



Current Railroad Trends and Business Conditions

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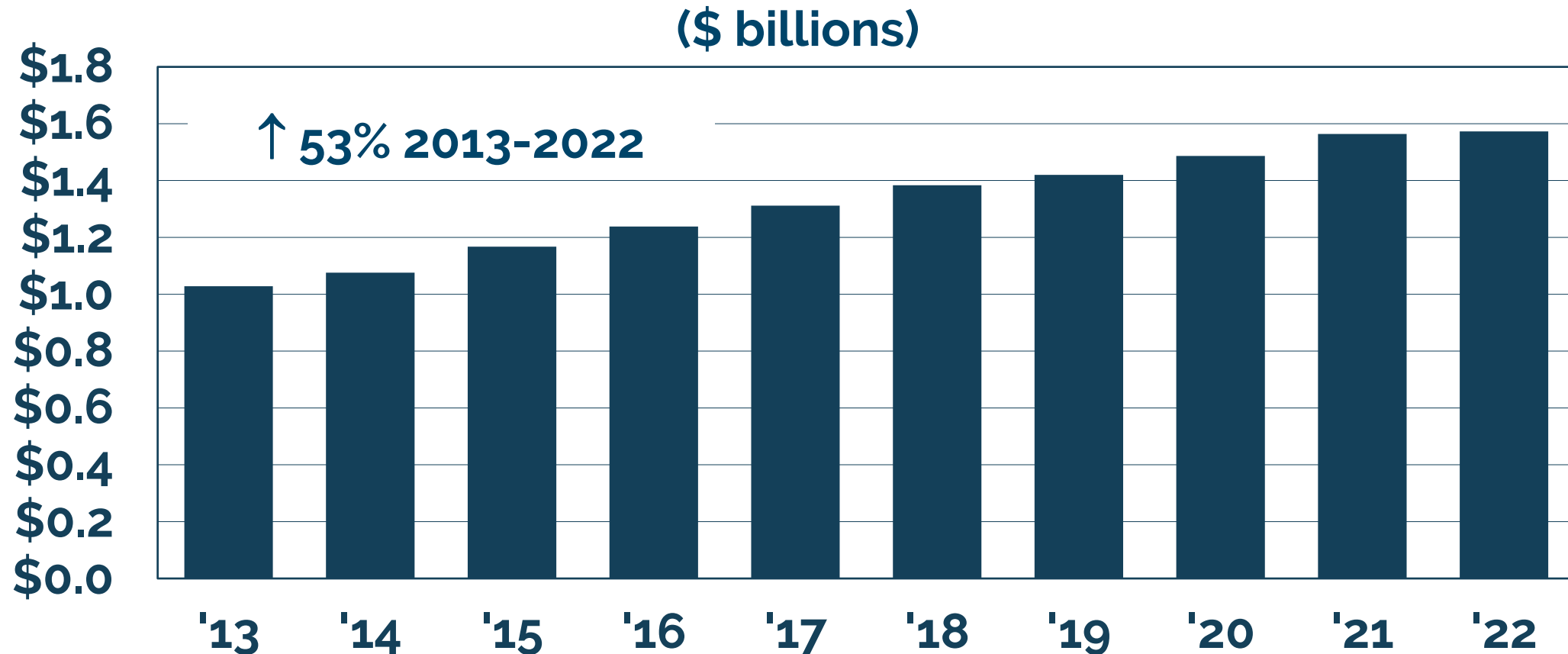
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July 26, 2023

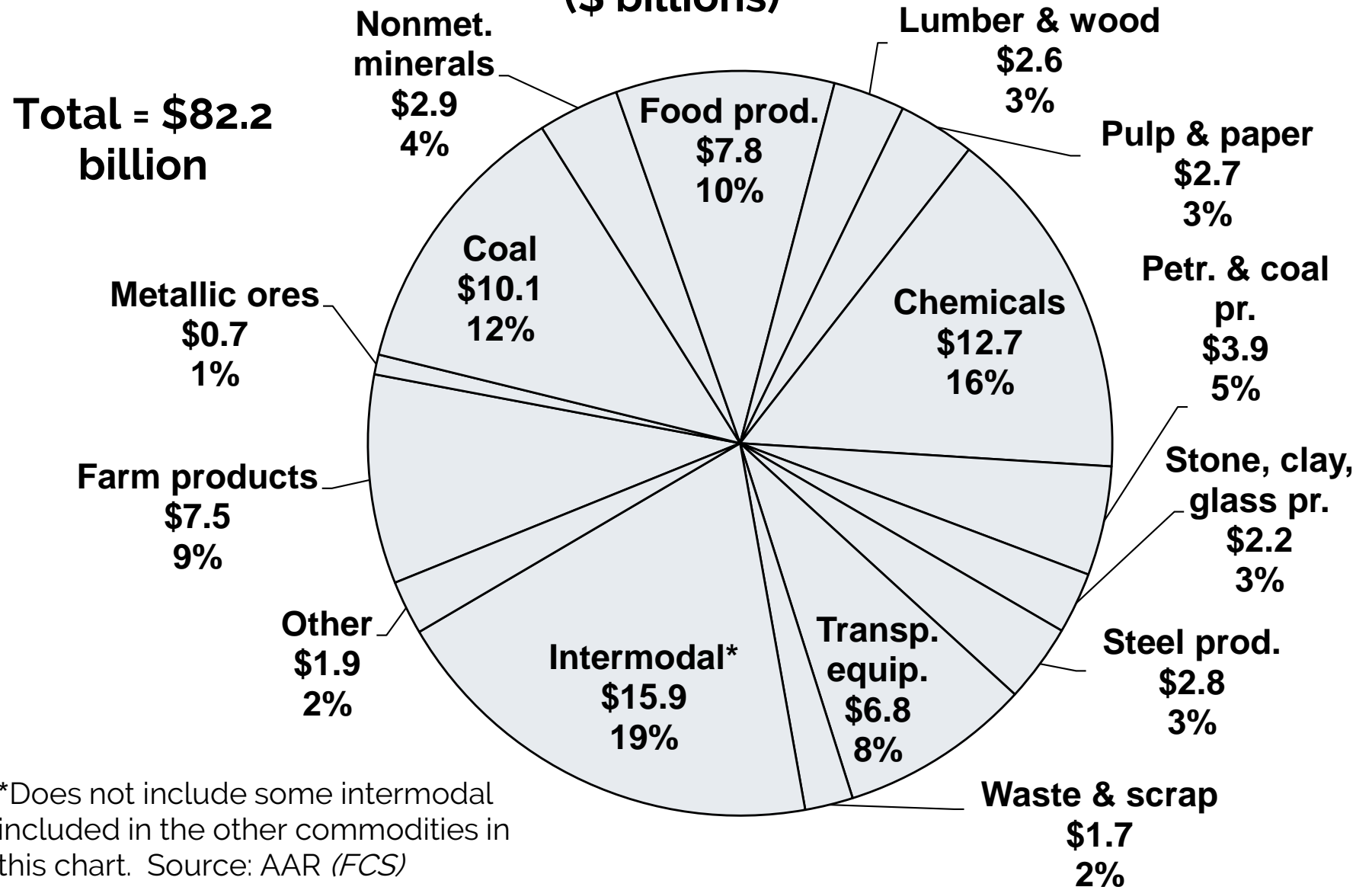


Railroad Pay Nearly \$1.6 Billion in Property Taxes



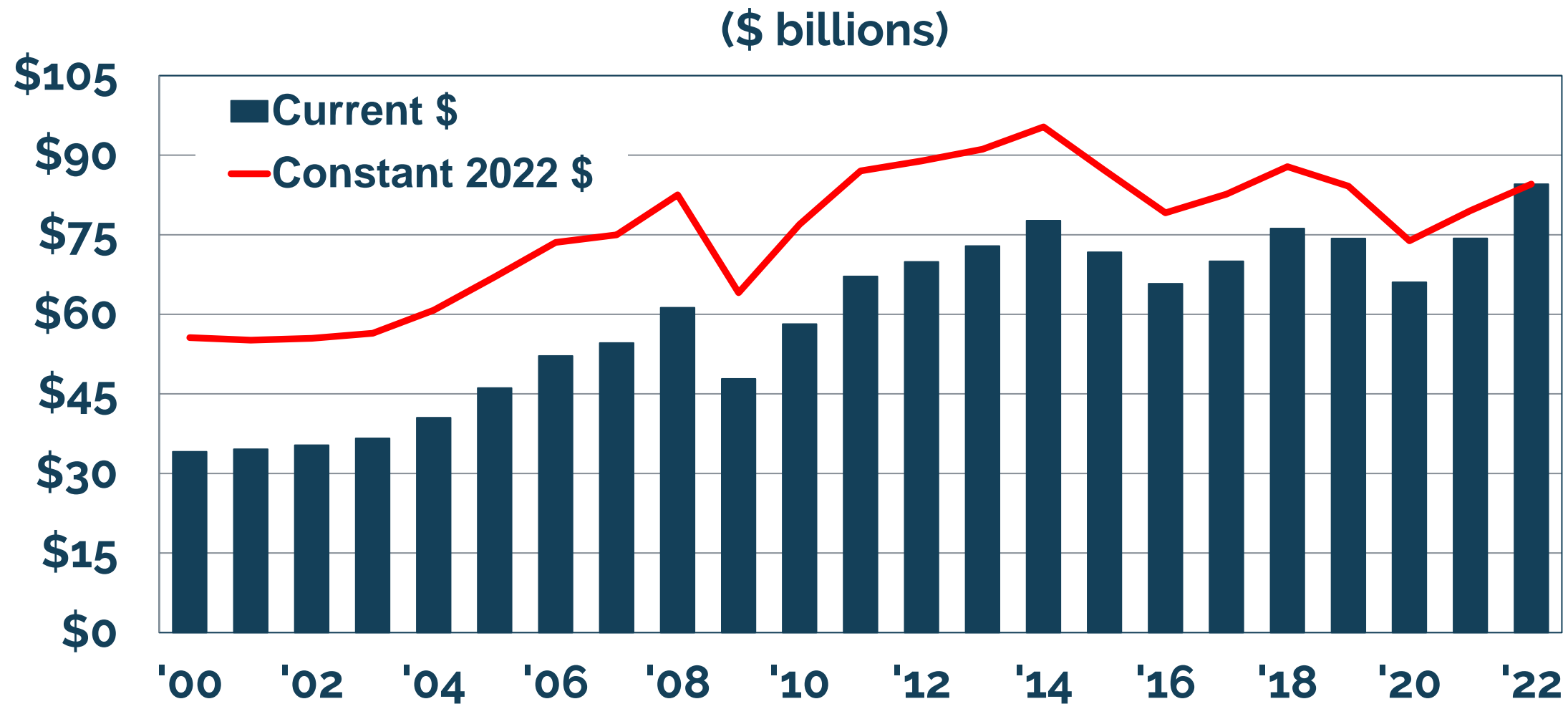
*Figures are for Class I railroads and include taxes based on value of real estate and personal property used in rail operations. Excludes taxes on gross receipts, franchise fees, excise taxes, and similar items. Source: R-1 reports

U.S. Class I RR Gross Revenue in 2022 (\$ billions)



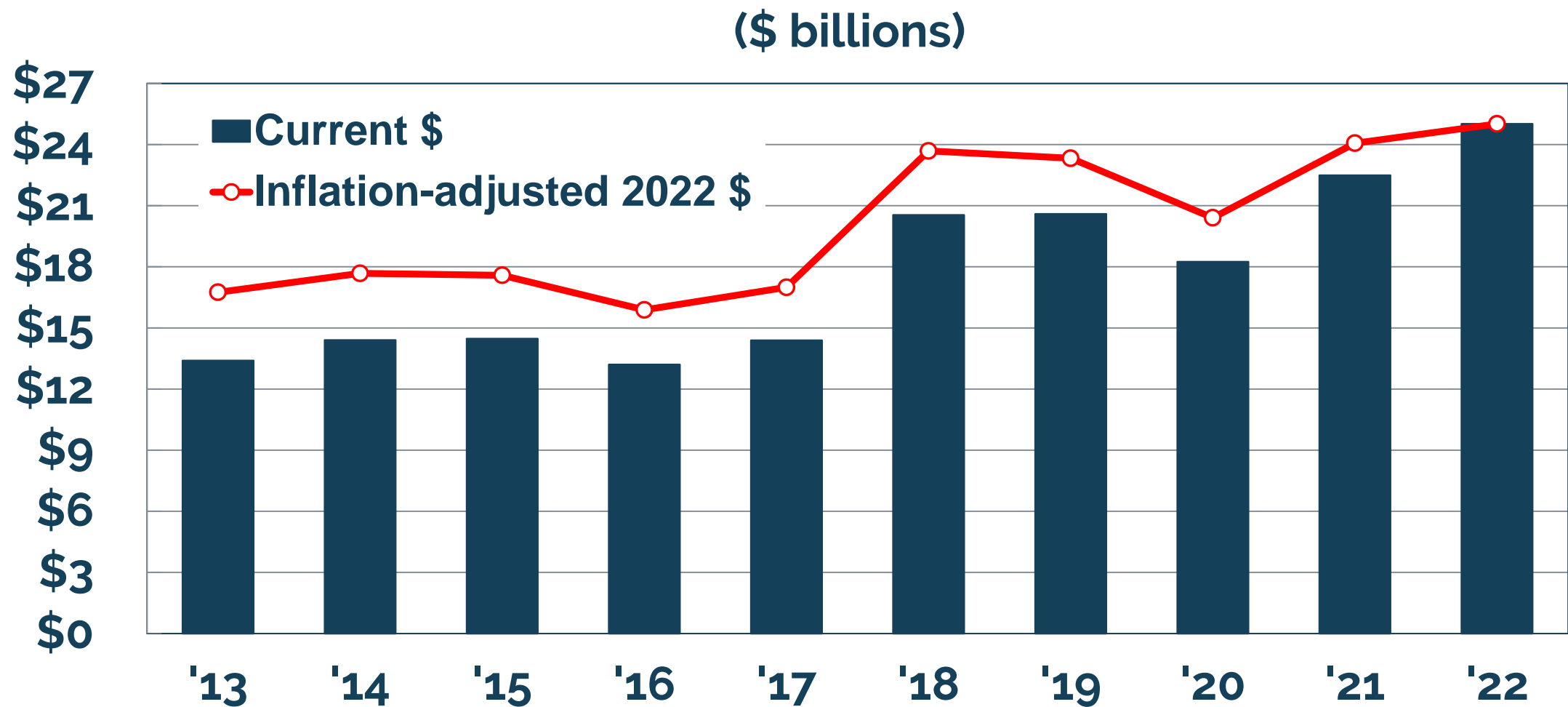
**Railroads
carry just
about
everything.**

