

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

**PCA**®

*Since 1916*

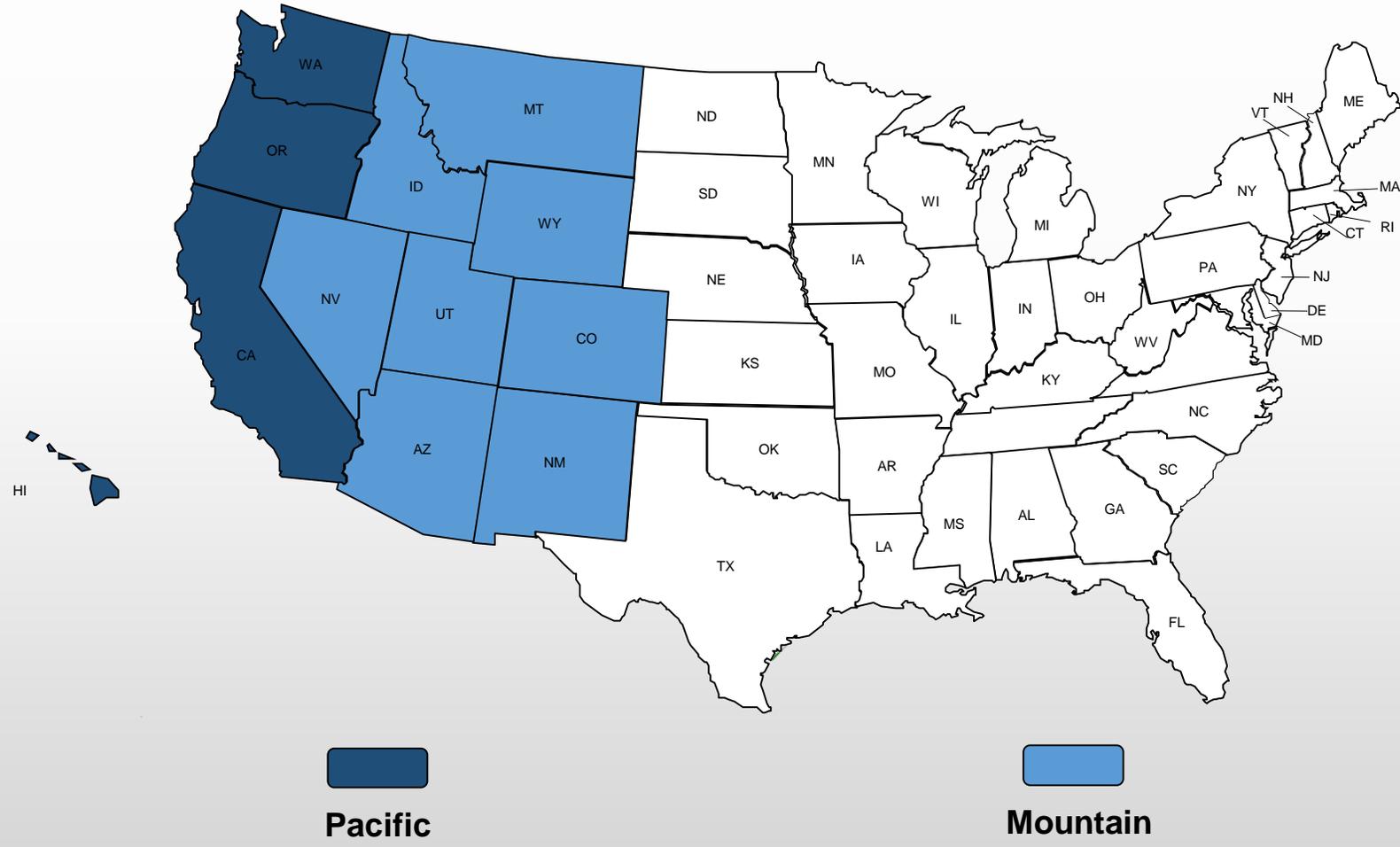
America's Cement Manufacturers™

# Coronavirus Regional Briefing: Western U.S.

Brian Schmidt, Regional Economist

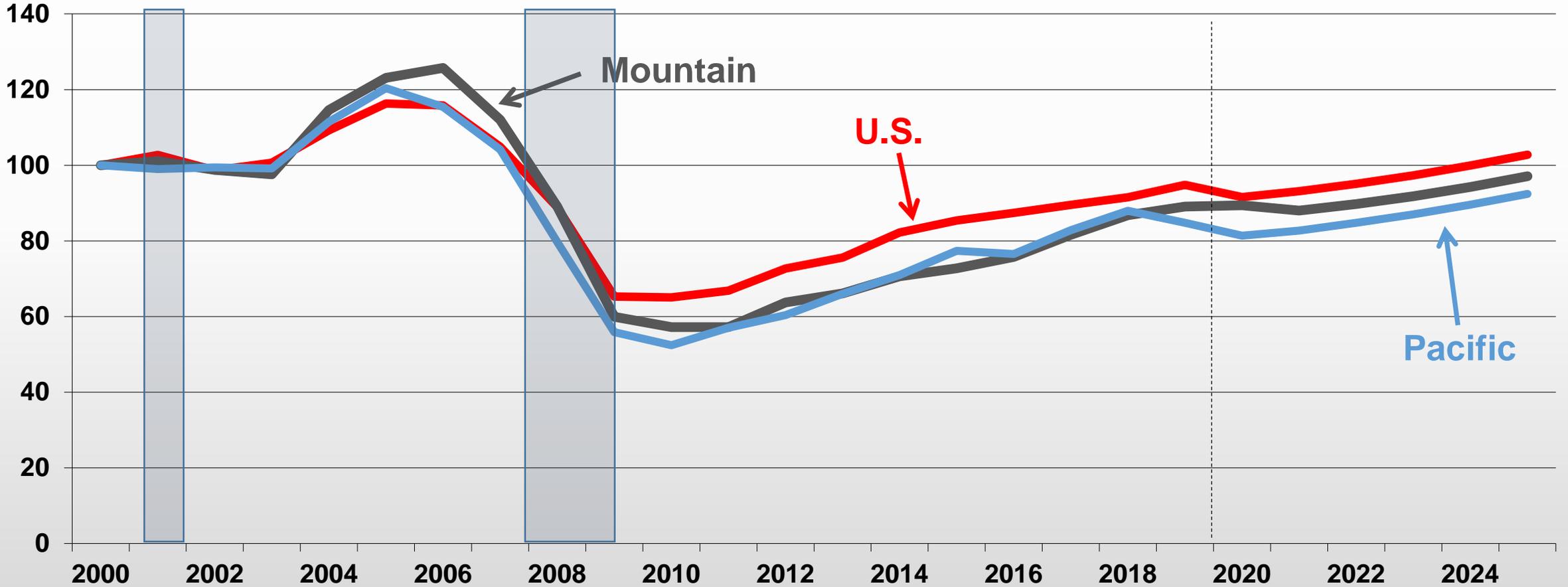
July 2020

# Regional Focus



# Total Cement Consumption

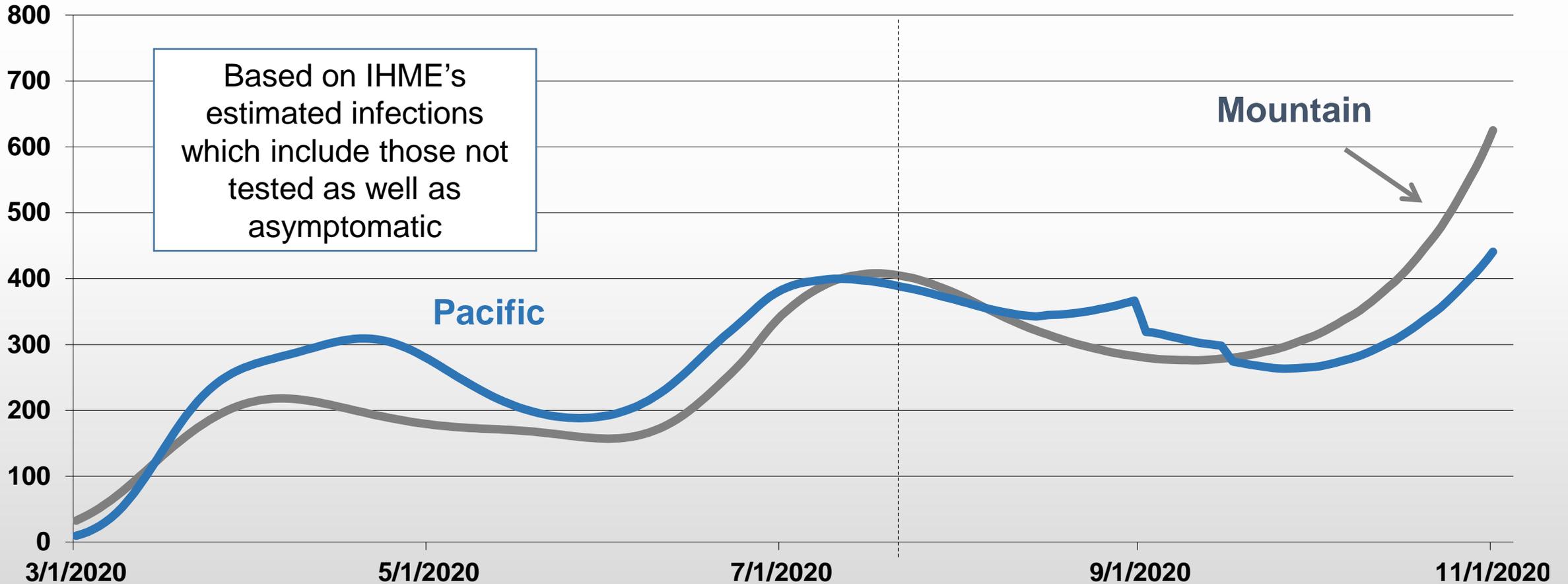
Index, 2000=100



Source: USGS, PCA

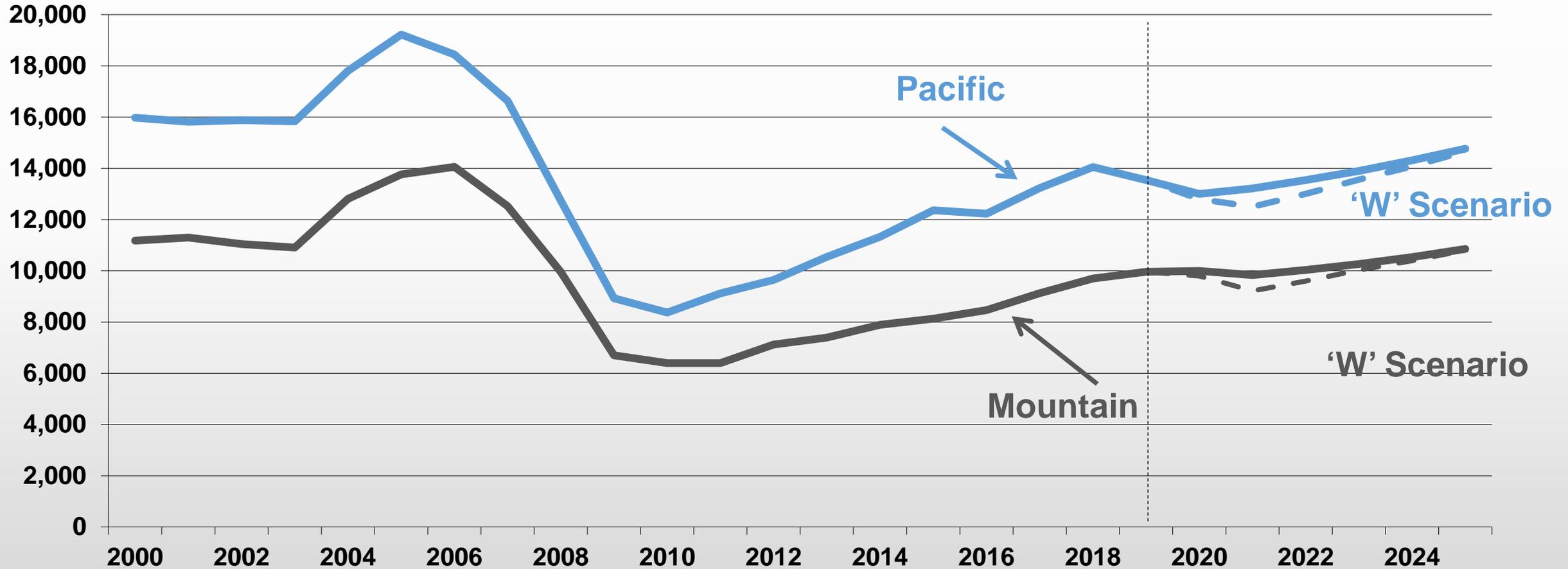
# IHME Projected Daily Infection Rates --Per Capita

