

The logo for PCA (Portland Cement Association) features the letters 'PCA' in a bold, white, sans-serif font. A white swoosh underline is positioned beneath the 'A', and a registered trademark symbol (®) is located to the right of the swoosh.

PCA®

Since 1916

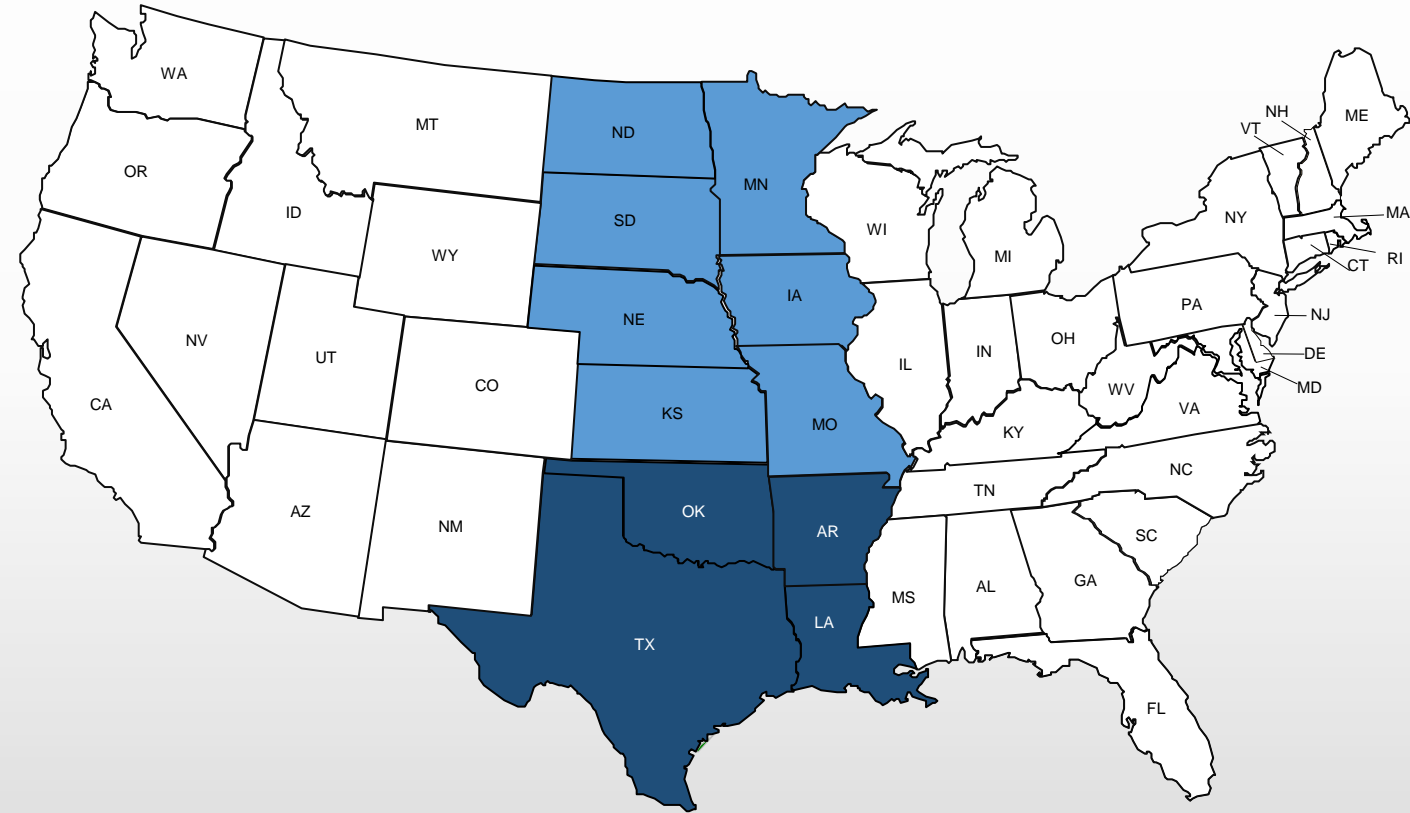
America's Cement Manufacturers™


Regional Briefing Central U.S.

Dave Zwicke, Sr. Director & Regional Economist

May 2022

Regional Focus

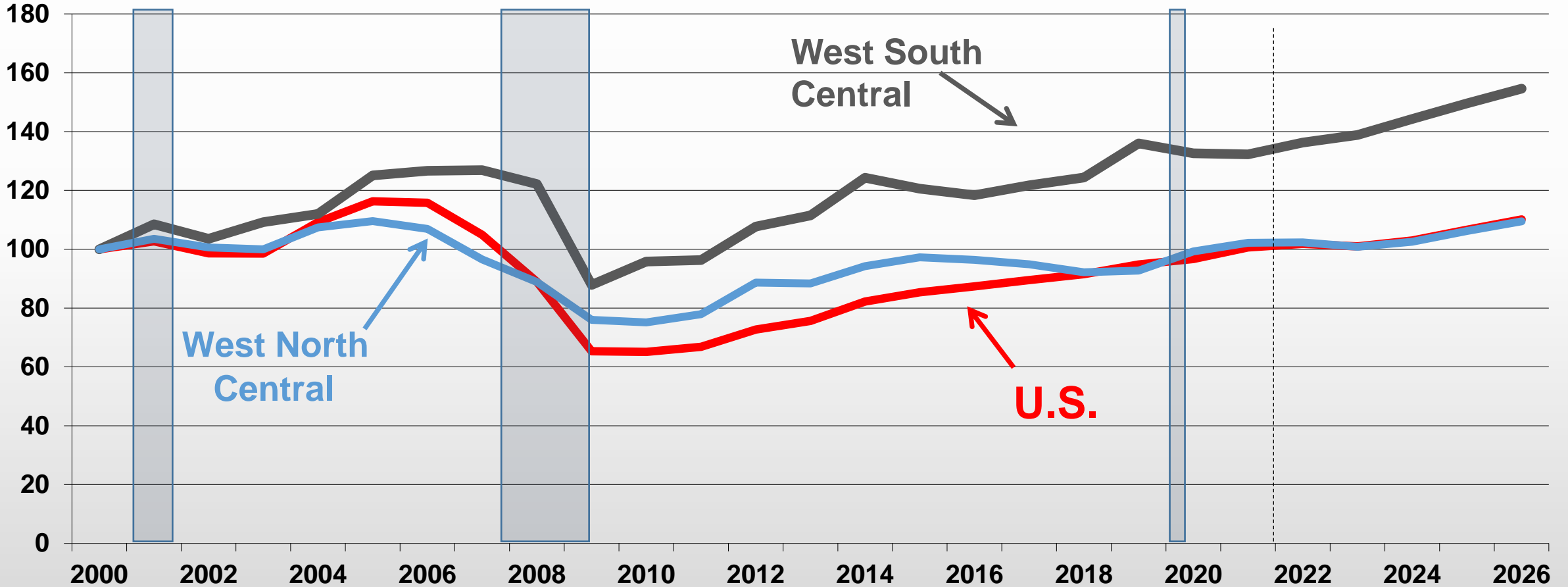



West South Central


West North Central

Total Cement Consumption

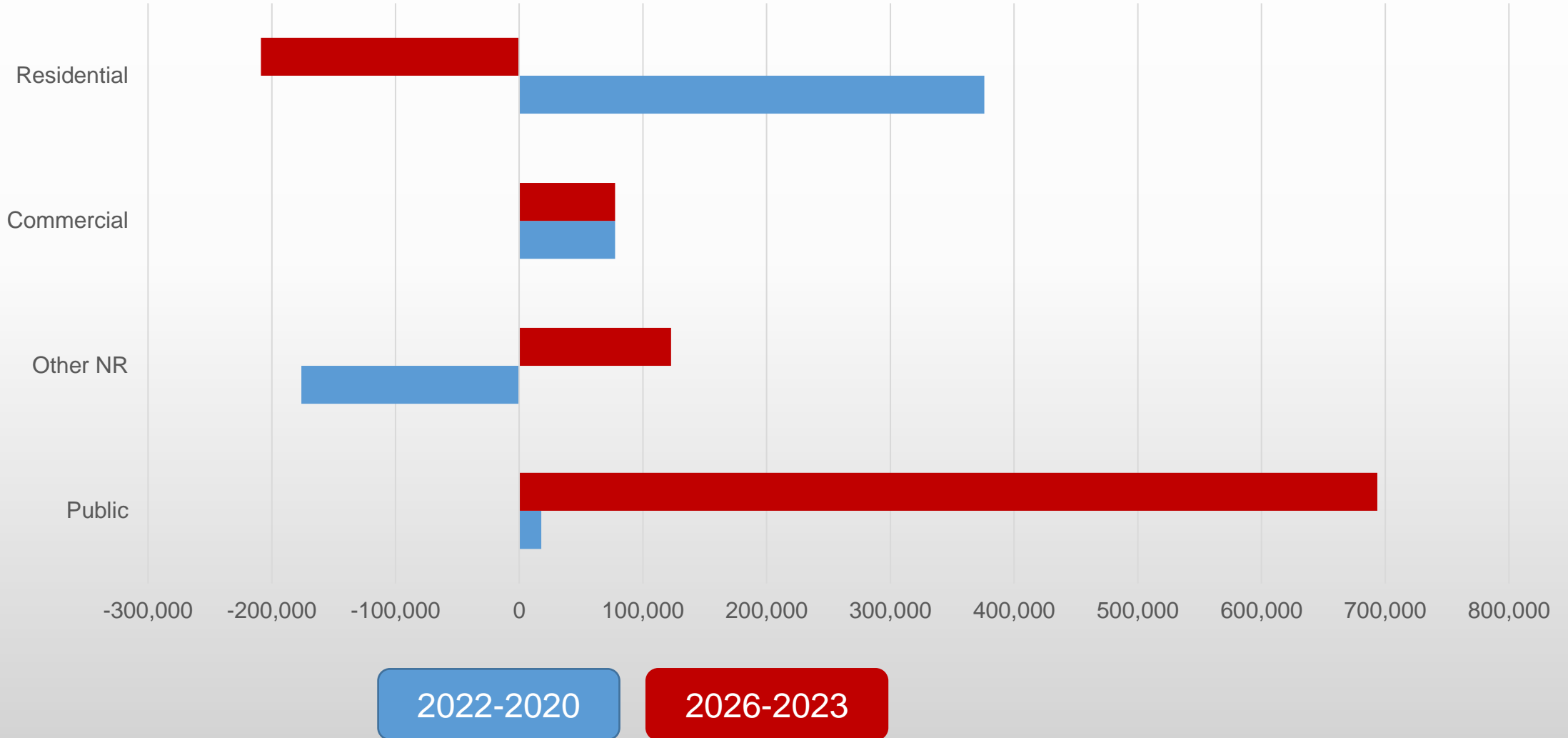
Index, 2000=100



Source: USGS, PCA

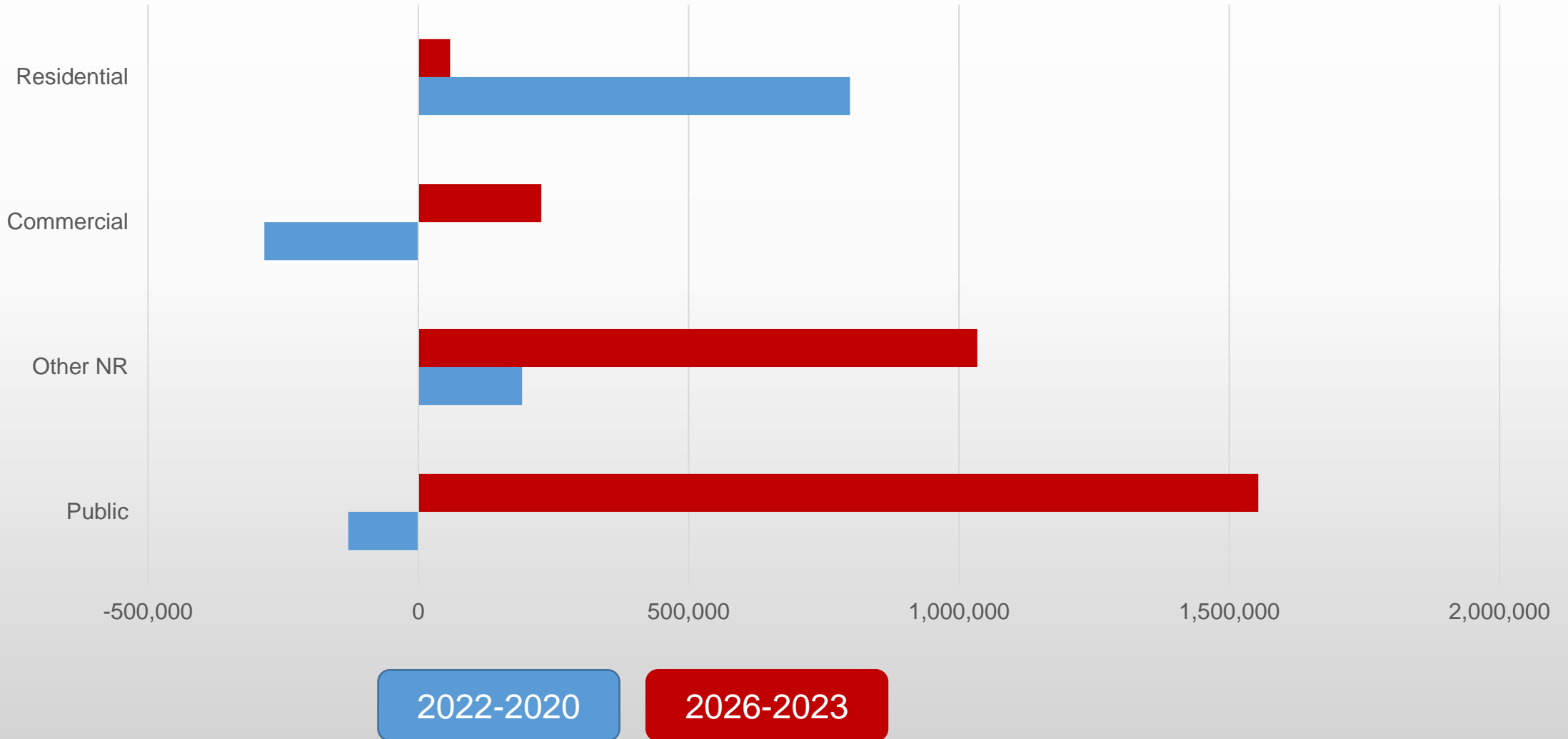
Composition of Cement Growth: West North Central