Class I Railroad Operating Revenue



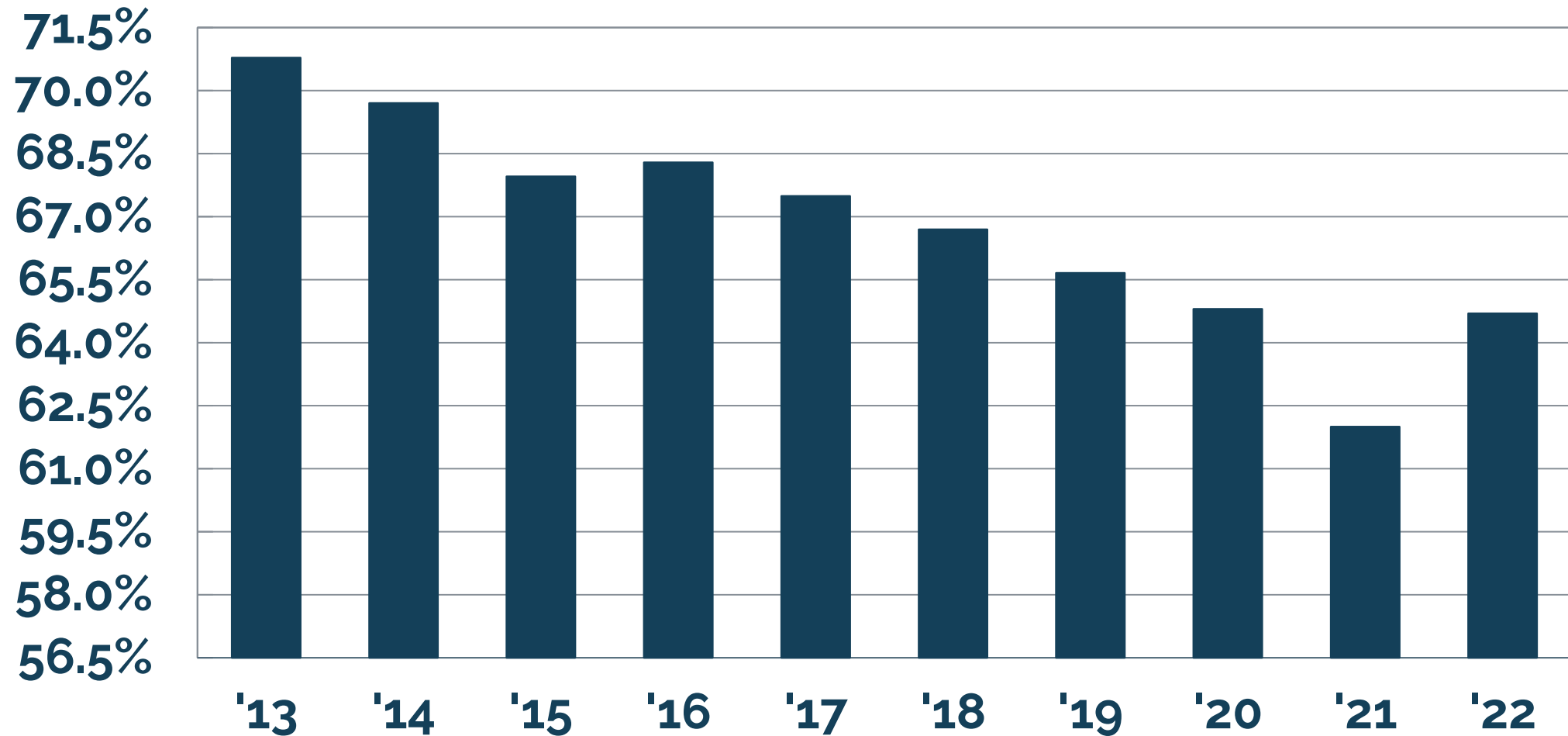
Source: AAR

Higher Railroad Net Income



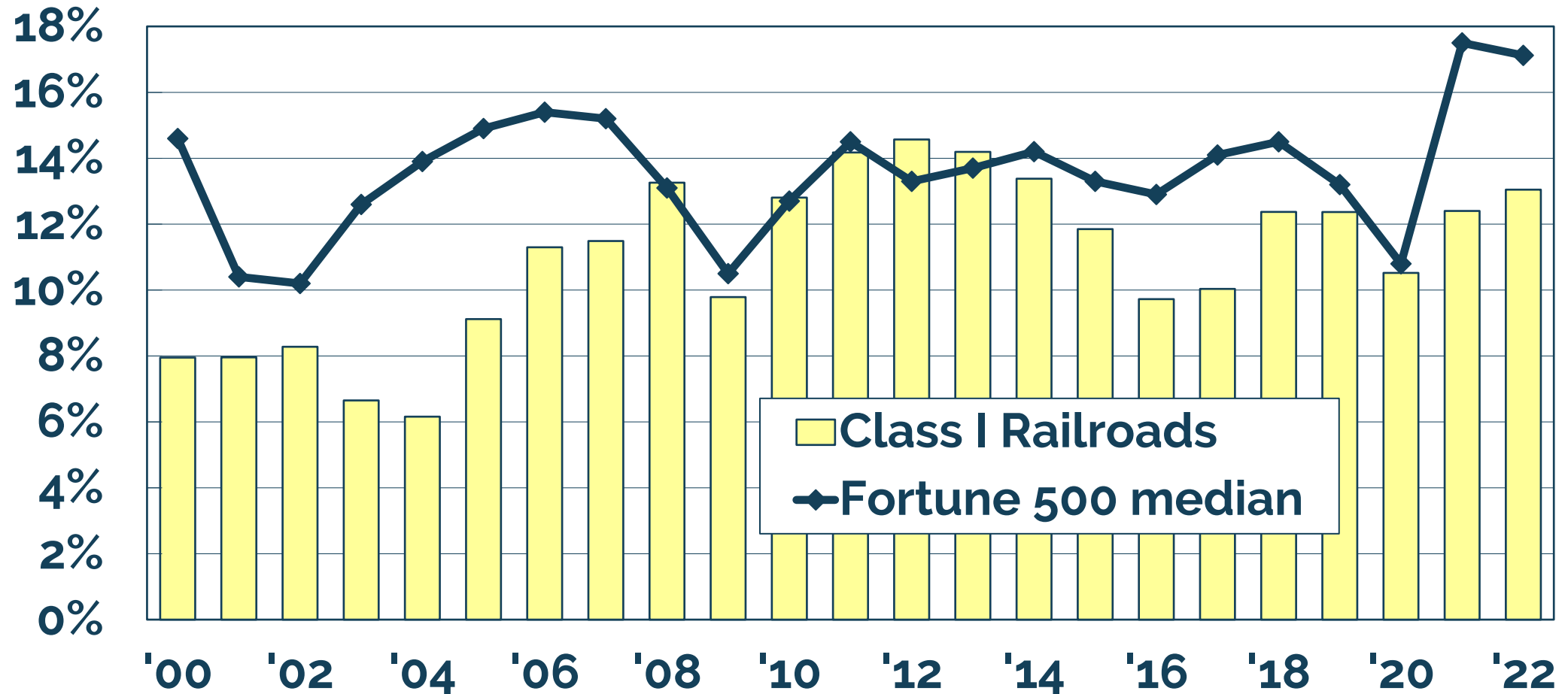
Figures are for Class I railroads. Source: AAR

Class I Railroad Operating Ratio*



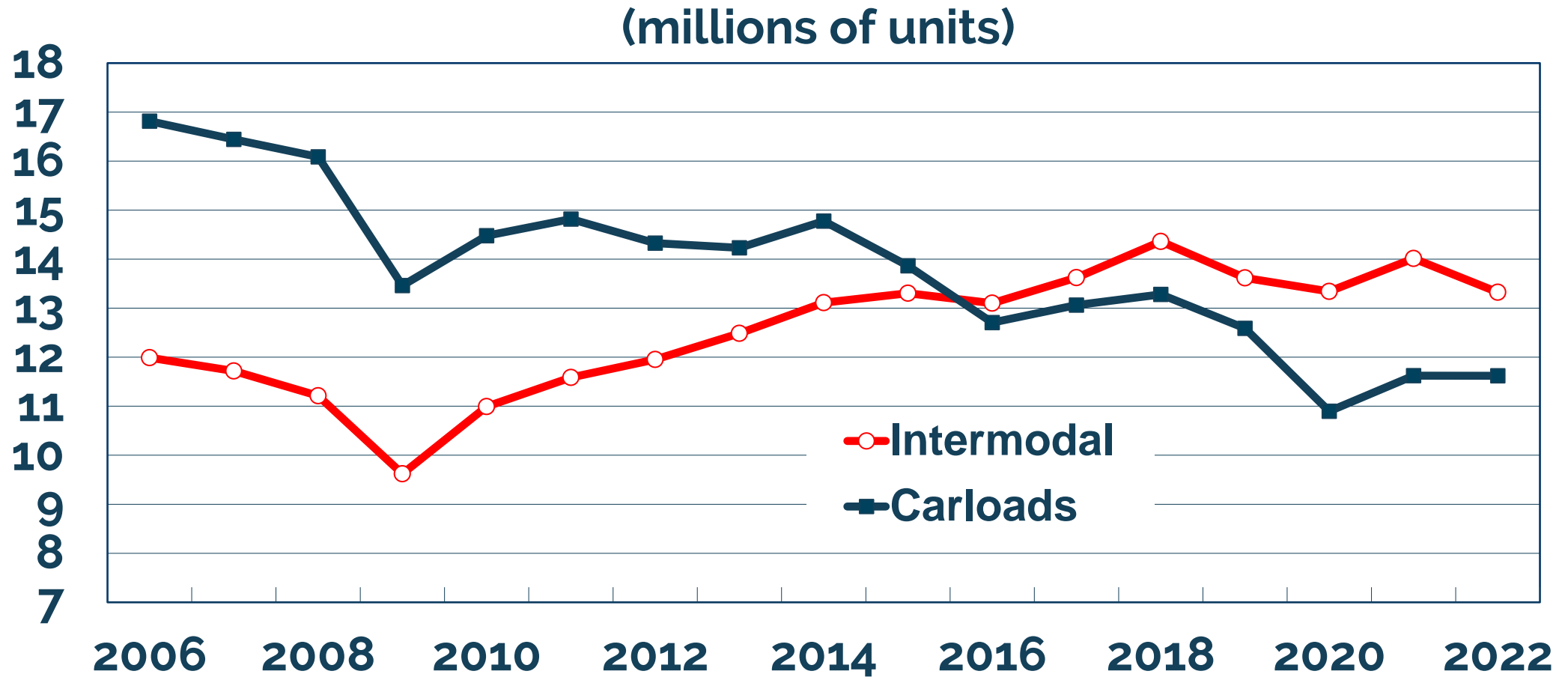
*Operating expenses as a percentage of operating revenue. Source: AAR

Return on Equity: Freight RRs vs. Fortune 500



Return on equity = net profit / shareholders' equity. Source: AAR, *Fortune*

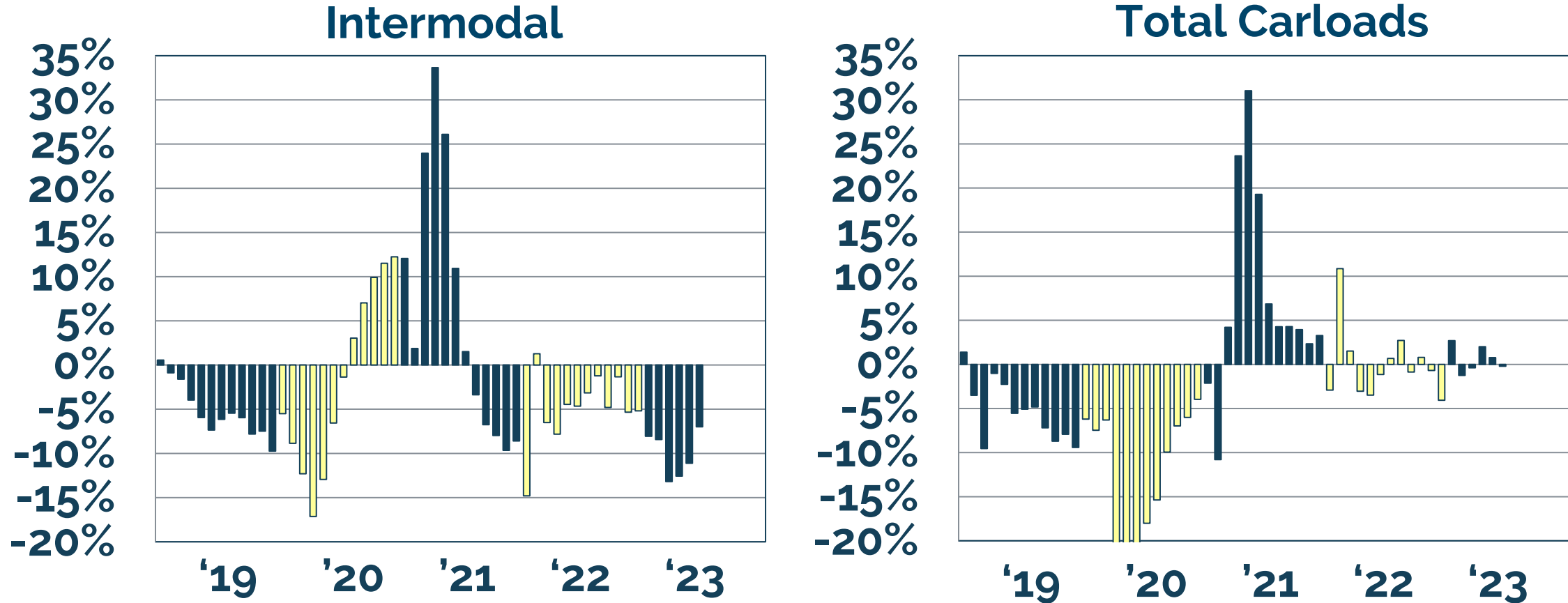
U.S. Rail Intermodal vs. Carloads



Data are originations and do not include the U.S. operations of CN, CPKC, and GMXT. Source: AAR *Rail Time Indicators*