New Daily COVID-19 Infections per Million of Population (July 14, 2020 Update)



# Total Cement Consumption – Western U.S.

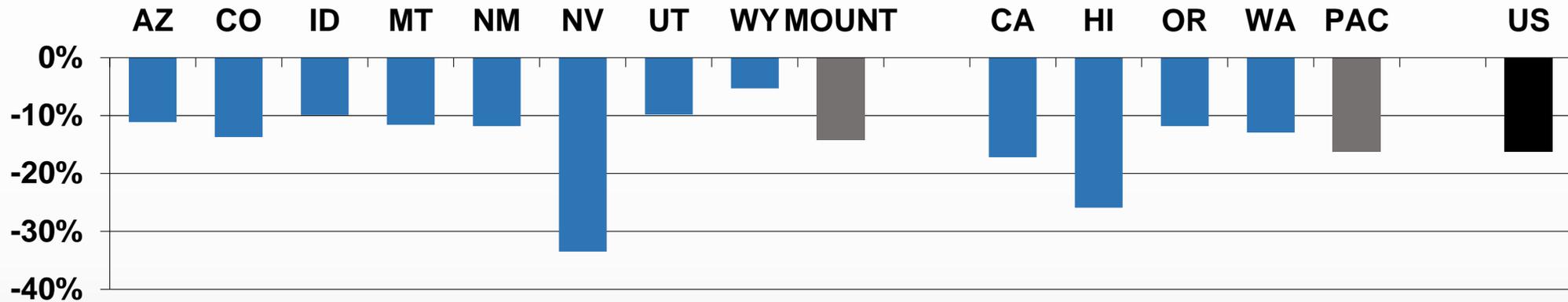
(000 Metric Tons)



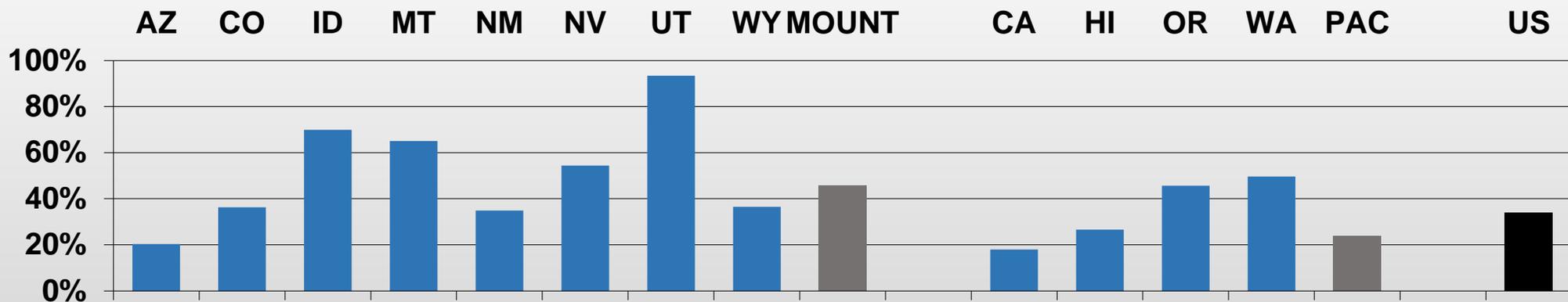
# Economic Outlook

# Employment Recovery

## Percent Change in Employment (February through April)

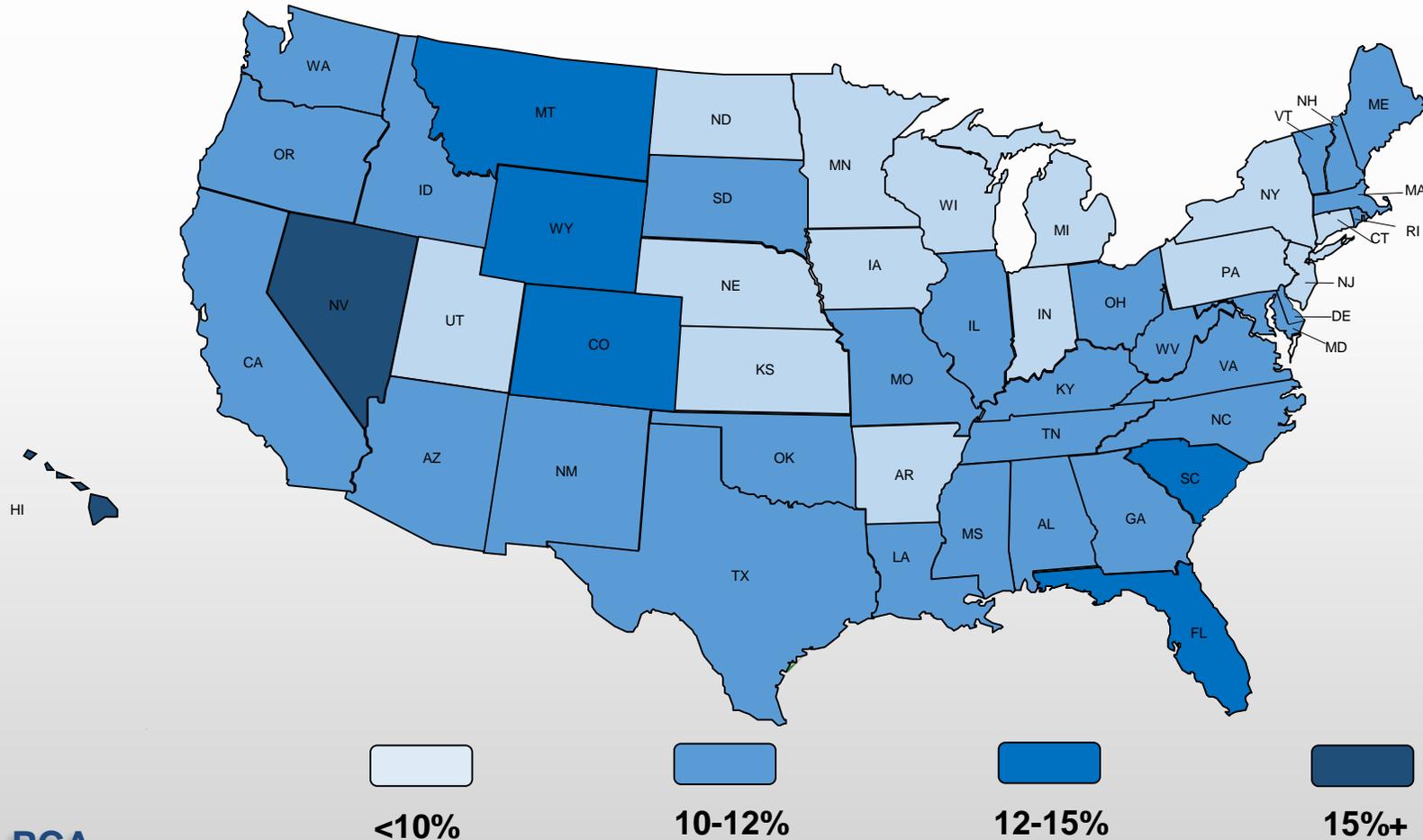


## Percent of Employment Losses Recovered (June from April trough)



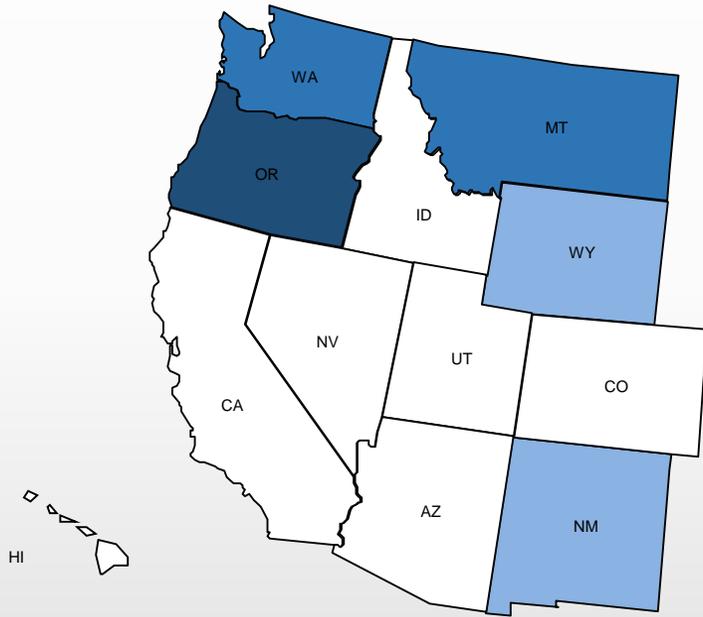
# Leisure and Hospitality Exposure

## Share of Total Nonfarm Employment



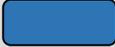
Source: BLS, PCA

# Oil, Agriculture, and Manufacturing Exposure



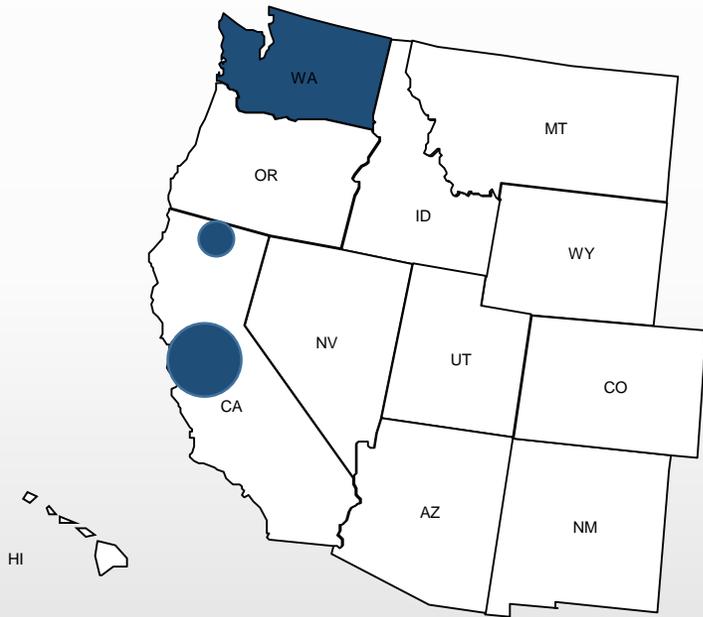
- As a whole, the region's economy is generally diverse
- Not very reliant on energy, agriculture, or manufacturing
- Oil exposure in New Mexico and Wyoming (and to a lesser degree Colorado) represent an area of concern