Metric Tons



Composition of Cement Growth: West South Central

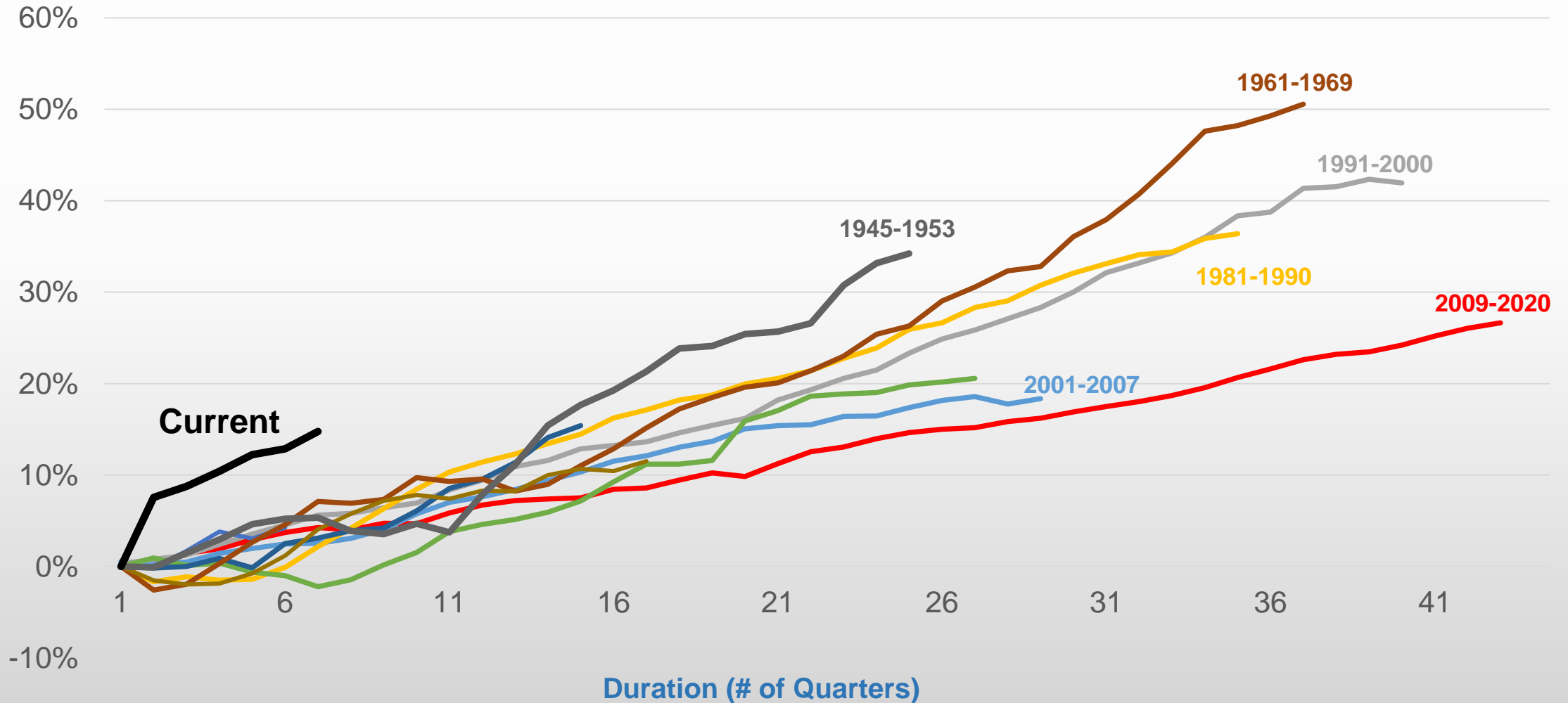
Metric Tons



Economic Outlook

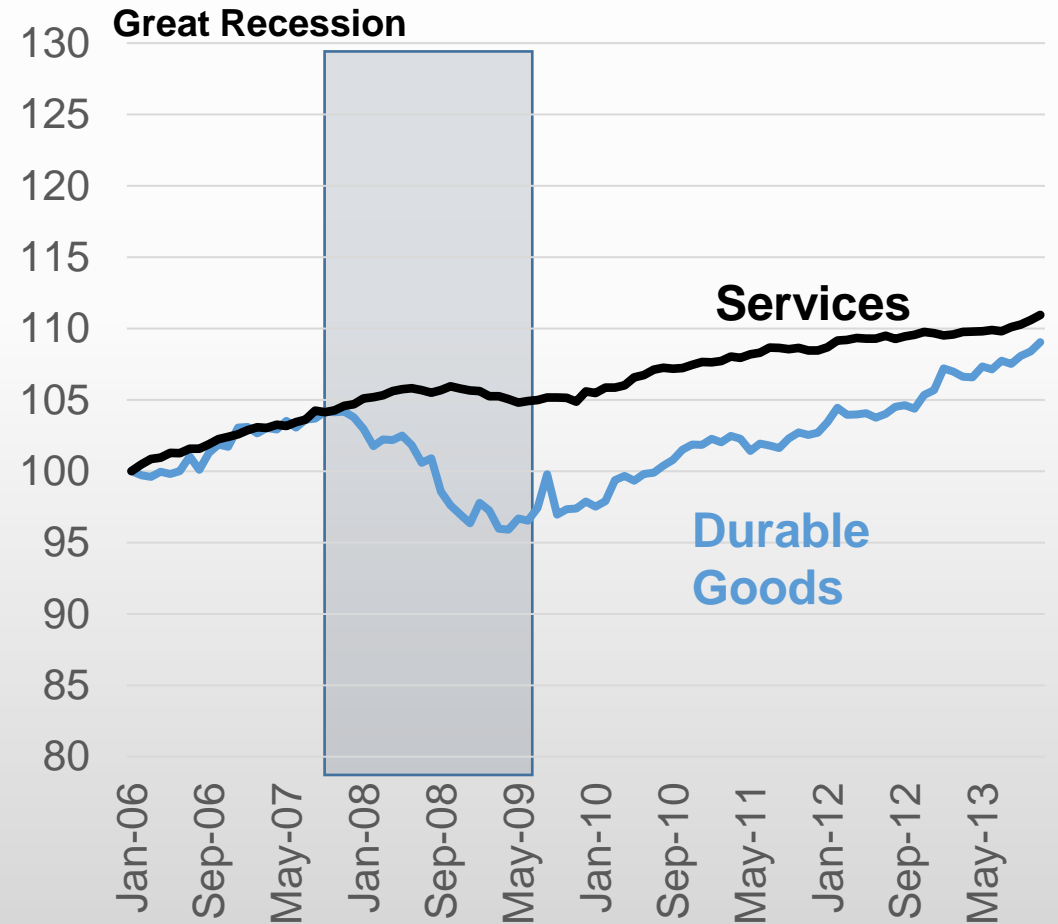
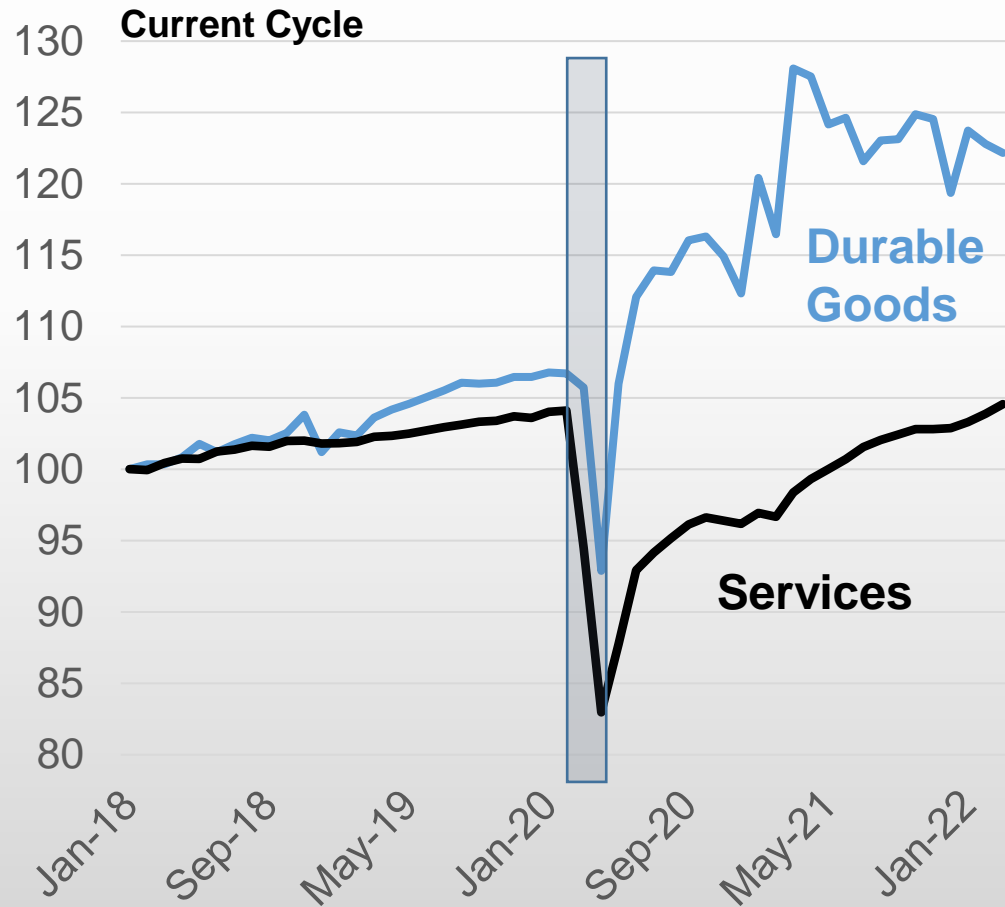
Strength & Duration of U.S. Recoveries

Real GDP Percentage Growth From Previous Trough



Durable goods spending far outpacing demand for services

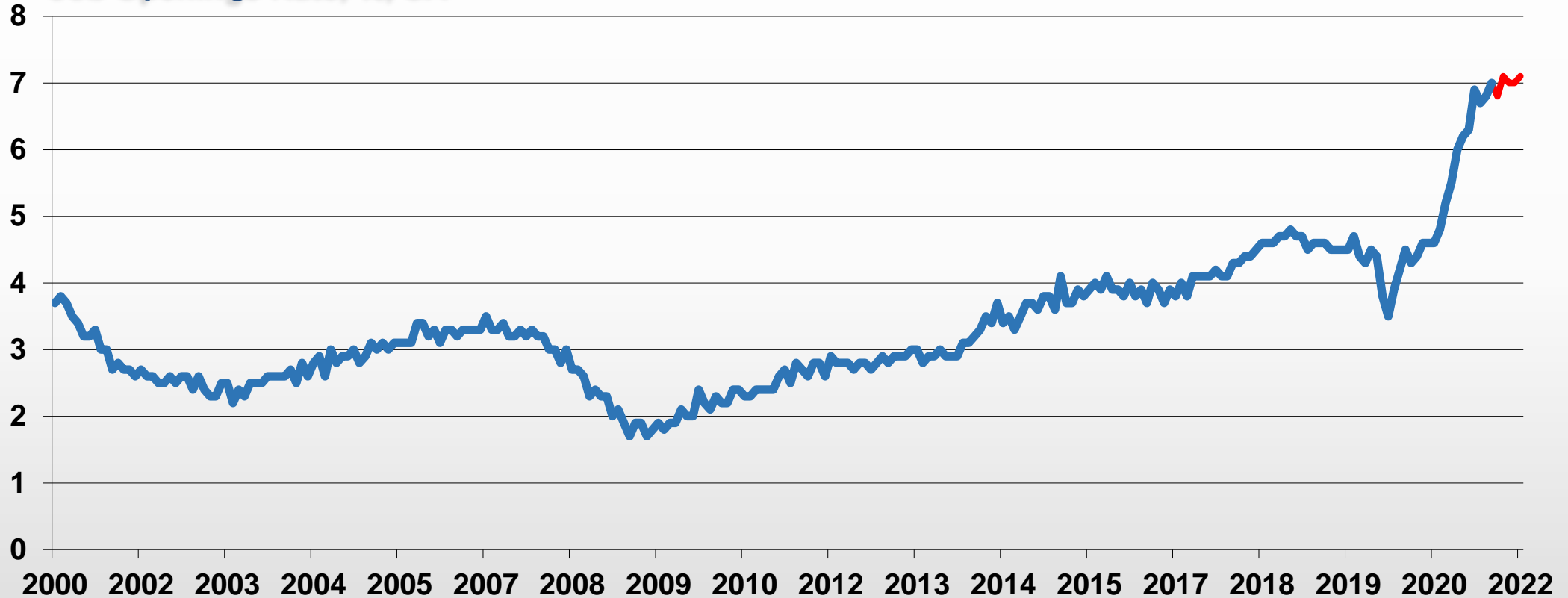
Real Personal Consumption Expenditure, Index