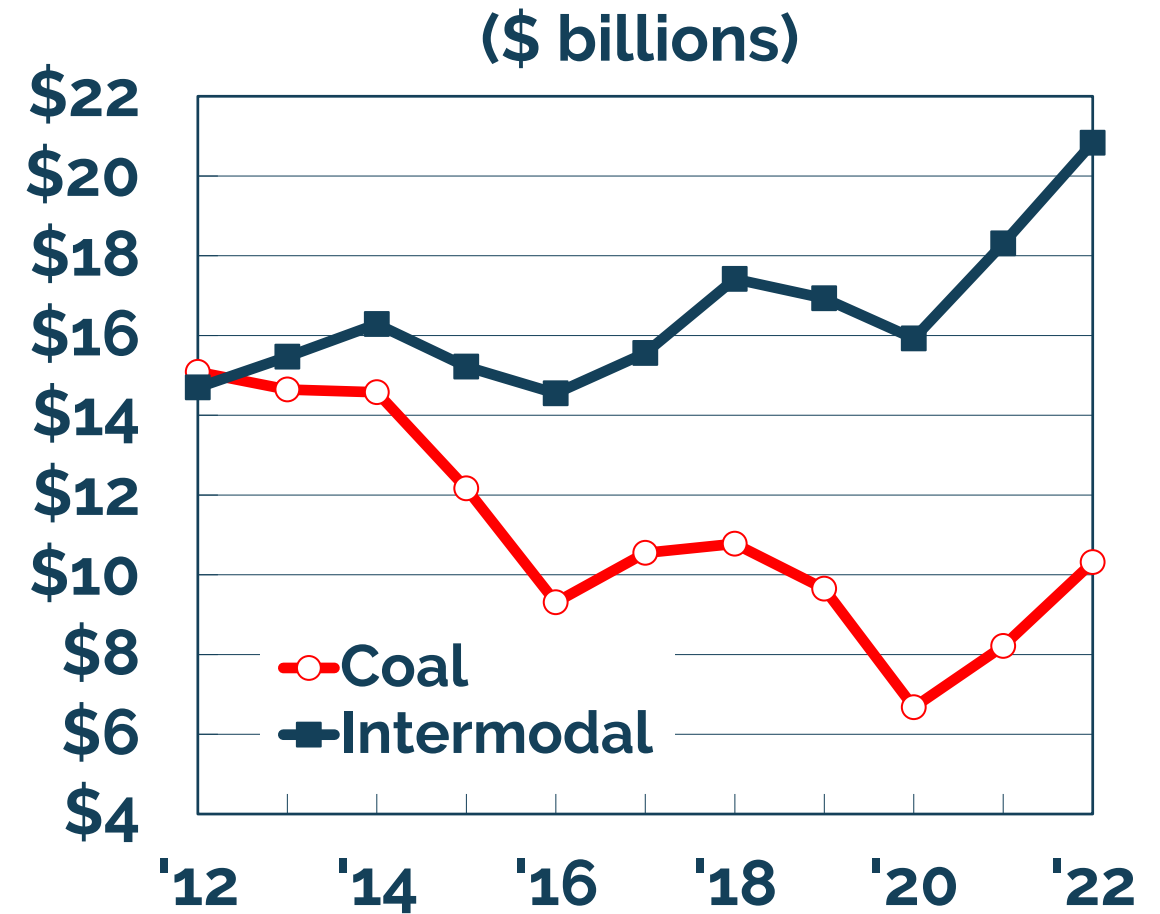
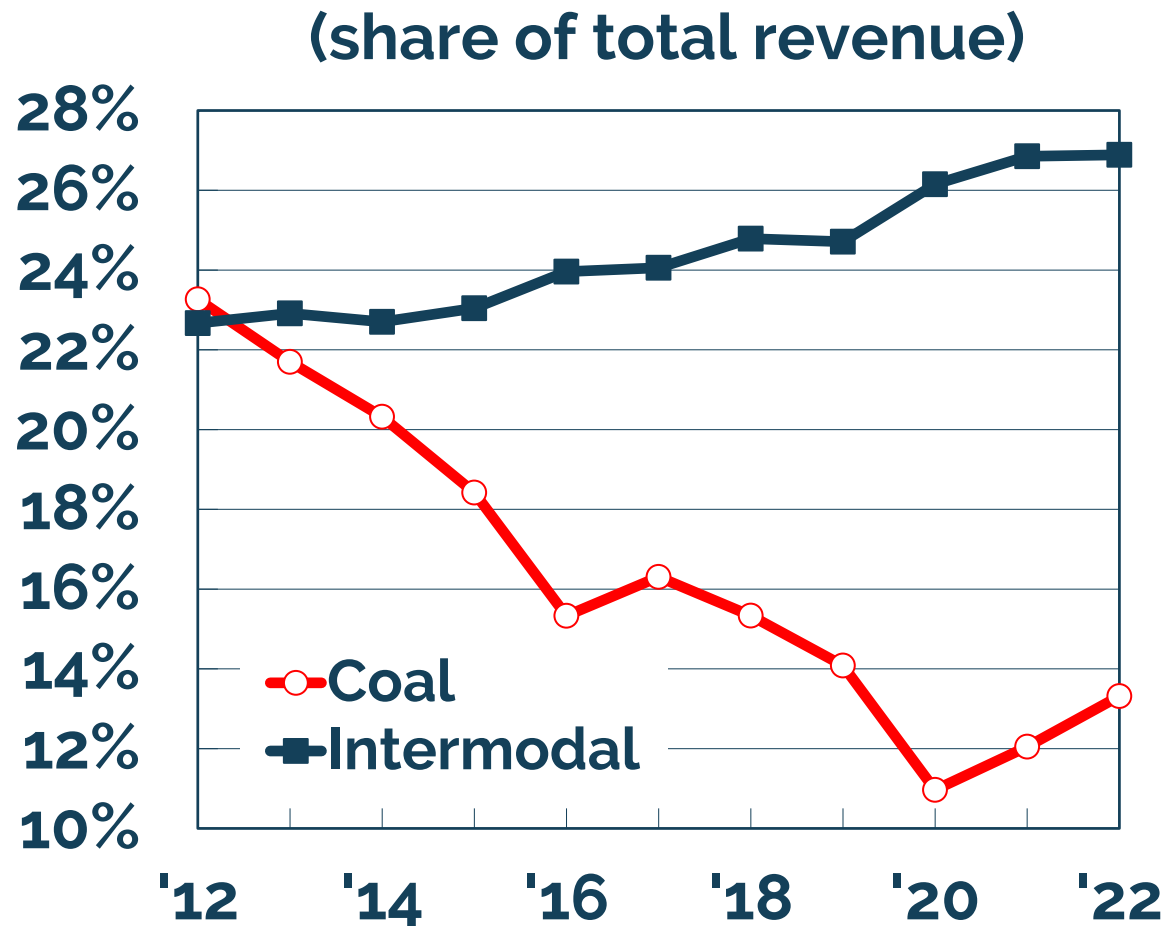
U.S. Rail Intermodal vs. Carloads

(% change from same month previous year)



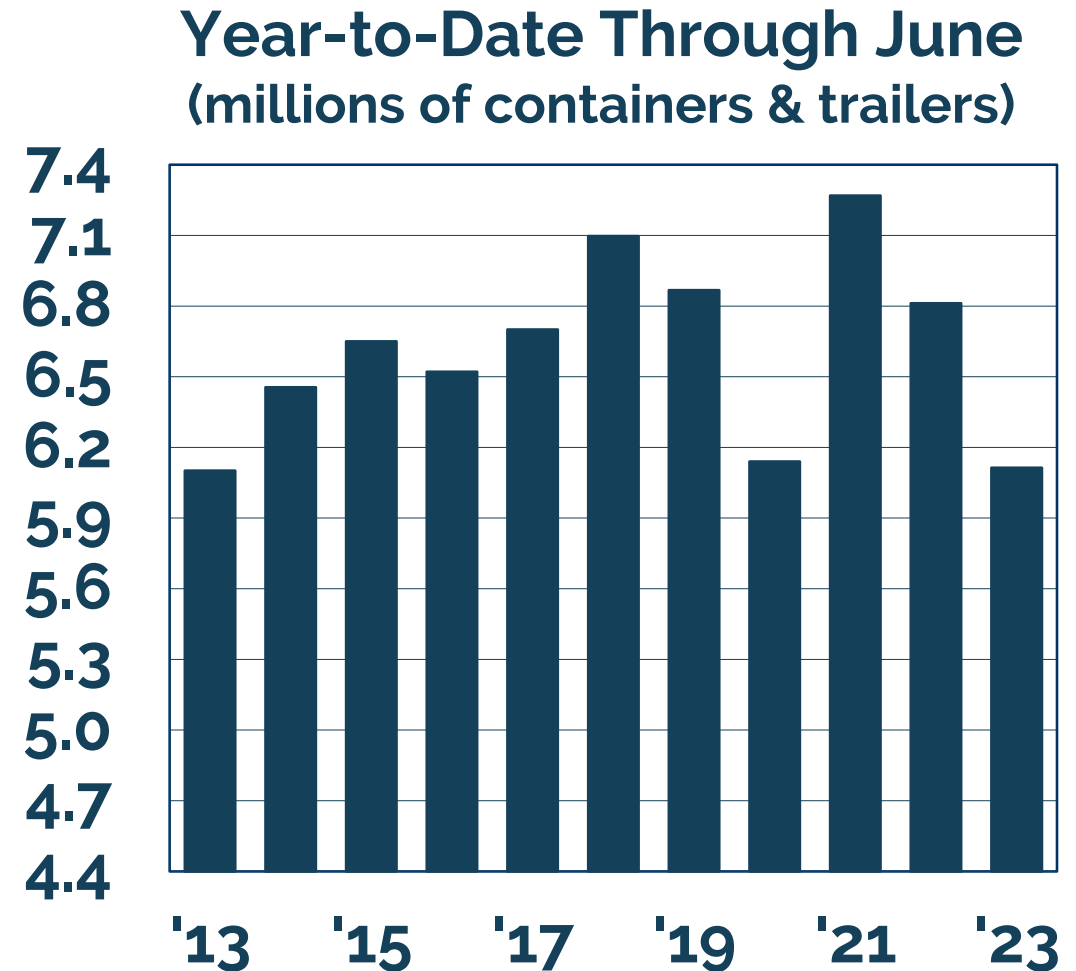
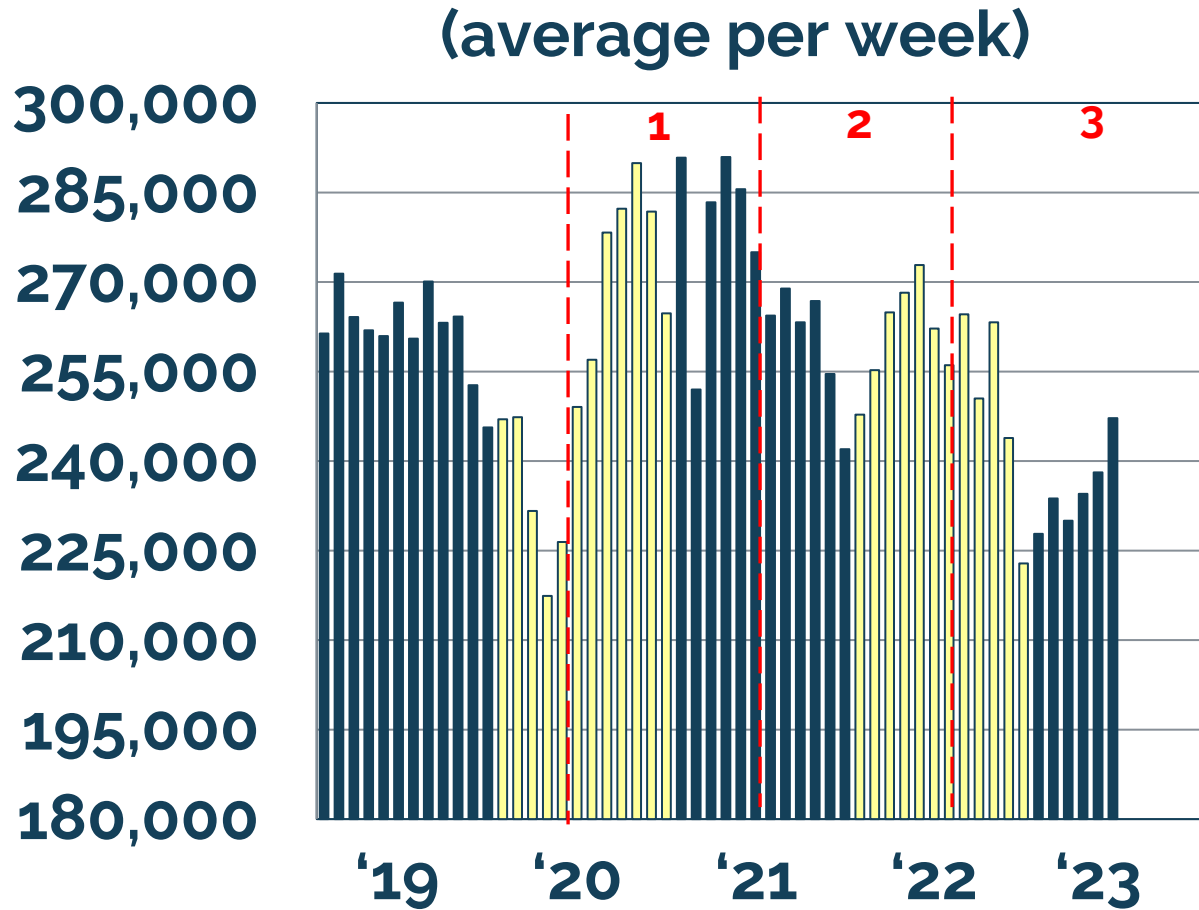
Data are based on originations, are not seasonally adjusted, and don't include the U.S. operations of CN, CPKC, and GMXT. Source: AAR