  
Oil States

  
Agriculture

  
Manufacturing  
& Agriculture

# Construction Non-Exempt Impact

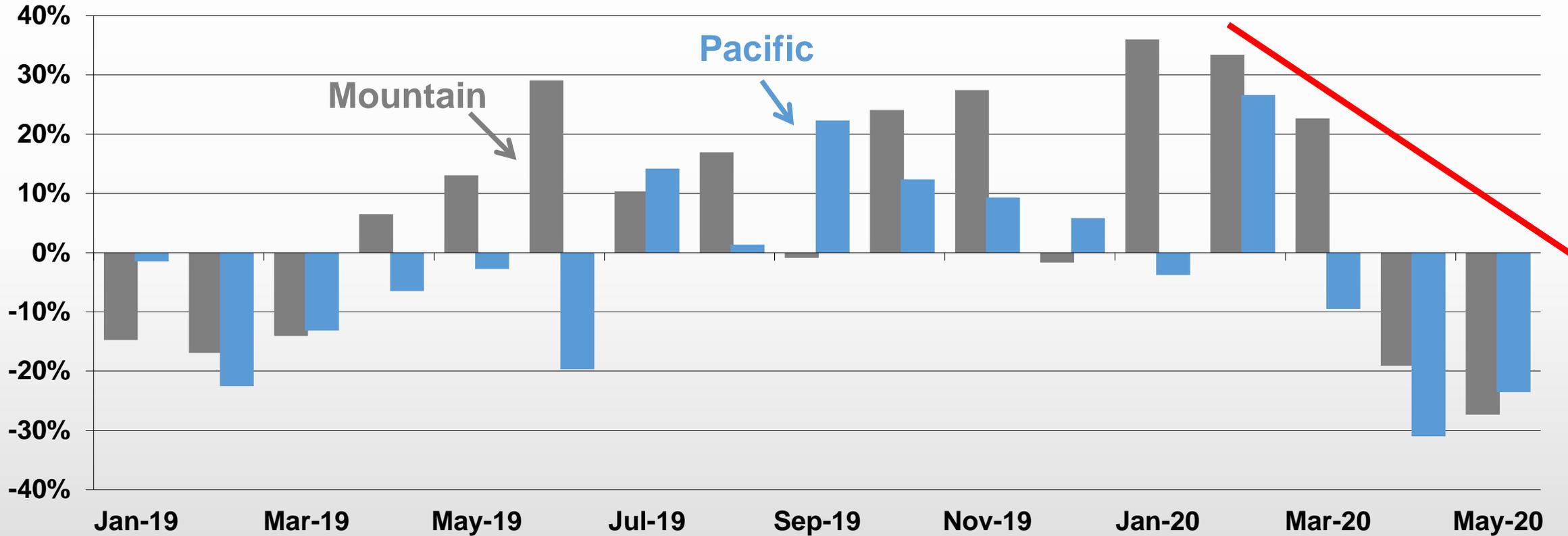


- An adverse wrinkle experienced in some markets due to construction not being considered exempt from stay at home orders
- Entire state of Washington as well as parts of California, mainly the Bay area
- Very depressed volumes in April for these areas

# Residential Outlook

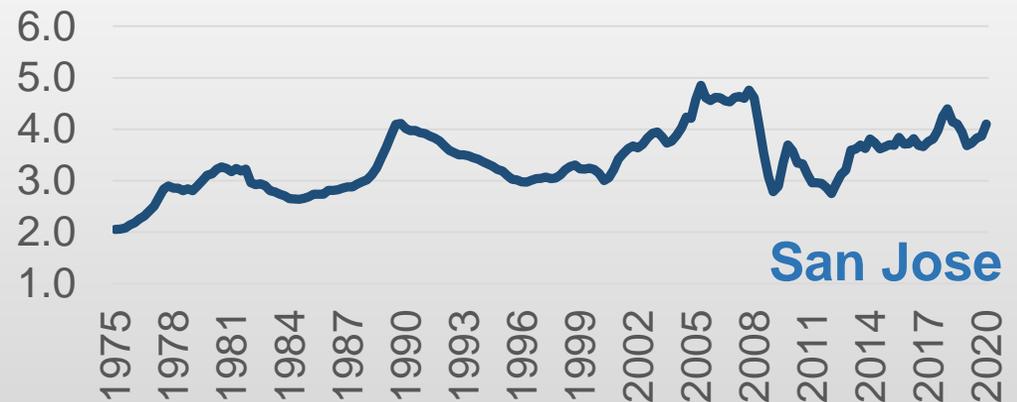
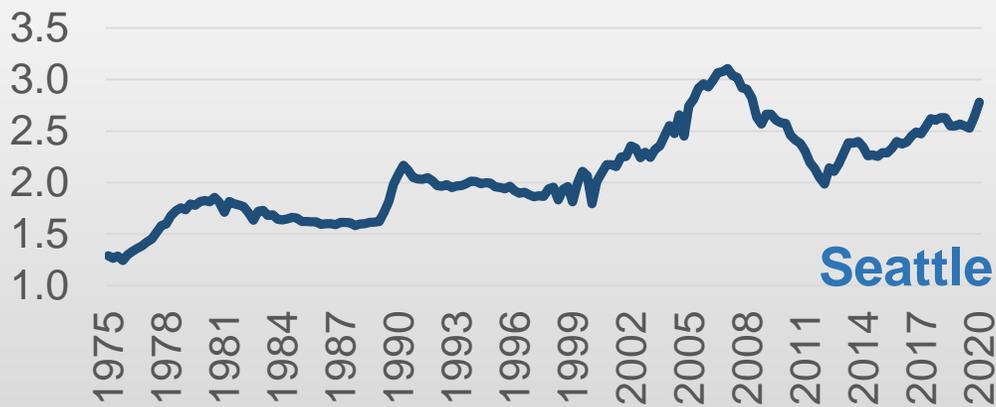
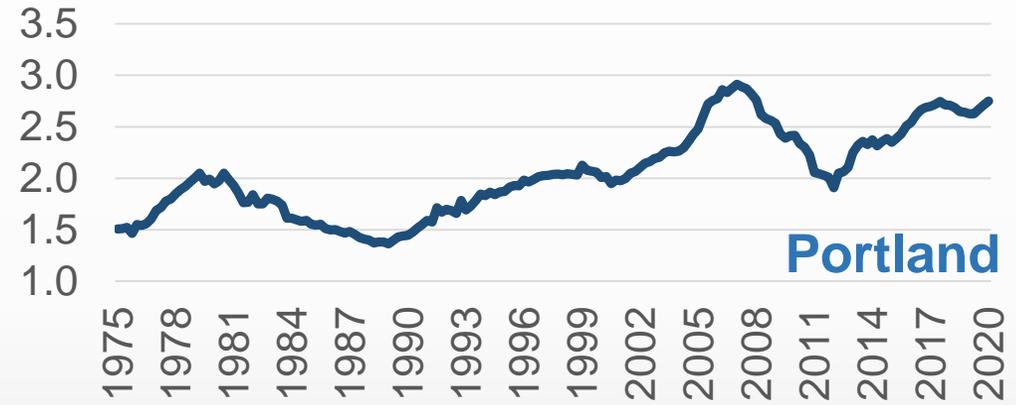
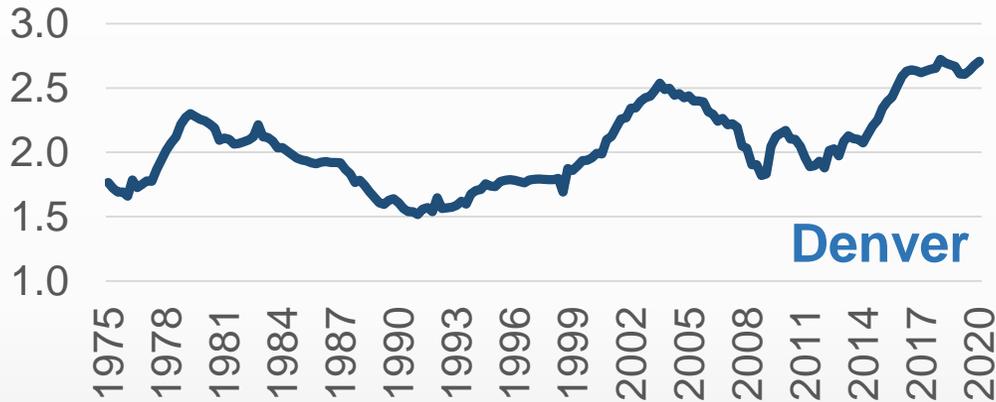
# Housing Permits – Western U.S.

Seasonally adjusted, year-over-year percent change.



# Home Affordability Concerns

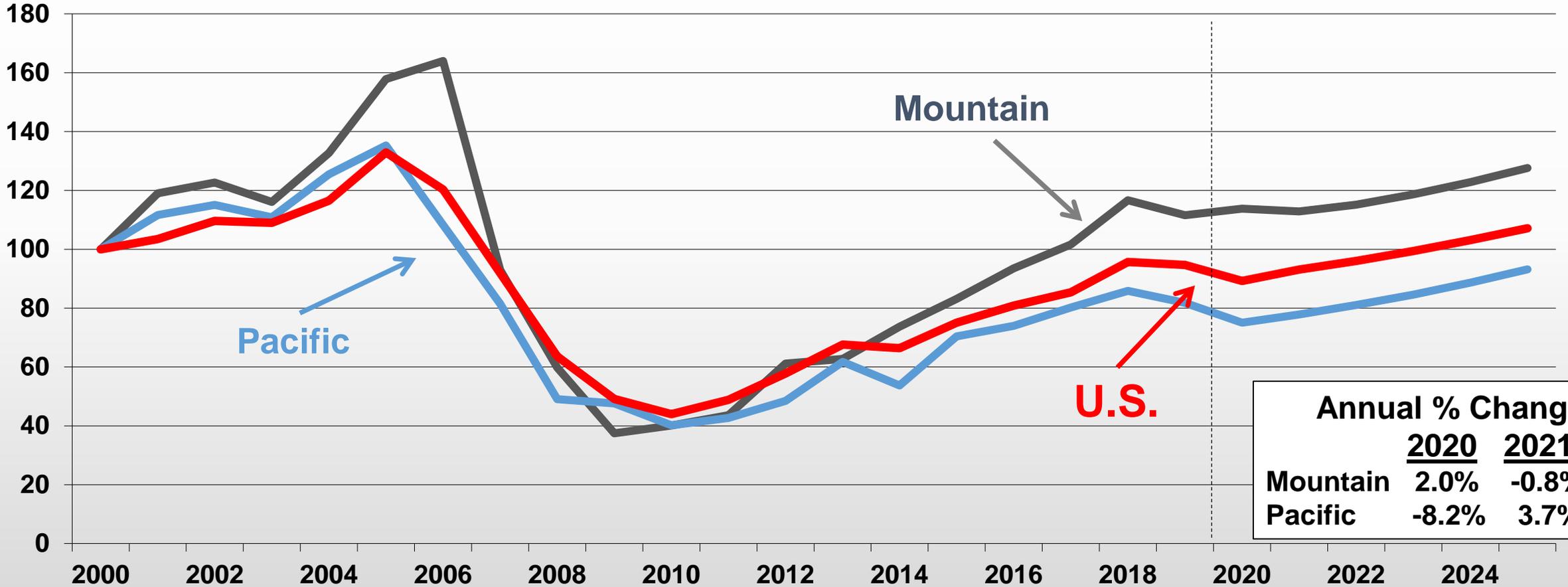
## Home Price-to-Household Income, SA



Source: NAR, BEA, BOC, Moody's

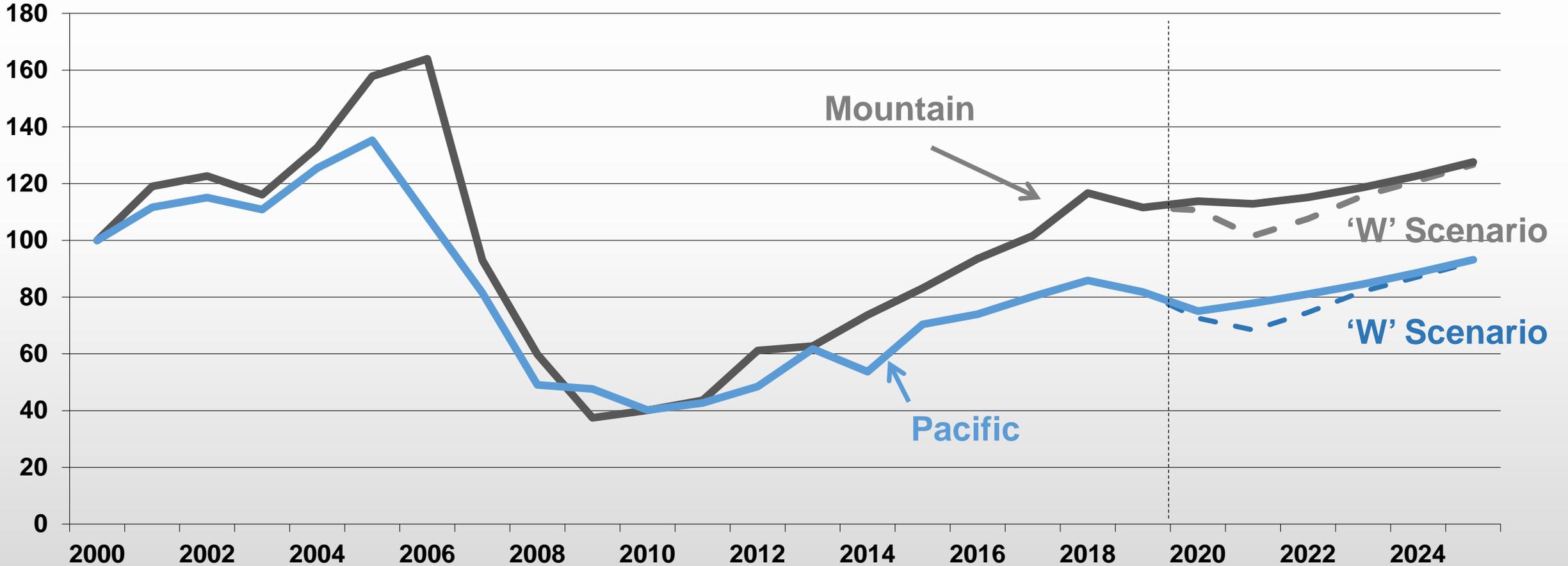
# Residential Cement Consumption – Western U.S.