Source: BEA, PCA

Labor Markets Remain Tight

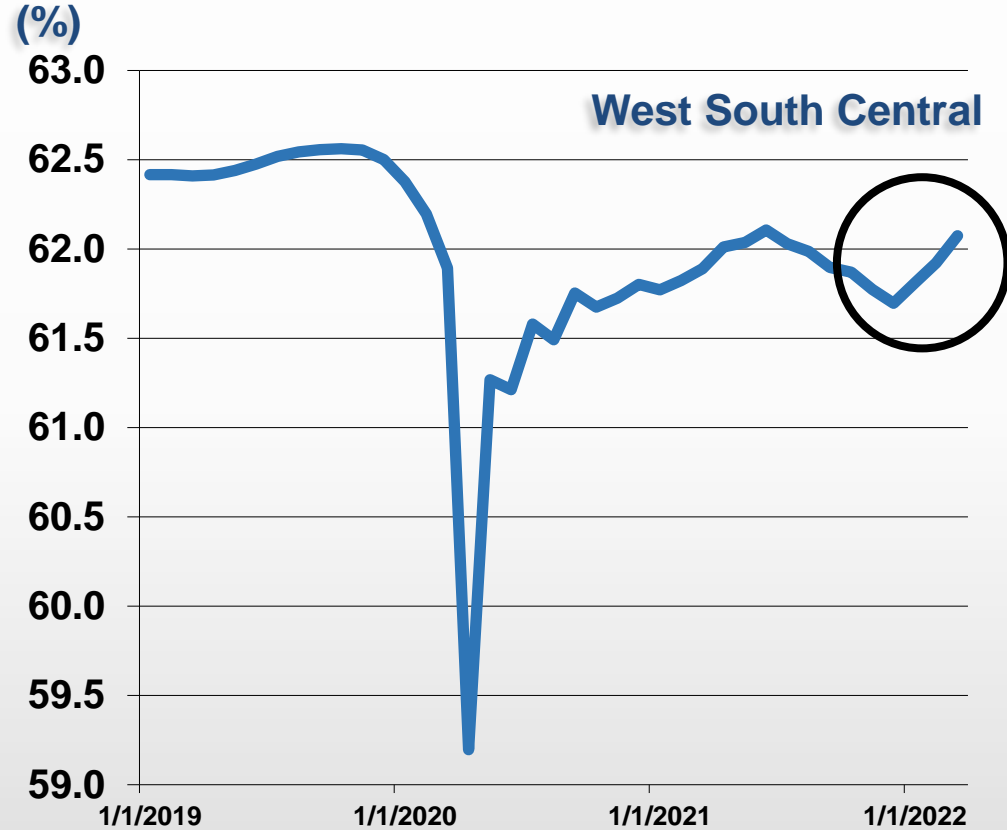
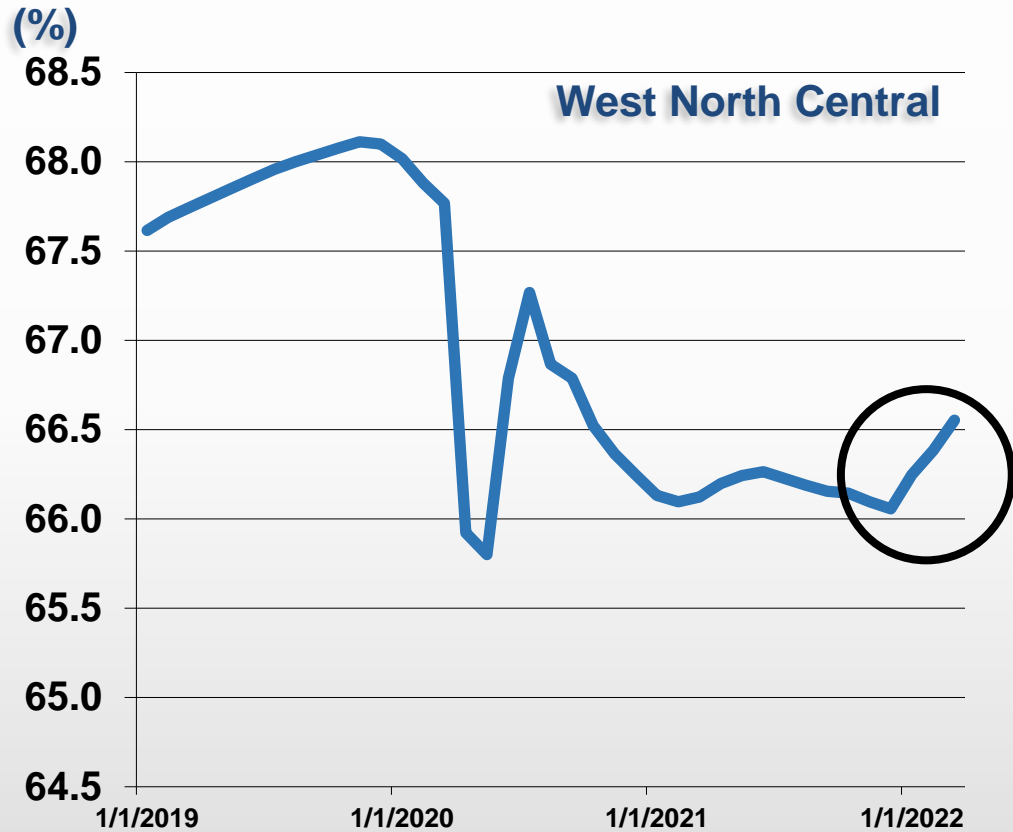
Job Openings Rate, %, SA



Source: BLS

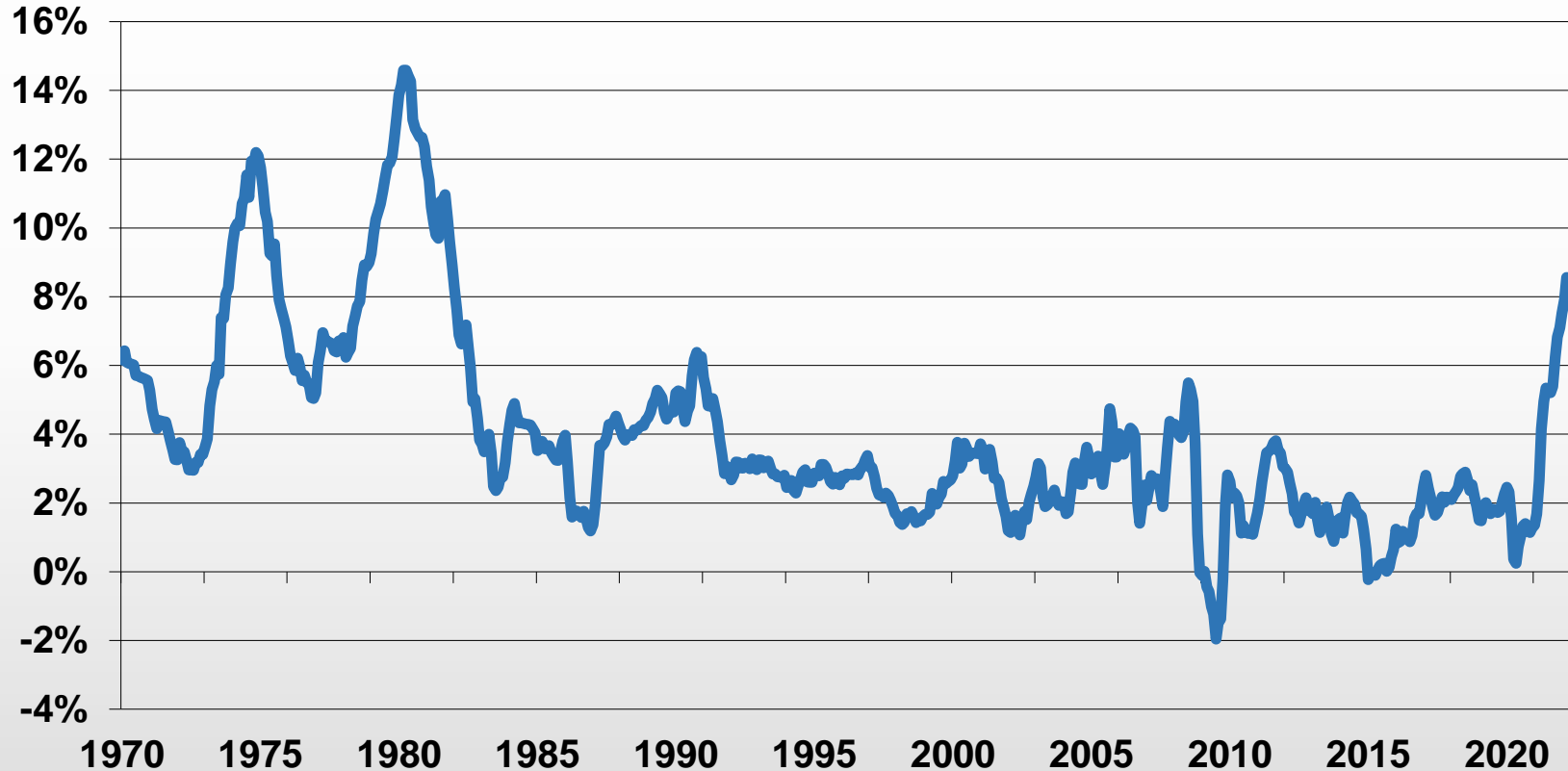
Workers are now re-entering the labor force

Labor Force Participation Rate



Inflation

Y-o-Y Change CPIU—Urban Consumer



Demand-Side and Supply-Side factors are resulting in 40 year high inflation rates.

- Wage inflation brought on by reduced labor participation, health concerns due to Covid, child care, heightened unemployment & Covid relief benefits, & retirements.
- Global supply chain disruptions.
- Logistic disruptions ship, truck & rail.

The longer these trends are in place, the more likely higher inflation becomes “embedded” and implies a longevity for higher than desired inflation rates.

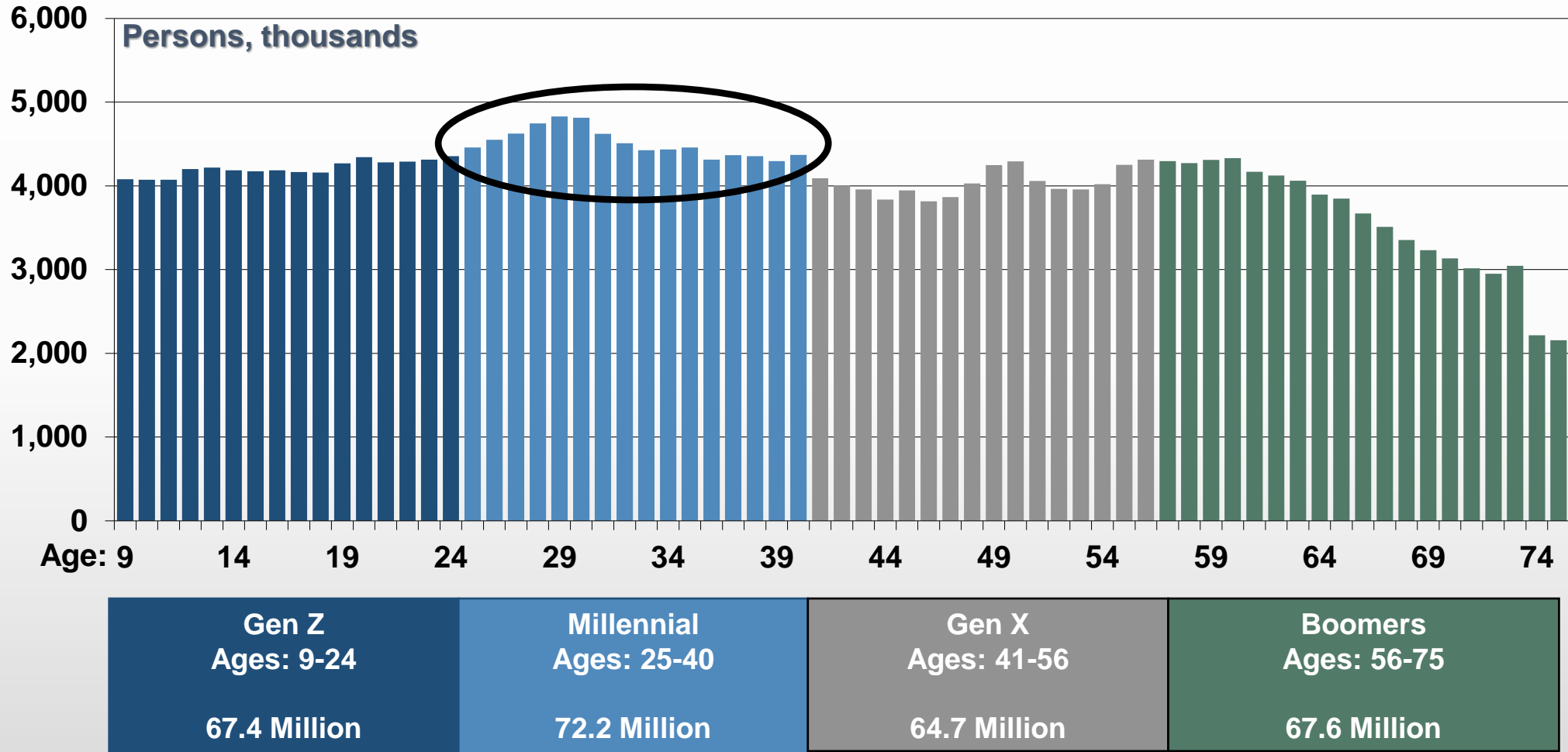
Residential Outlook

Housing Market Remains Very Tight

Months Supply of existing homes on market

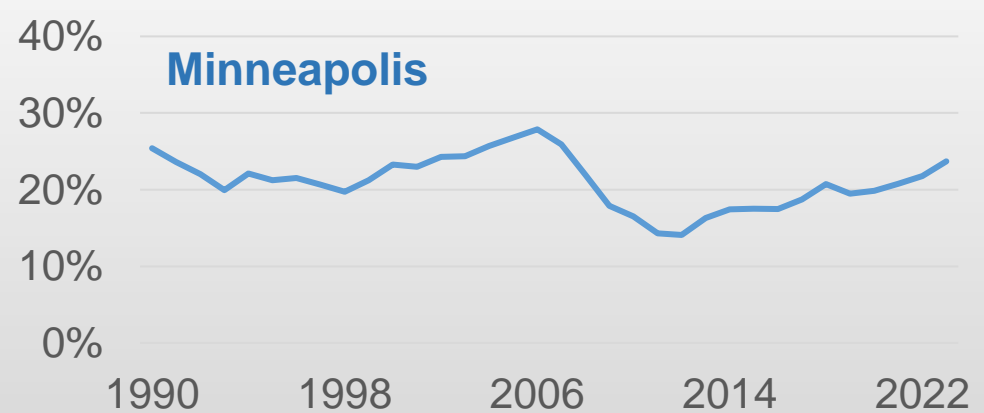
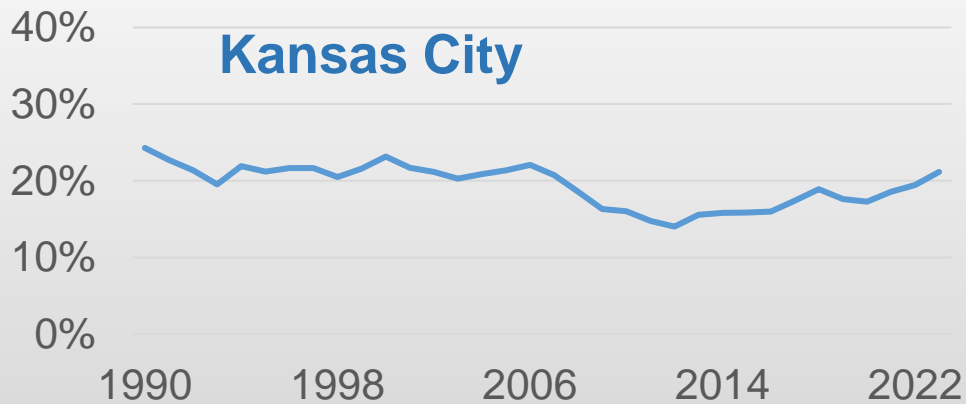
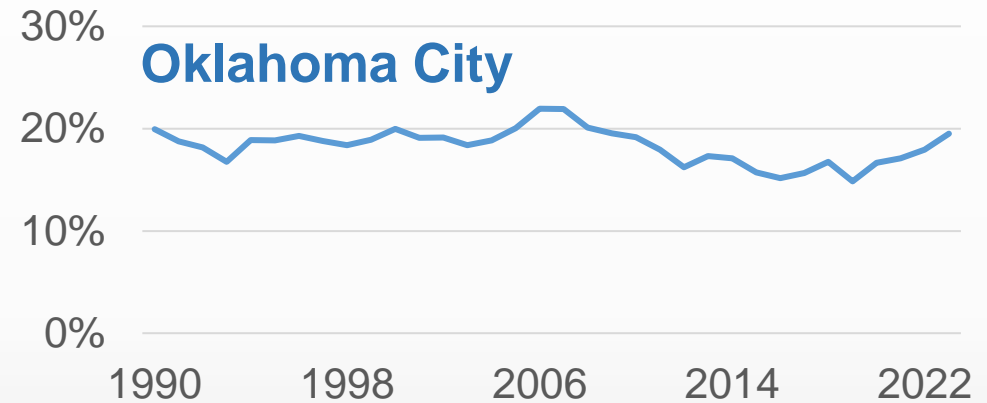
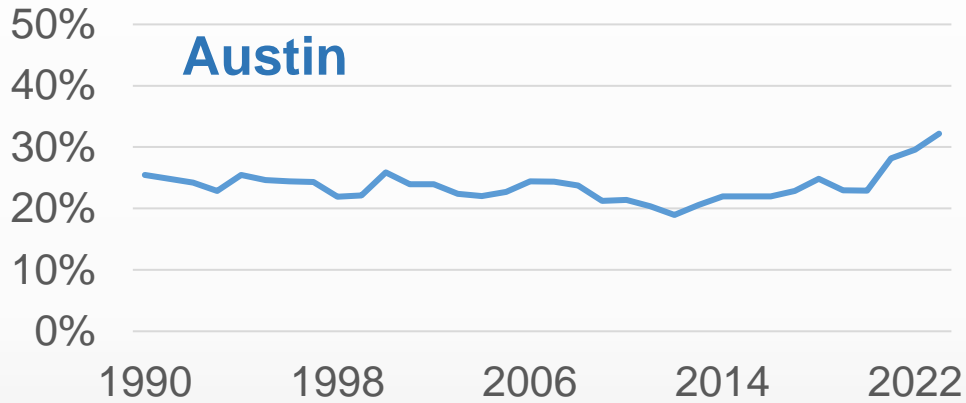