Intermodal is the Single Biggest Revenue Source for U.S. Railroads



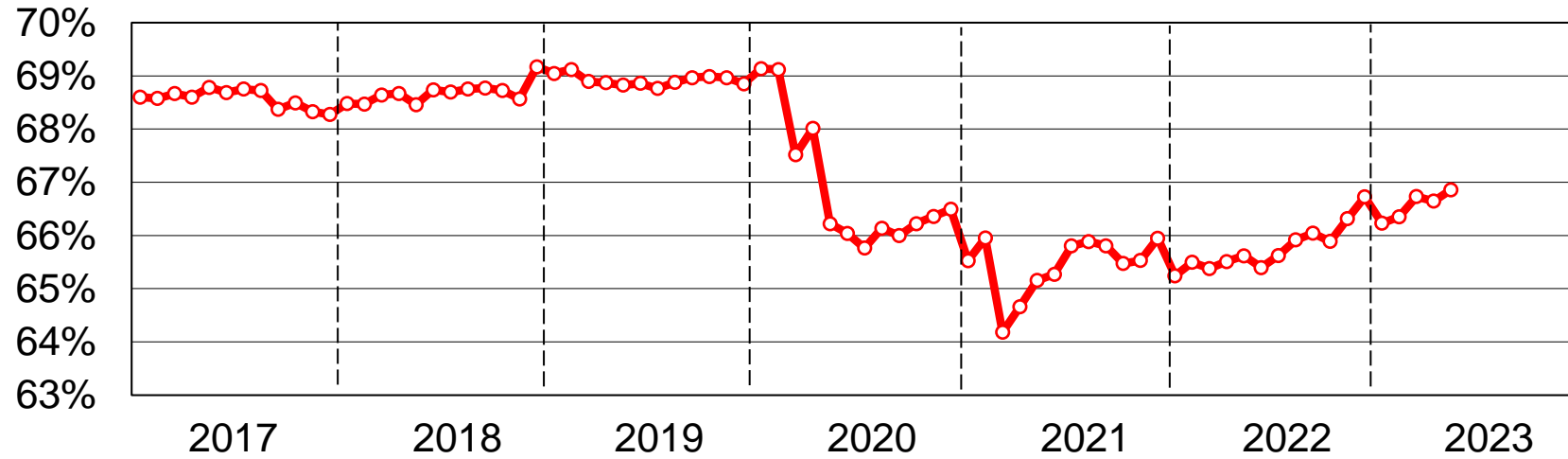
Data are for BNSF, CSX, KCS, NS, and UP combined. Source: company reports

U.S. Rail Intermodal



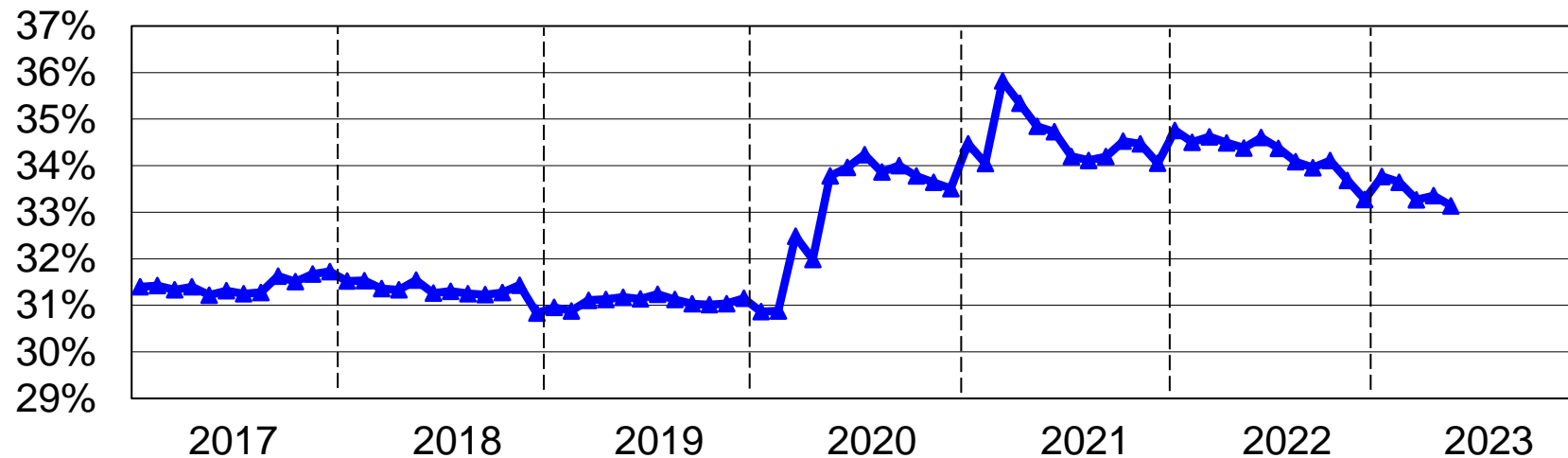
Data are originations, are not seasonally adjusted, and do not include the U.S. operations of CN, CPKC, and GMXT. Source: AAR *Rail Time Indicators*

Services as a % of Total Consumer Spending: Jan. 2017 - May 2023



Source: Bureau of Economic Analysis

Goods as a % of Total Consumer Spending: Jan. 2017 - May 2023



Source: Bureau of Economic Analysis

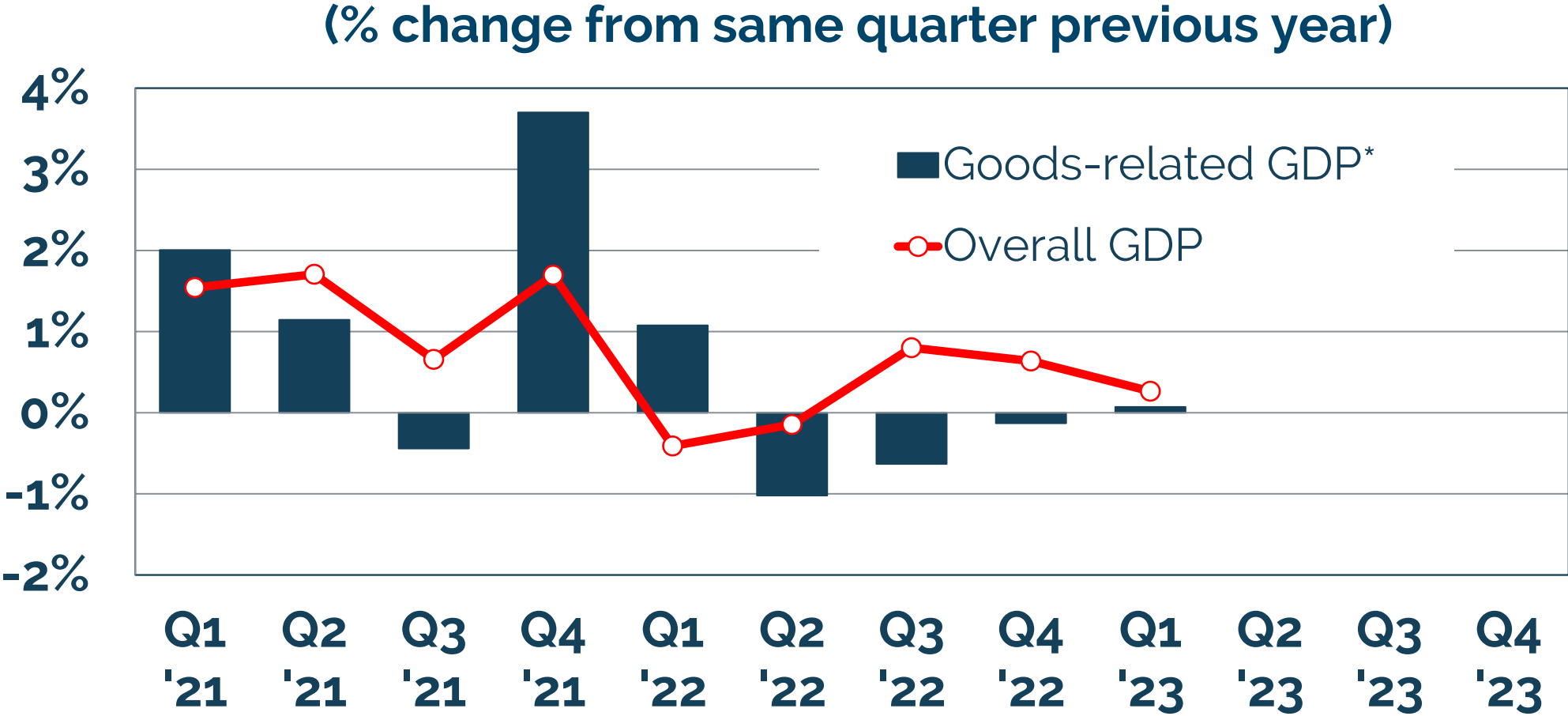
Many Interconnected Supply Chain Challenges

What Happened:

- Covid impact on ports, transportation providers, manufacturing plants, etc.
- Shortages of chassis, trucks, drivers, containers, warehouse labor, warehouse space, etc.
- Lack of container ship availability
- Extreme weather
- Freak events



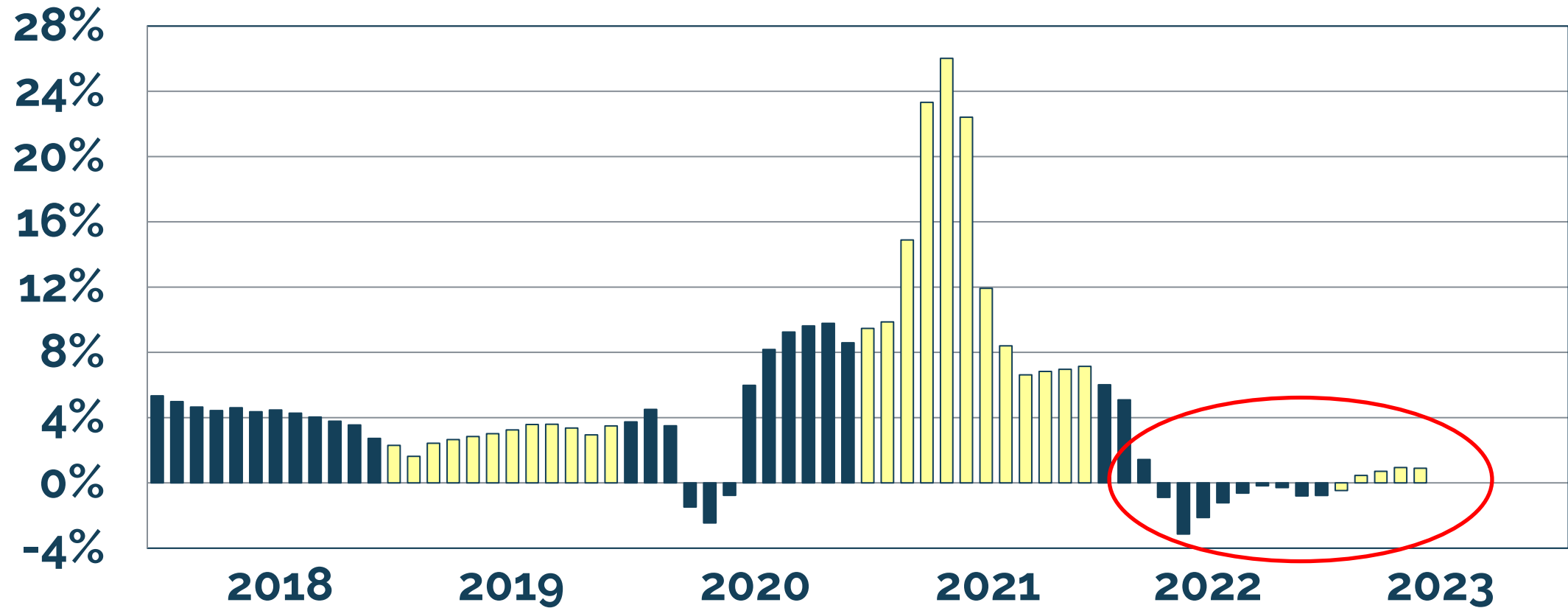
Overall GDP vs. Goods-Related GDP



*Imports, exports, & personal consumption of goods; fixed residential investment; business investment in equipment & structures; government gross investment; and change in inventories.