Index, 2000=100



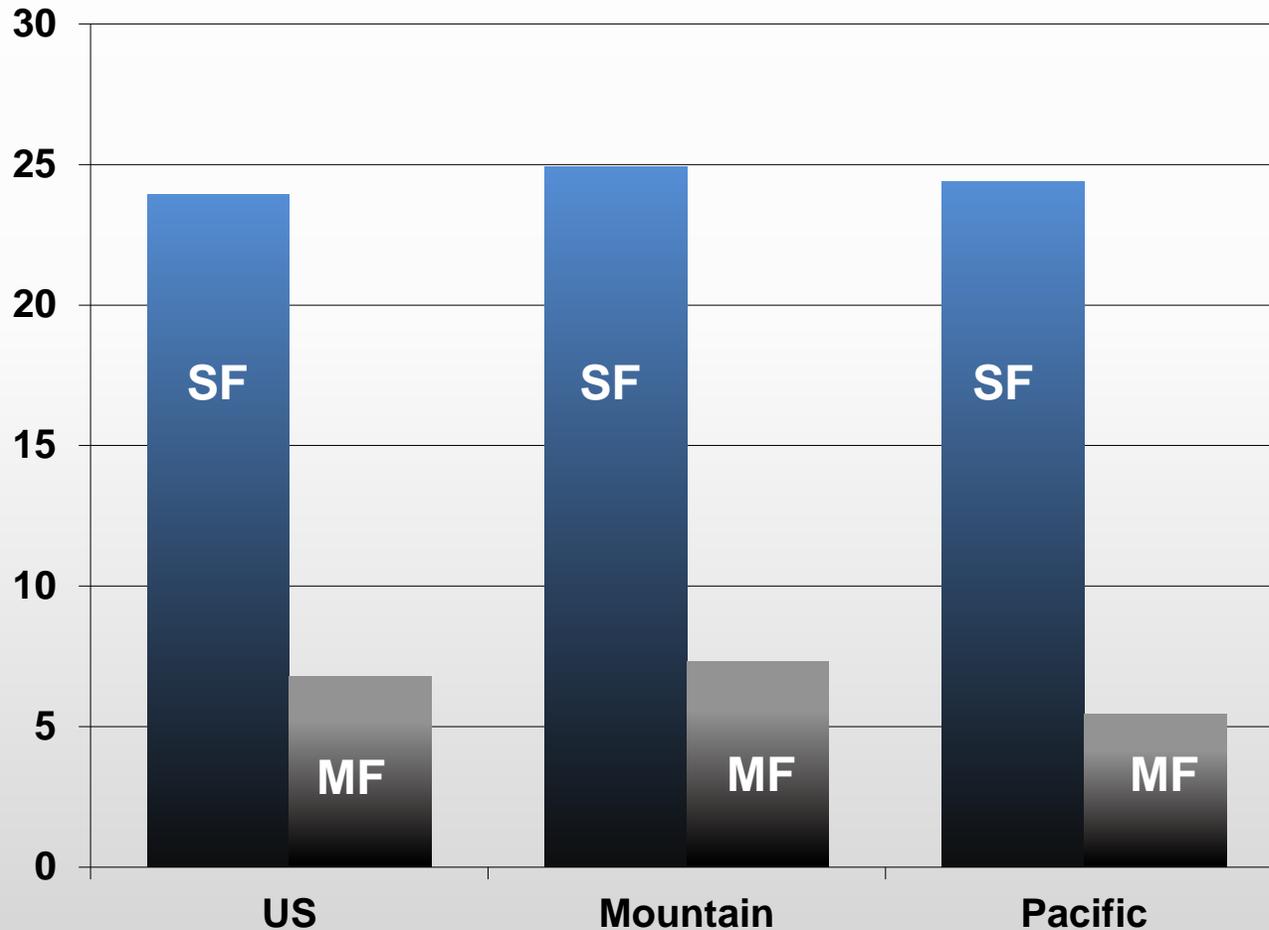
# Residential Cement Consumption – Western U.S.

Index, 2000=100



# Potential Shift in Homebuyer Preferences?

Metric Tons of Cement Per Housing Unit

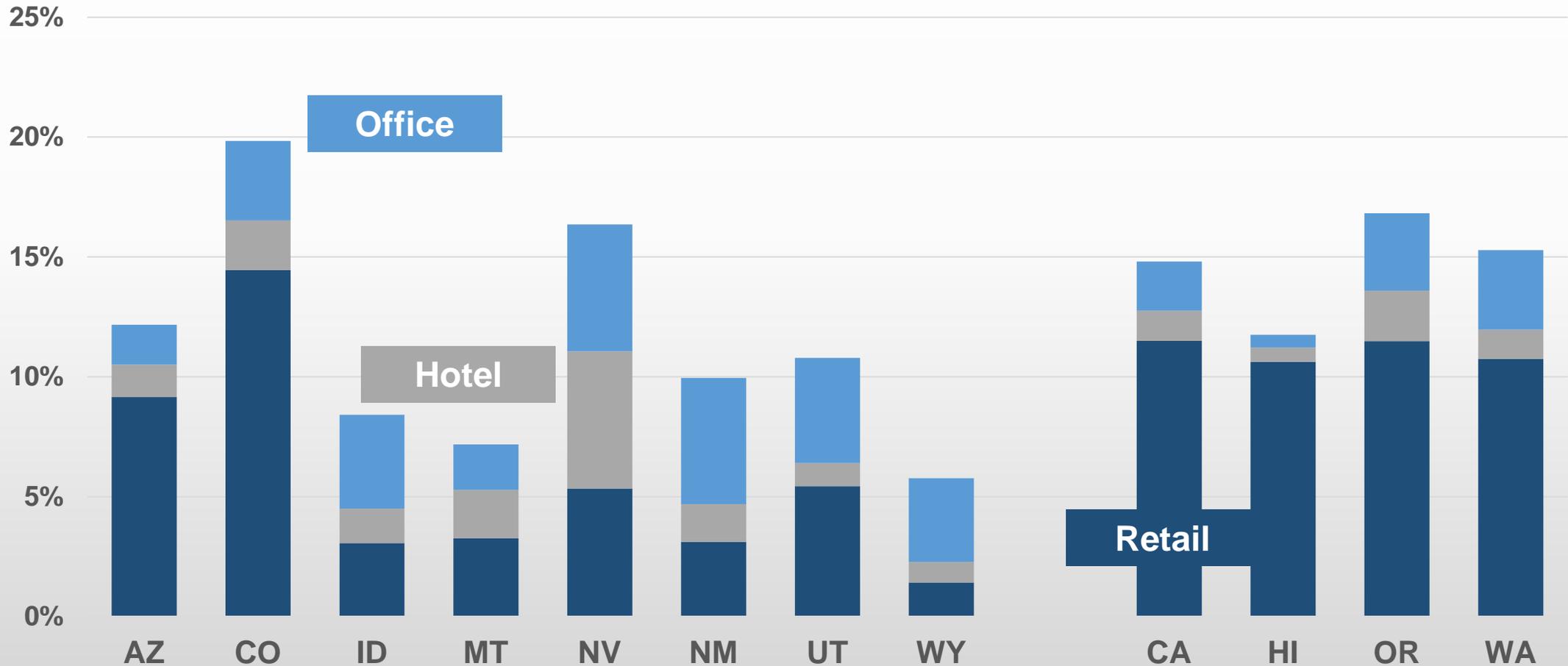


- 21% of agents reported buyers seeking the benefits of new homes, such as office space or backyards. (Source: NAR Research Group Survey)
- Potential for intrastate moves from urban to suburban/exurban locations.
- A 10% compositional shift from multi to single family would amount to roughly 60k MTs annually in Mountain and 115k MTs in the Pacific.