Demographics By Generation



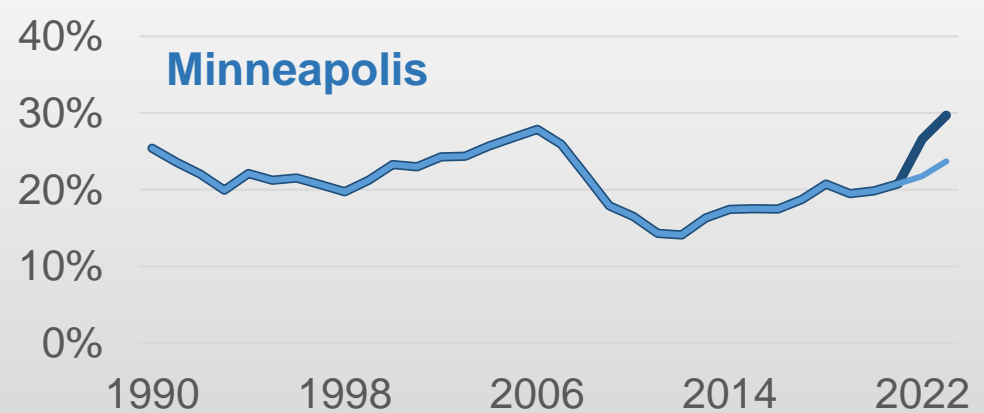
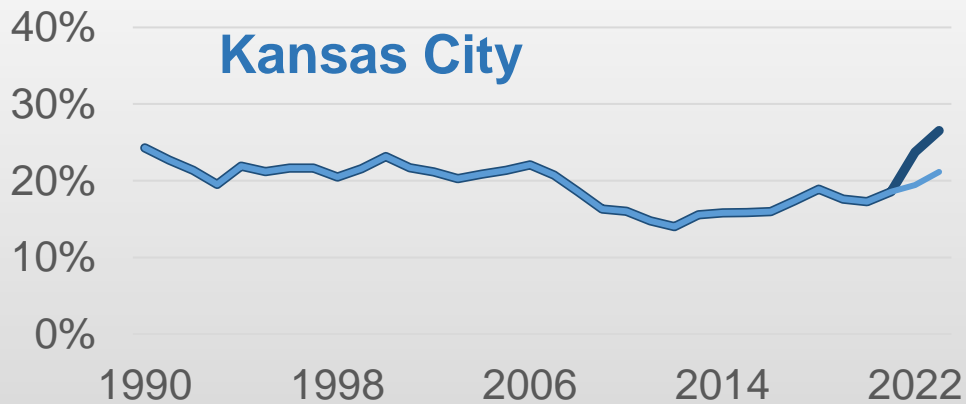
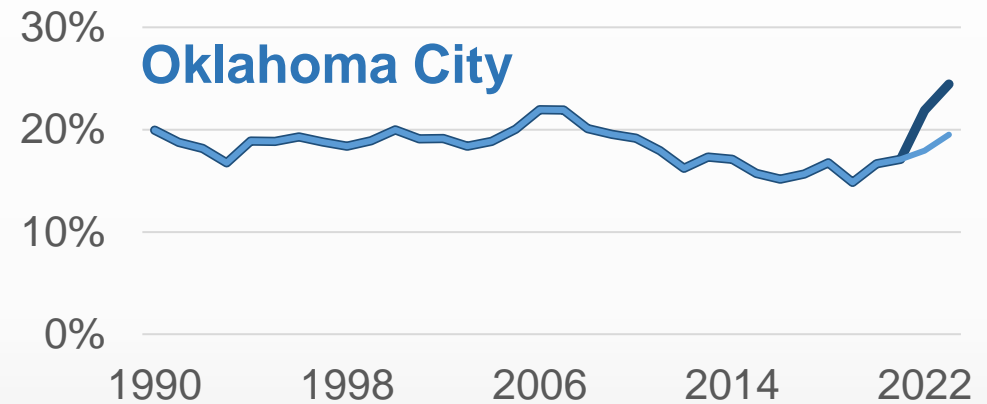
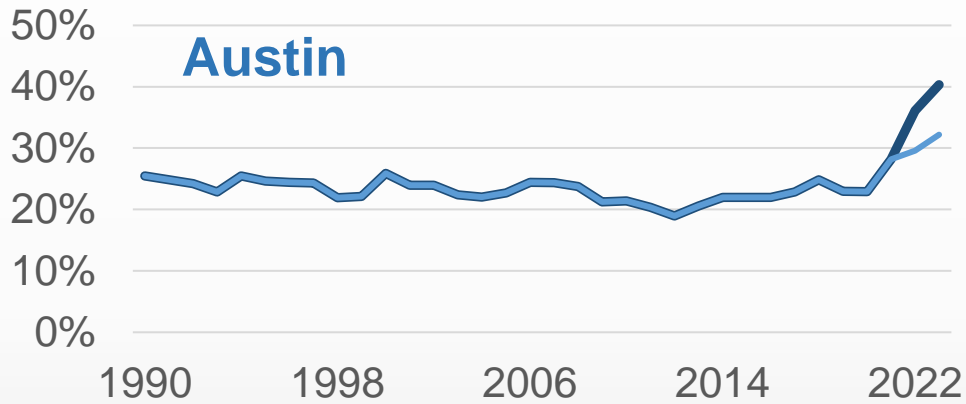
Substantial Deterioration in Affordability

Mortgage Principle and Interest Payment as Share of Median Household Income



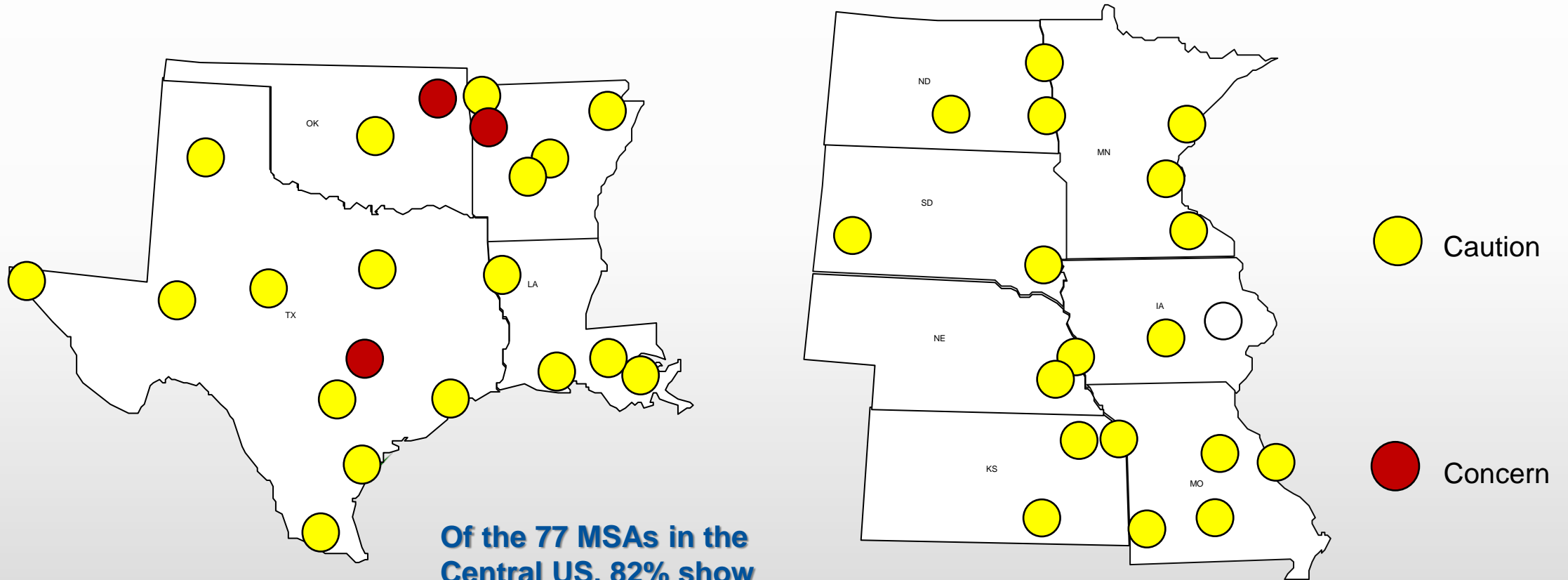
Substantial Deterioration in Affordability

Mortgage Principle and Interest Payment as Share of Median Household Income



Rising Mortgage Rates Impact on Affordability- 2022

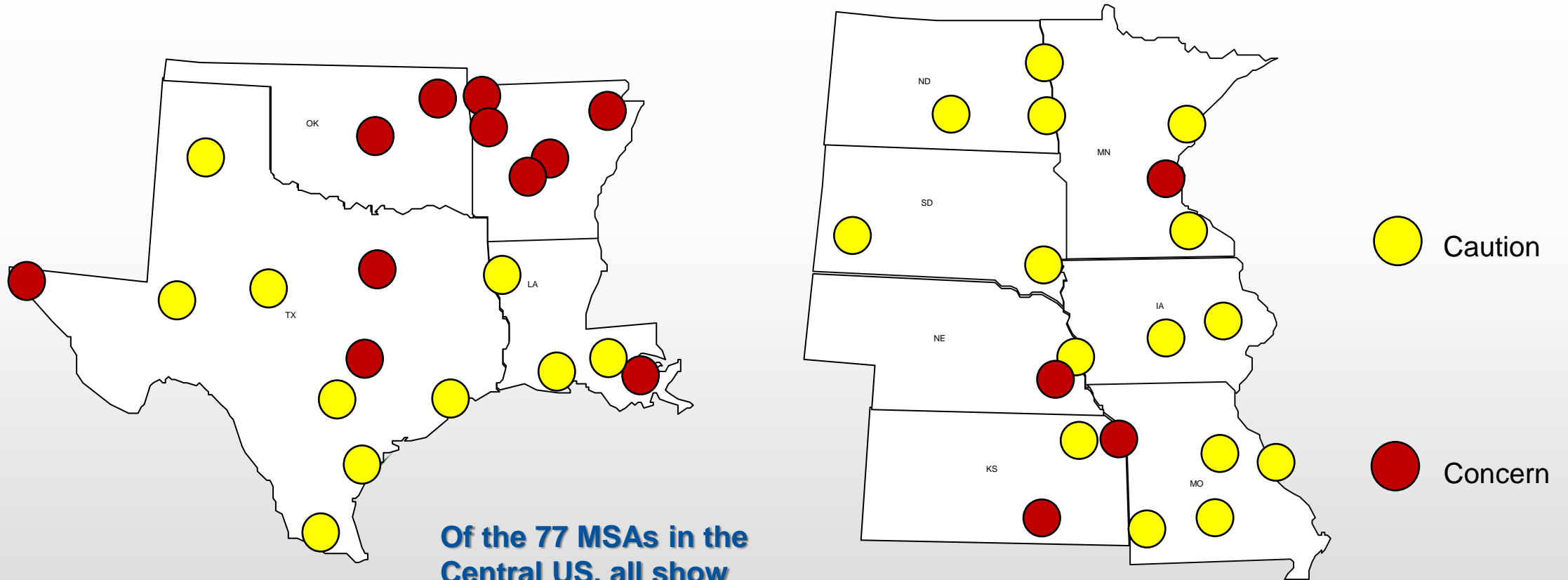
Regional MSA, Annual Mortgage Payment as share of Household Income, Mortgage Rate: 5%



Of the 77 MSAs in the Central US, 82% show 'caution' and 7% show 'concern'

Rising Mortgage Rates Impact on Affordability- 2023

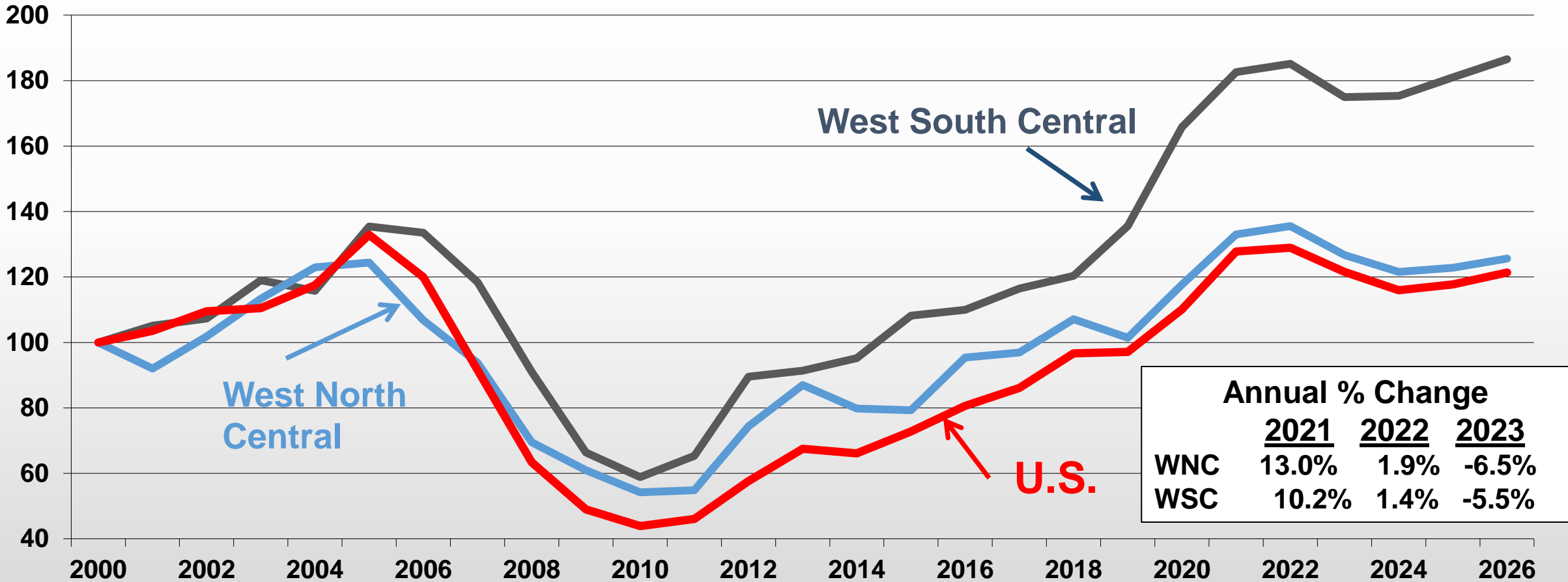
Regional MSA, Annual Mortgage Payment as share of Household Income, Mortgage Rate: 6%



Of the 77 MSAs in the Central US, all show 'caution' and 38% show 'concern'

Residential Cement Consumption – Central U.S.

