

The logo for PCA (Portland Cement Association) features the letters 'PCA' in a bold, white, sans-serif font. A white swoosh underline starts under the 'A' and extends to the right, ending with a registered trademark symbol (®).

**PCA**®

*Since 1916*

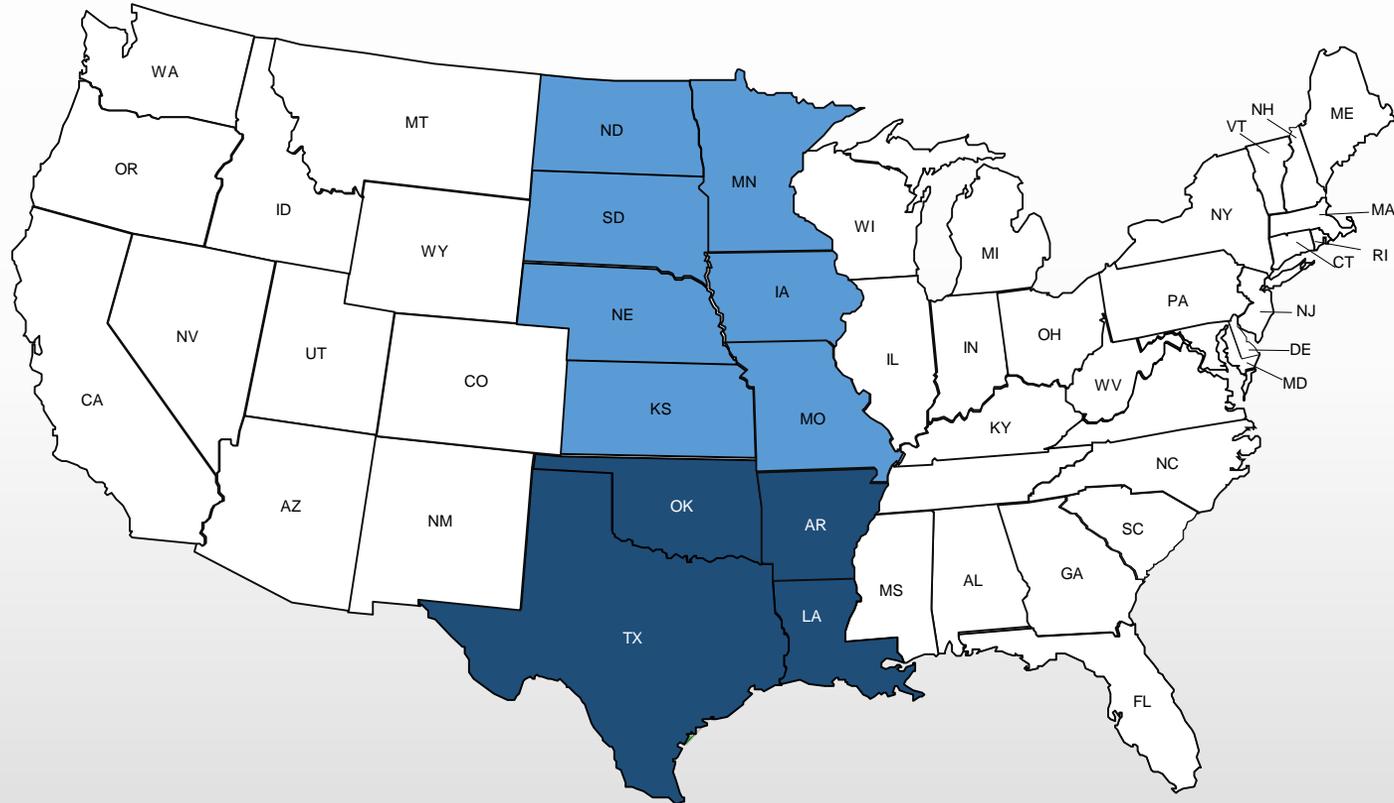
America's Cement Manufacturers™

# Coronavirus Regional Briefing: Central U.S.

Dave Zwicke, Sr. Director & Regional Economist

July 2020

# Regional Focus

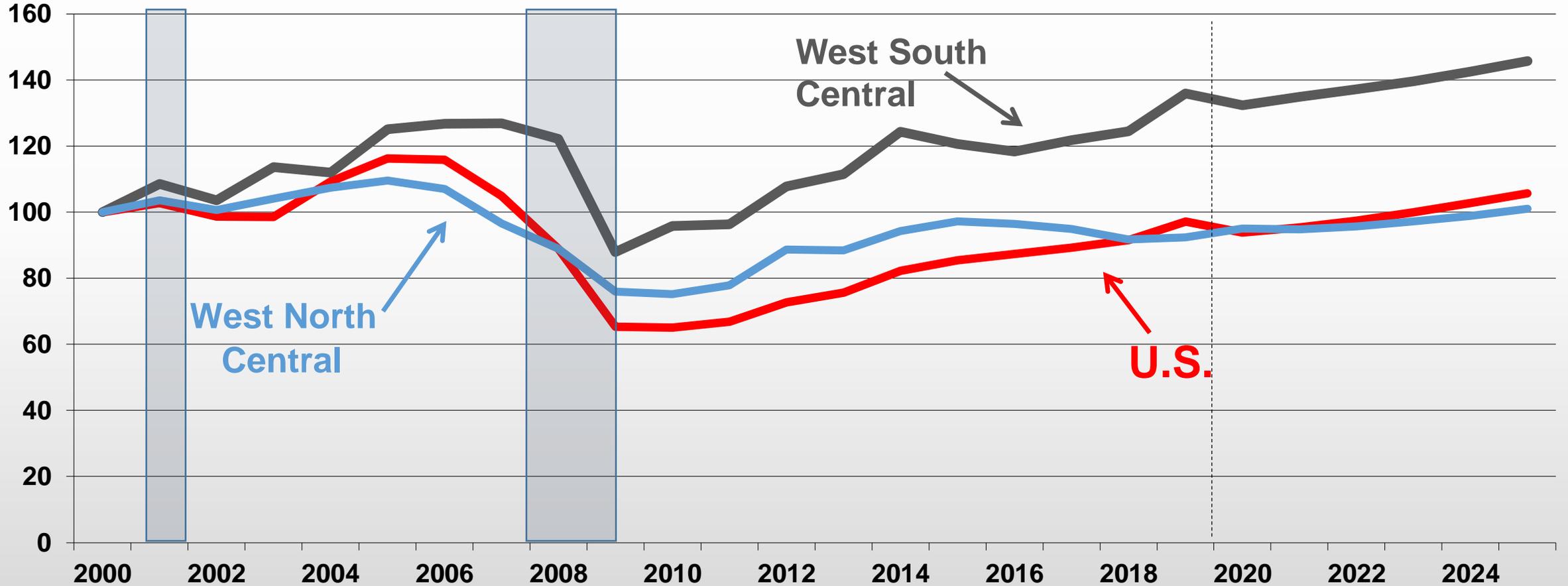


  
**West South Central**

  
**West North Central**

# Total Cement Consumption

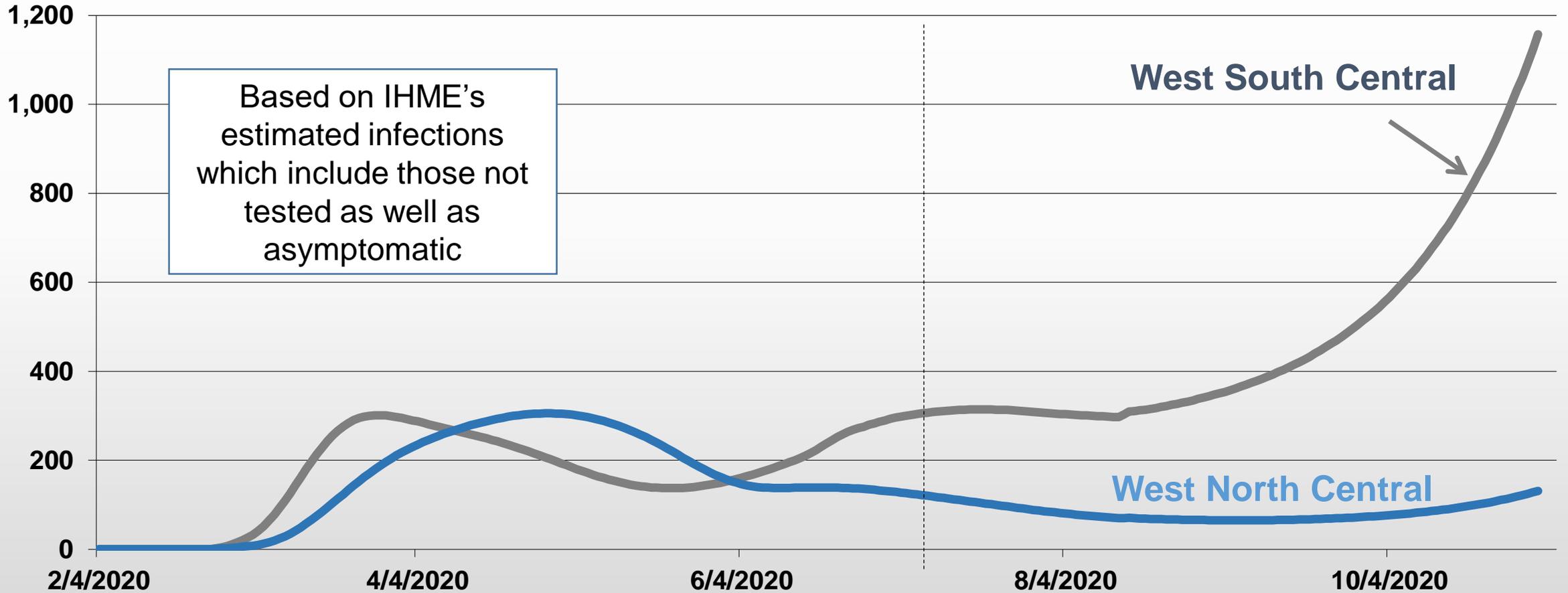
Index, 2000=100



Source: USGS, PCA

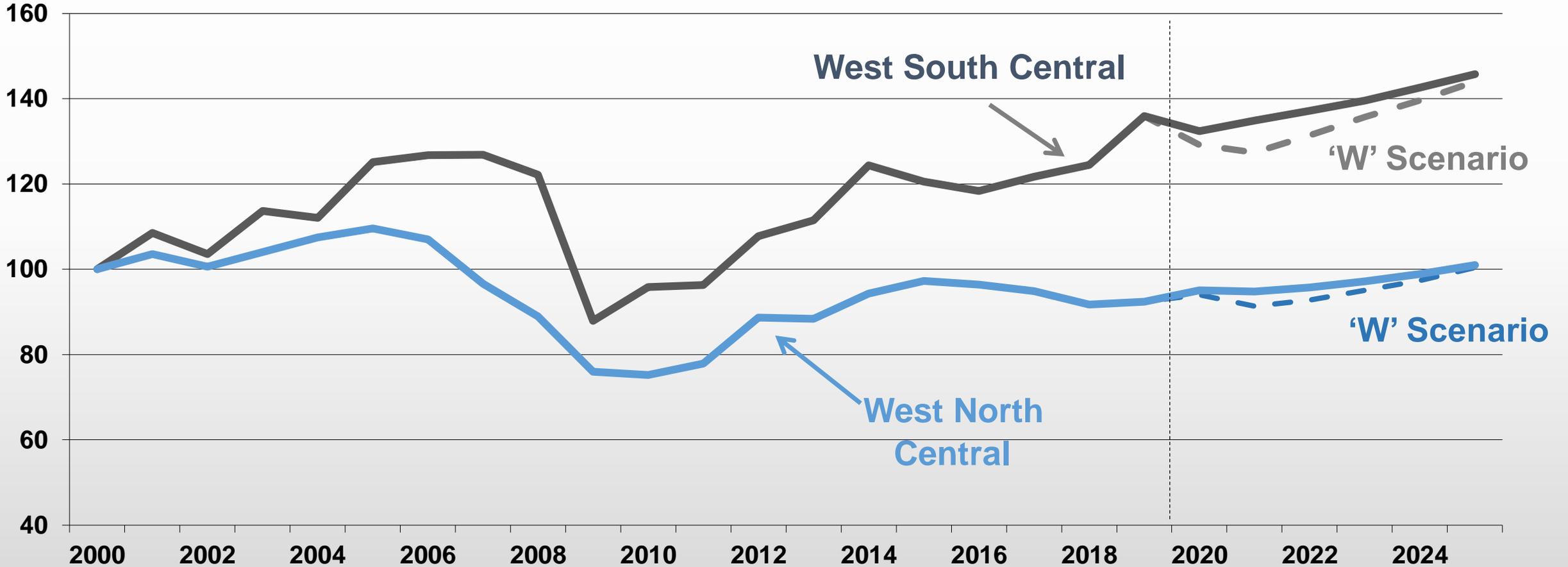
# IHME Projected Daily Infection Rates --Per Capita

New Daily COVID-19 Infections per Million of Population (July 7, 2020 Update)