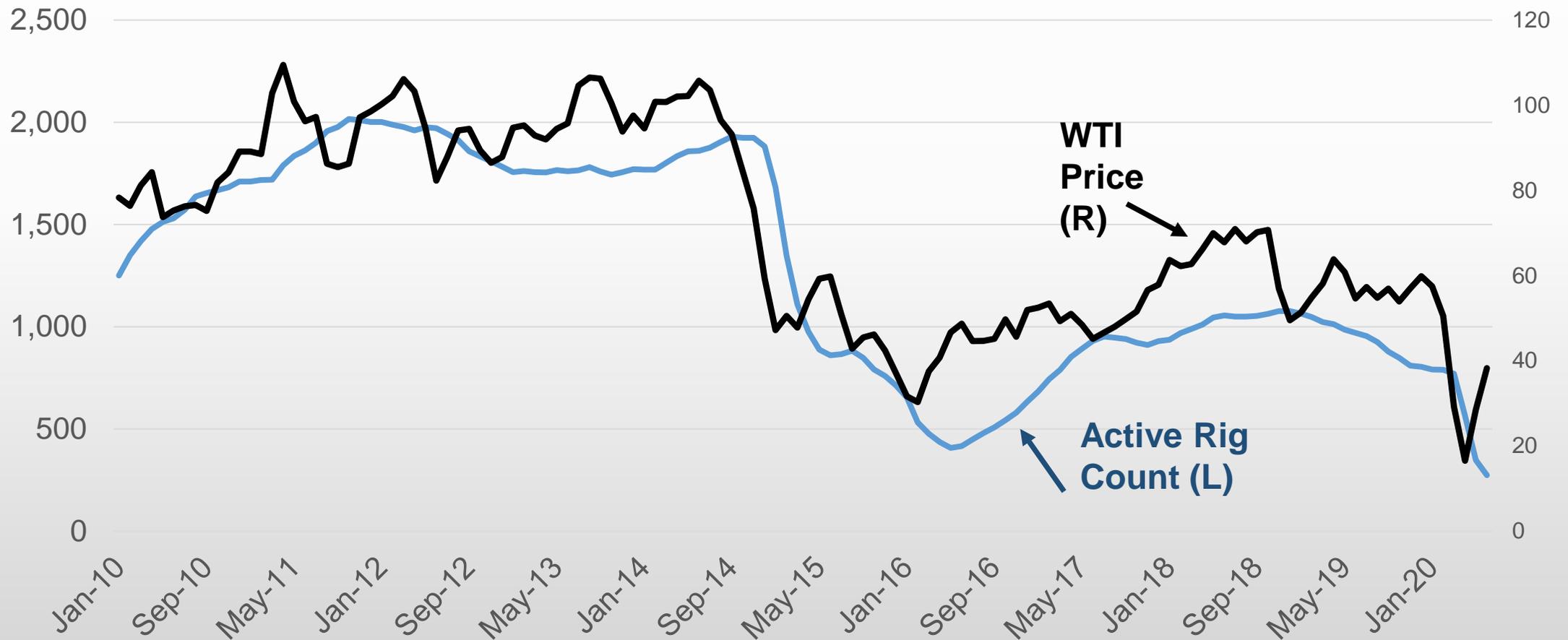
# Nonresidential Outlook

# Office, Hotel, and Retail Importance

Percent Share of Total Cement



# Oil & Gas Drilling a Concern in Some States

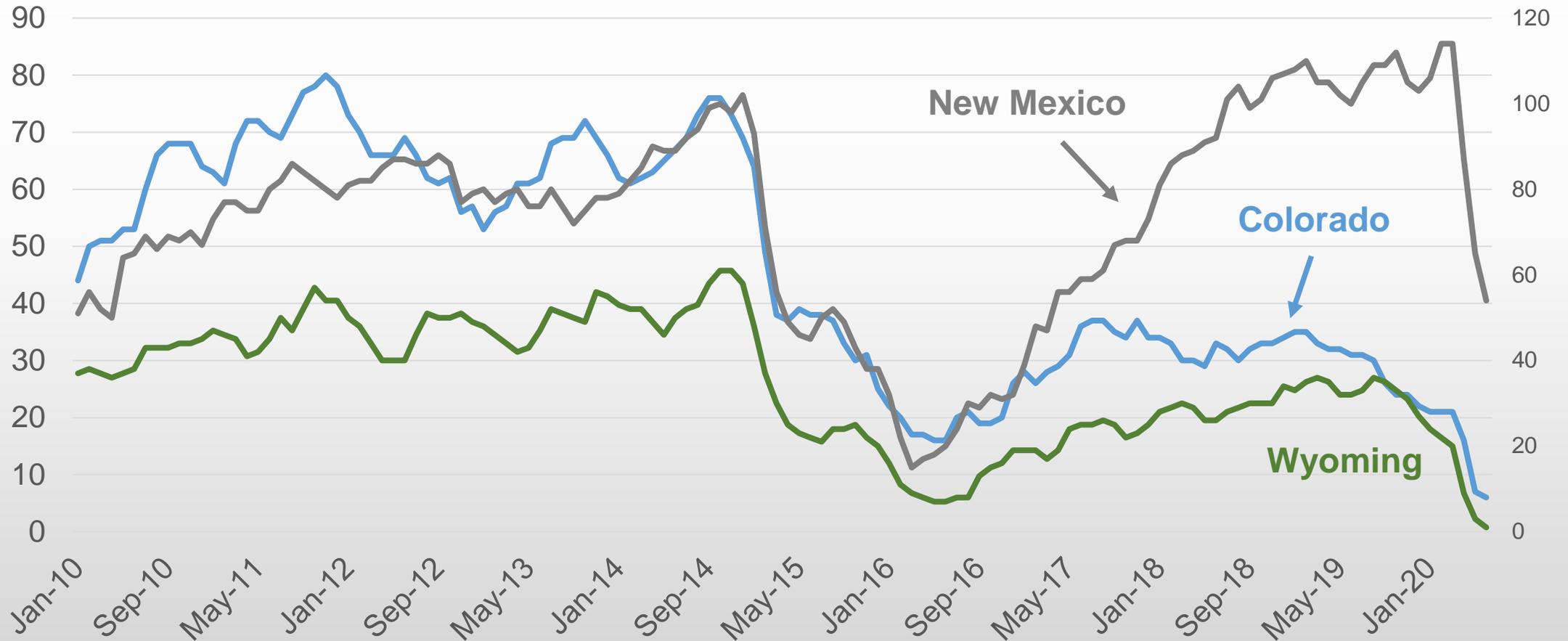


Source: Baker Hughes Incorporated, EIA

# Oil & Gas Drilling a Concern for Some States

Average Active Rotary Rigs - Total, (#)

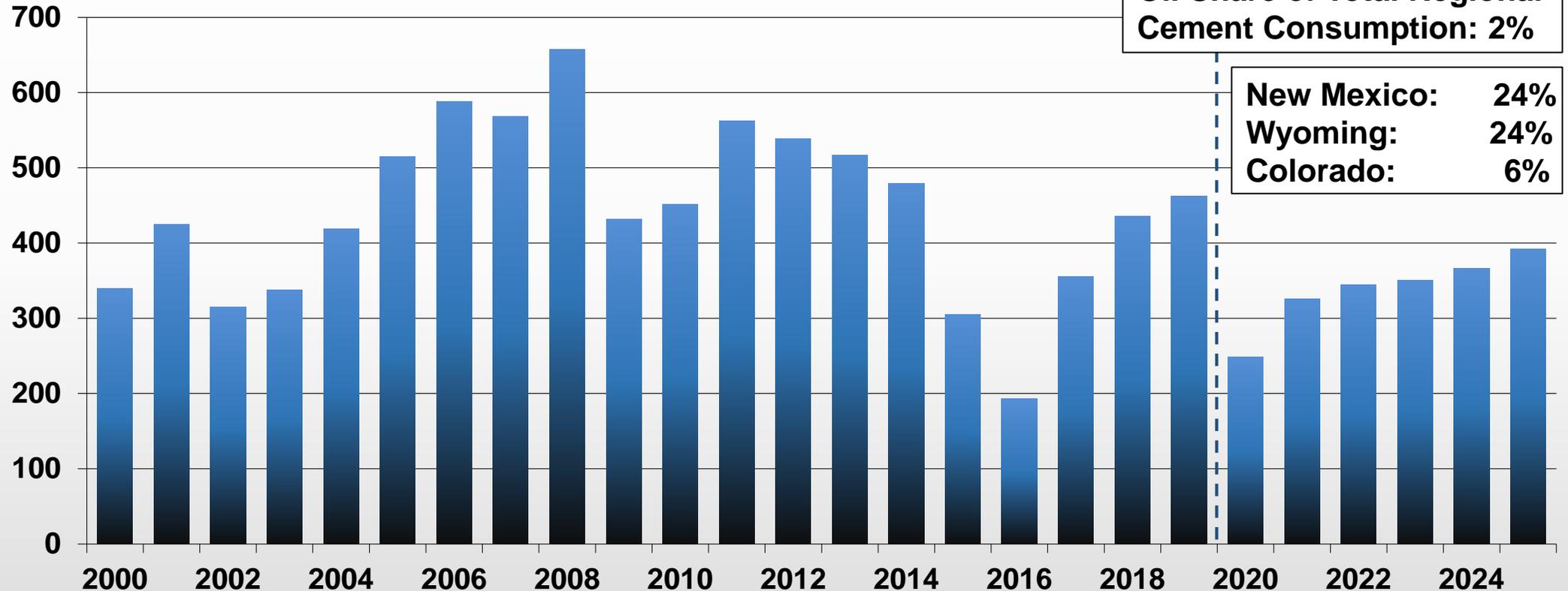
<b>Percent Change Since February:</b>	
New Mexico	-53%
Colorado	-71%
Wyoming	-95%
U.S.	-65%



Source: Baker Hughes Incorporated

# Oil Well Cement Consumption – Western U.S.

Metric Tons, Thousands



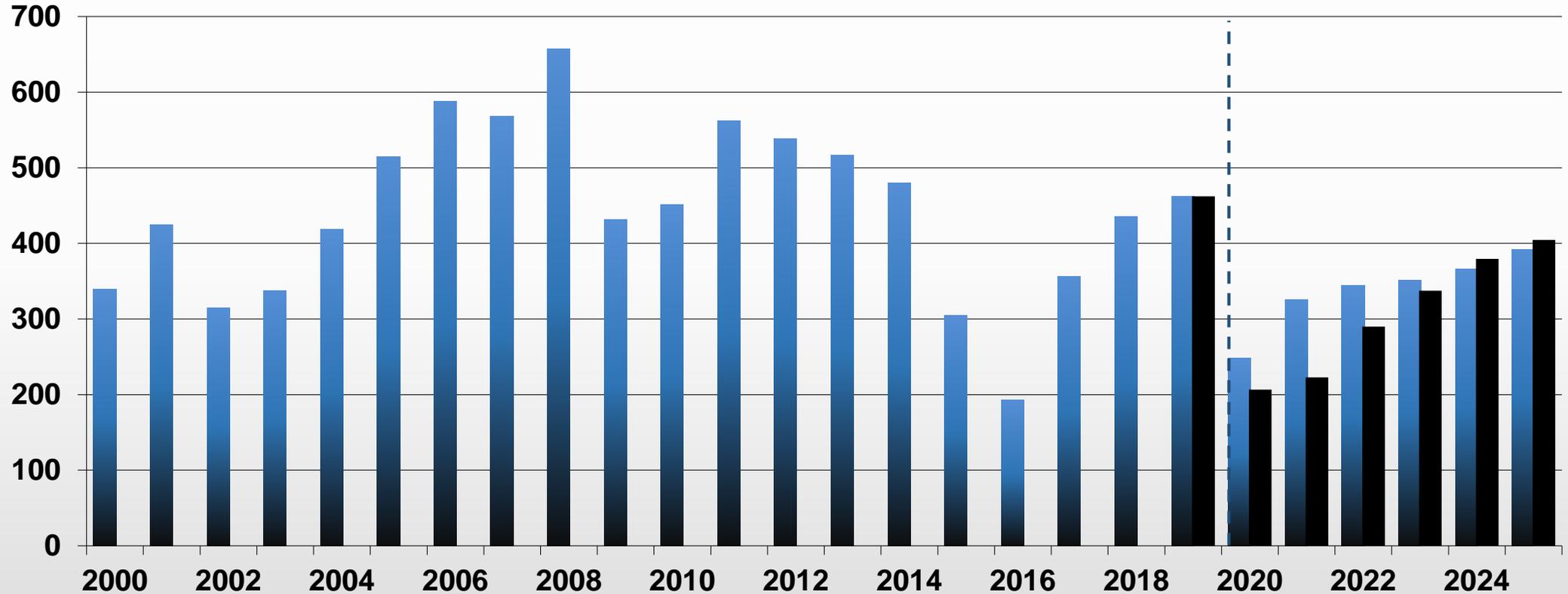
**Oil Share of Total Regional Cement Consumption: 2%**

**New Mexico: 24%**  
**Wyoming: 24%**  
**Colorado: 6%**

Year	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2023F	2024F
Change (%)	-31%	44%	10%	2%	-46%	31%	6%	2%	4%	7%