Index, 2000=100

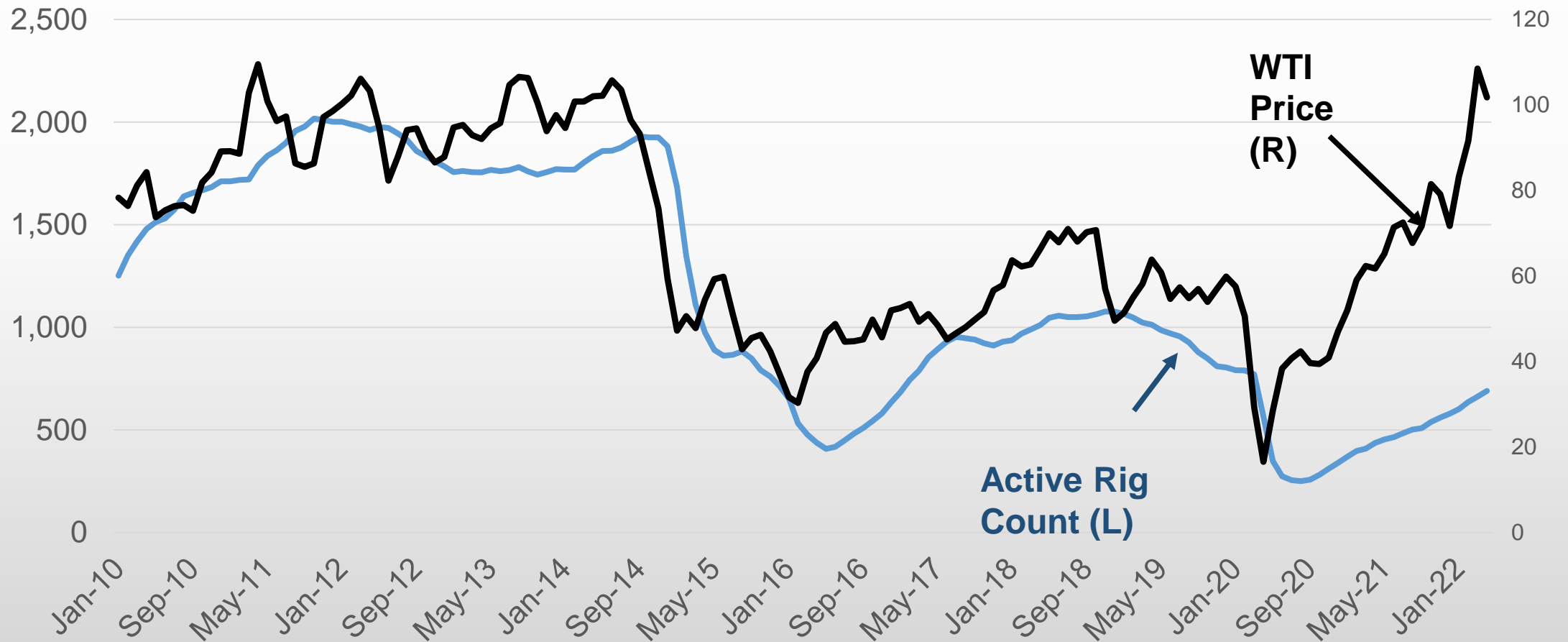


Source: USGS, PCA

Nonresidential Outlook

Oil & Gas Drilling Improving, Still Slower Than Past Cycles

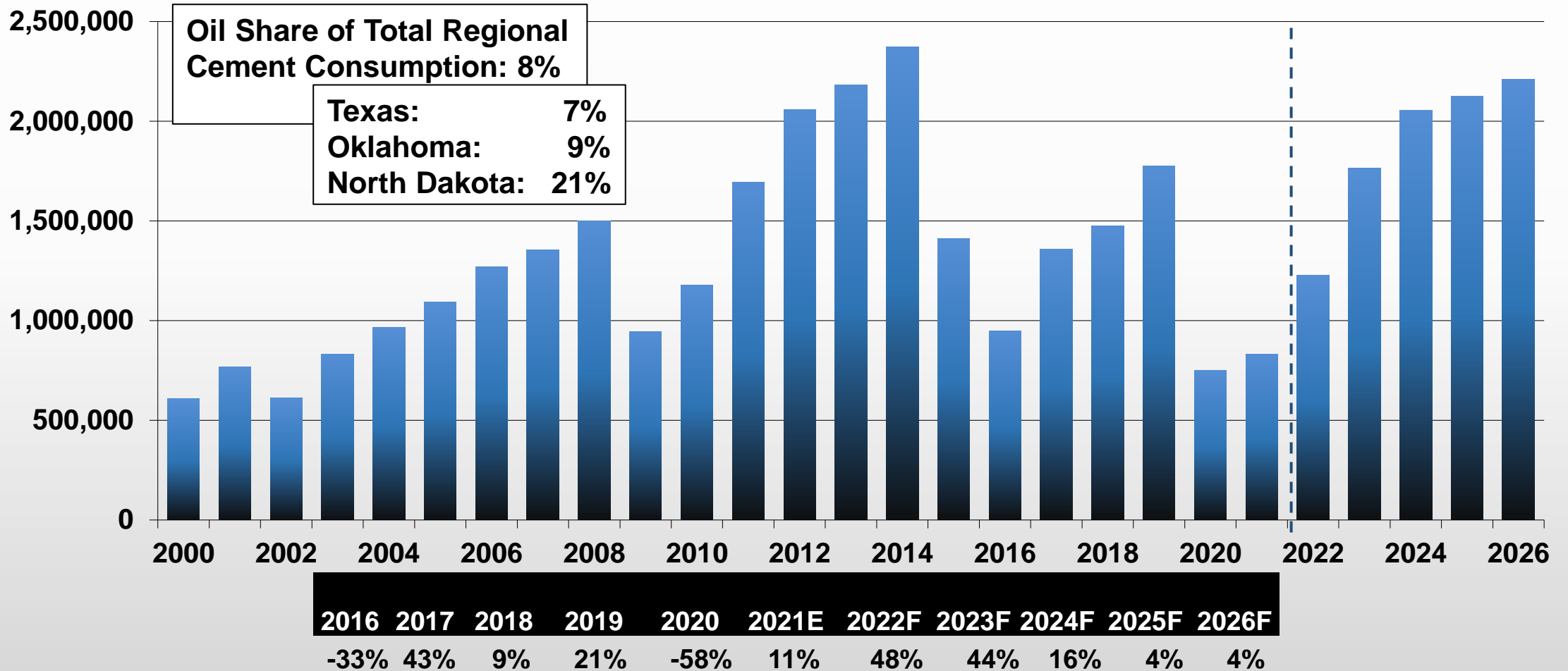
2Q Moving Average



Source: Baker Hughes Incorporated, EIA

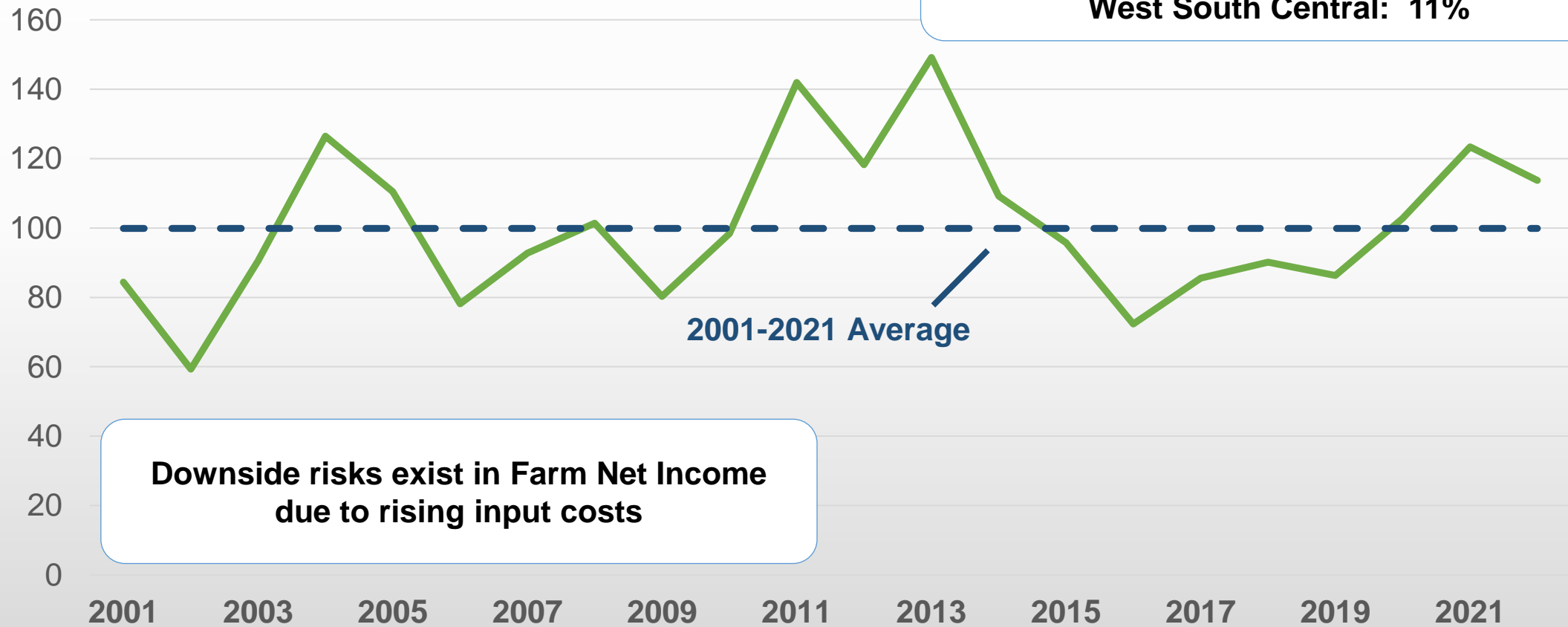
Oil Well Cement Consumption – Central U.S.

Metric Tons, Thousands



U.S. Net Farm Income

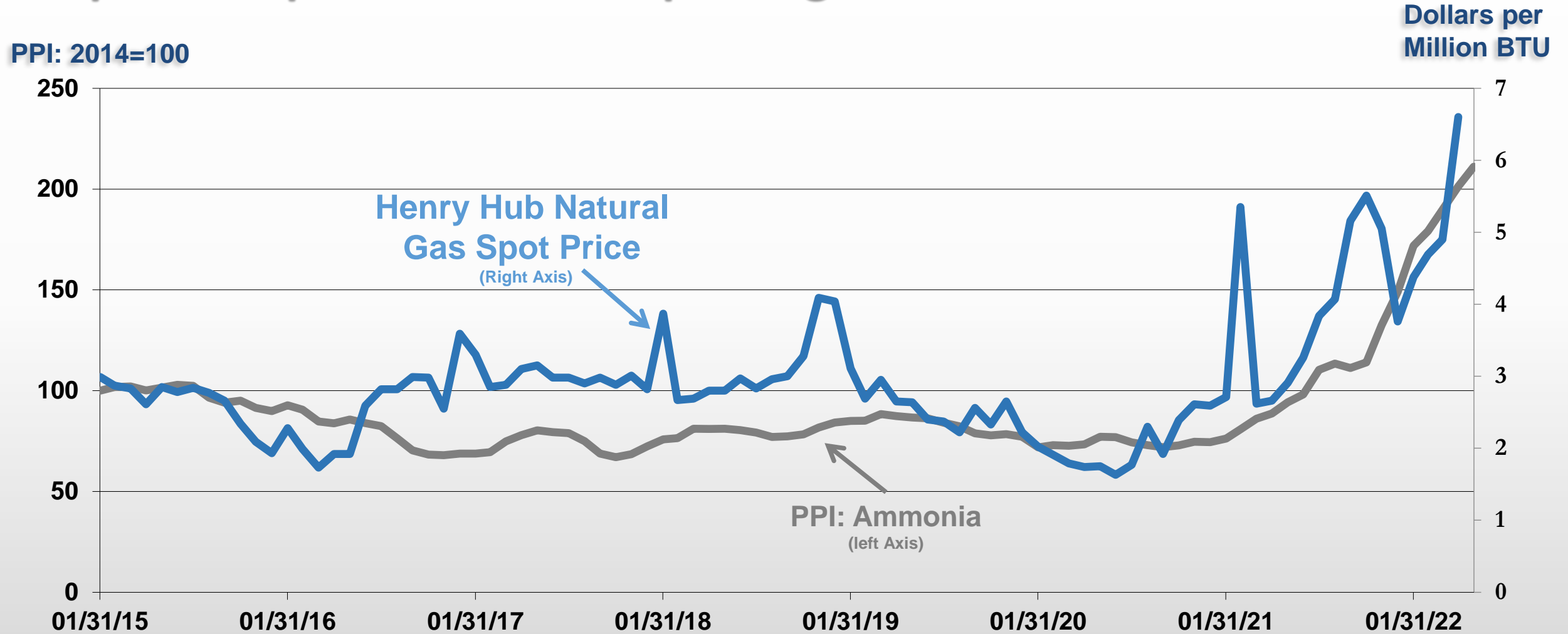
Real 2019 \$s, billions



Share of U.S. Gross Farm Receipts
West North Central: 29%
West South Central: 11%