# Total Cement Consumption – Central U.S.

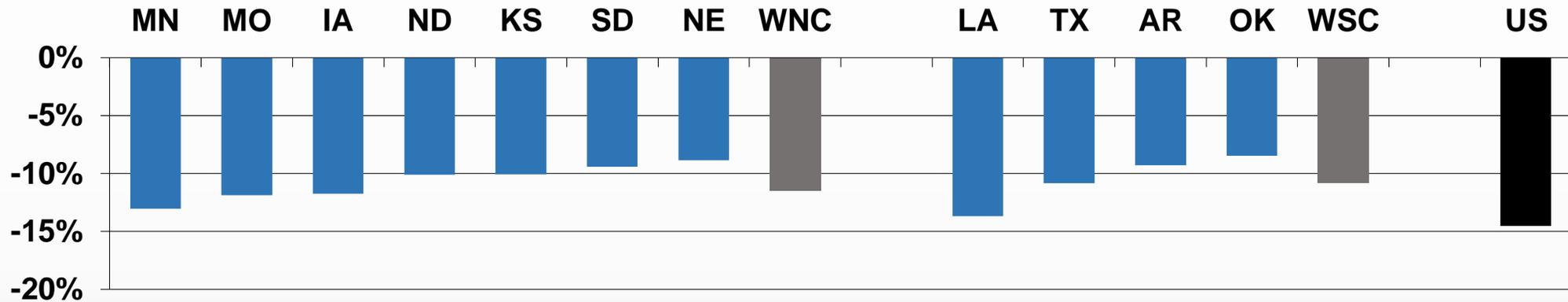
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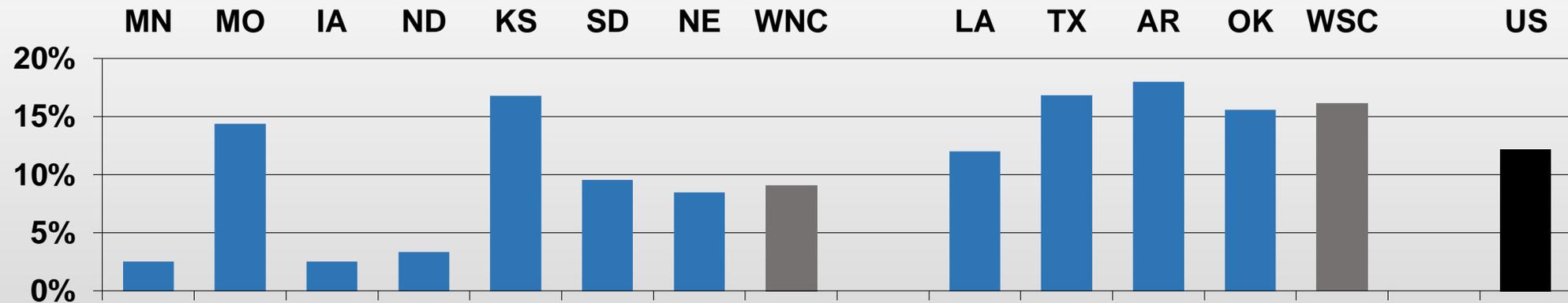
# Economic Outlook

# Employment Recovery

## Percent Change in Employment (March through April)

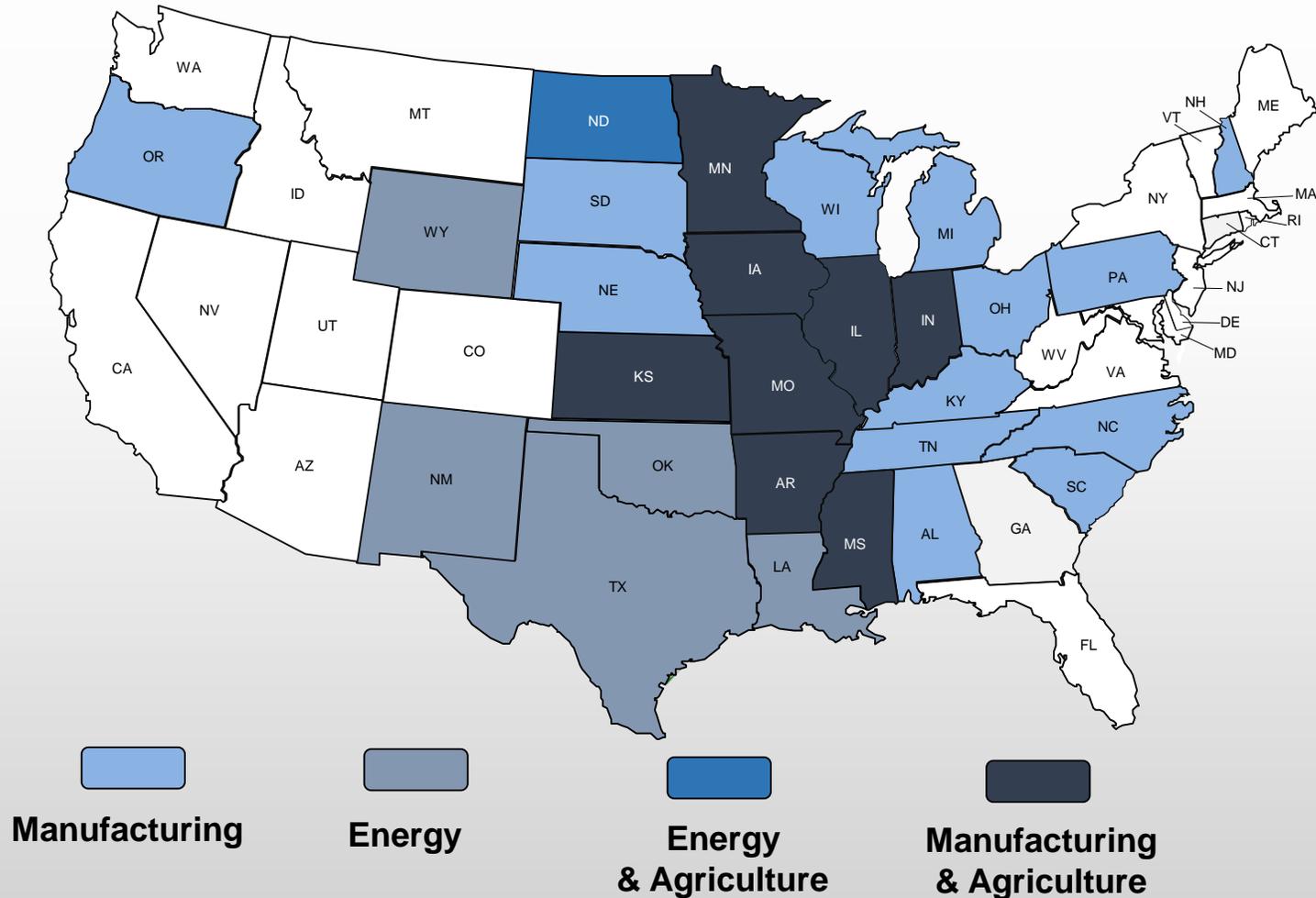


## Percent of Employment Losses Recovered (May)



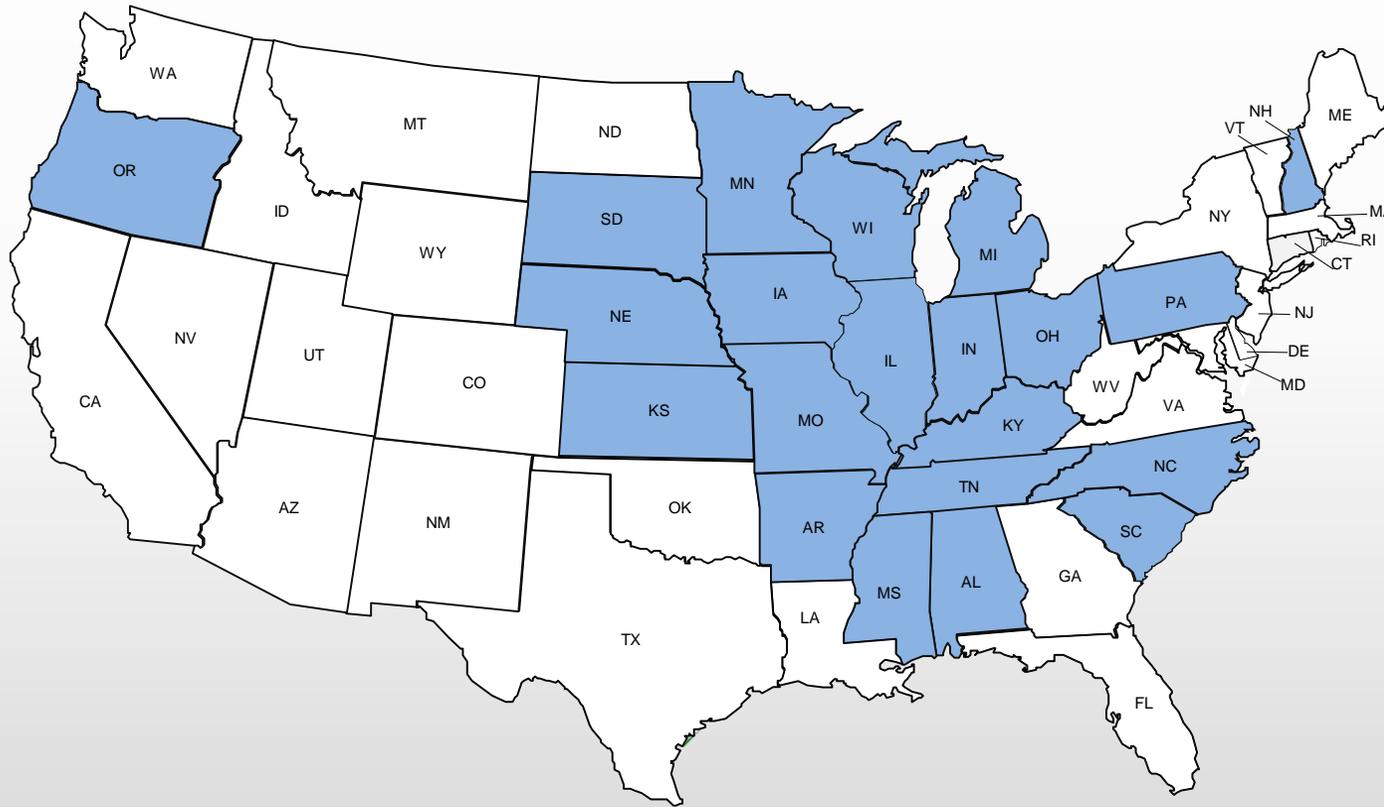
Note: Based on U.S. June report, 34% of jobs have been recovered while regional figures are still pending