# Oil Well Cement Consumption – Western U.S.

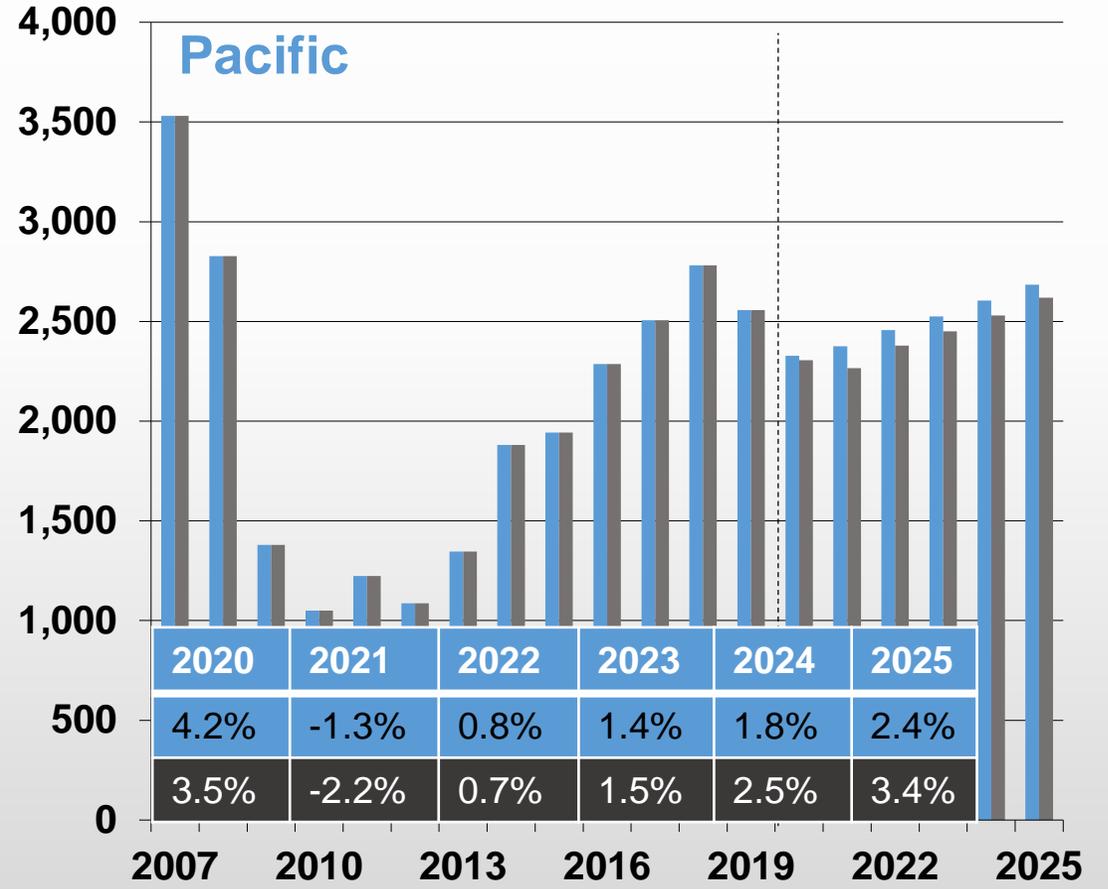
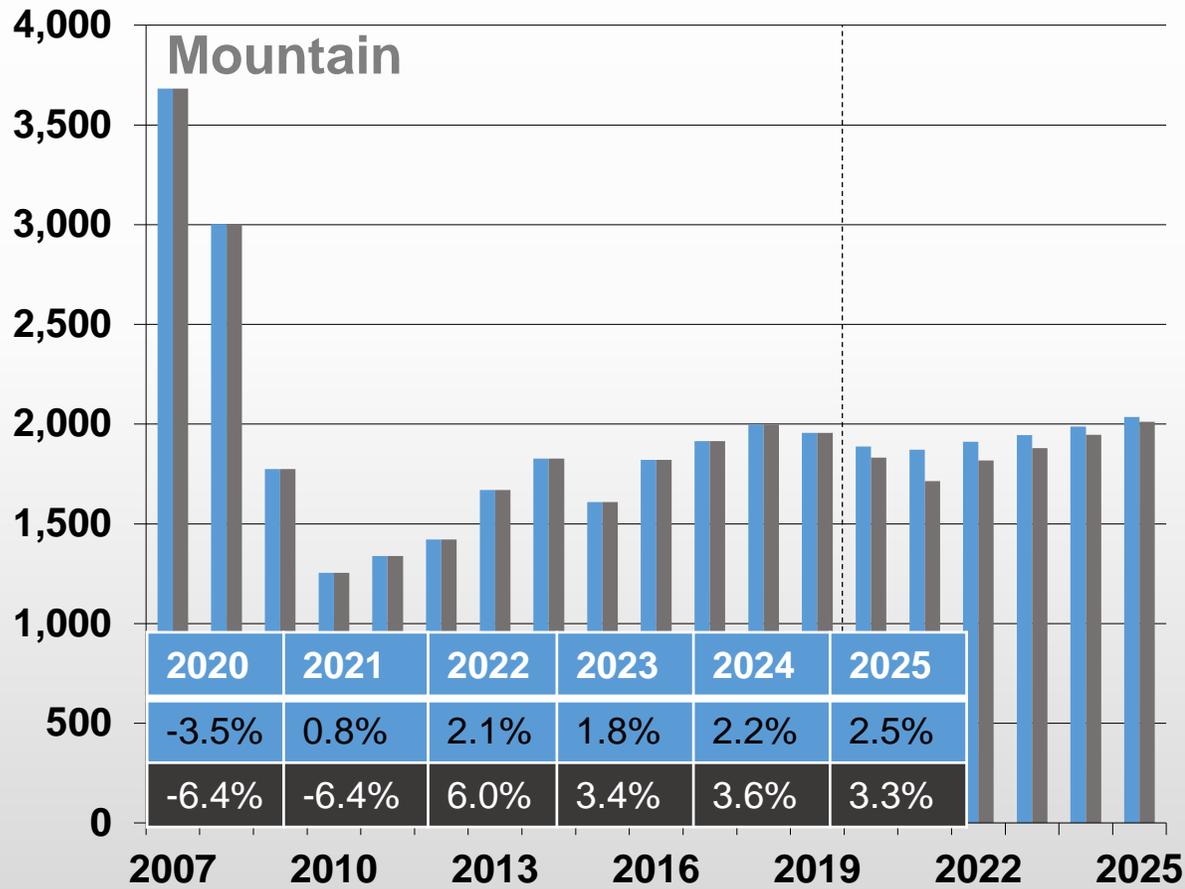
Metric Tons, Thousands



	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2023F	2024F
Baseline	-31%	44%	10%	2%	-46%	31%	6%	2%	4%	7%
“W”	-31%	44%	10%	2%	-55%	8%	30%	16%	12%	7%

# Nonresidential Cement Consumption – Central U.S.

Metric Tons (000s)



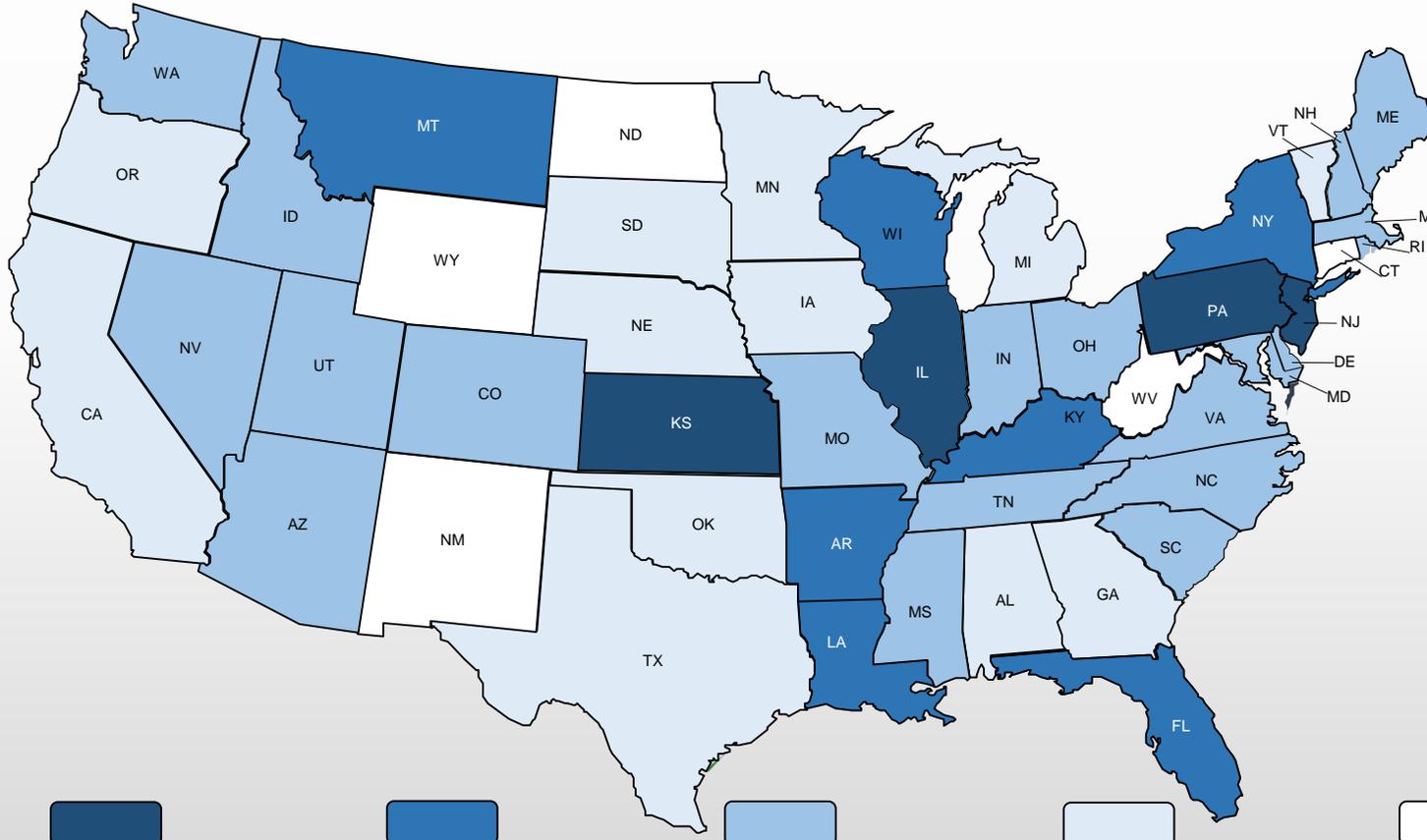
# Public Outlook

# State Rainy Day Funding – FY2020

Rainy day balances as share of general fund expenditures

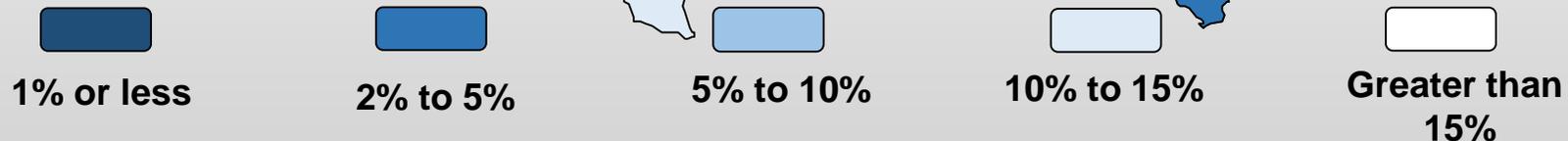
**Current National Average: 7.6%**

**Prior to Great Recession: 4.5%**



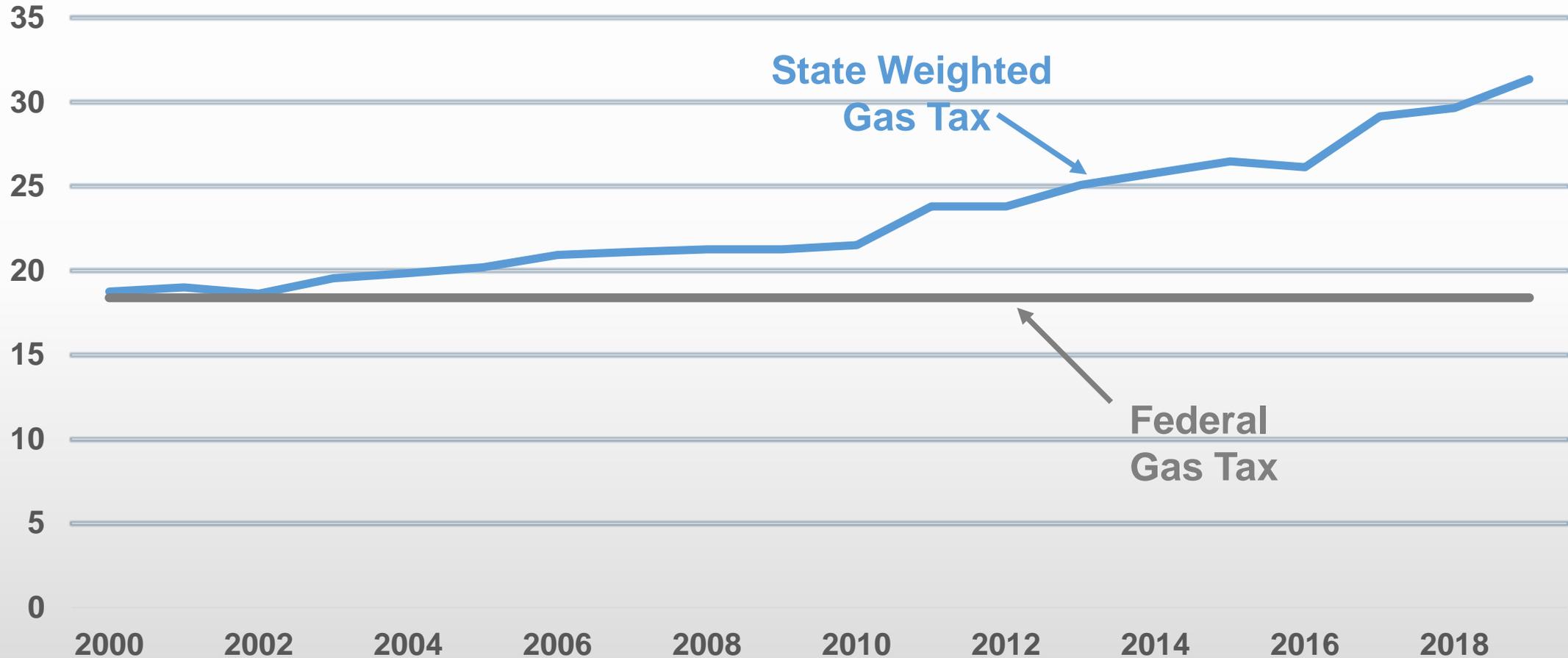
**Kansas and Illinois effectively have \$0 balances, Pennsylvania and New Jersey are roughly 1%**