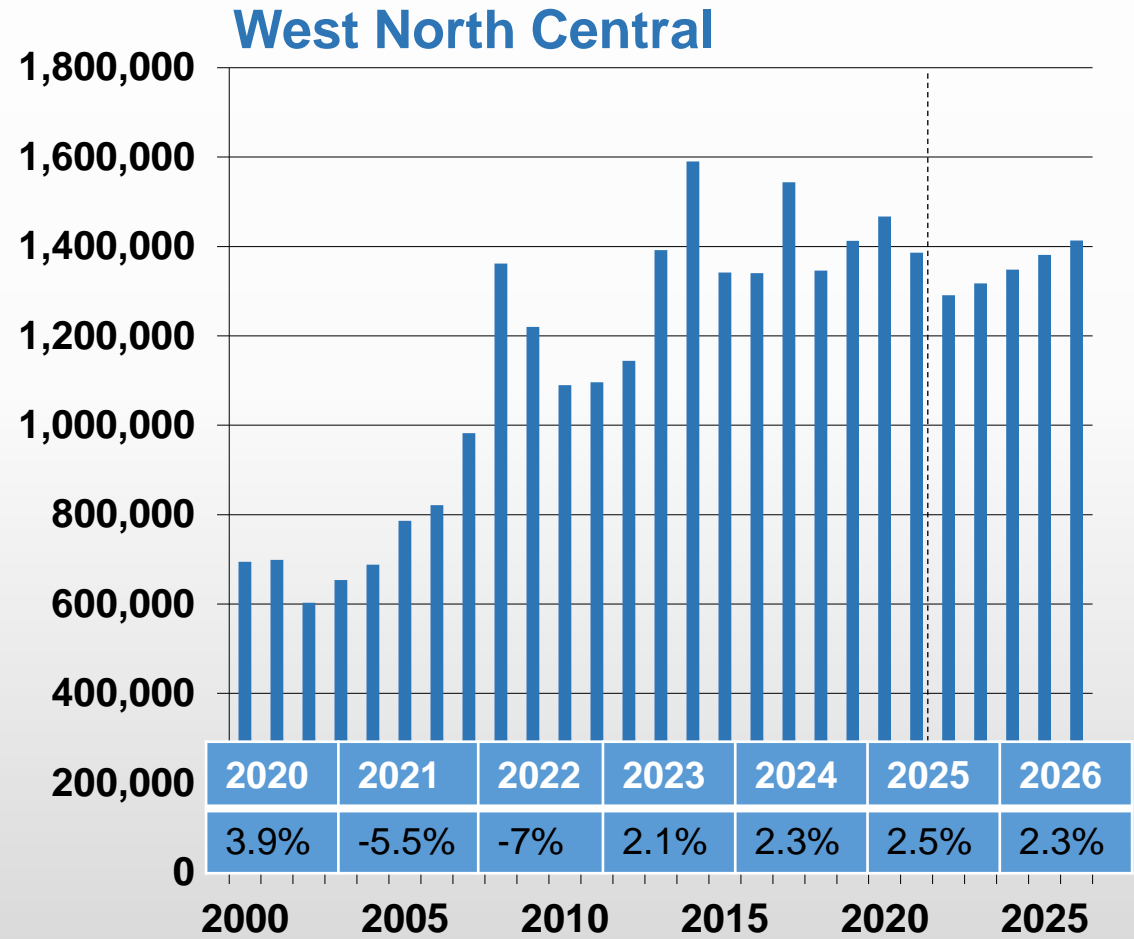
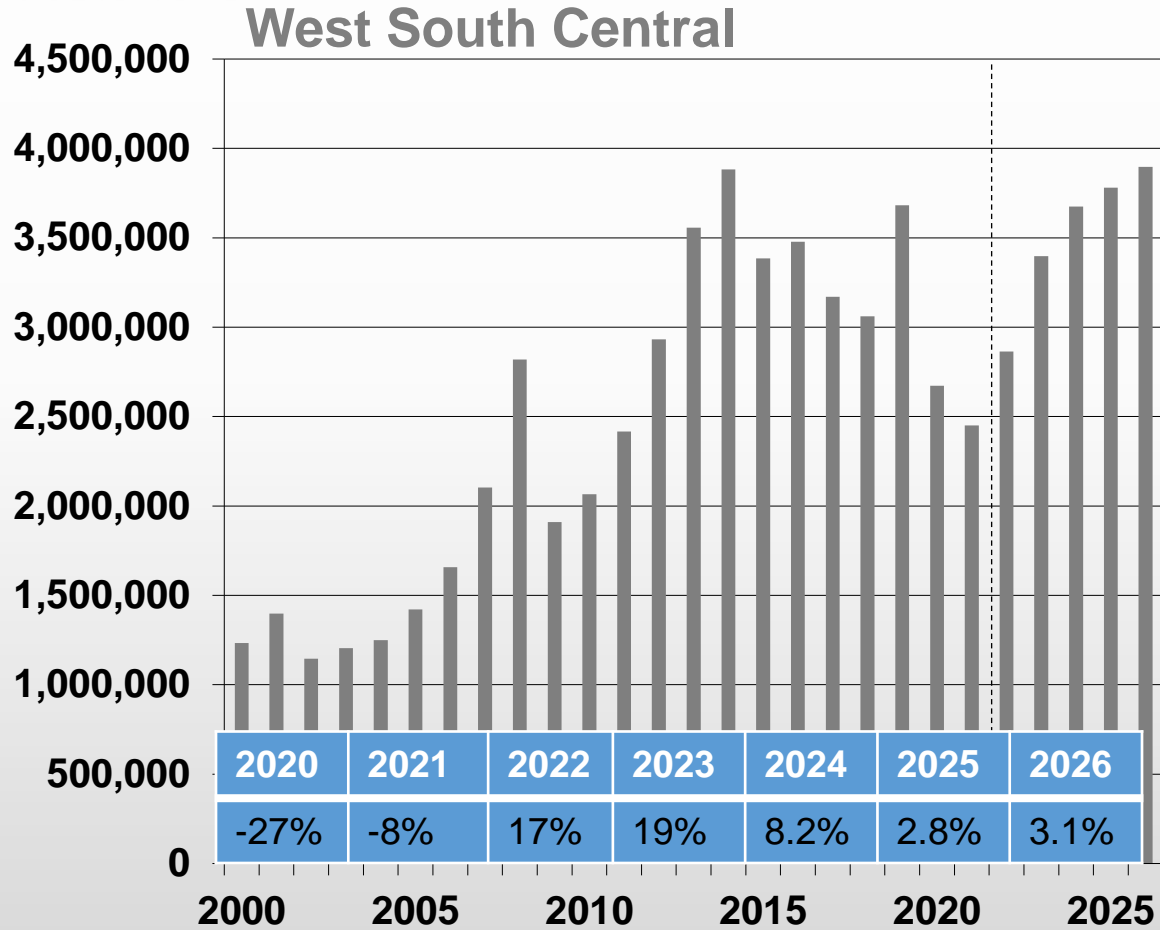
Downside risks exist in Farm Net Income due to rising input costs

Input cost pressures are impacting fertilizer cost



Non-Commercial Cement Consumption – Central U.S.

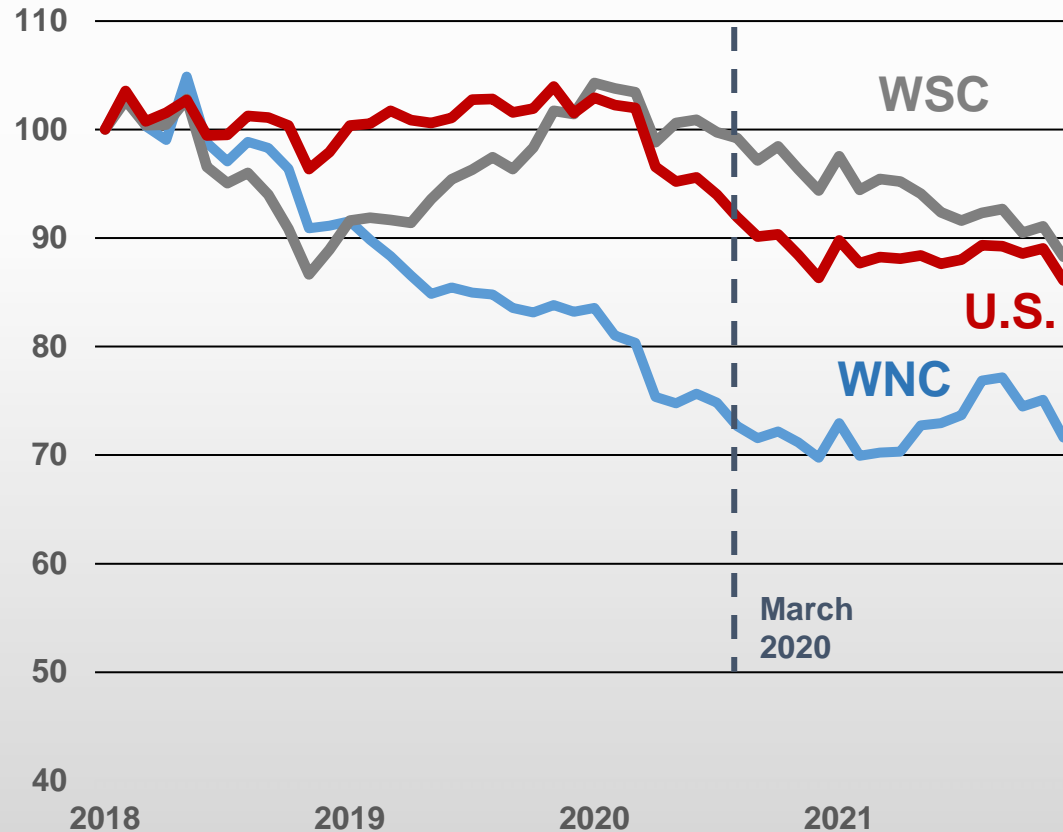
Metric Tons



Commercial Sector Construction Spend

Put-In-Place Construction

January 2018=100



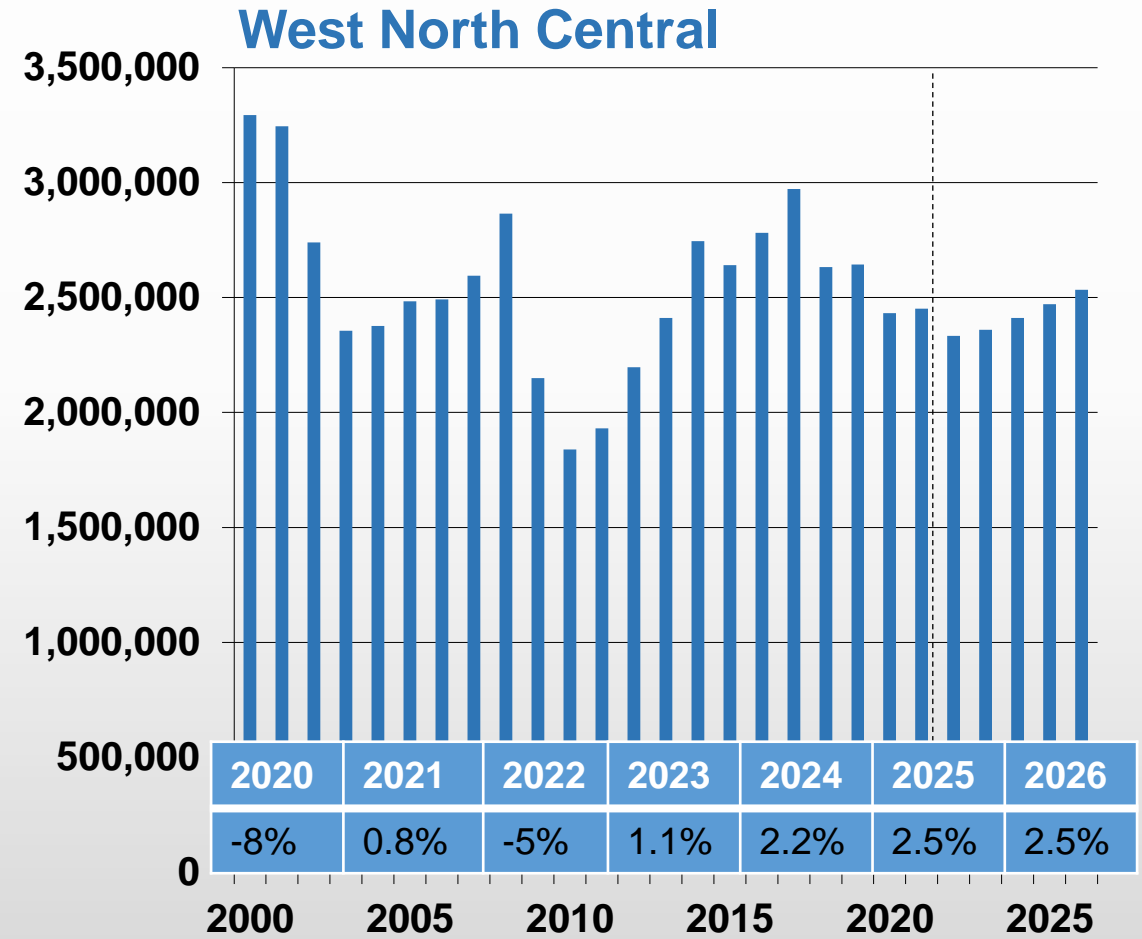
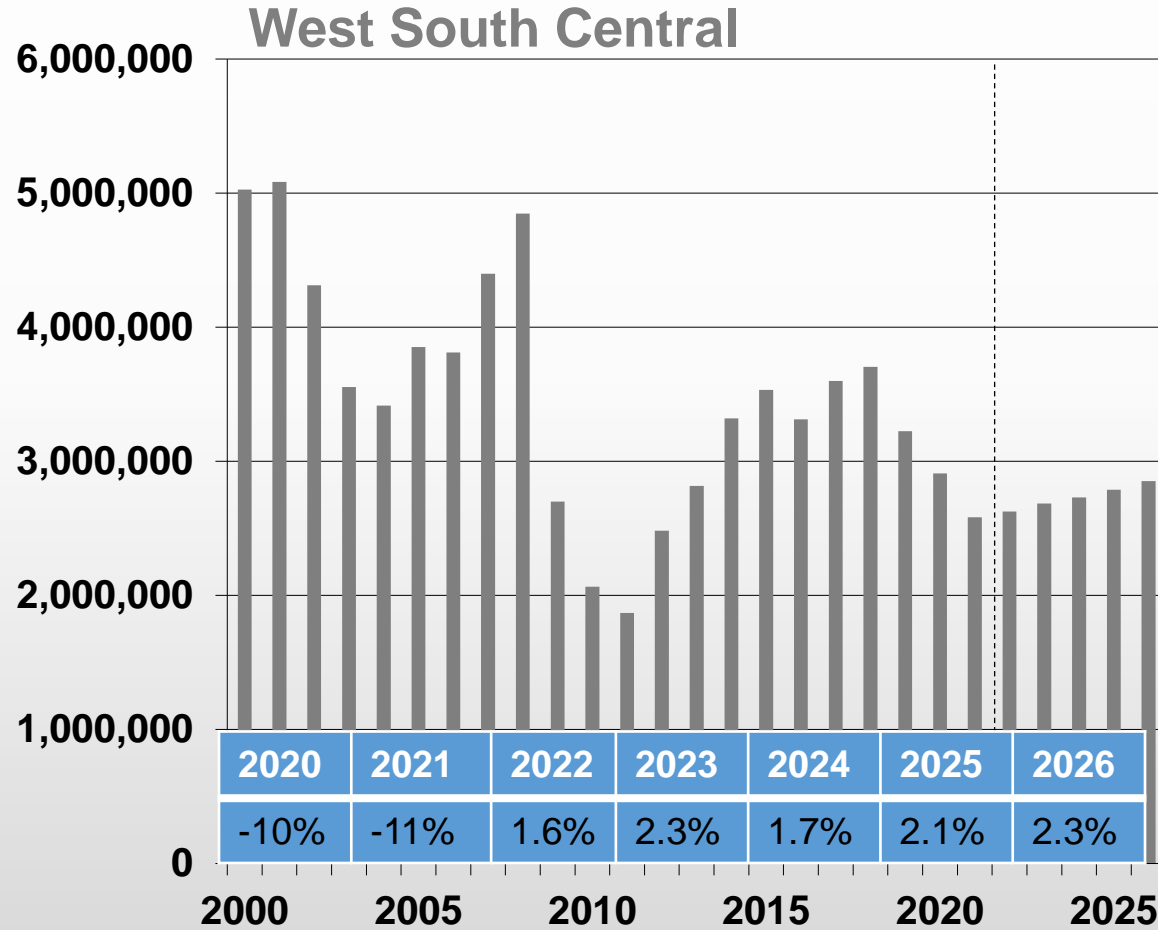
Central Region (WNC+WSC)

Nonresidential Construction Spend

<u>Category</u>	<u>2021</u>	<u>Trend</u>
Total NR	-5.4%	--
Amusement	-14.8%	--
Commercial/Retail	6.4%	↑
Education	-11.7%	--
Hospitals	-4.6%	↓
Industrial	18.6%	--
Lodging	-40.8%	↑
Office	-18.7%	--
Utilities	-21.6%	↓

Commercial Cement Consumption – Central U.S.