# Manufacturing, Energy, and Agriculture Exposure

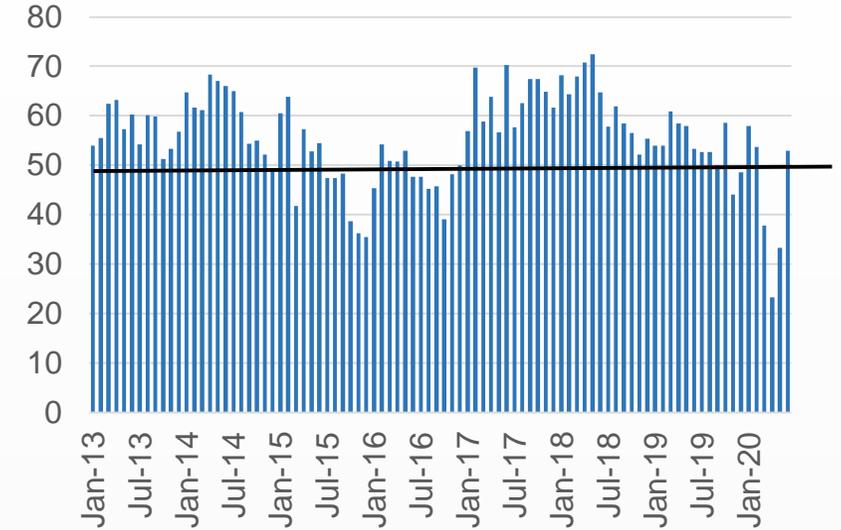


# Manufacturing Exposure

## 10% or Greater Manufacturing Share of Total Employment



### Mid American Production Index

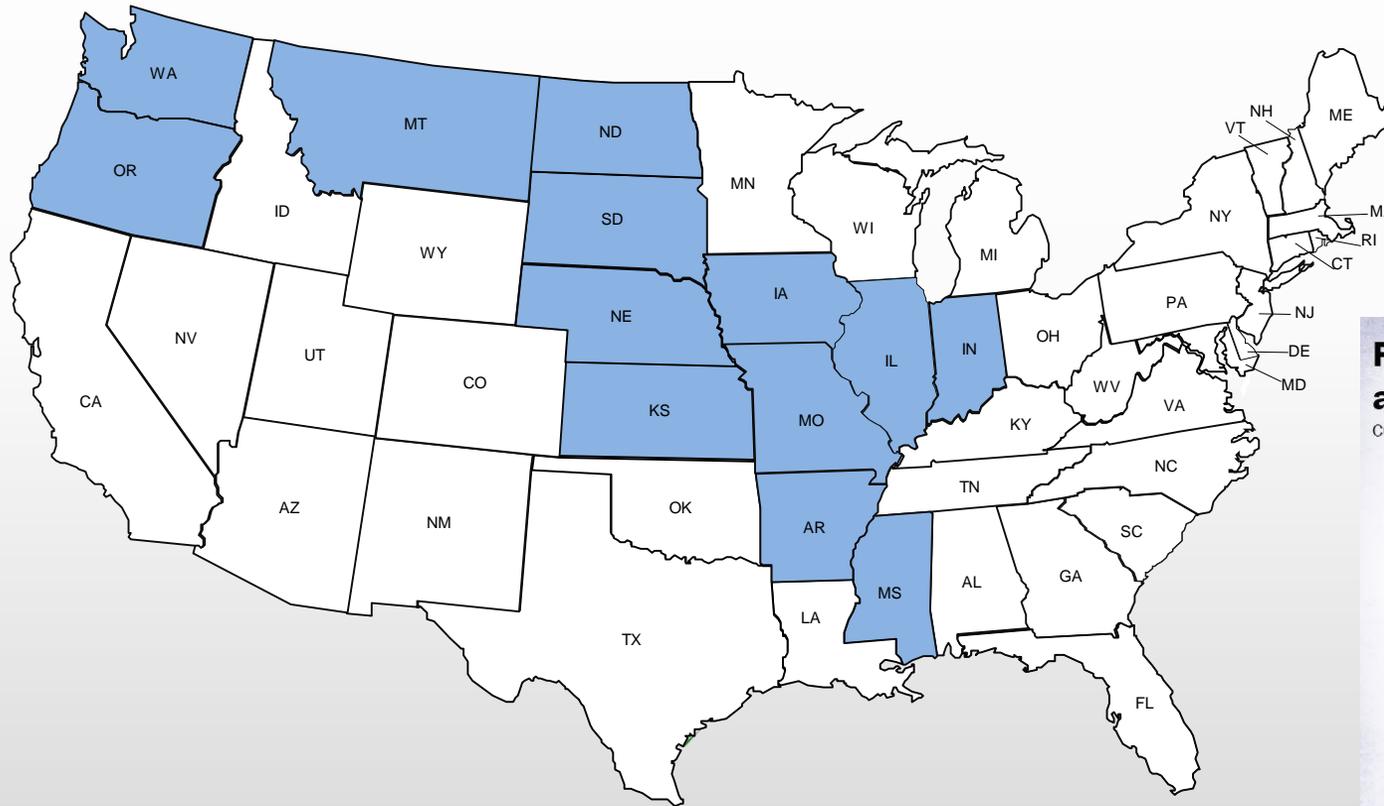


### Manufacturing Employment (000s)



# Agriculture Exposure

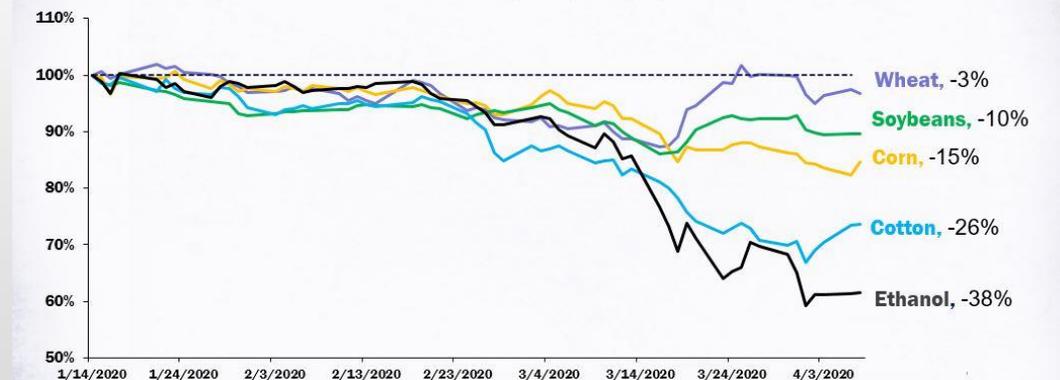
Crop Cash Receipts 10% or Greater Share of Gross State Product



- Closures of schools, restaurants, corporate cafeterias...have deeply unsettled agriculture futures markets.
- Additionally, reduced demand for ethanol in light of lower gasoline consumption continues to weigh on the market.
- Meat processing plant closures have created a bottlenecks and subsequent end-market price increase which has lowered demand.

**Figure 1. Impact of COVID-19 on Corn, Cotton, Ethanol, Soybean and Wheat Futures Prices**

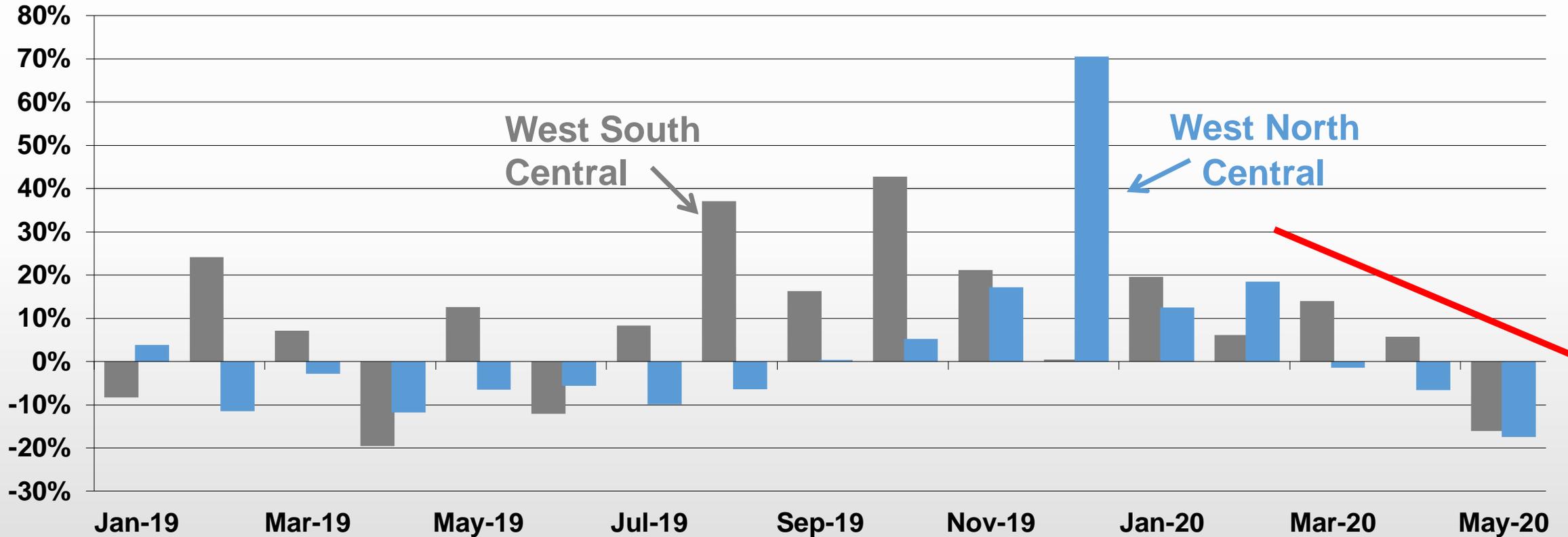
Cumulative Percent Change in Price Since Outbreak Confirmed By China (January 14)



# Residential Outlook

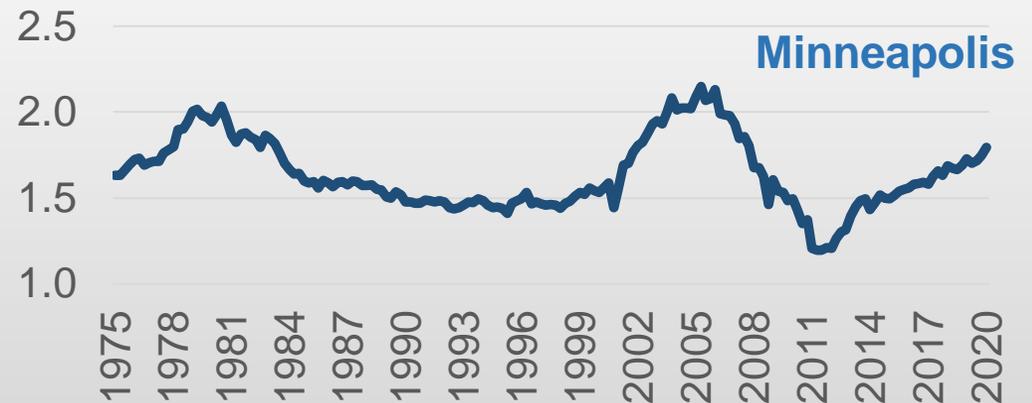
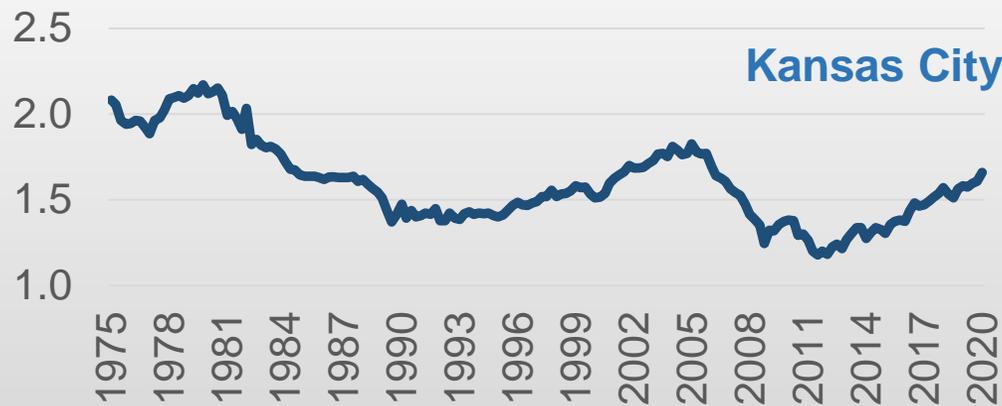
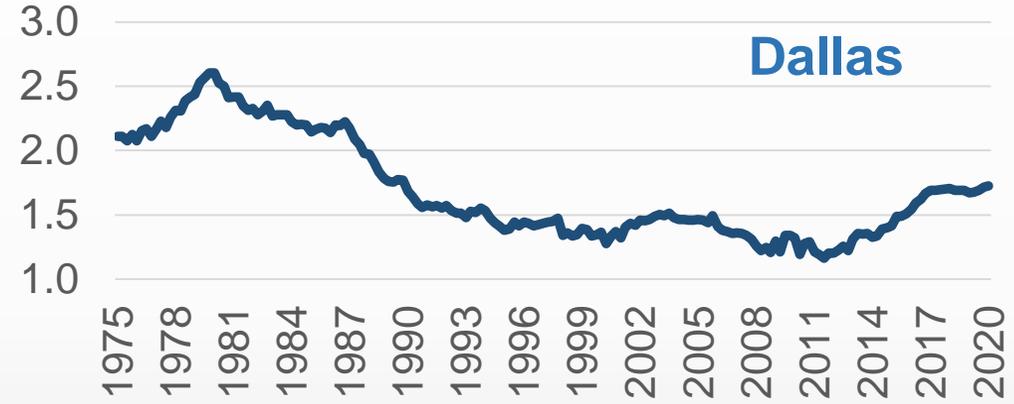
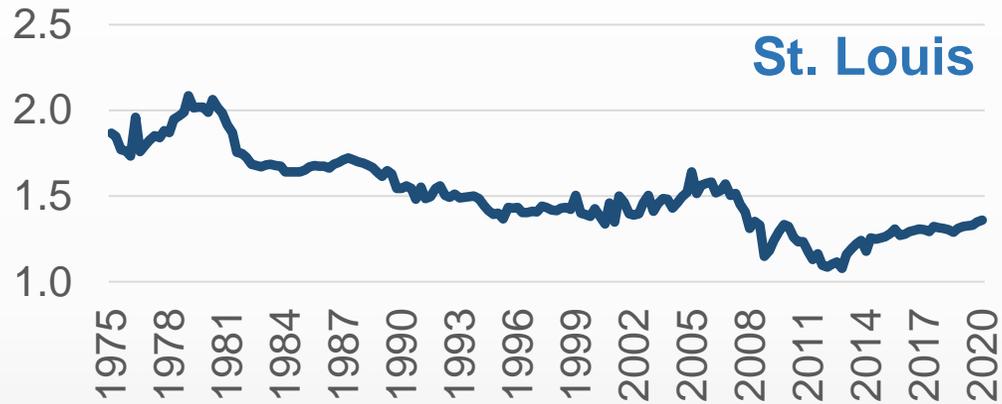
# Housing Permits – Central U.S.

Seasonally adjusted, year-over-year percent change.