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

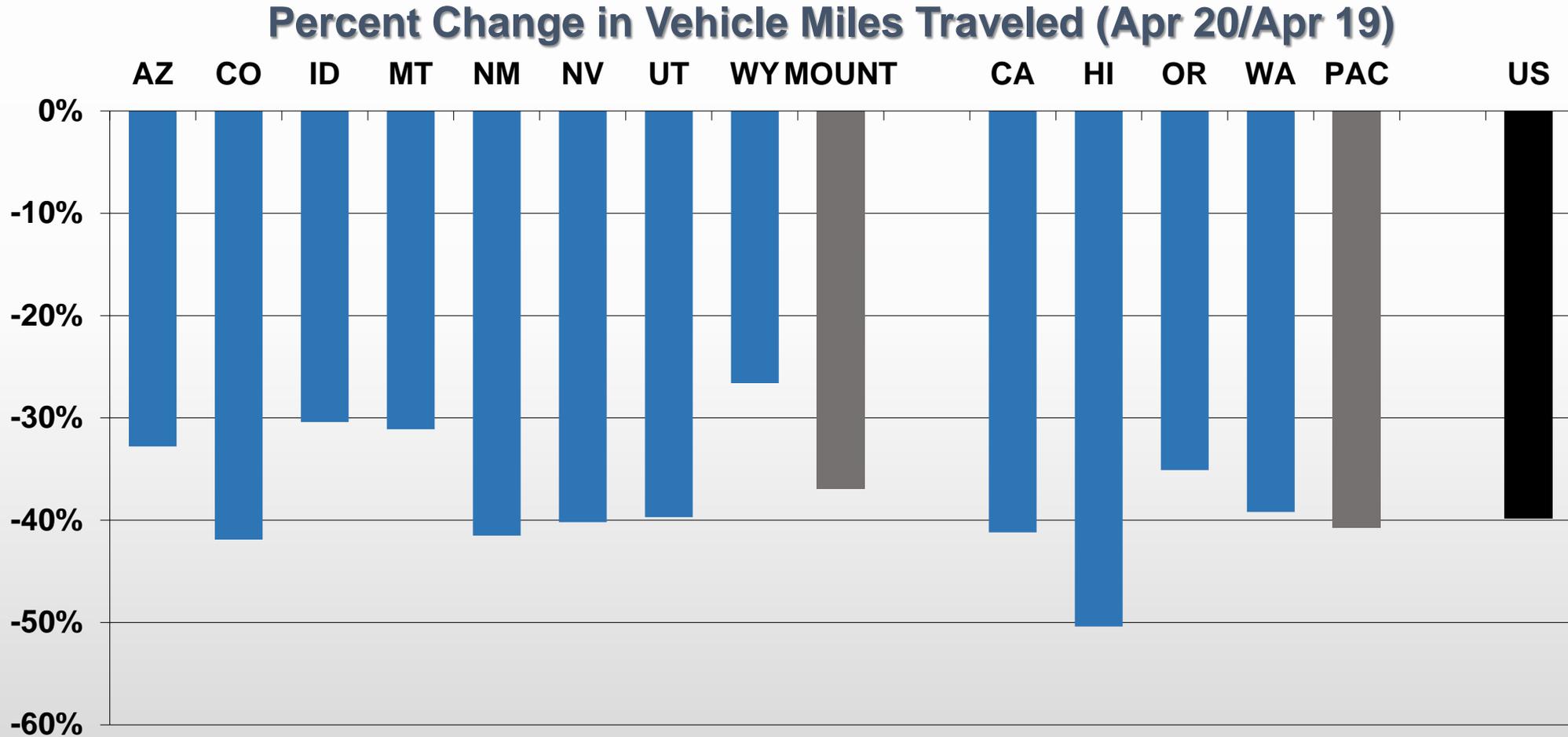


# States Have Been Increasingly Less Reliant on Federal Funds

Cents Per Gallon

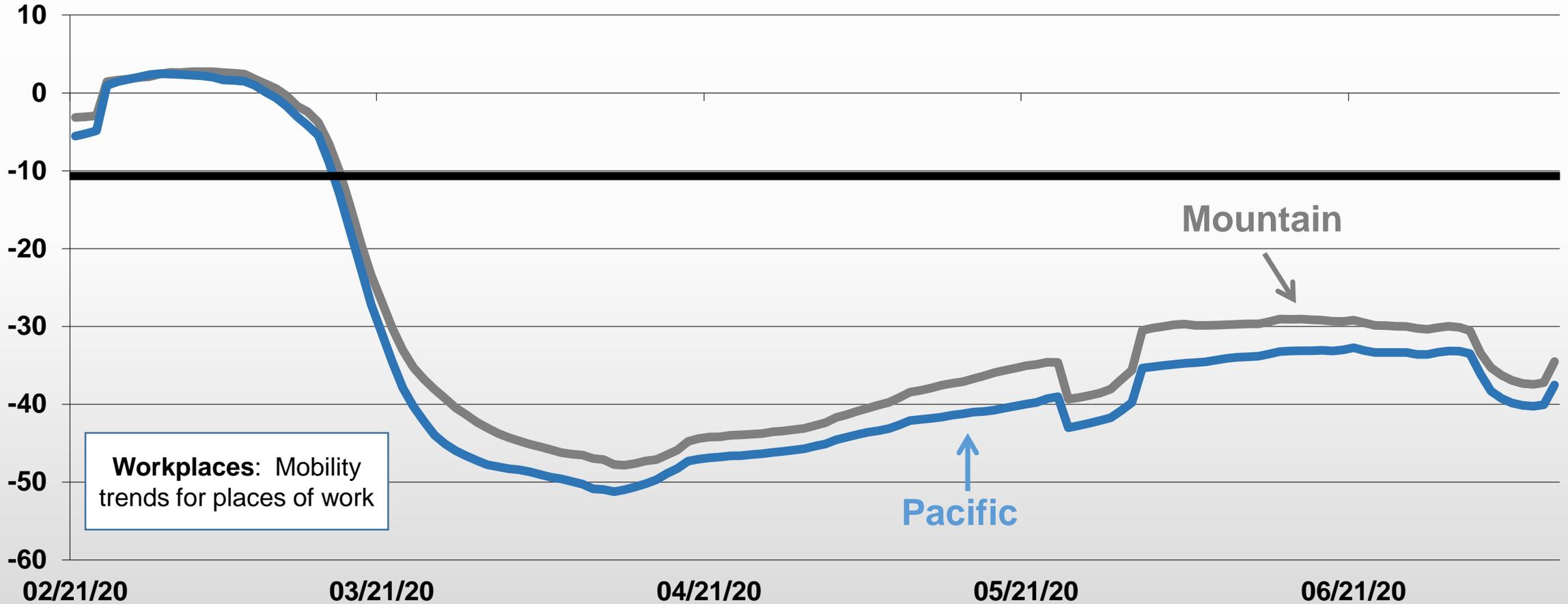


# Reduction in Vehicle Miles Traveled



# Employees returning to Work...

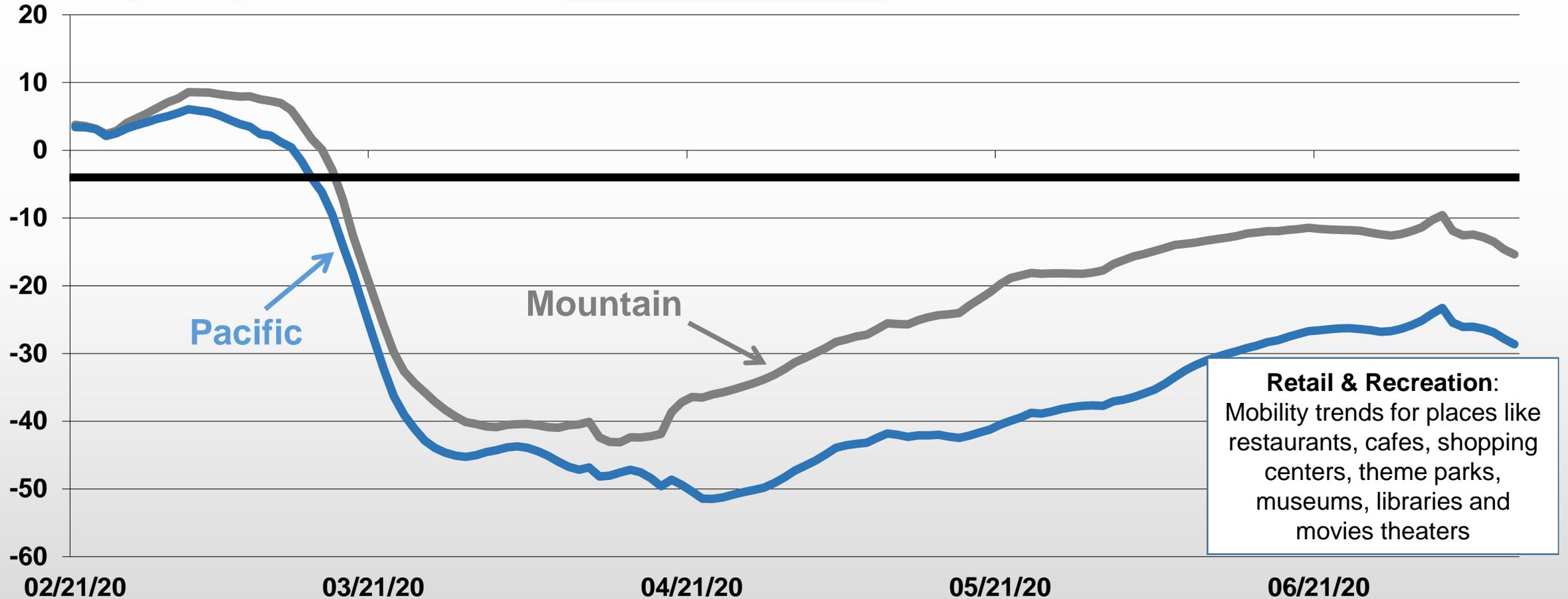
Percentage change from baseline visits—Workplace



Workplaces: Mobility trends for places of work

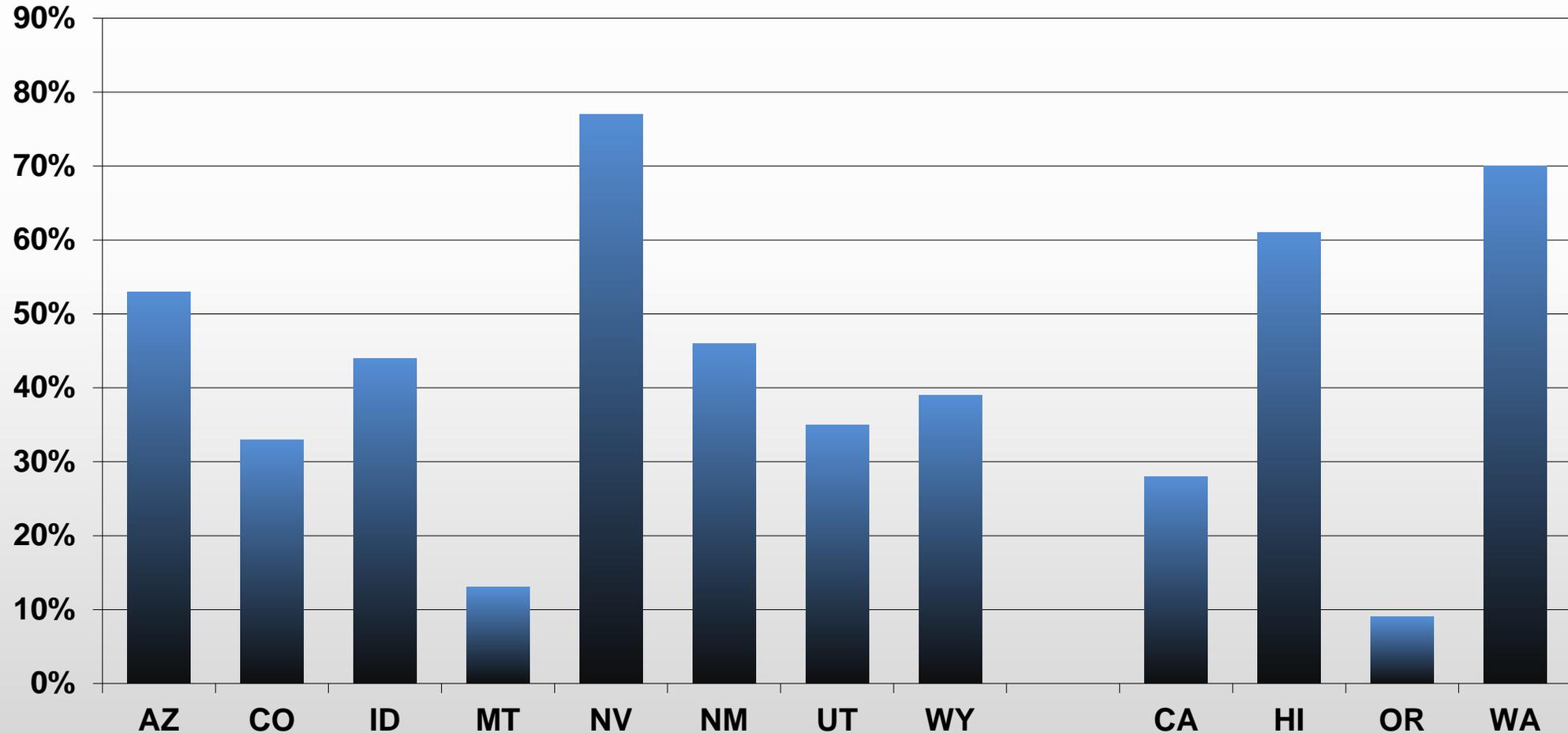
# Consumers Once Again Showing Apprehension