Weak Recent Growth in Consumer Spending on Goods

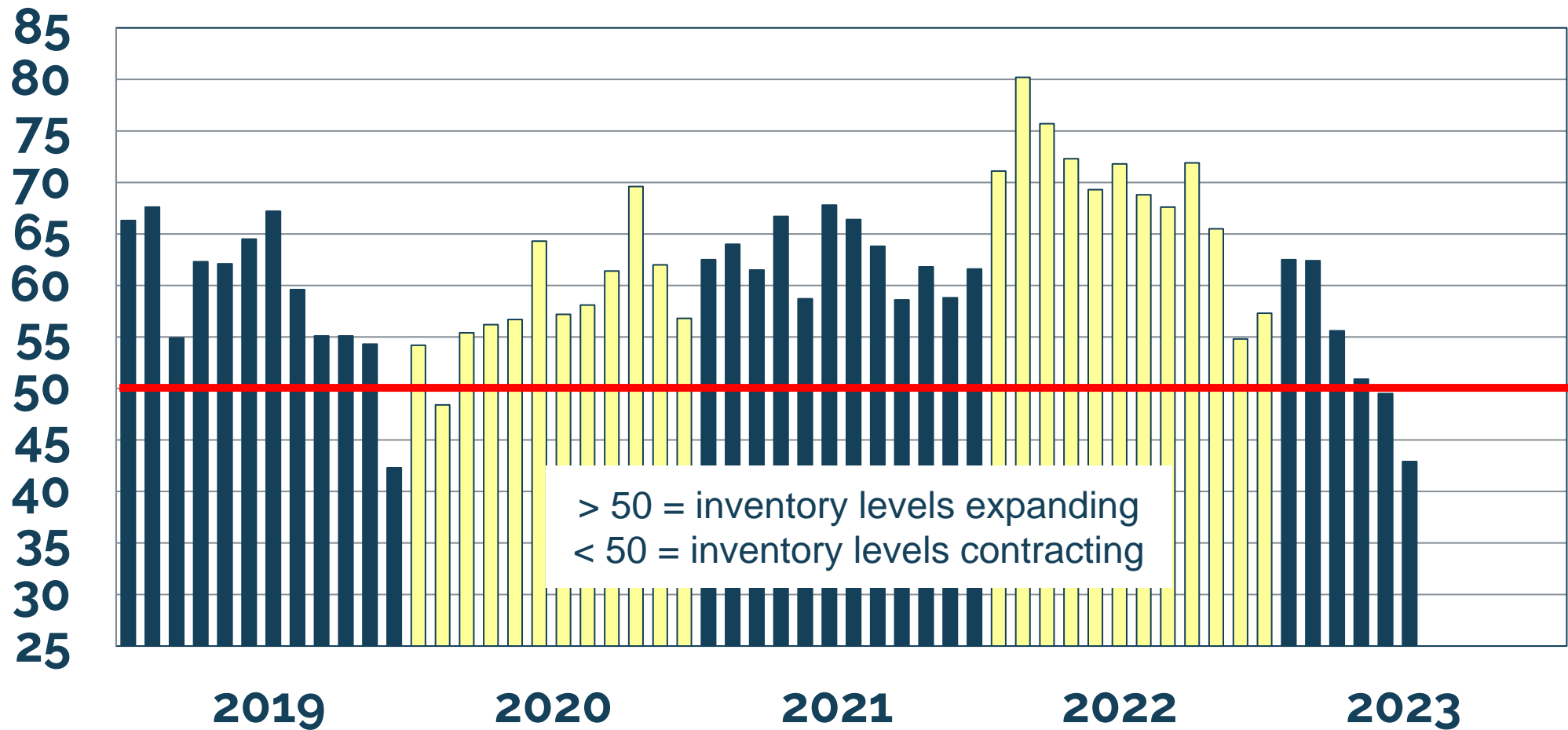
Year-Over-Year Change in Consumer Spending on Goods*



*3-month moving average, inflation-adjusted dollars

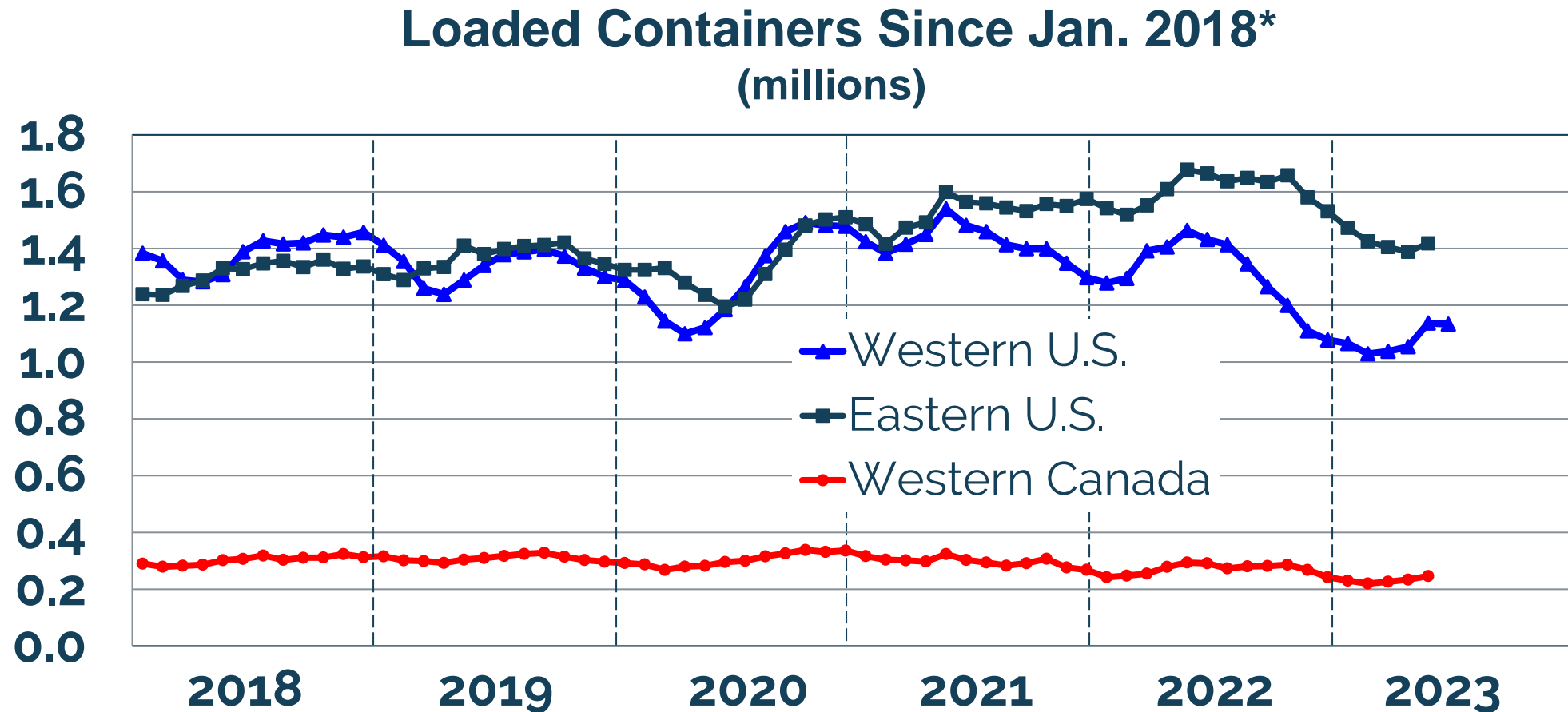
Source: BEA

Inventories Are Falling



Source: Logistics Managers' Index

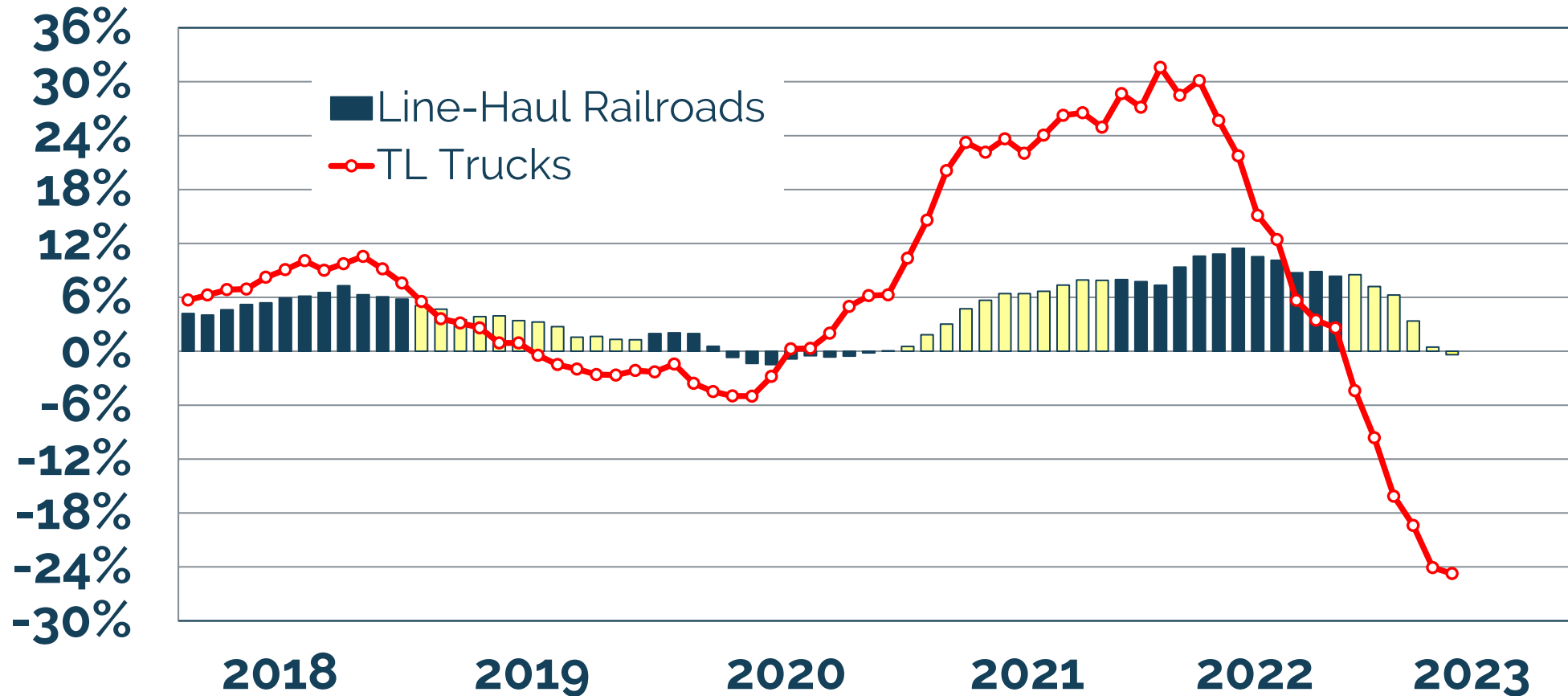
Geographic Changes in Port Volumes



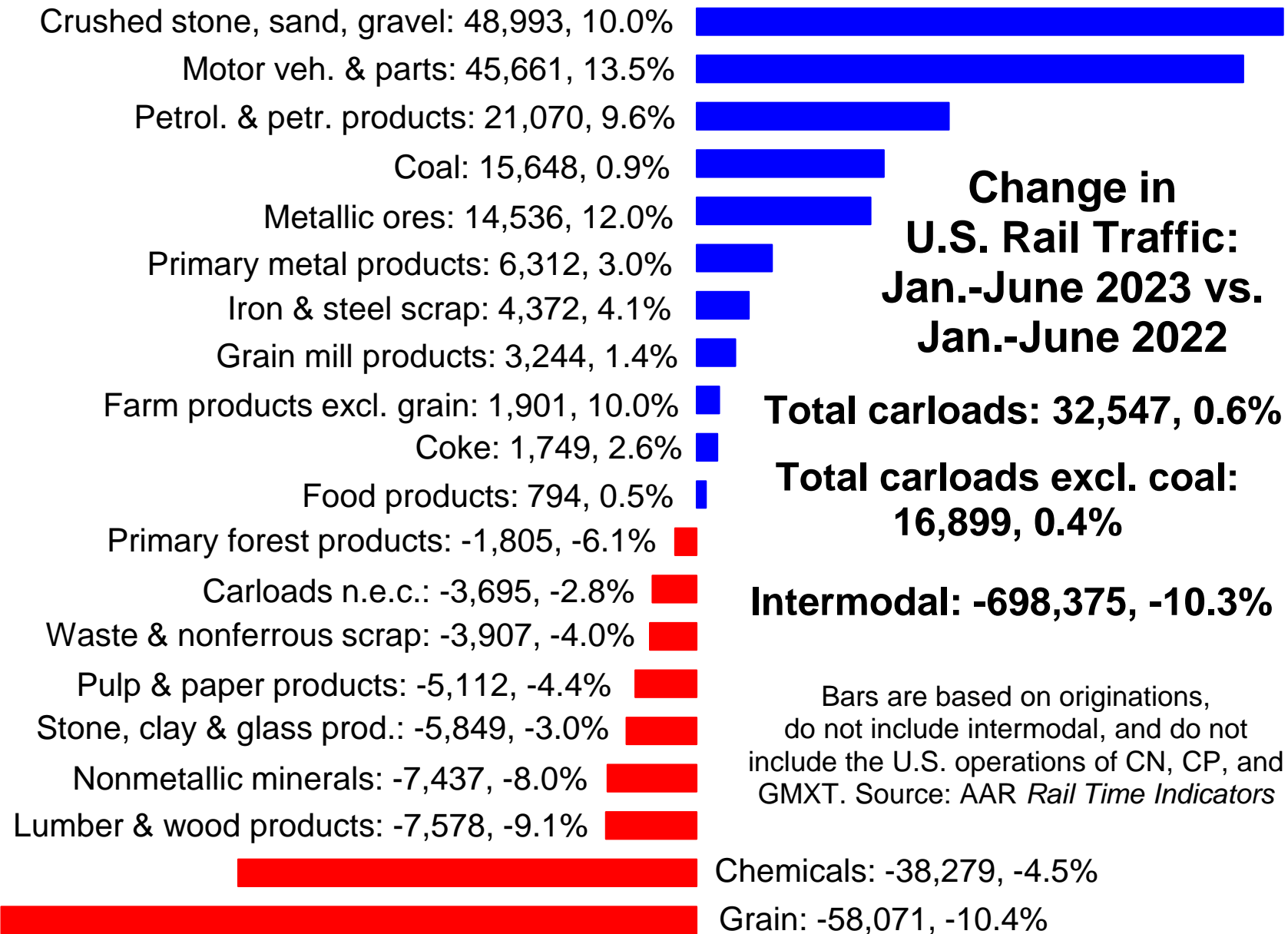
*Loaded import + export TEUs. Figures are 3-month averages. Western U.S. is Long Beach, LA, Oakland, & Seattle/Tacoma. Eastern U.S. is Baltimore, Charleston, Houston, NY/NJ, Savannah, & Virginia. Western Canada is Prince Rupert & Vancouver. Source: individual ports