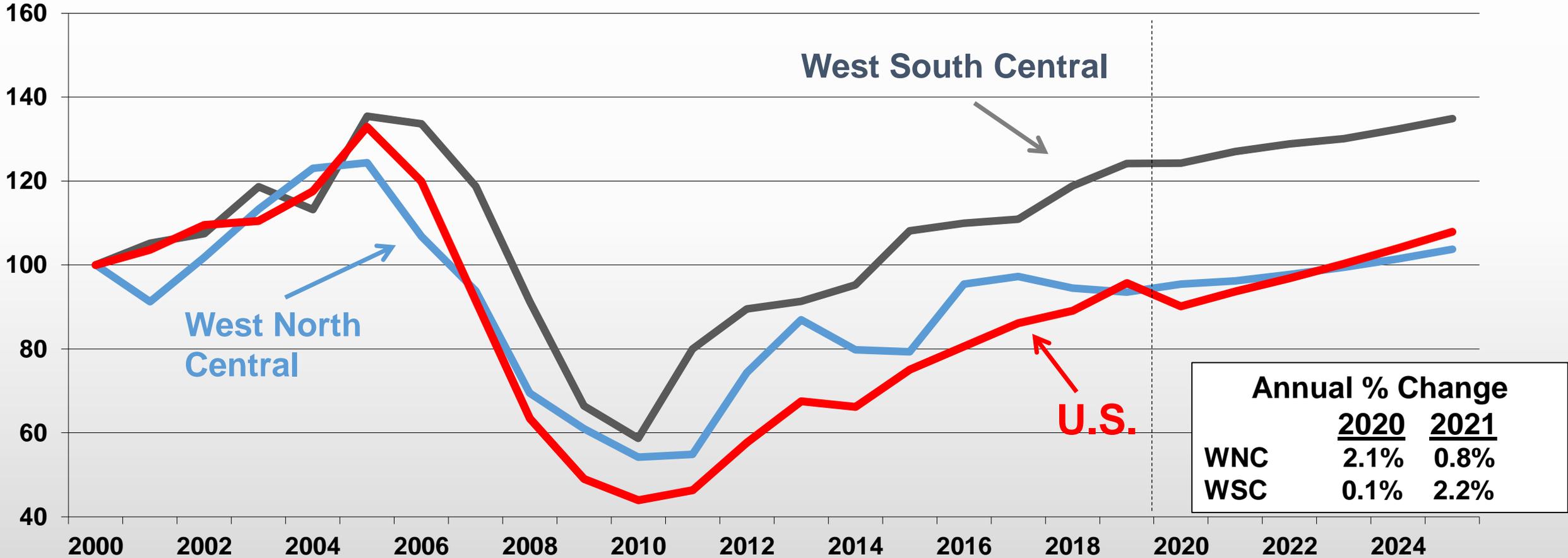
# Favorable Regional Home Affordability will Provide Support

## Home Price-to-Household Income, SA



# Residential Cement Consumption – Central U.S.

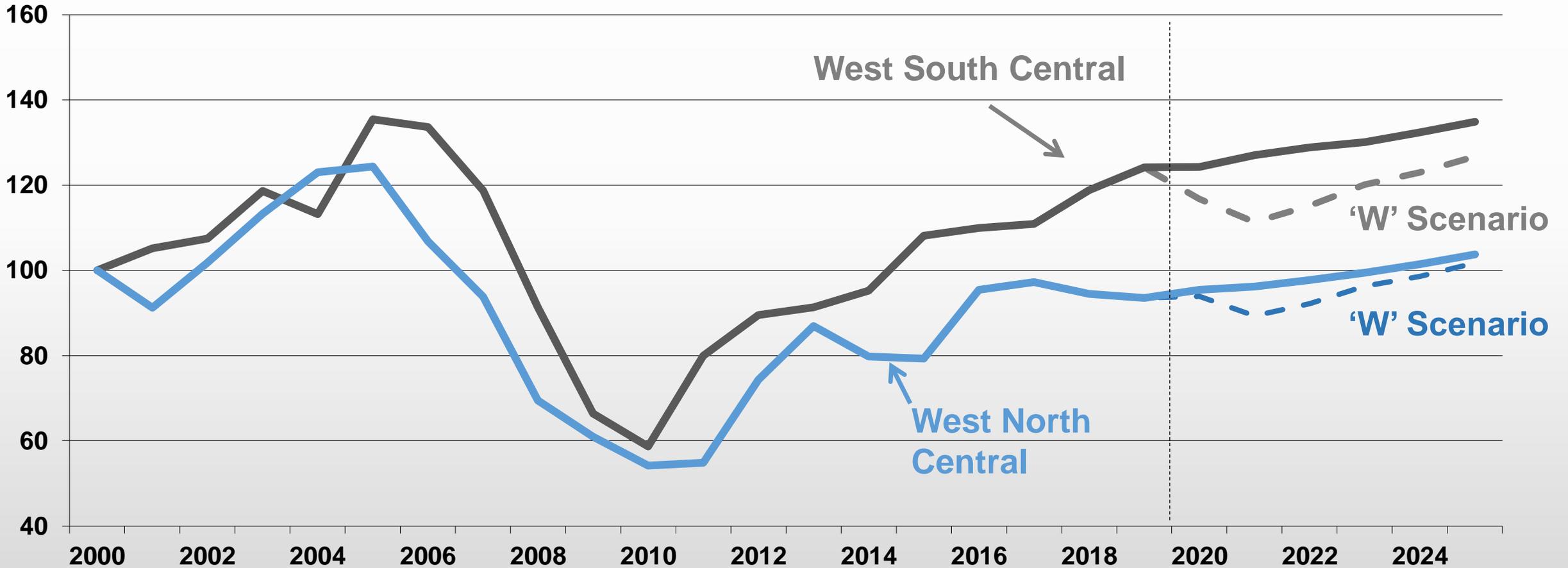
Index, 2000=100



Source: USGS, PCA

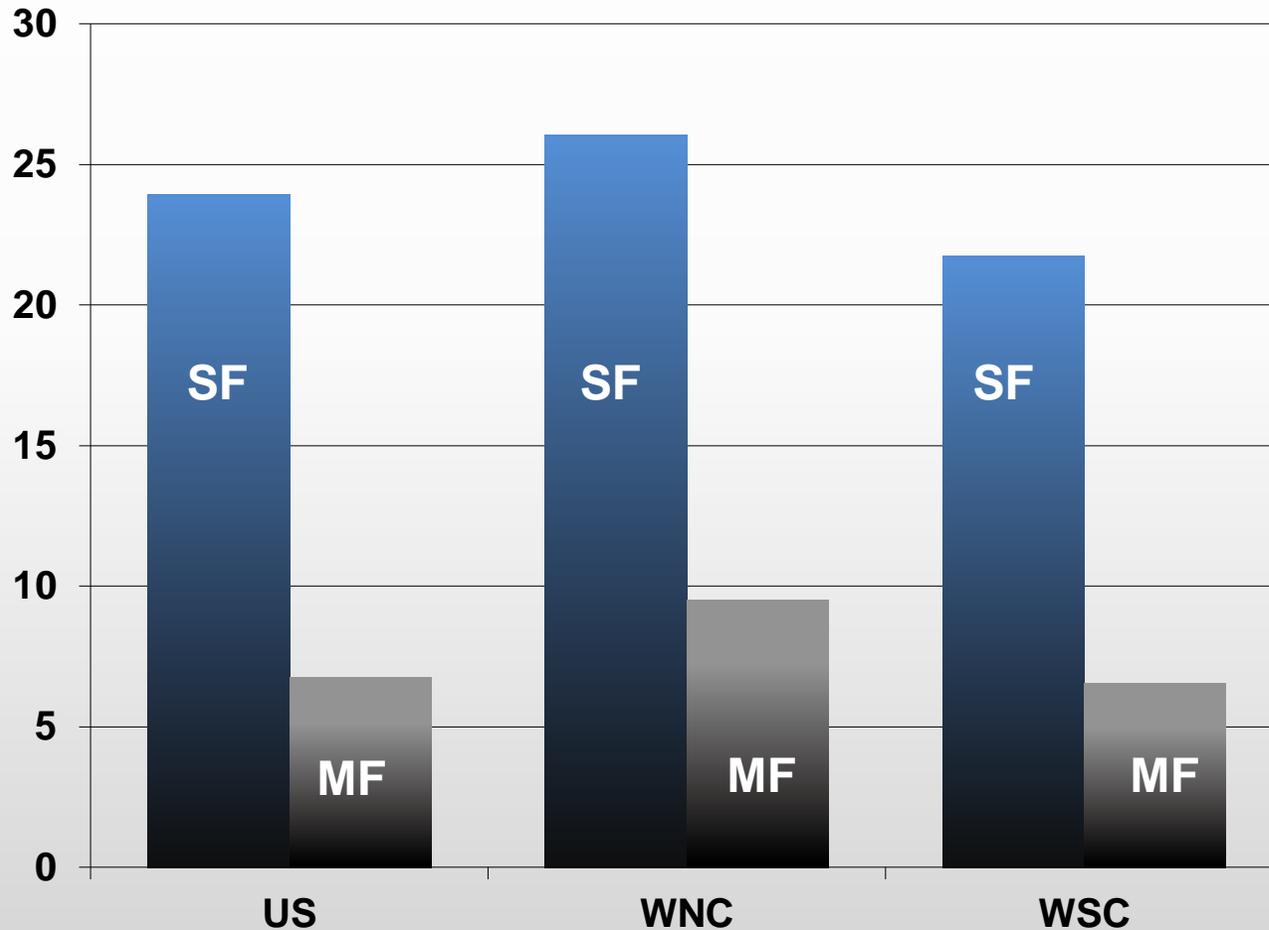
# Residential Cement Consumption – Central U.S.

Index, 2000=100



# Potential Shift in Homebuyer Preferences?

Metric Tons of Cement Per Housing Unit

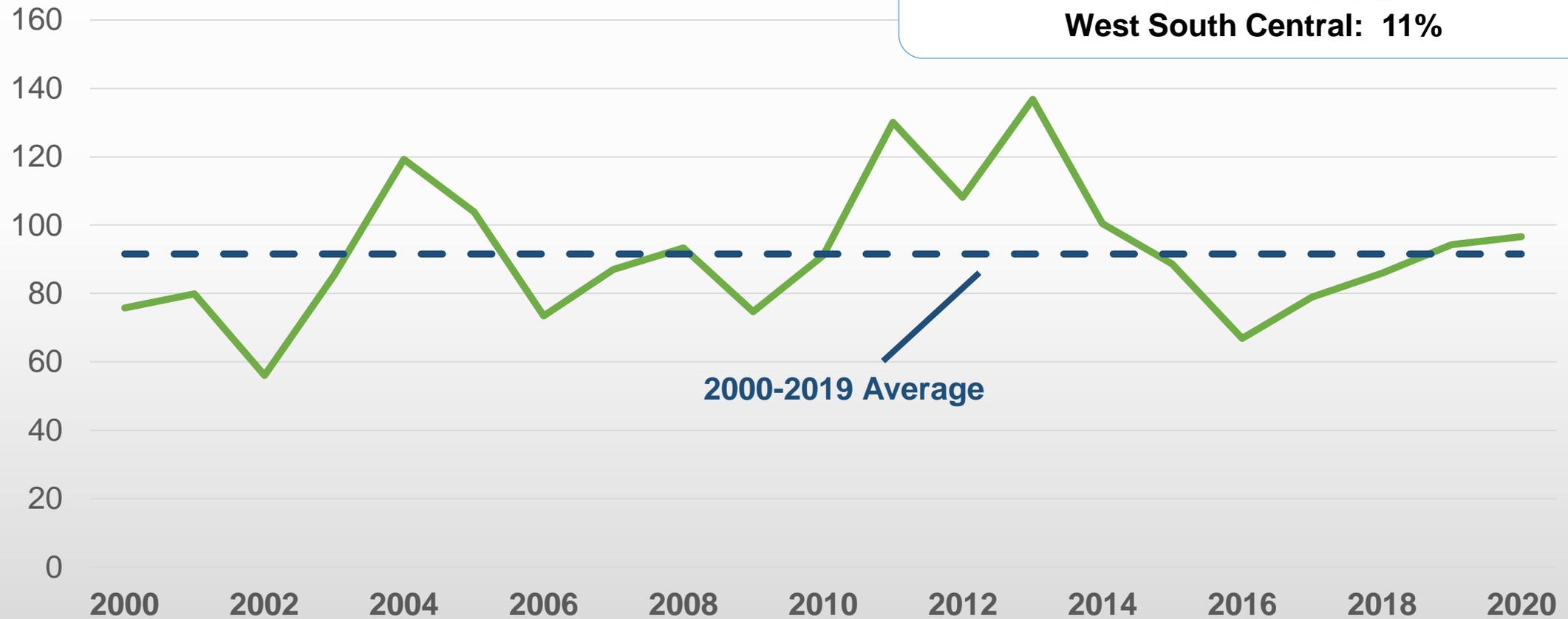


- 21% of agents reported buyers seeking the benefits of new homes, such as office space or backyards. (Source: NAR Research Group Survey)
- Potential for intrastate moves from urban to suburban/exurban locations.
- A 10% compositional shift from multi to single family would amount to roughly 50k MTs annually in WNC and 125k MTs in the WSC.

