food/beverage/tobacco 22%; transp. equip. -9%)
- Office 5%
- Highway and street 7%
- Transportation -0.7% (air -7%; freight rail/trucking 6%; mass transit -1%)
- Health care 6% (hospital 3%; medical building 19%; special care -13%)
- Lodging -26%

# Forward-looking indicators



<b>Indicator</b>	<b>Latest date</b>	<b>Current value</b>	<b>Year-ago value</b>
Architecture Billings Index (ABI)	May	53.5	58.6
Dodge Momentum Index (DMI)	May	170	150
Multifamily permits not yet started	May	127,000	98,000

# Medium-term impacts as recovery begins

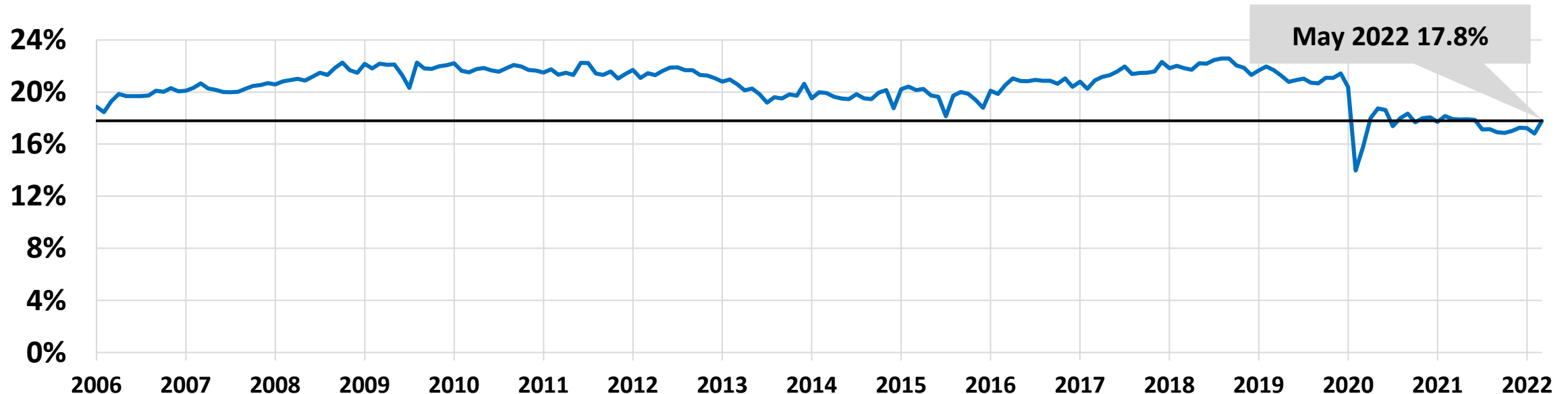


- Economic recovery should continue but invasion of Ukraine and Western sanctions add to cost and supply-chain pressures
- Slower rebound than for other sectors as owners, investors/lenders, institutions, and public agencies face uncertainty about future demand, costs, and completion times
- Continuing 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 18% 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-May 2022**

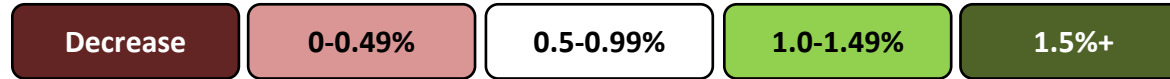


# Long-run construction outlook (post-pandemic)



- 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%)

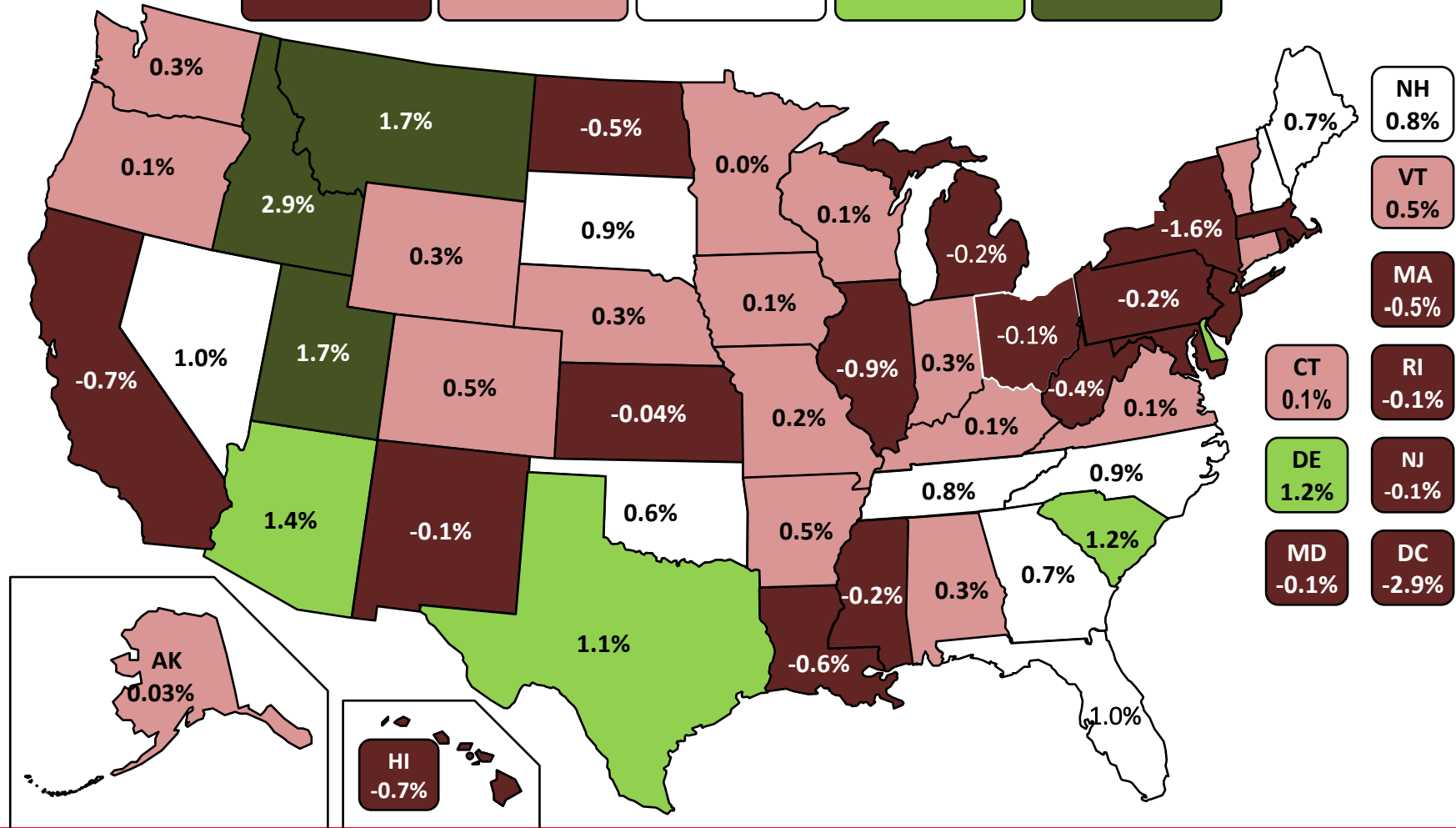


## Top 6

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](mailto:ken.simonson@agc.org))



- *The Data DIGest*: weekly 1-page email (subscribe at <http://store.agc.org>)
- *Construction Inflation Alert*:  
<https://www.agc.org/learn/construction-data/agc-construction-inflation-alert>
- 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](http://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>