Percentage change from baseline visits—Retail & Recreation



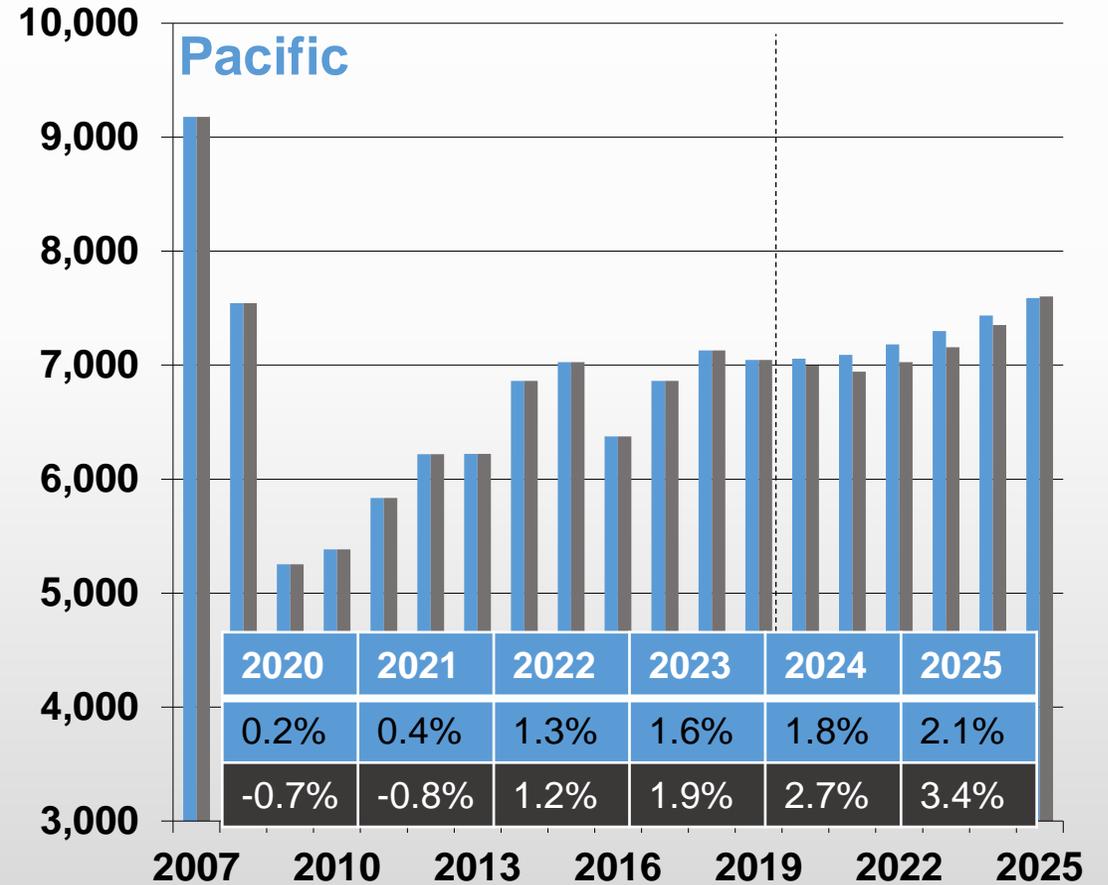
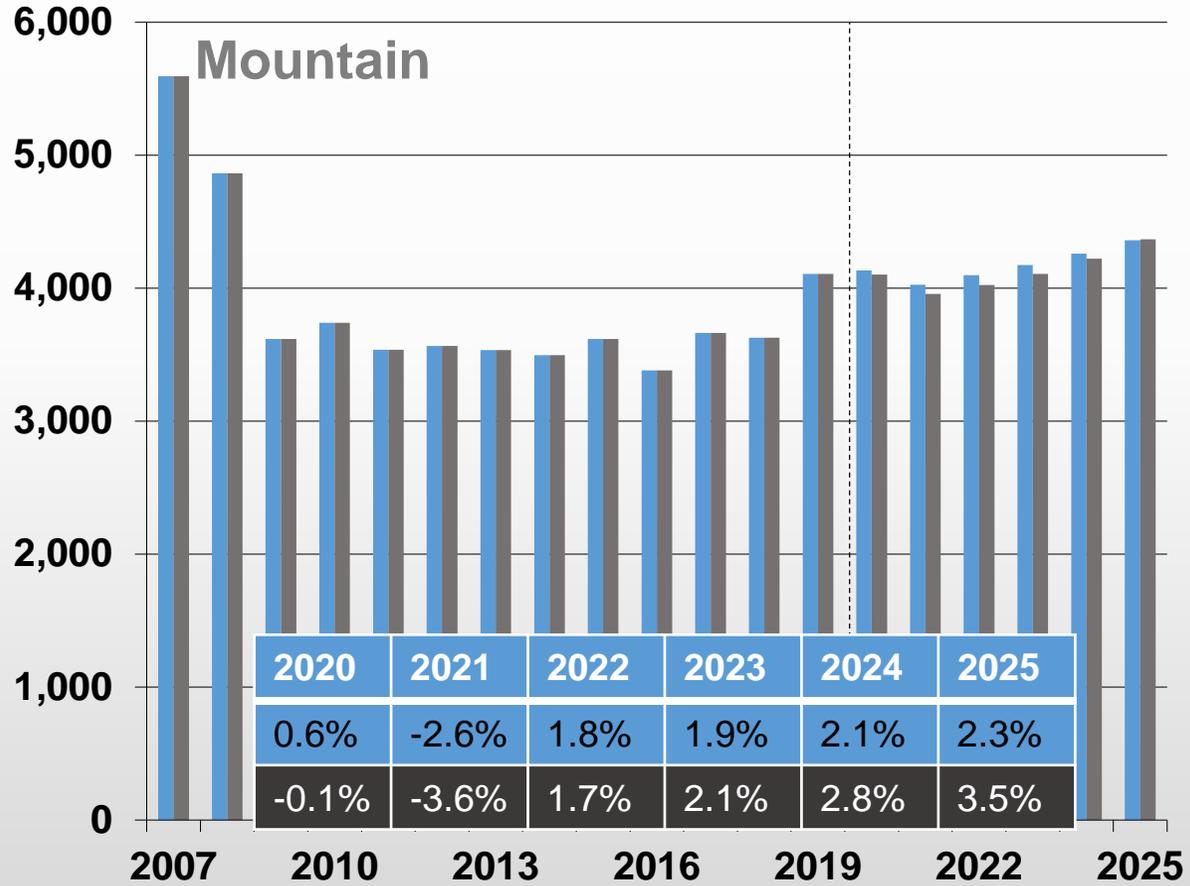
# States with High Sales Tax Exposure at Risk

Sales tax as a share of total tax collections



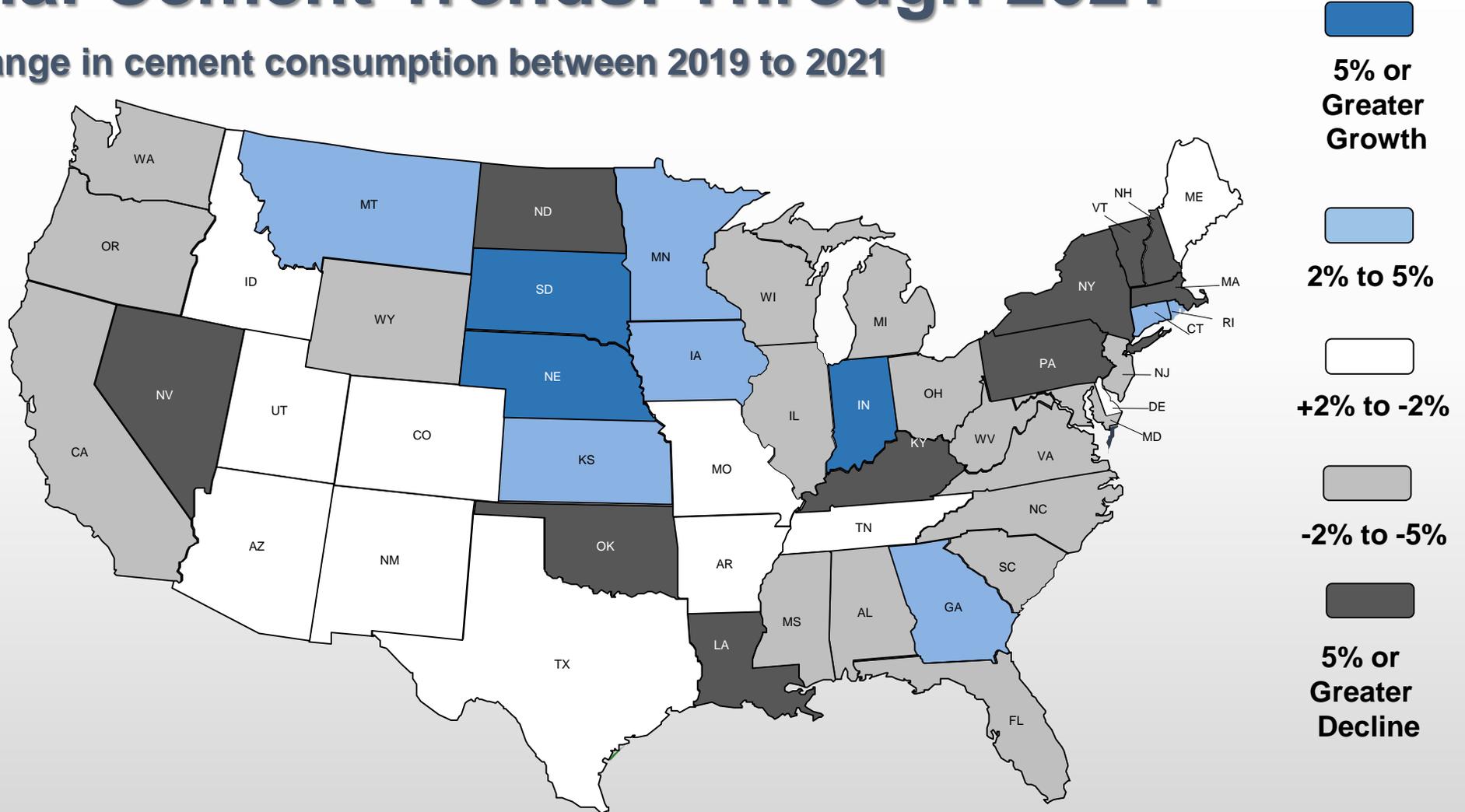
# Public Cement Consumption – Western U.S.

Metric Tons (000s)



# Regional Cement Trends: Through 2021

Based on change in cement consumption between 2019 to 2021



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