# Nonresidential Outlook

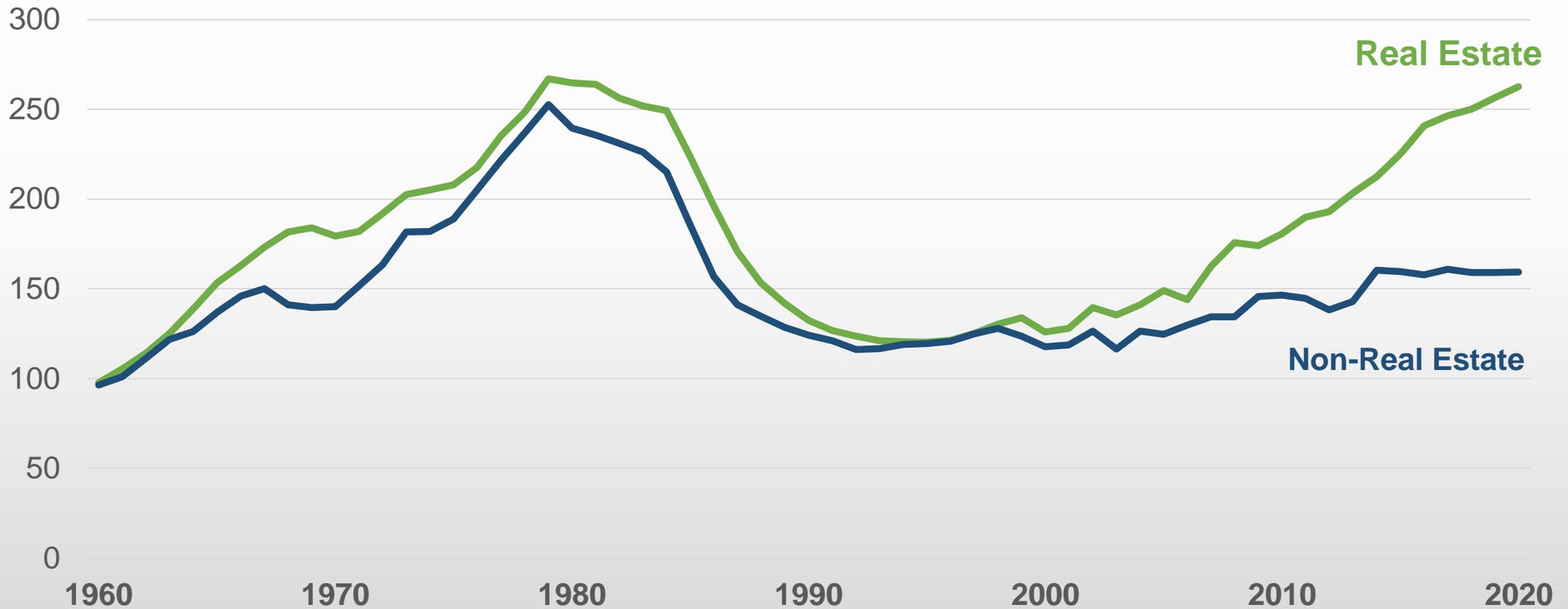
# U.S. Net Farm Income

Real 2019 \$s, billions

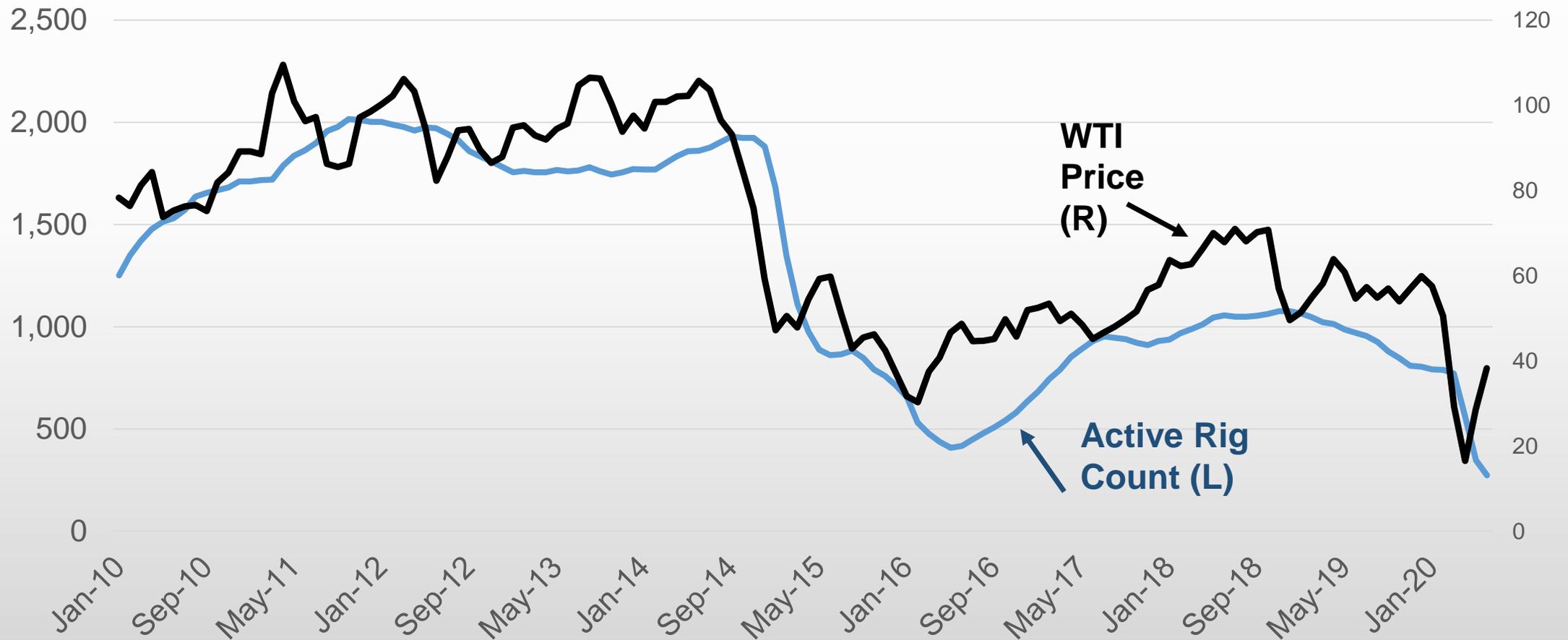


# U.S. Farm Debt

Real 2019 \$s, billions



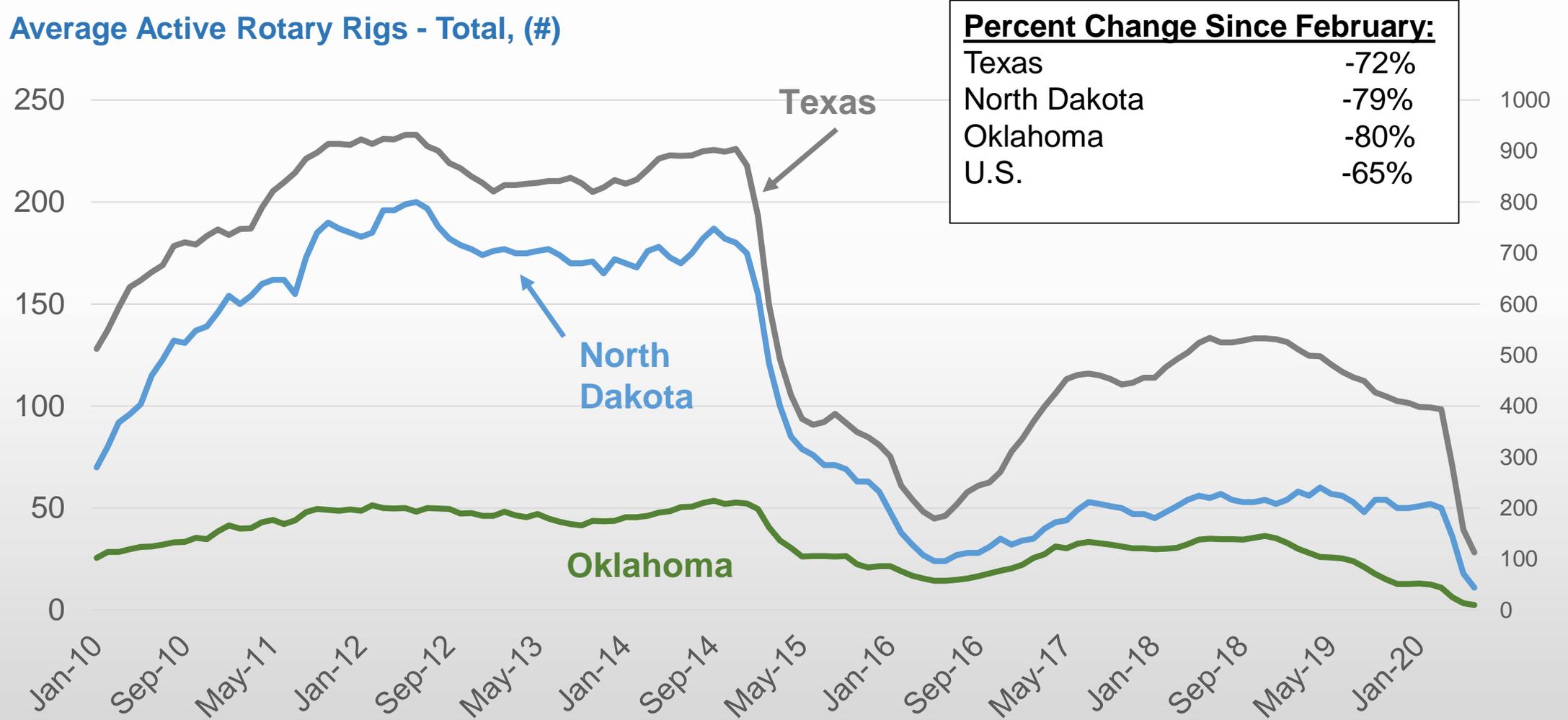
# Oil & Gas Drilling a Regional Concern



Source: Baker Hughes Incorporated, EIA

# Oil & Gas Drilling a Regional Concern

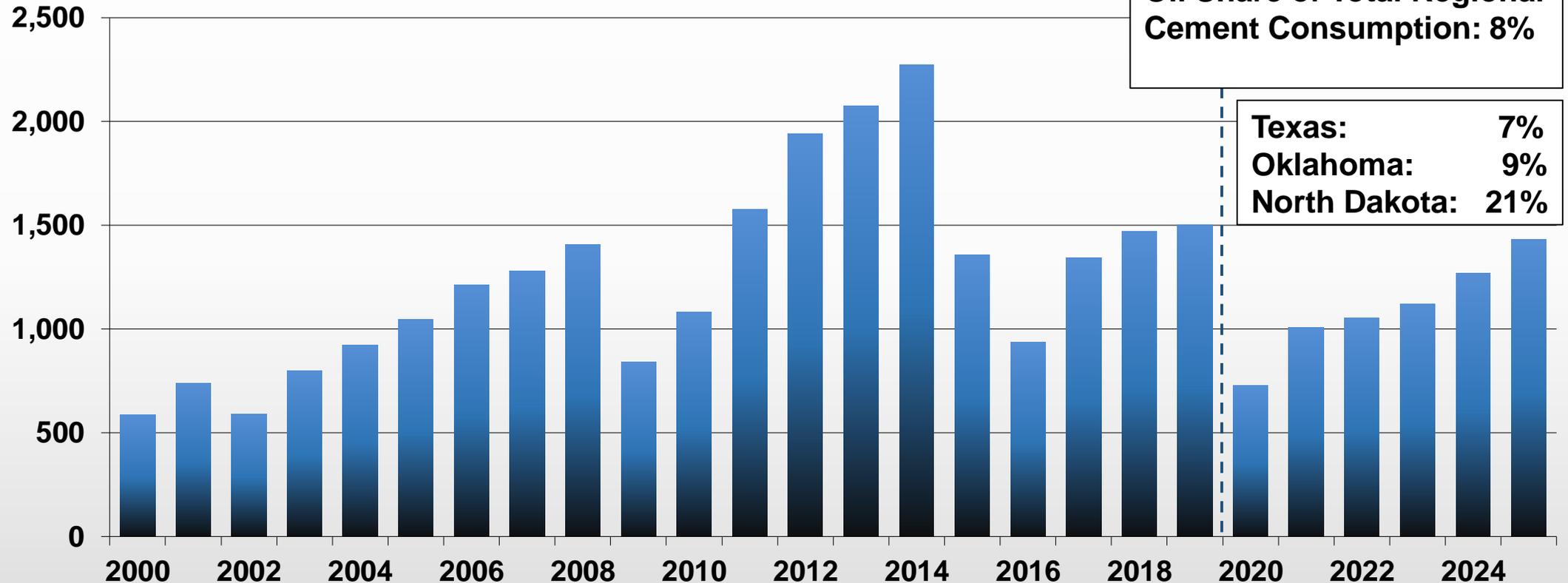
Average Active Rotary Rigs - Total, (#)



Source: Baker Hughes Incorporated

# Oil Well Cement Consumption – Central U.S.

Metric Tons, Thousands



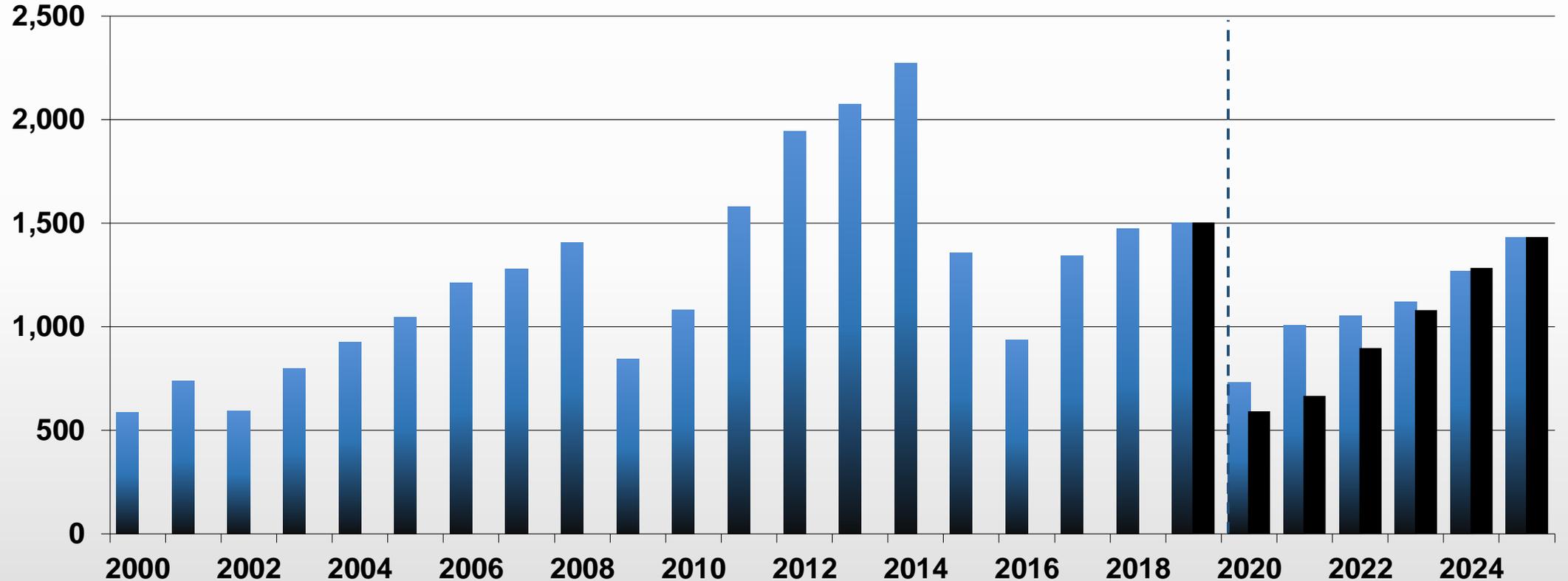
**Oil Share of Total Regional Cement Consumption: 8%**