Truck Rates Are Falling

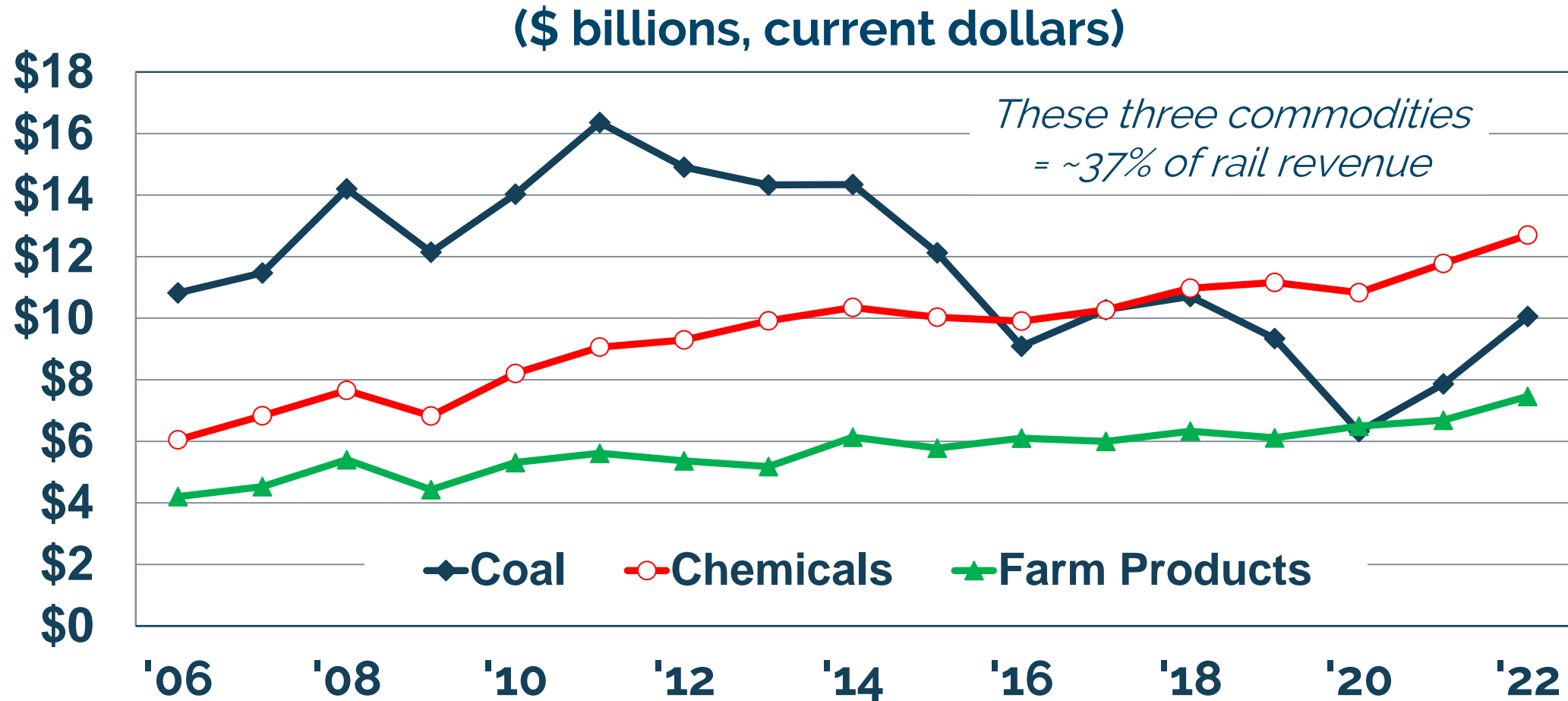
Year-Over-Year Change in the Producer Price Index



Source: Bureau of Labor Statistics



Rail Revenue From Coal, Chemicals, and Farm Products



Data are for Class I railroads and do not include some intermodal movements.
Source: AAR *Freight Commodity Statistics*

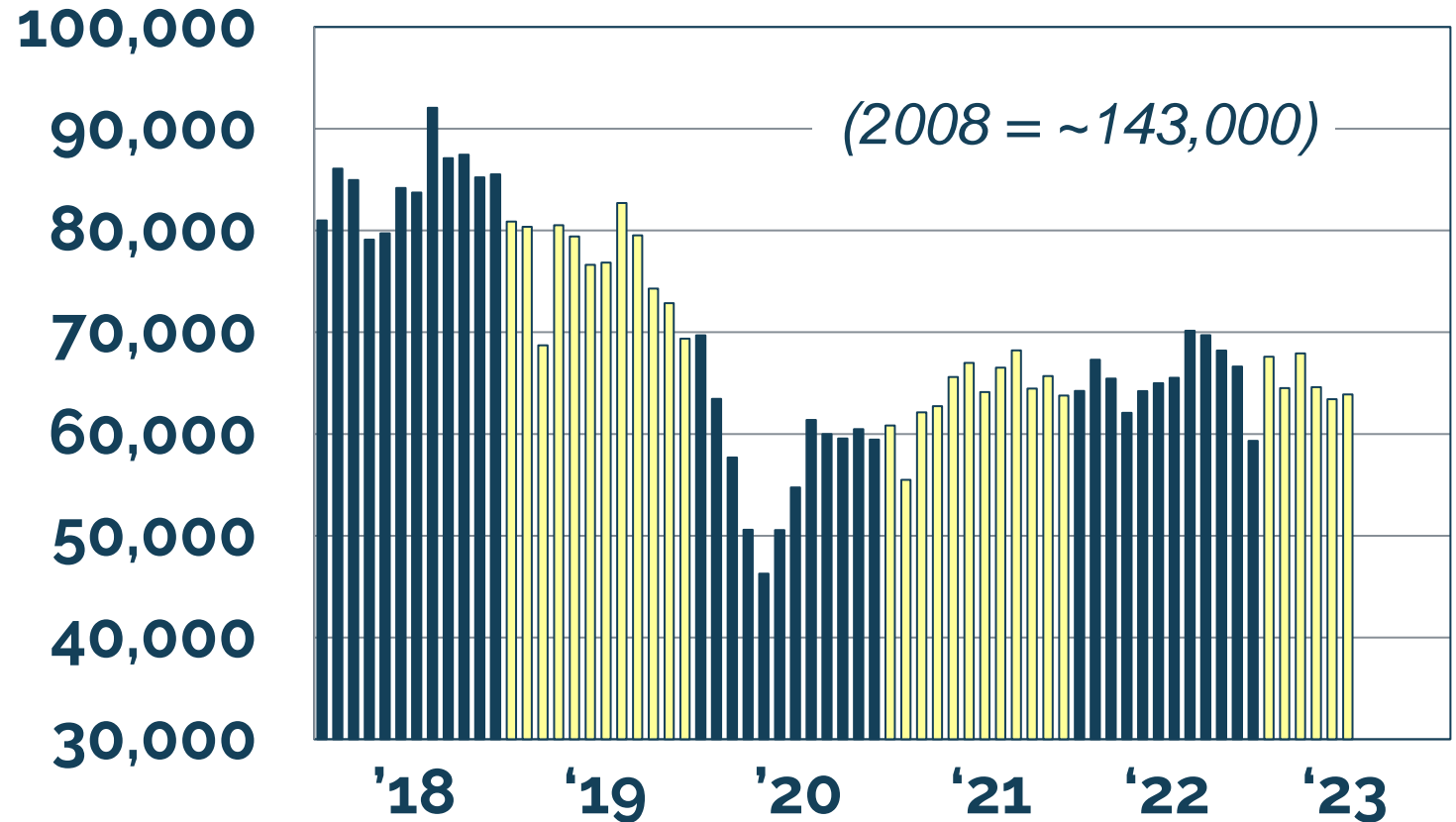
Rail Carloads of Coal

% U.S. Electricity Generation

| | 2000 | 2010 | 2020 | 2023* |
|-------------|------------|------------|------------|------------|
| Coal | 52% | 45% | 19% | 15% |
| Natural Gas | 16% | 24% | 40% | 40% |
| Nuclear | 20% | 20% | 20% | 19% |
| Renewables | 2% | 4% | 13% | 18% |
| Hydro | 7% | 6% | 7% | 7% |
| Other | 3% | 1% | 1% | 1% |

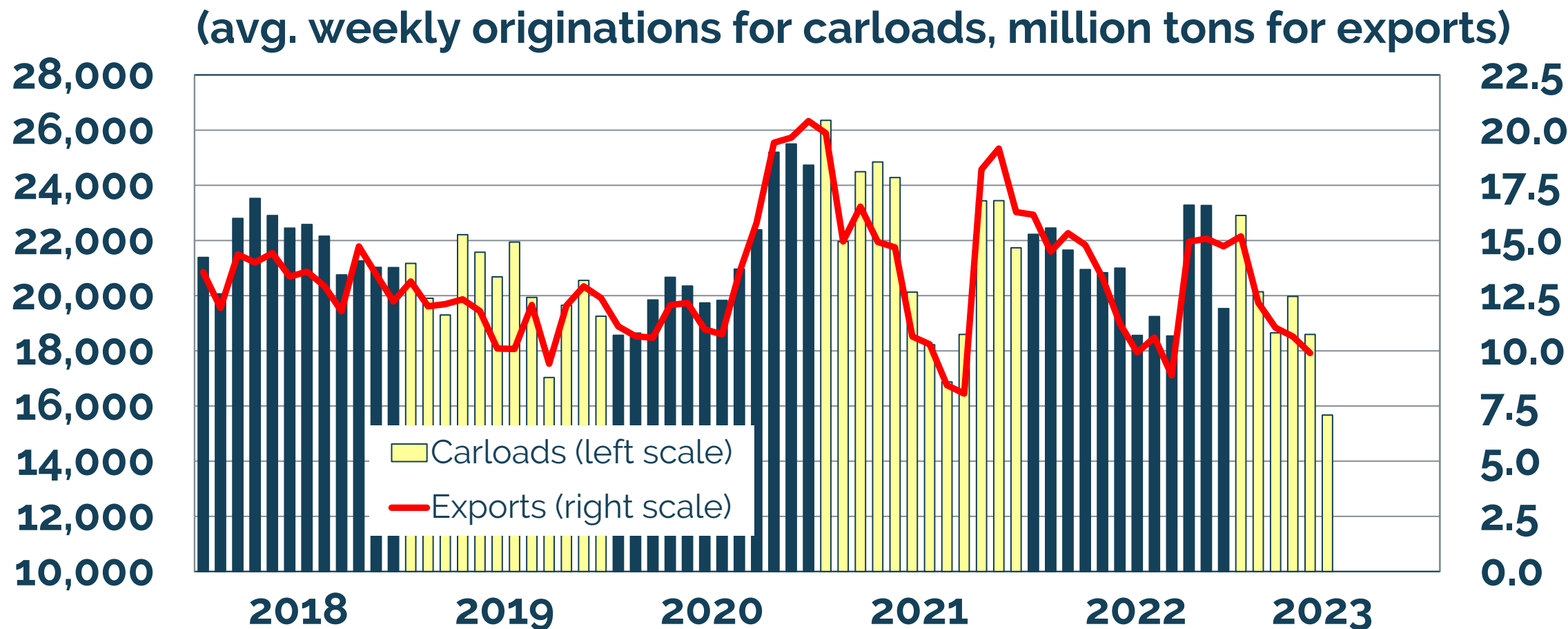
*Jan-May Source: EIA

(avg. weekly originations by month)



Data are not seasonally adjusted, and don't include the U.S. operations of CN, CPKC, and GMXT. Source: AAR

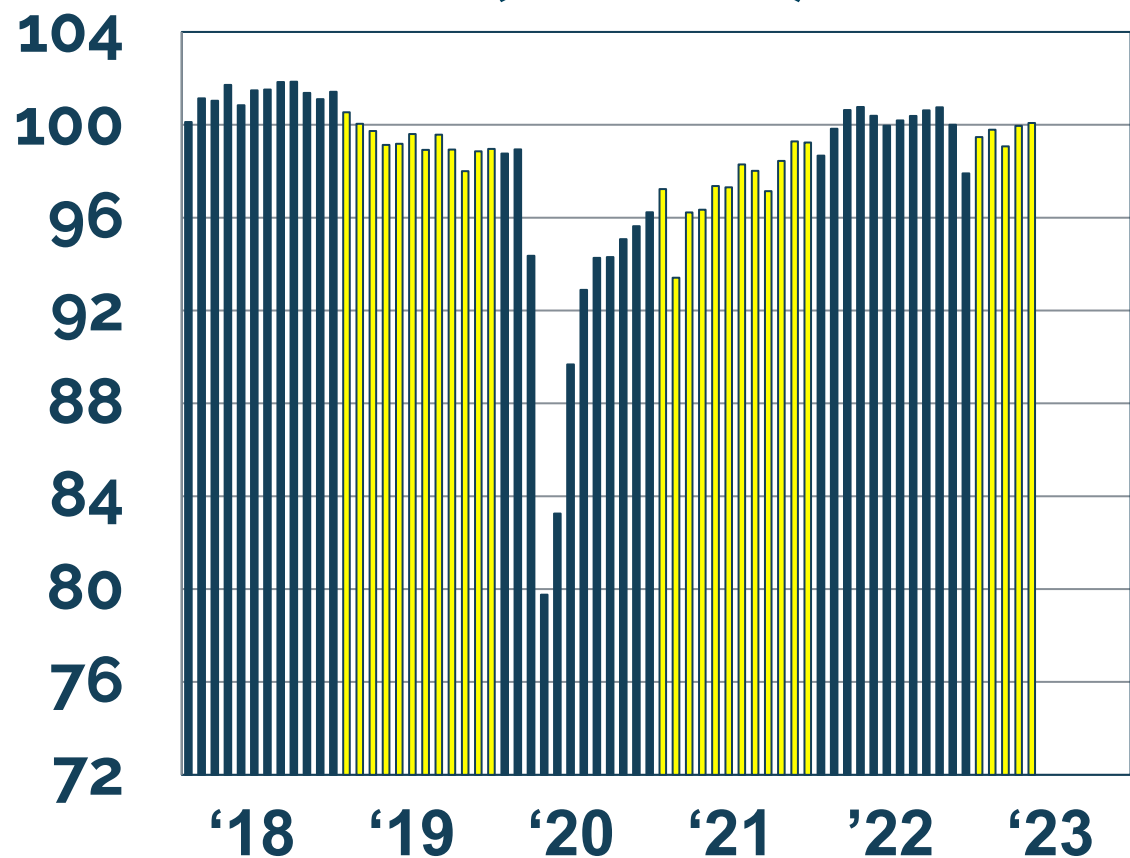
Rail Carloads of Grain vs. Grain Exports



Carloads don't include intermodal, are not seasonally adjusted, and don't include the U.S. operations of CN, CPKC, and GMXT. Source: AAR, USDA