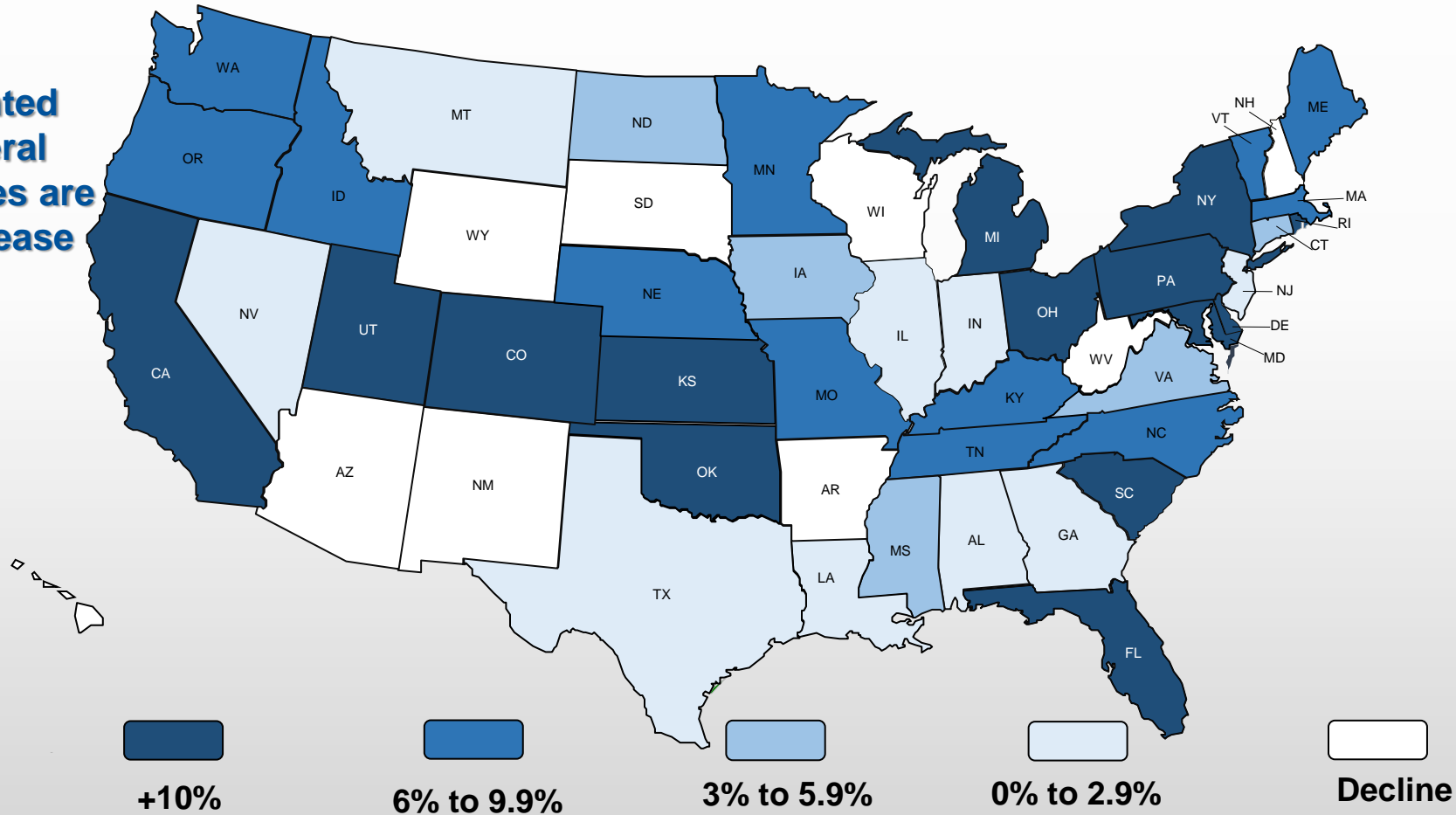
Metric Tons



Public Outlook

General Fund Percentage Expenditure Change – FY2022

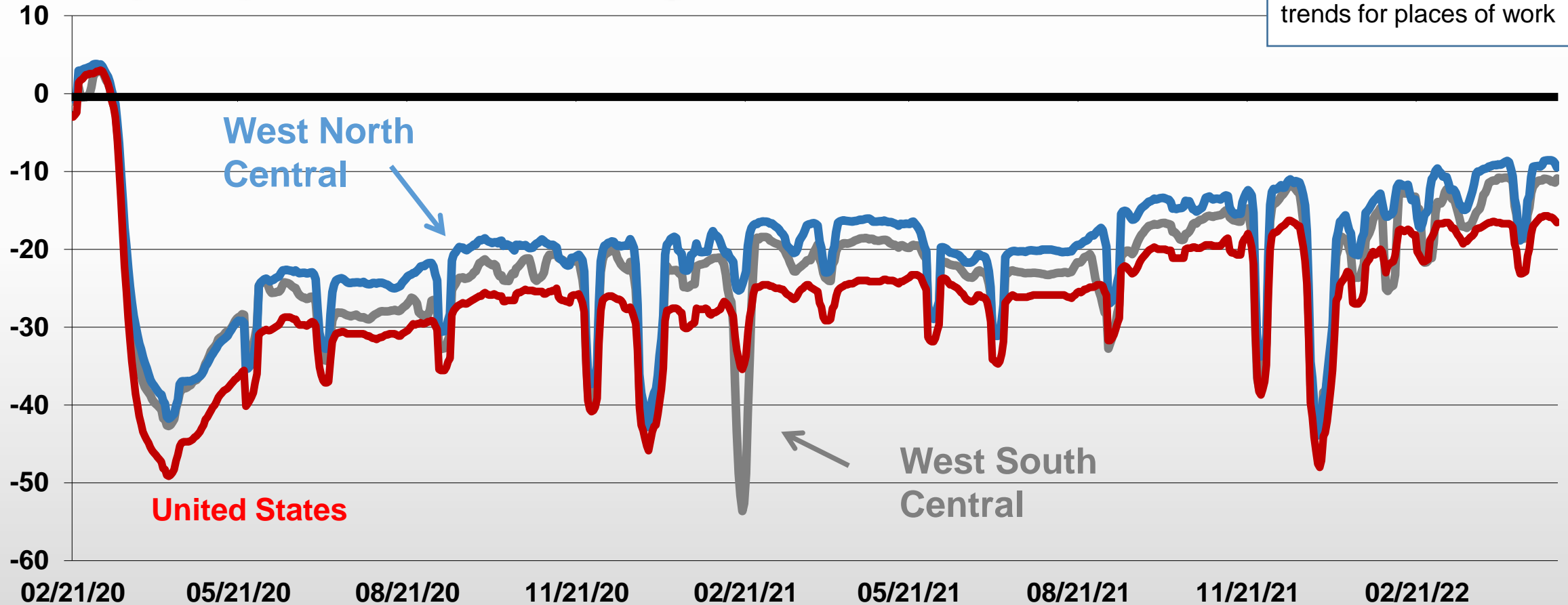
On a state weighted basis, 2022 general fund expenditures are expected to increase 9.3%.



Employees returning to Work

Percentage change from baseline visits—Workplace

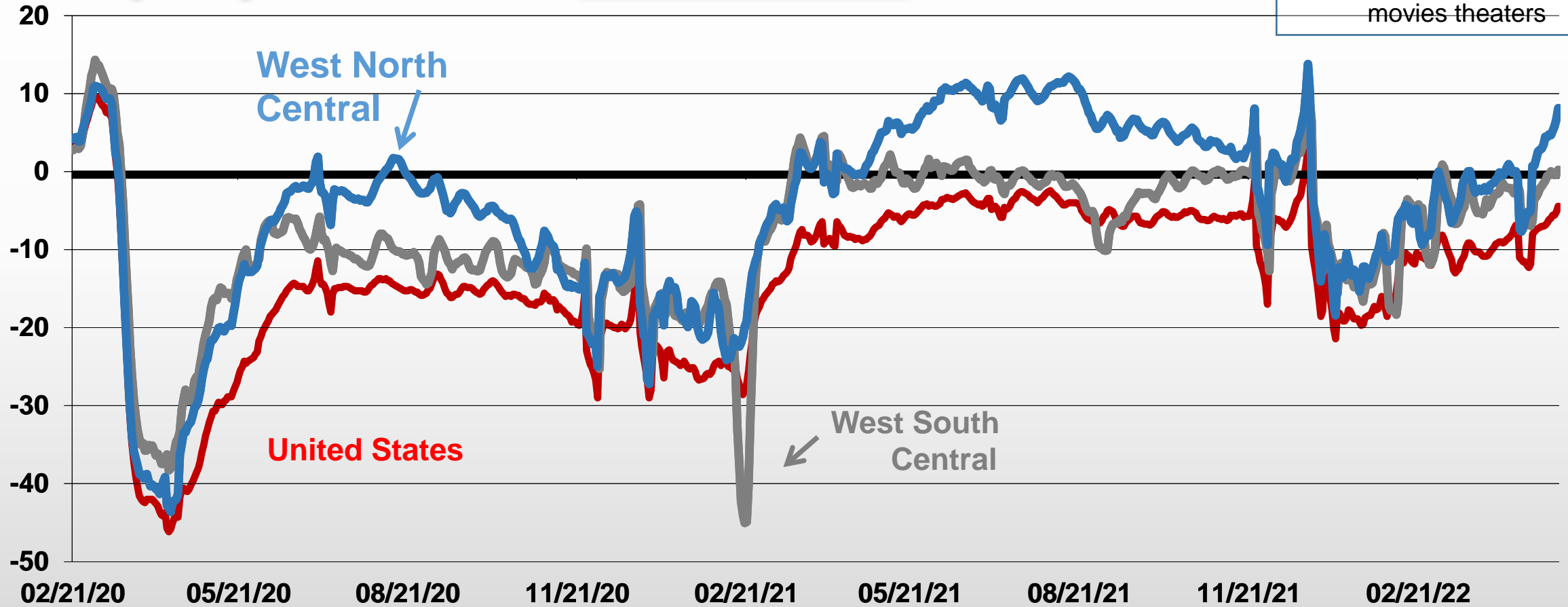
Workplaces: Mobility trends for places of work



Consumers Showing Apprehension

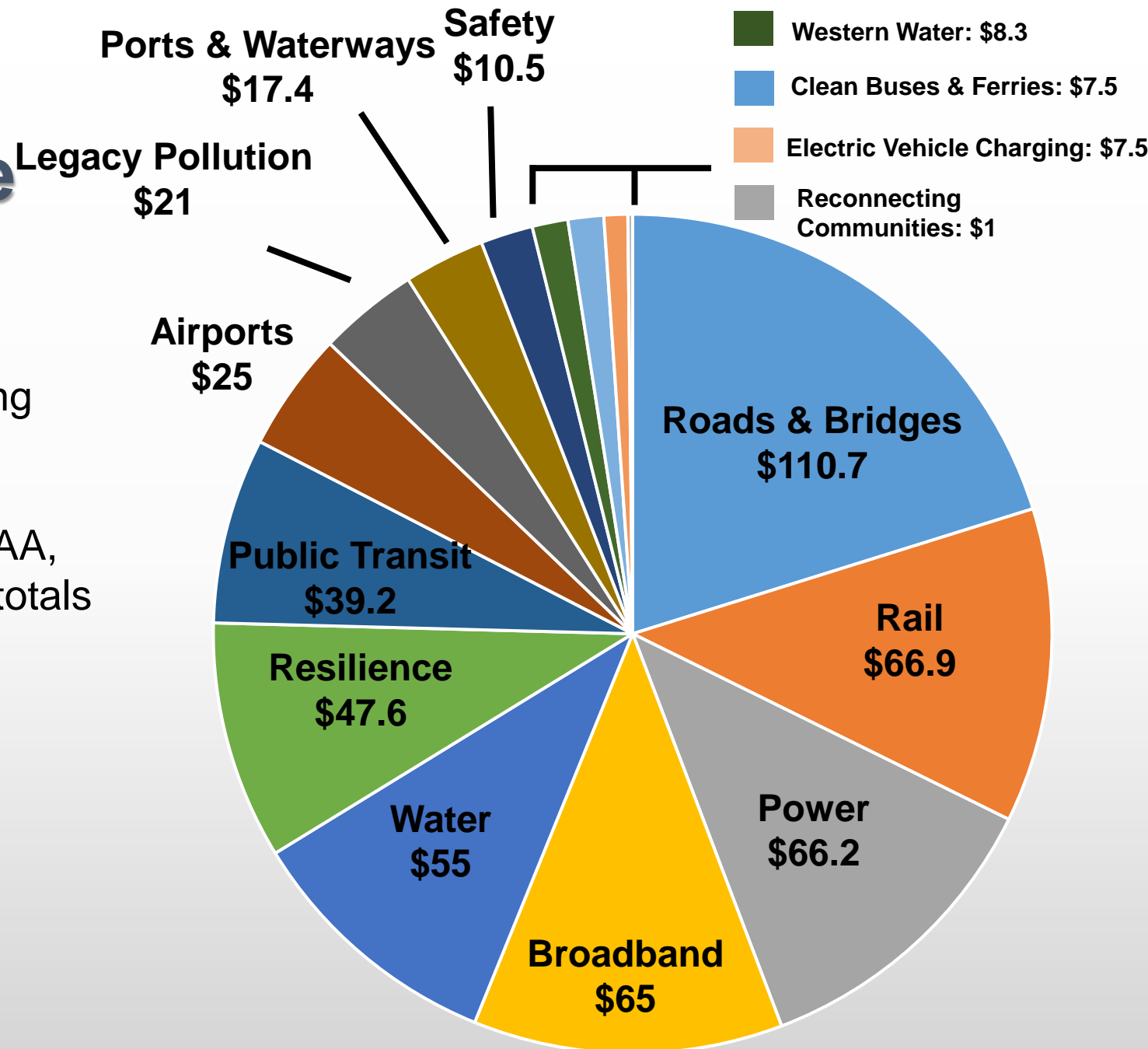
Retail & Recreation:
Mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries and movies theaters