**Texas: 7%**  
**Oklahoma: 9%**  
**North Dakota: 21%**

Year	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2023F	2024F
Change (%)	-31%	44%	10%	2%	-51%	38%	5%	6%	13%	13%

# Oil Well Cement Consumption – Central U.S.

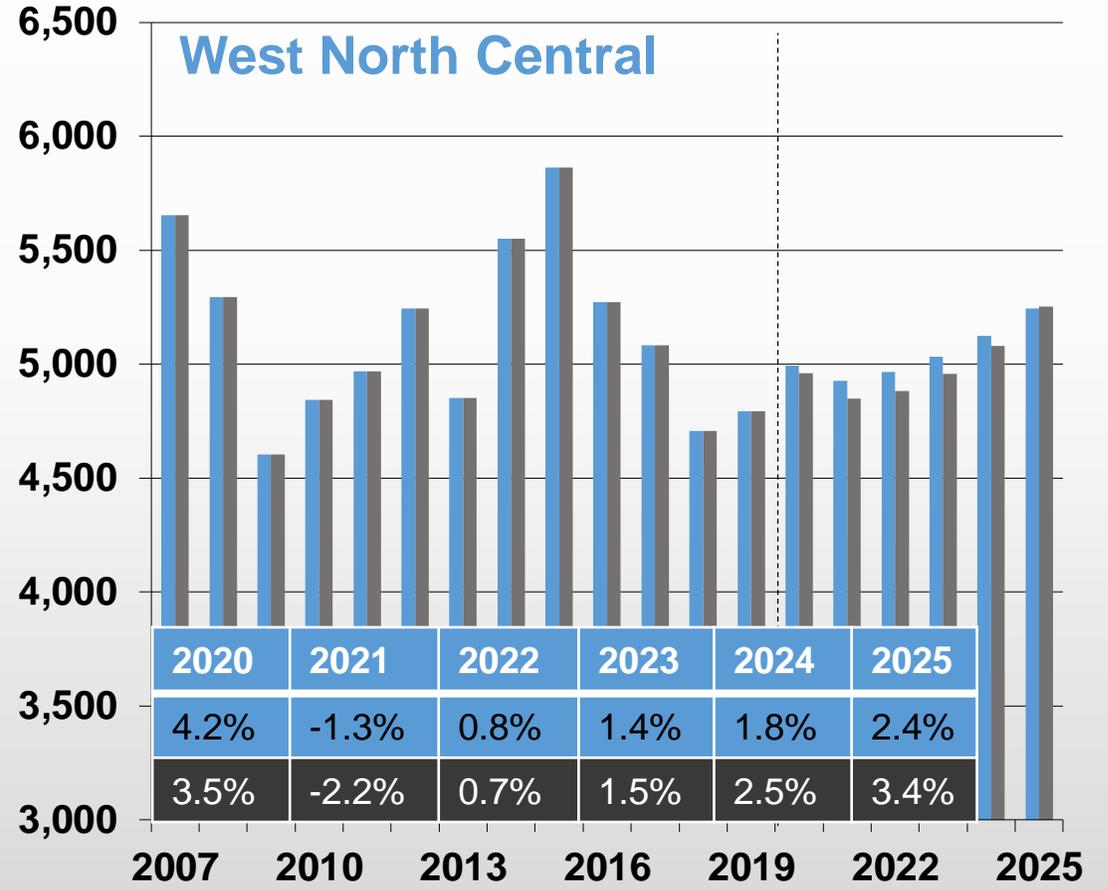
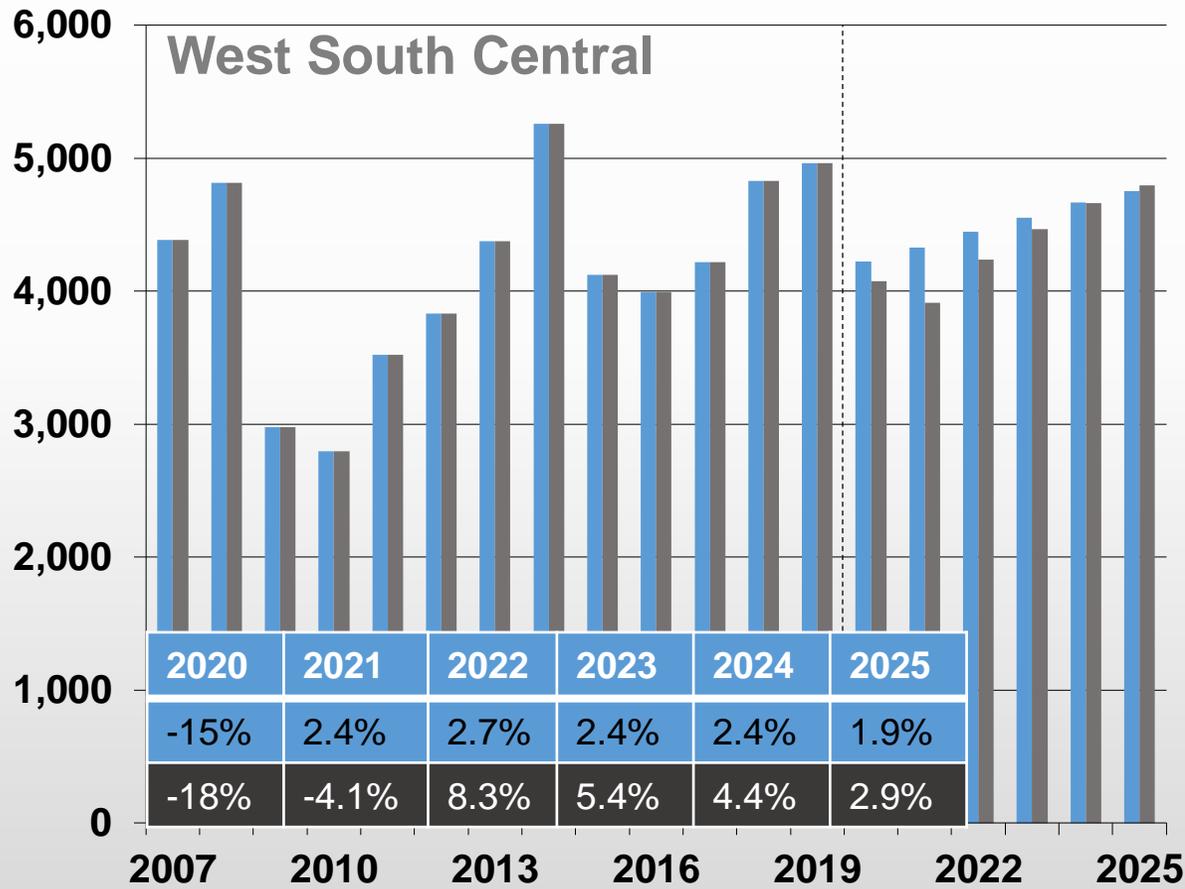
Metric Tons, Thousands



	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2023F	2024F
Baseline	-31%	44%	10%	2%	-51%	38%	5%	6%	13%	13%
“W”	-31%	44%	10%	2%	-61%	12%	35%	21%	19%	12%

# Nonresidential Cement Consumption – Central U.S.

Metric Tons (000s)