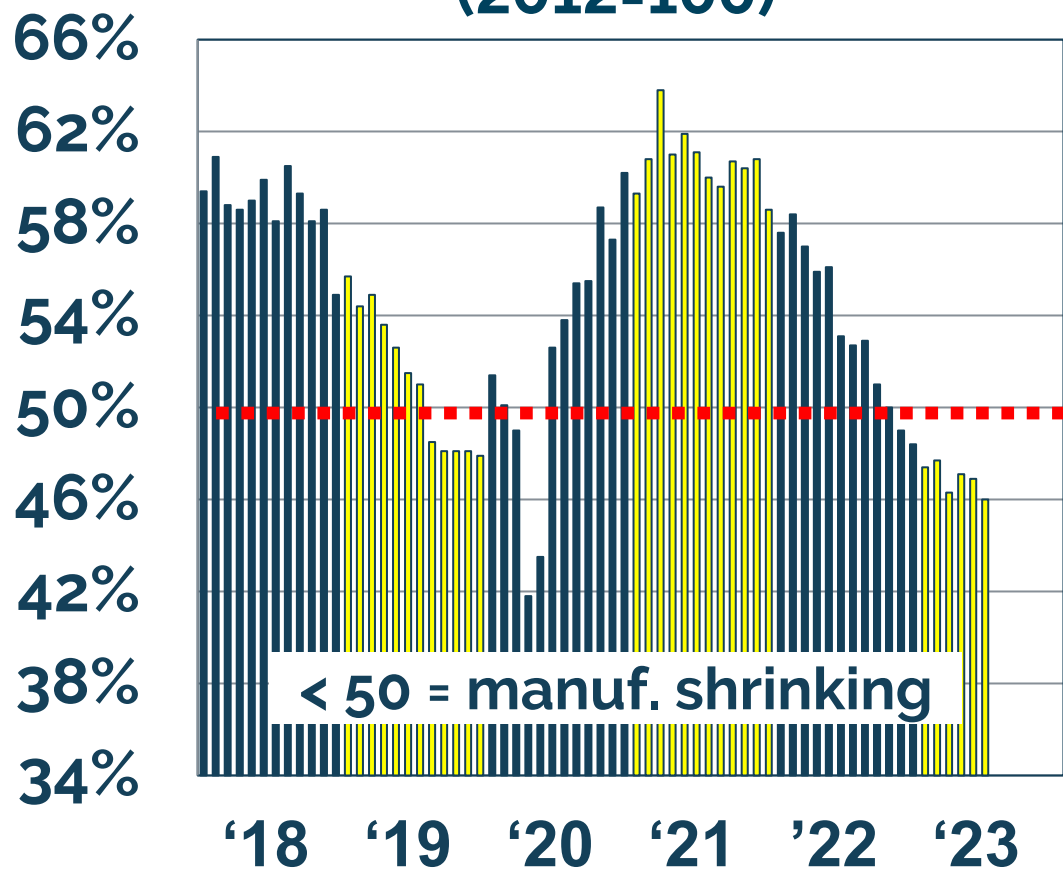
Manufacturing Weakness

U.S. Manufacturing Output (2012=100)



Source: Federal Reserve Board

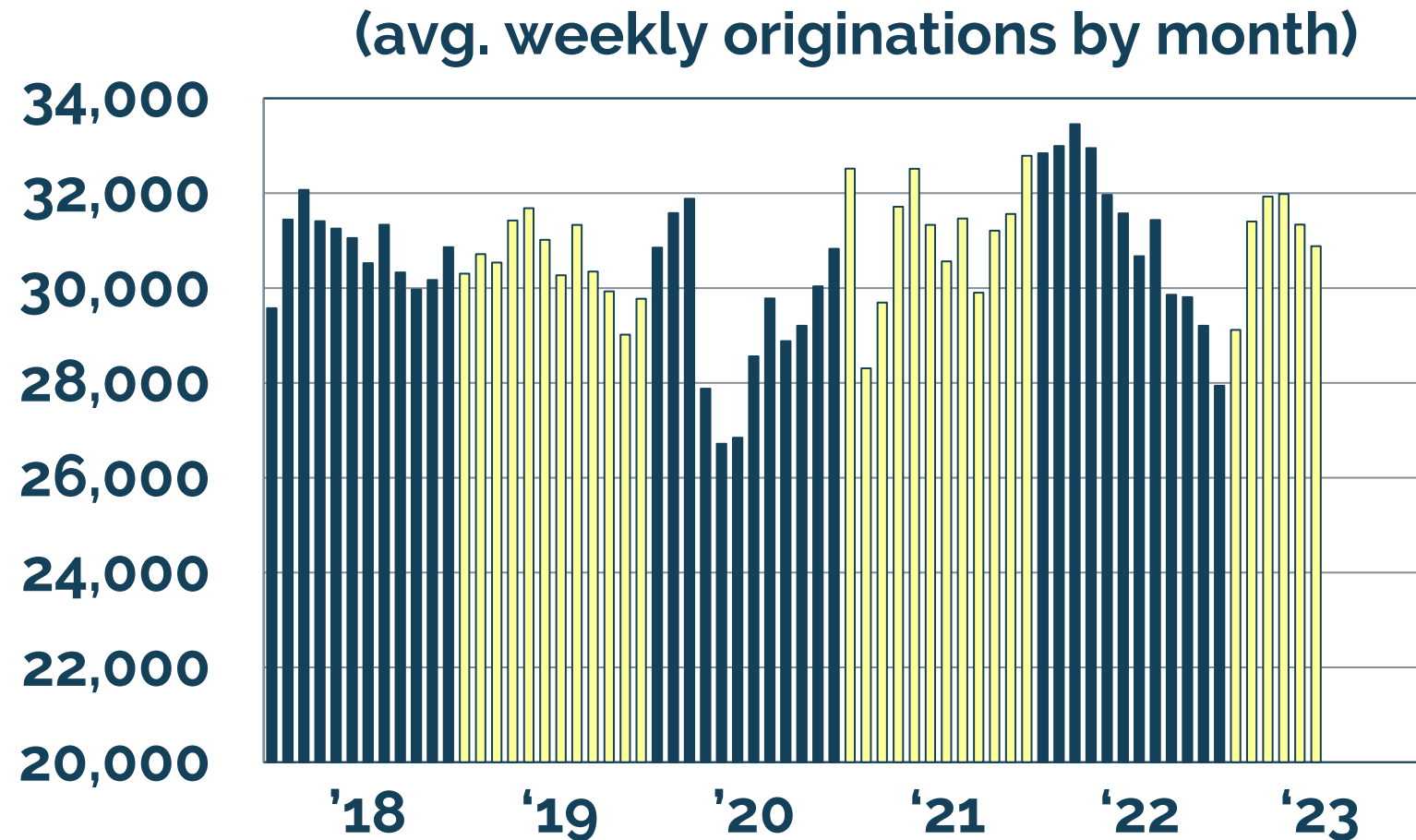
Manufacturing PMI® (2012=100)



Source: Institute for Supply Management

U.S. Rail Carloads of Chemicals

- Closely aligned with manufacturing
- Natural gas is key input
- Huge variety of products



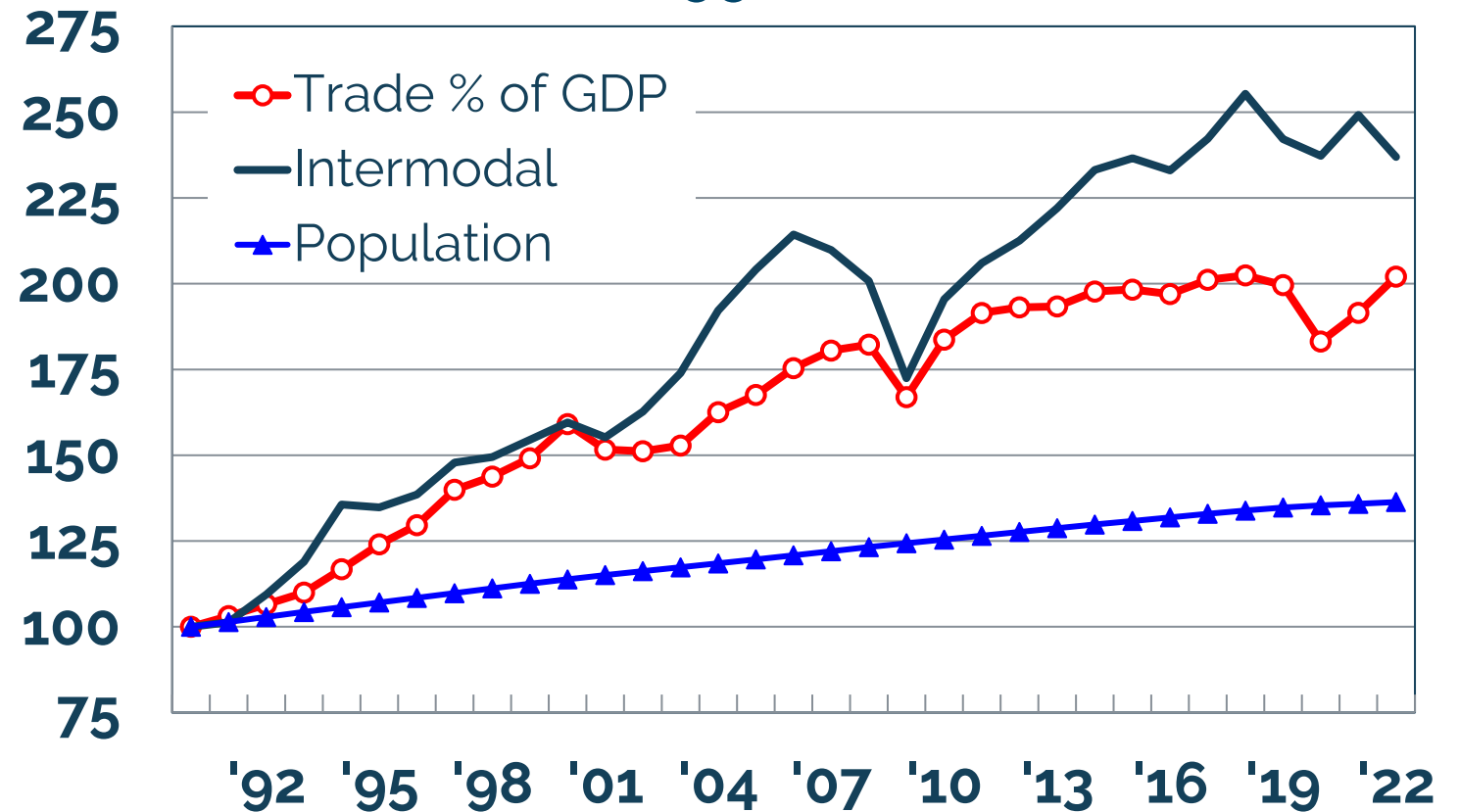
Data don't include intermodal, are not seasonally adjusted, and don't include the U.S. operations of CN, CPKC, and GMXT. Source: AAR

Looking Ahead

A few key points:

- Service, service, service
- Trucks will remain fierce competitors.
- Potential markets should keep growing.
- Must get through present period first.
- Regulation and legislation matter.
- Environmental benefits.
- Go buy more stuff.

Trade vs. Rail Intermodal vs. Population (1990 = 100)



Source: AAR, BEA

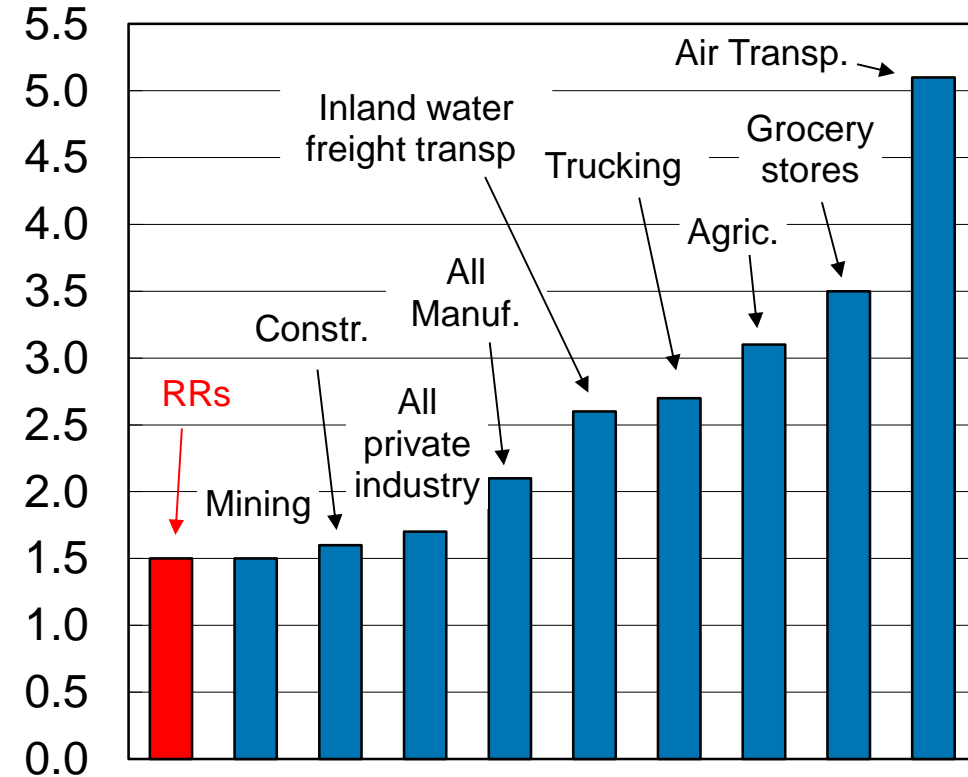
Safe and Always Trying to Get Safer

Changes in Railroad Accident Rates 2000-2022

| | |
|-----------------------|------|
| Total train accidents | -23% |
| Collisions | -47% |
| Derailments | -29% |
| Other | 6% |
| Track-caused | -52% |
| Equipment-caused | -18% |
| Human factors-caused | -8% |
| Employee injuries | -48% |
| Grade crossings | -22% |
| Hazmat incidents | -73% |