Percentage change from baseline visits—Retail & Recreation



Infrastructure Package

- Represents \$545 billion in new spending
- Bill reauthorizes current surface transportation bills (FAST Act, WRDA, FAA, etc.) at current levels for 5 years, which totals \$1.2 trillion
- Much less in dollar size than previous proposals but heavier emphasis on traditional infrastructure



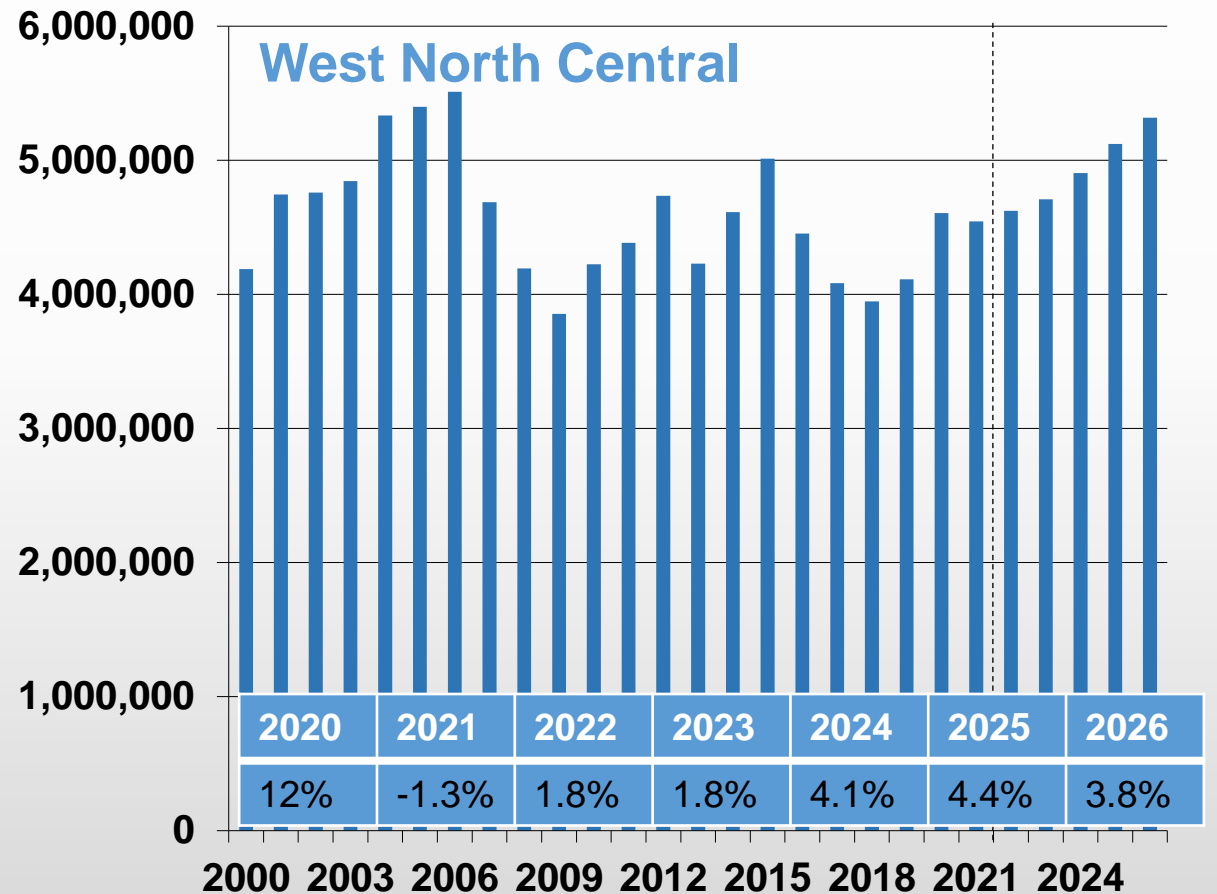
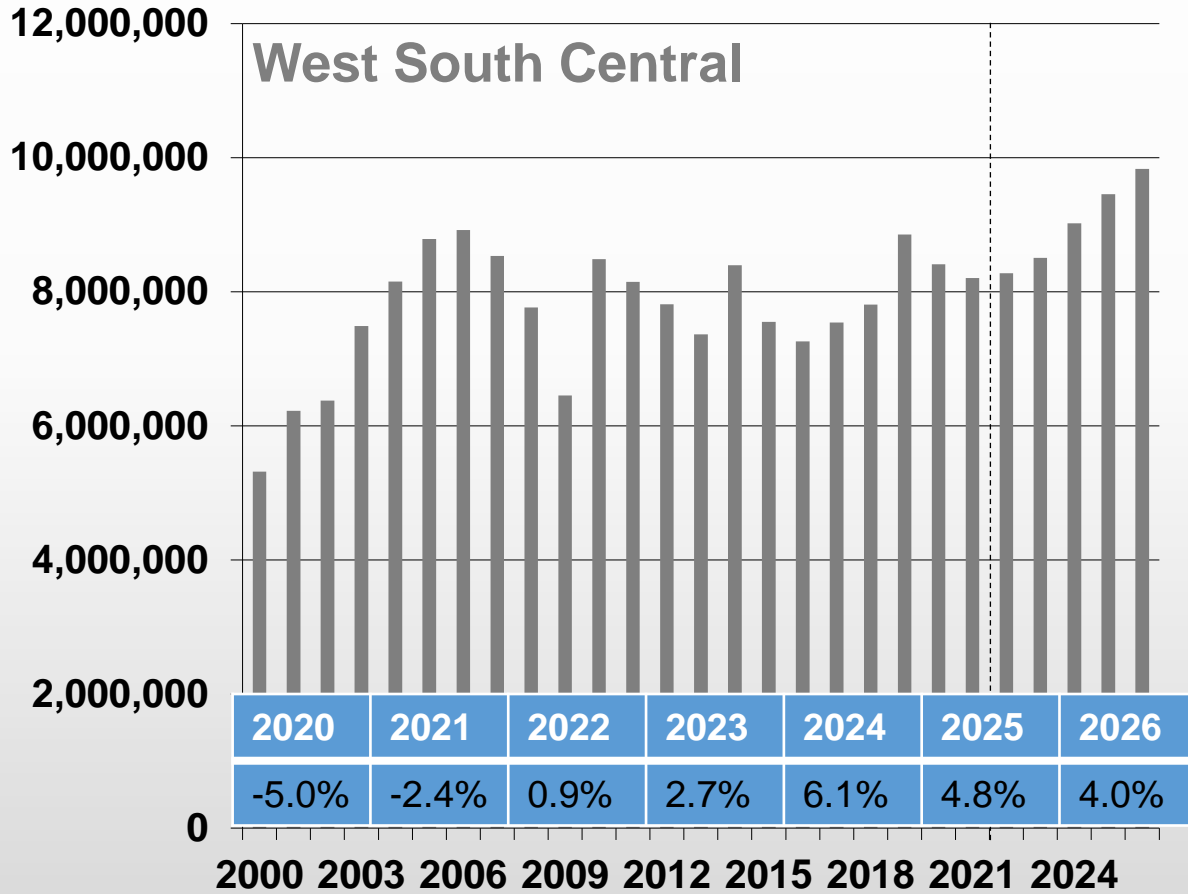
Infrastructure Timing Distribution Highway & Bridges

Process repeated across all construction segments that are impacted by the Infrastructure Program

	Spending Allocation Billion \$	Fiscal Year Spending				Total Spent	Total Spent
		2023	2024	2025	2026		
		Year 1	Year 2	Year 3	Year 4		
2023	\$14	\$3	\$6	\$3	\$2	\$14	100%
2024	\$14		\$3	\$6	\$3	\$12	86%
2025	\$14			\$3	\$6	\$9	64%
2026	\$14				\$3	\$3	21%
Total Spending	\$70	\$3	\$9	\$12	\$14		

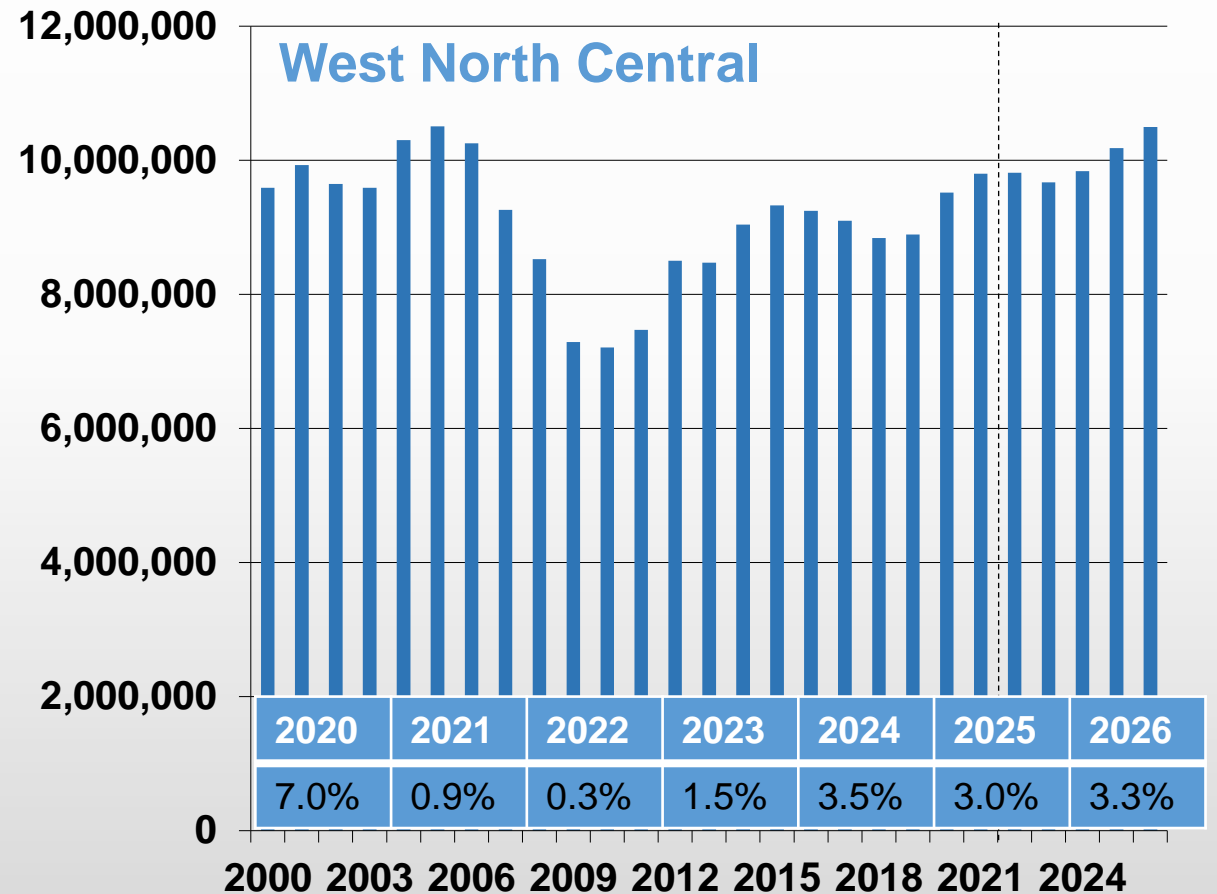
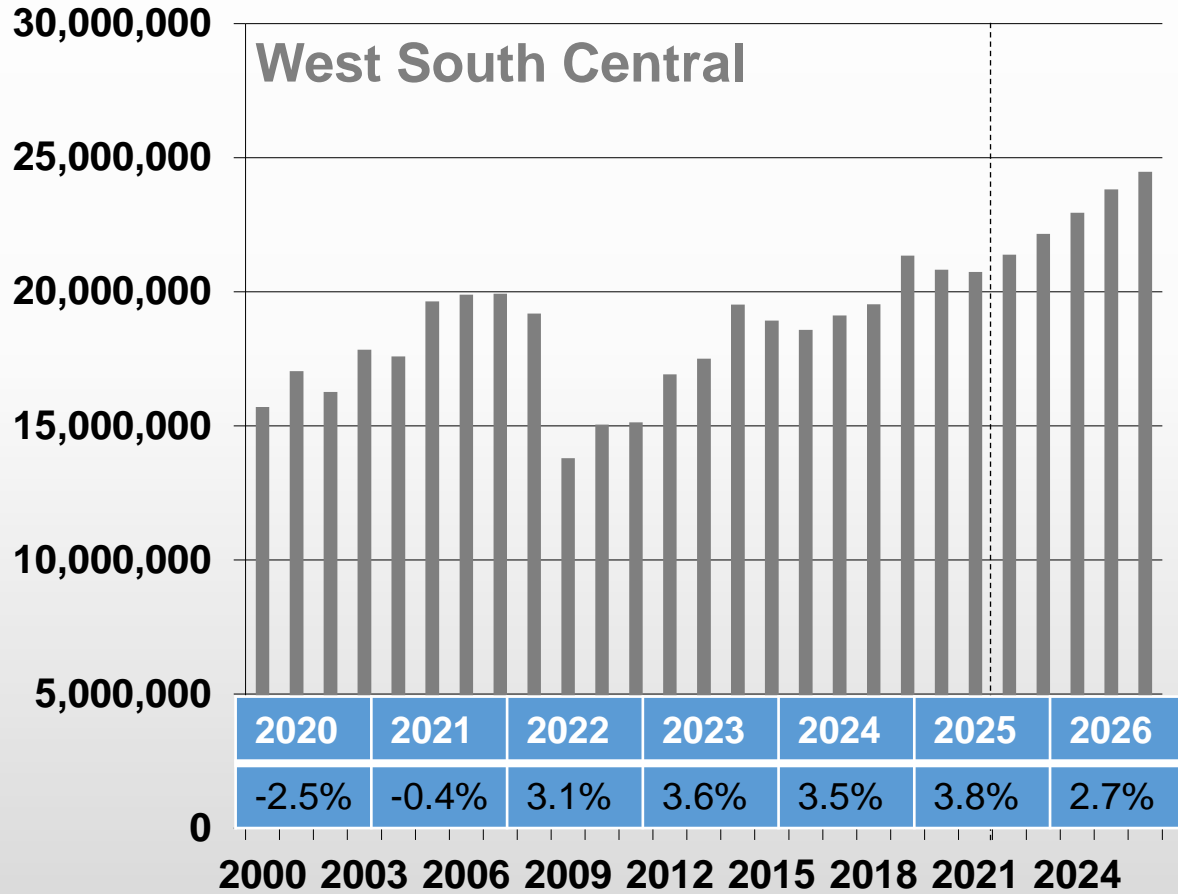
Public Cement Consumption – Interior U.S.

Metric Tons



Total Cement Consumption – Interior U.S.

Metric Tons (000s)



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 in a registered trademark symbol (®).

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