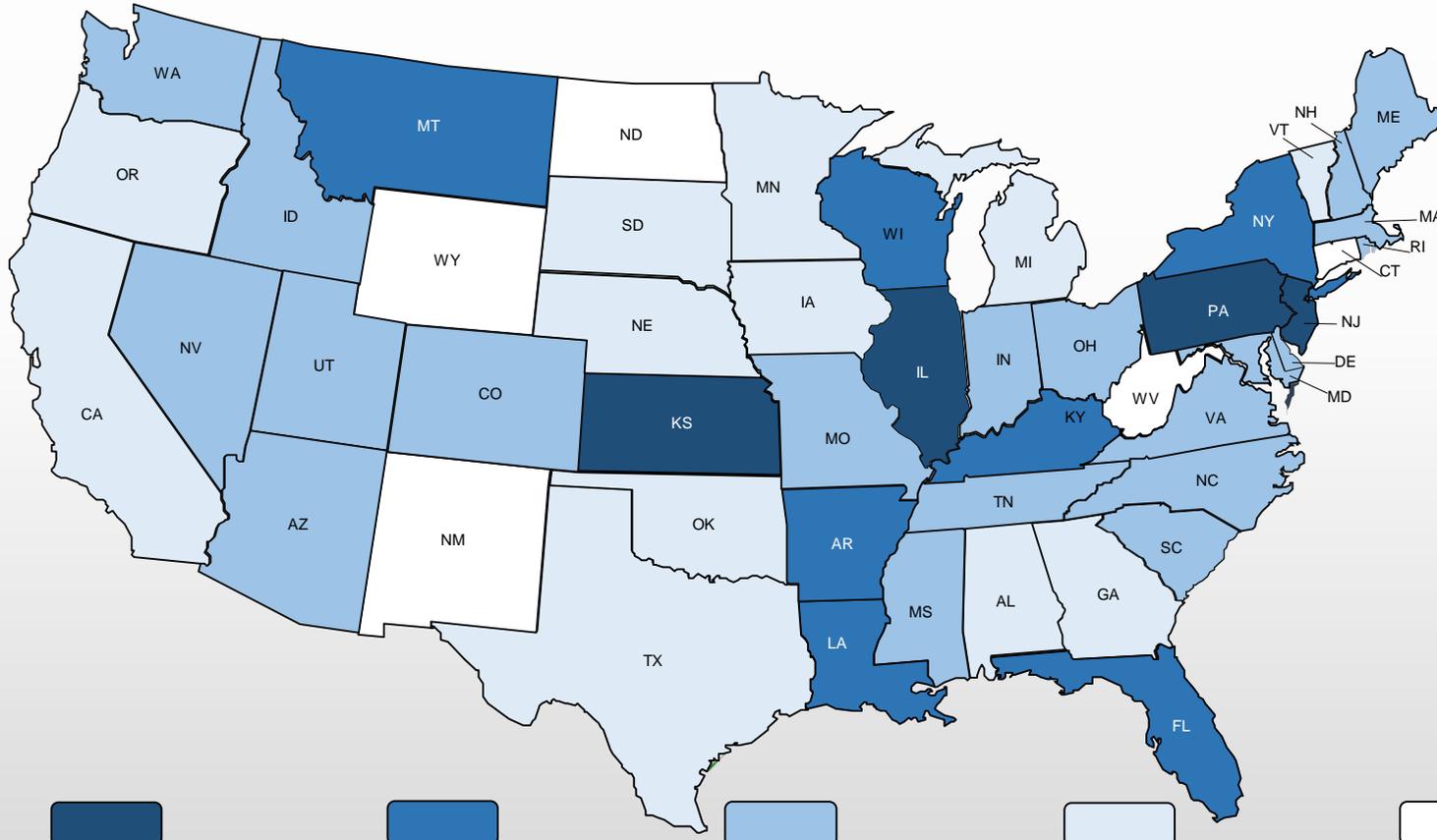
# Public Outlook

# State Rainy Day Funding – FY2020

Rainy day balances as share of general fund expenditures

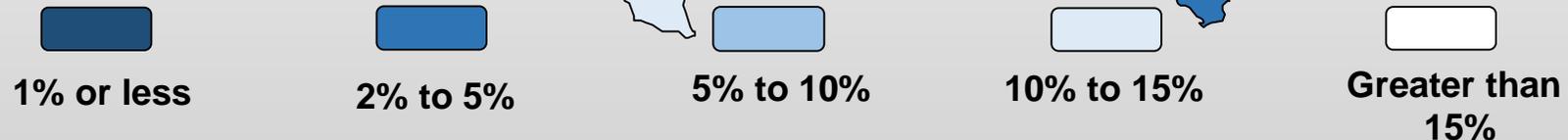
**Current National Average: 7.6%**

**Prior to Great Recession: 4.5%**



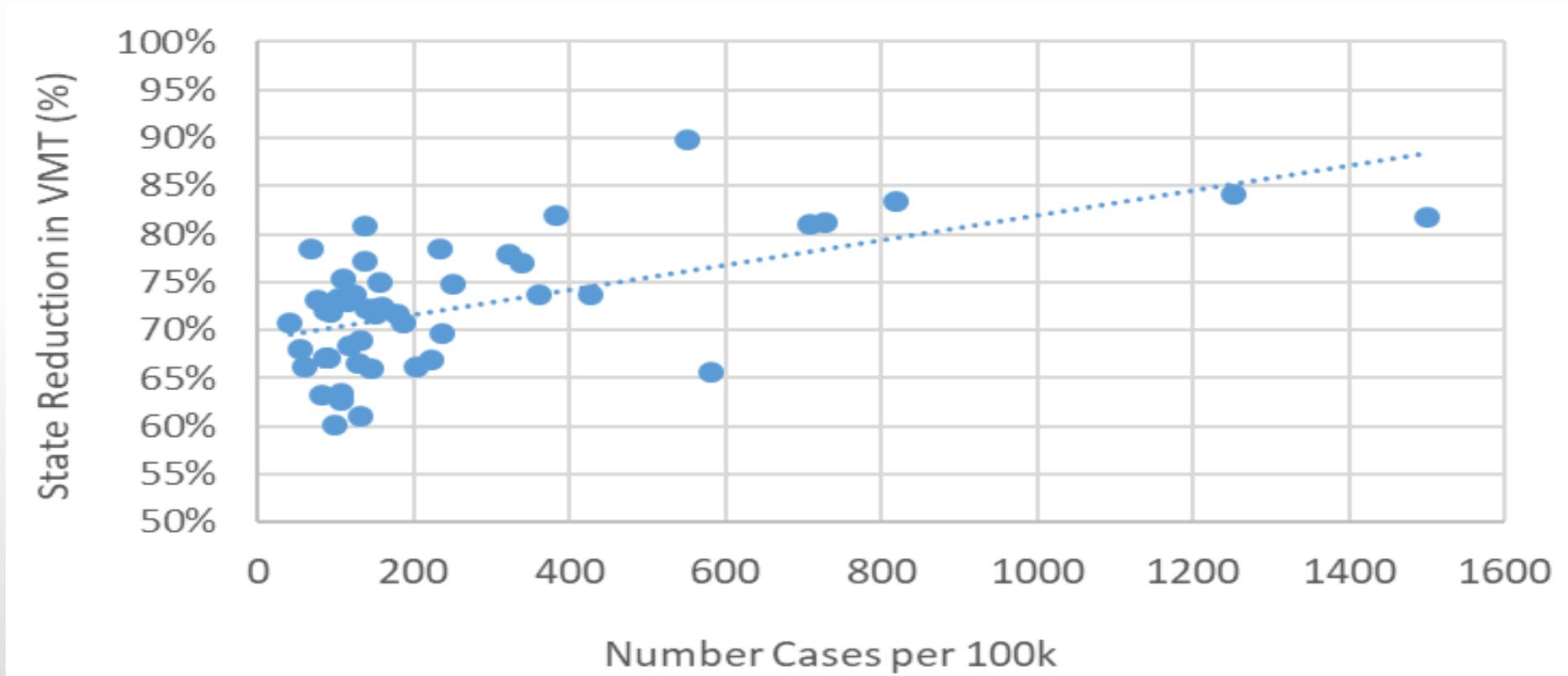
**Kansas and Illinois effectively have \$0 balances, Pennsylvania and New Jersey are roughly 1%**

**Oil revenue reliant states of New Mexico, North Dakota and Wyoming have respective balances of 27%, 30% and 109%**



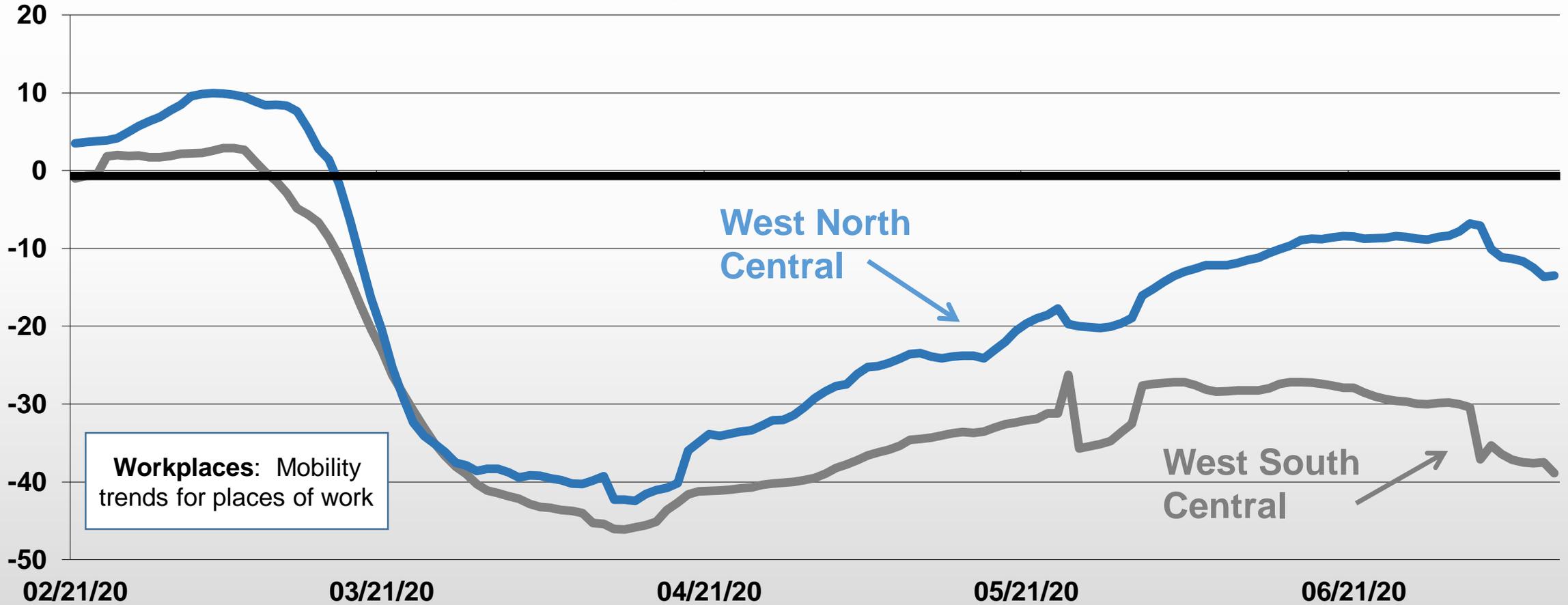
# Reduction in Vehicle Miles Traveled Relative to COVID-19 Cases

Percent change in VMT the second week of April vs. first week of March



# Employees returning to Work...

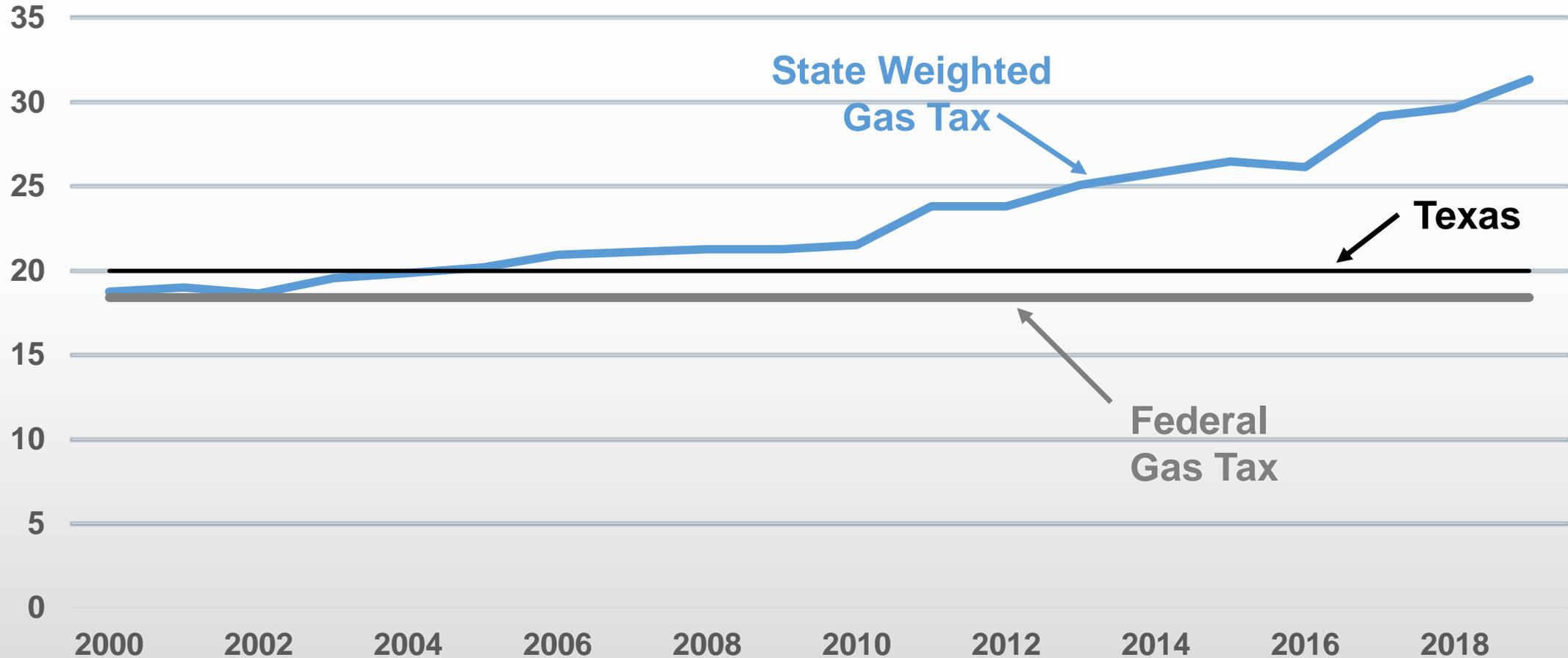
Percentage change from baseline visits—Workplace



Workplaces: Mobility trends for places of work

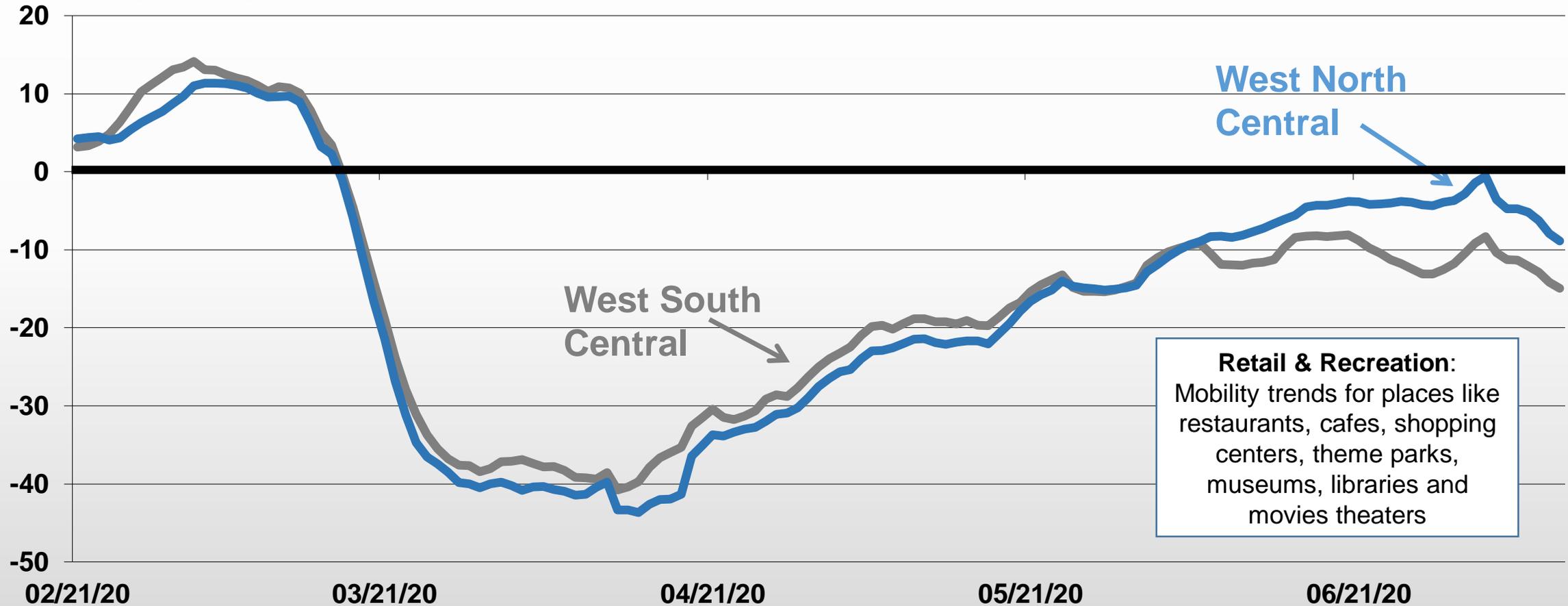
# States Have Been Increasingly Less Reliant on Federal Funds