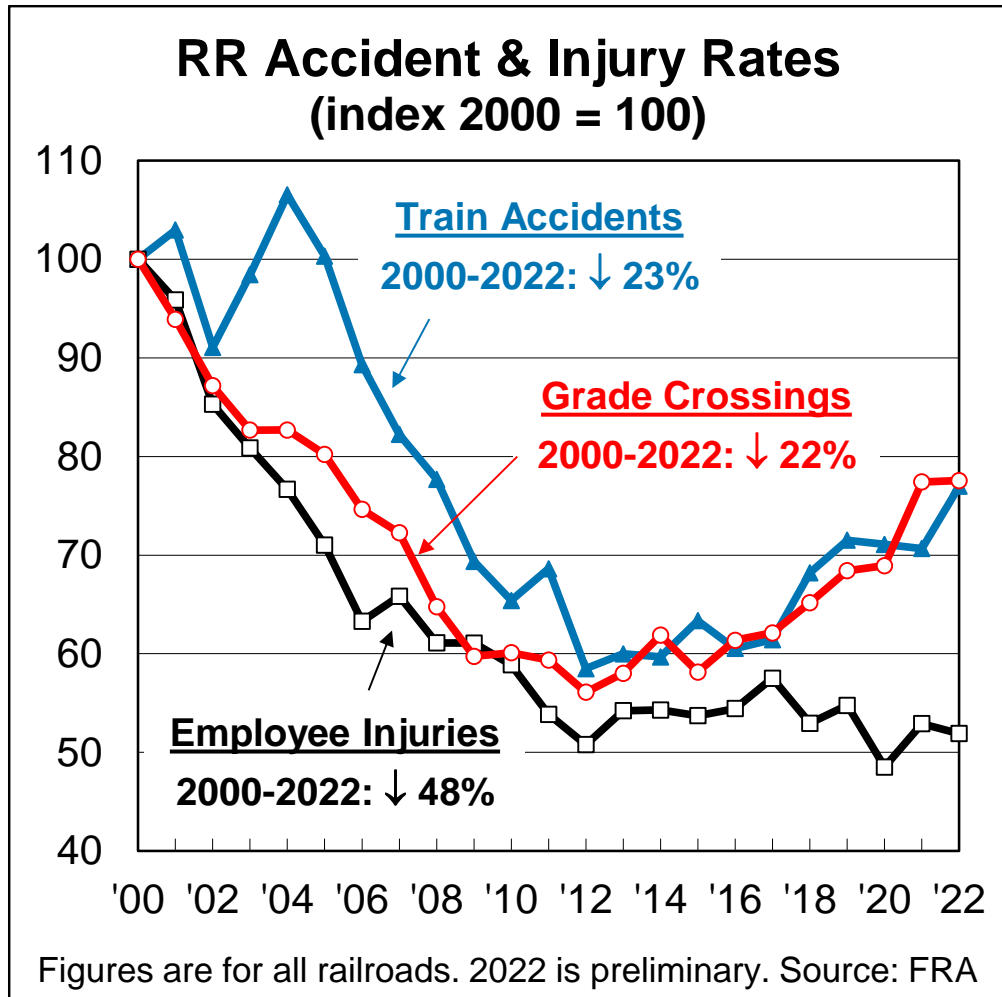
2022 is preliminary. Source: FRA, AAR

RRs Are Safer Than Most Other Industries (injuries per 200,000 employee-hours)



Data are for 2021. Source: Bureau of Labor Statistics

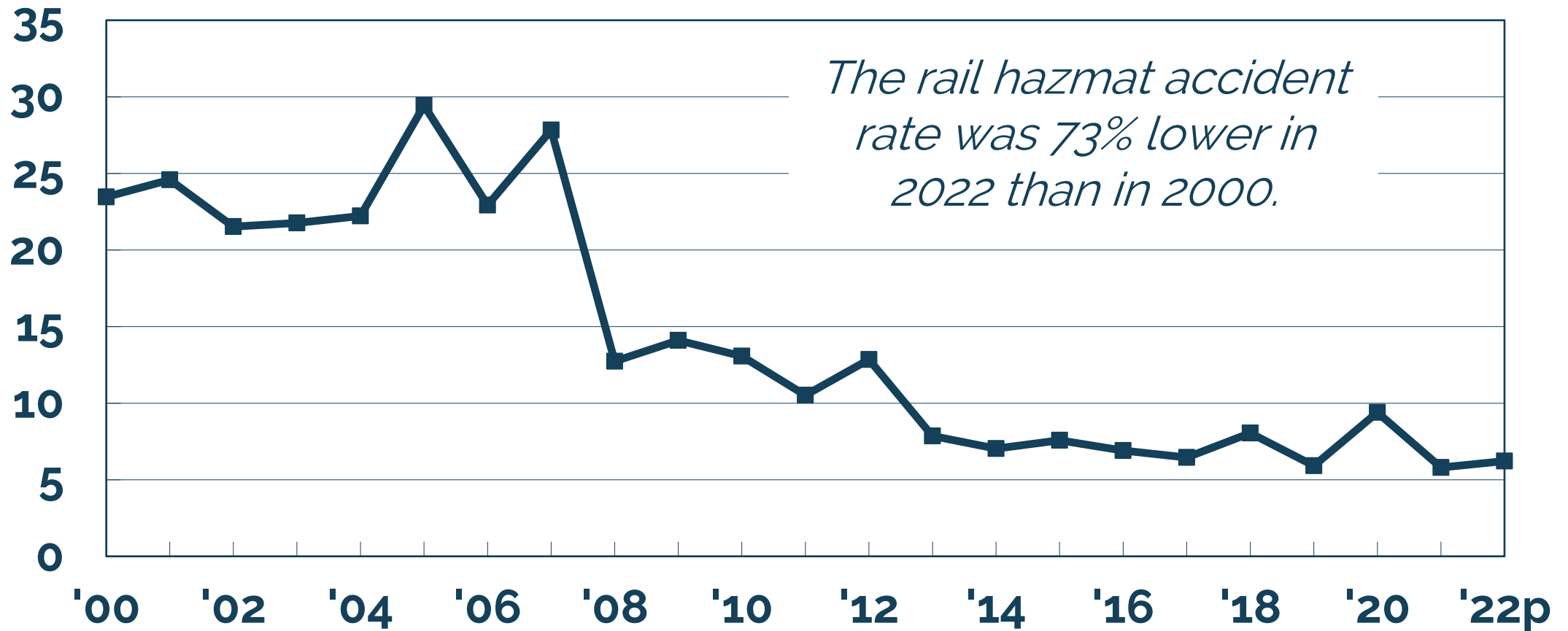
Some Safety Trends Moving in Wrong Direction





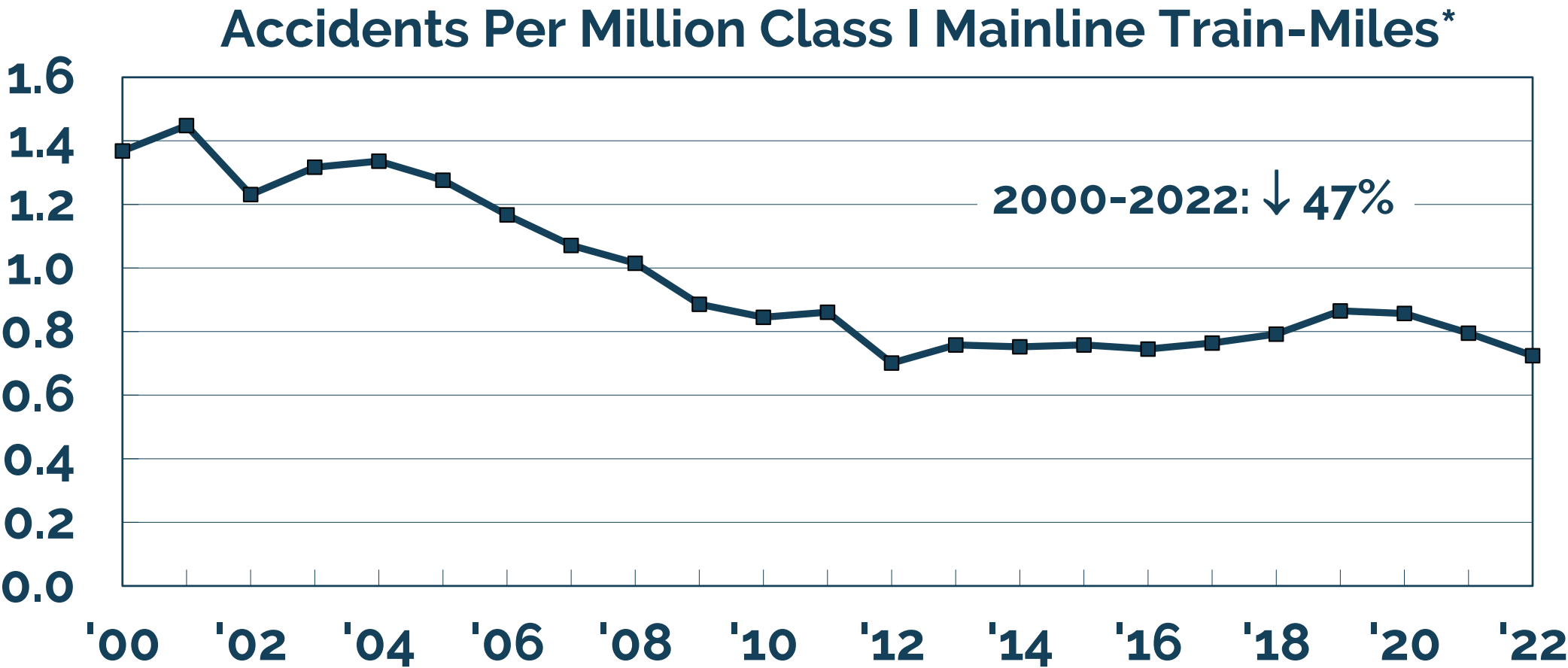
Sharply Lower Rail Hazmat Accident Rate

(Accidents With a Hazmat Release Per Million Hazmat Carloads)



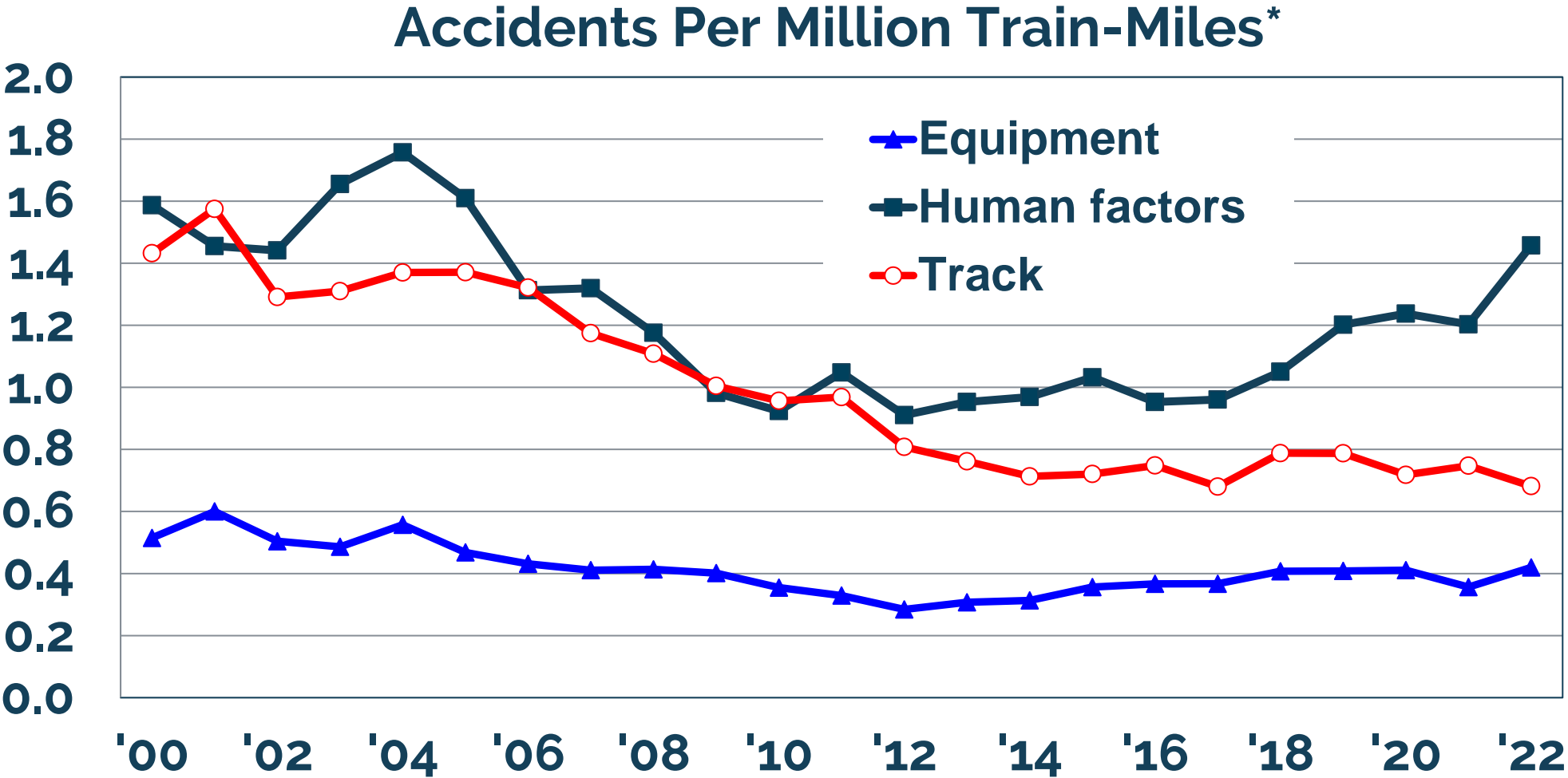
Source: AAR, FRA

Mainline Train Accidents



*A million train-miles is roughly equivalent to 300 trips across the country. Source: FRA

Train Accidents by Cause



*A million train-miles is roughly equivalent to 300 trips across the country. Source: FRA

The Vast Majority of Class I Train Derailments Happen in Rail Yards



219 MAINLINE DERAILMENTS**

(24% of total)

- **208** with no hazmat, injuries or fatalities
- **7** with hazmat
- **4** with injuries

**IN 2022, THERE WERE 927*
CLASS I FREIGHT TRAIN
DERAILMENTS.**

A train derailment is any time a single rail car wheel leaves the rail, whatever the reason.

706 RAIL YARD DERAILMENTS***

(76% of total)

- **700** with no hazmat, injuries or fatalities
- **4** with injuries
- **1** with hazmat
- **1** with a fatality

Issues Coming Out of East Palestine

- More hot-box detectors, lower threshold
- Crew size
- Length of trains
- Role of technology
- Public trust



Association of American Railroads www.aar.org



Ferrosur



CPKC

Wheeling & Lake Erie
RAILWAY COMPANY

Rj Corman
Railroad Group



BNSF
RAILWAY

Ferromex

ALASKA
RAILROAD



Florida East Coast
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