Cents Per Gallon



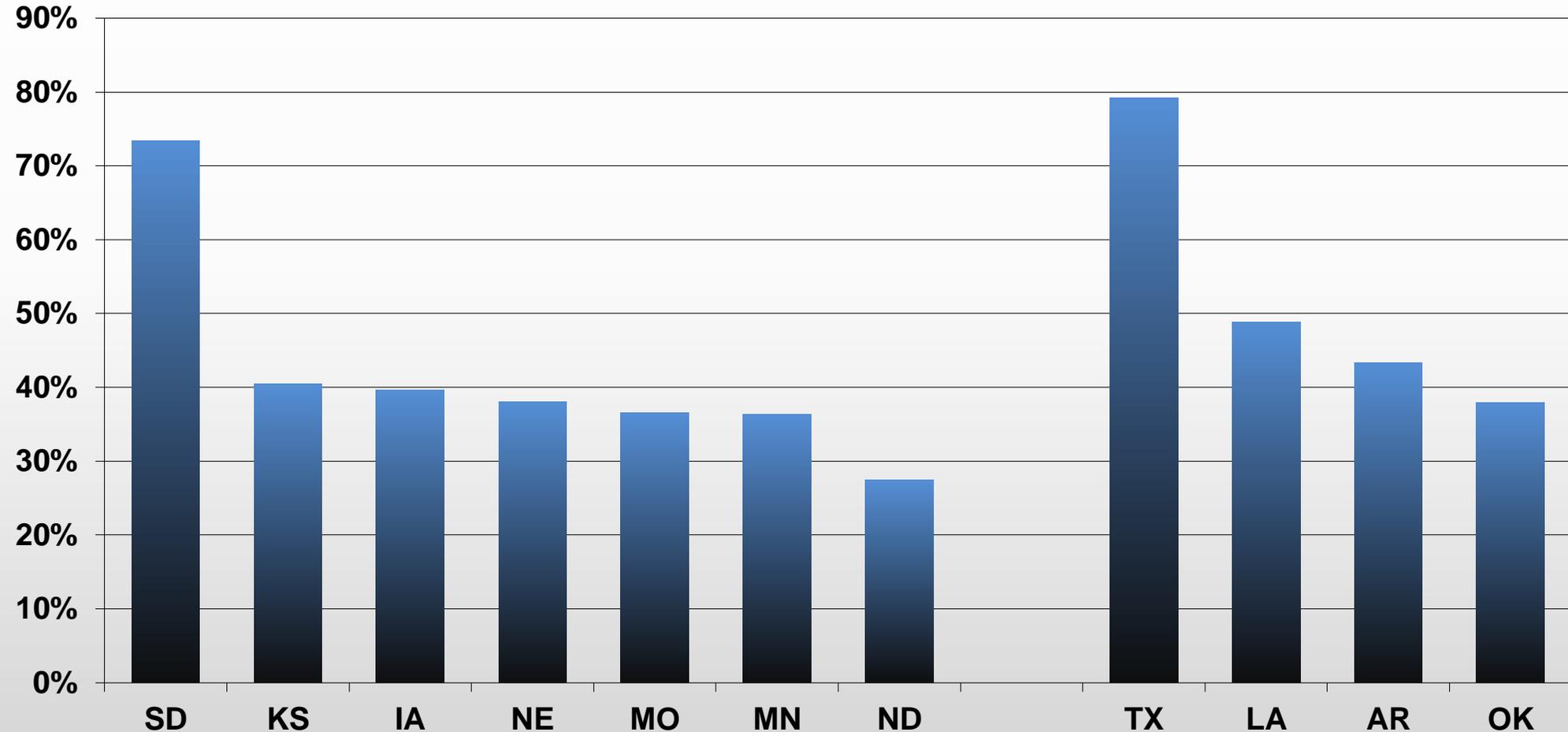
# Consumers Once Again Showing Apprehension

Percentage change from baseline visits—Retail & Recreation



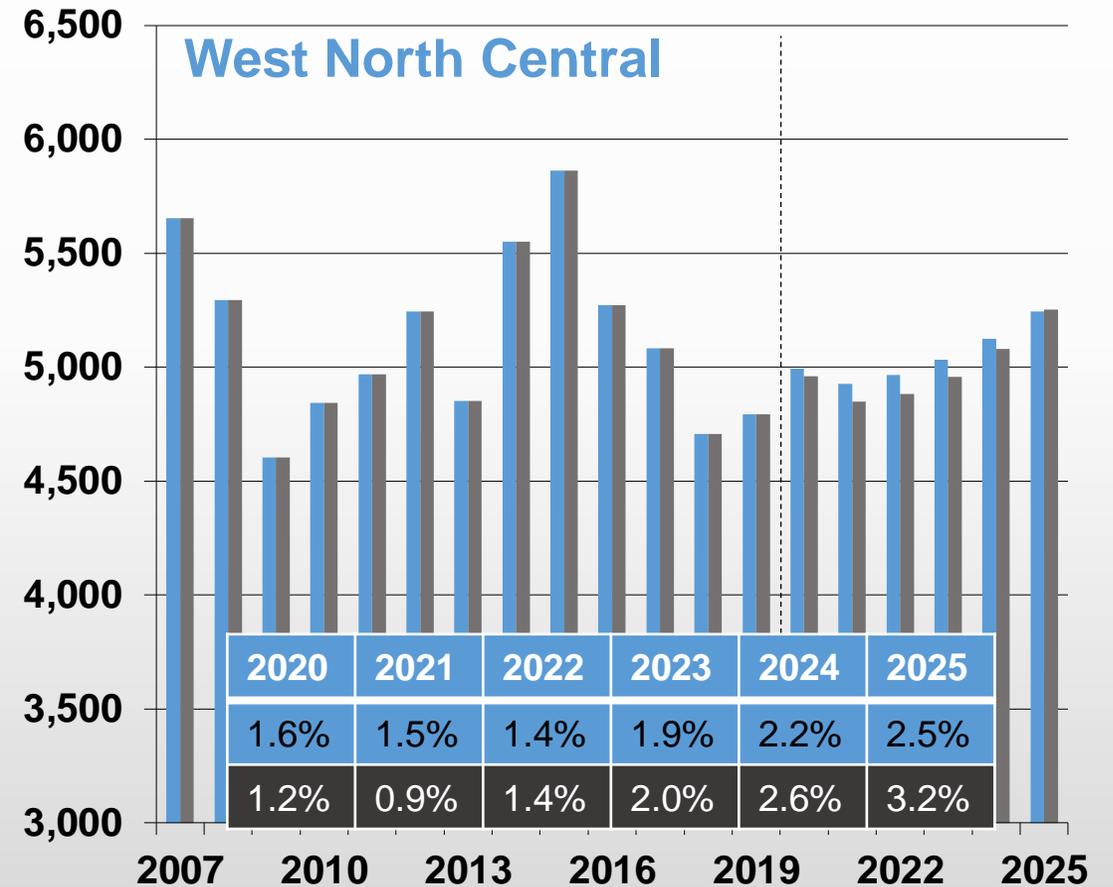
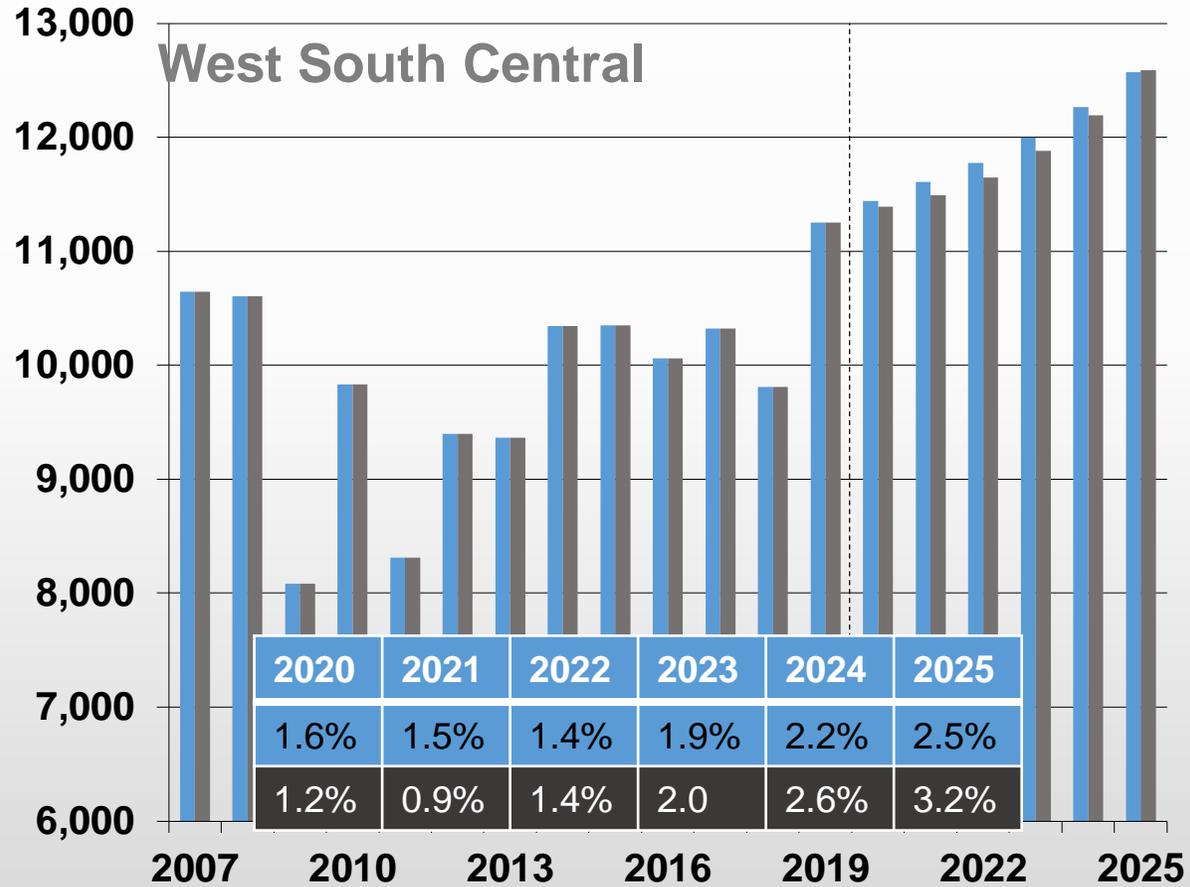
# States with High Sales Tax Exposure at Risk

Sales tax as a share of total tax collections



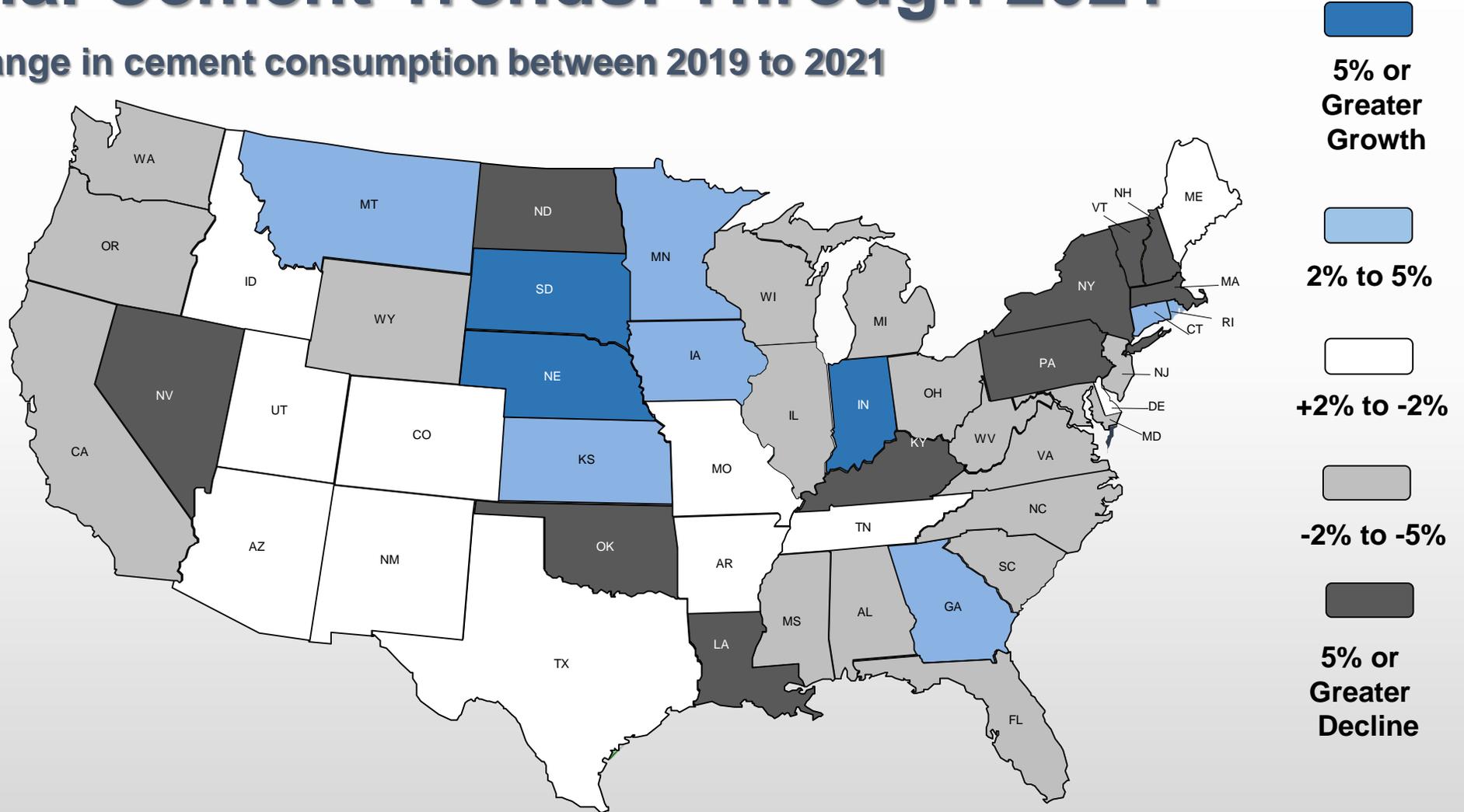
# Public Cement Consumption – Interior U.S.

Metric Tons (000s)



# Regional Cement Trends: Through 2021

Based on change in cement consumption between 2019 to 2021



The logo for PCA (Portland Cement Association) features the letters 'PCA' in a bold, white, sans-serif font. A white swoosh underline is positioned under the 'A', and a registered trademark symbol (®) is located to the right of the swoosh. The logo is set against a background of a large concrete bridge structure with arches, set in a mountainous landscape under a cloudy sky.

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