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abh consulting

NARS 2023



WHAT WE'LL COVER TODAY

- Ever-increasing demands for service
- Financial performance and changing investor perceptions
- The recession's lingering impact on growth, labor and demand
- A shifting regulatory climate
- Elevated profiles for Short Lines and regionals
- New rail leadership now (and to come?)

NSC & EAST PALESTINE – EXISTENTIAL THREAT?

- ▶ NS accident couldn't be worse timed or to a more unfortunate carrier
- ▶ NS safety history, efforts at Common Carriage, originator of TGE
- ▶ Rails are not *allowed* to carry haz-mat, they are *compelled* to
- ▶ ASCE Grade of B; Big & Consistent Capex

NSC & EAST PALESTINE CONTINUED

- ▶ Everyone on the attack:
 - ▶ Train length??
 - ▶ Crew size???
 - ▶ **ECB Brakes (car-based!) – your thoughts??**
 - ▶ Corp Greed/share buybacks??
 - ▶ *Don't trust the EPA*
 - ▶ *Fix everything but the problem!*
 - ▶ *Doubling hot-box detectors price tag \$1-2B*
 - ▶ *Etc.*

UNION PACIFIC'S SUNDAY SURPRISE

- ▶ Soroban forces a change of leadership (sometime this year)
- ▶ Suggests Vena (again)
- ▶ Another “existential fight for the soul of the rails”? (from growth to margin focus?)
- ▶ Many gaffes - Capex at 15% or less; G55; STB issues
- ▶ Chronic under-performance (of *potential*)
- ▶ Still the best job in the business
- ▶ KC “otherwise occupied” – right?

BRAND NEW BABY RAILROAD

- ▶ CPKC “Last Spike” April 14
- ▶ Never (NEVER) in doubt – just listen to the STB (and to me)
- ▶ Congrats to the STB for filtering out the noise (DOJ, Warren)
- ▶ New Growth Opportunities can help to turn around perception of rail
- ▶ Rail/Rail Competition
- ▶ Rail/Truck/Competition
- ▶ 80% Synergies – i.e; revenues
- ▶ Can the Unicorn bring it home – yes. In 3 years?

RAILSTOP10 (WINTER 2023)

1. Service Issues/Trendline
2. Just-in-Time for Recession? (Sub Q – Inflationary impact/Pricing)
3. Or will 2023 (finally!) be a base/normal year?
4. Labor – Ratification & Recession Choices?
5. What is the (quantifiable) “Pent-Up Demand”?

RAILSTOP10 (WINTER 2023) CONTINUED

6. Does “Service (really) Beget Growth”?
7. CPKC *will* pass; Conditions (if any)? Synergy timing?
8. Is this therefore *Peak STB*? Has the “axis of evil” shifted to the FRA?
9. Will intermodal finally get its MOJO workin’ again?
10. Talking the talk – Growth/Tech/ESG

Bonus Round:

- ▶ What trends will actually emerge from the pandemic?
JIC? Near or Re-shoring?

RAILROADS TODAY (2023), PART 1

- ▶ **Tactical not Strategic:** All hands on deck as ALL stakeholders demand service improvement
 - ▶ The service crisis is labor-driven, not capacity (Capex plans inflected up, however)
 - ▶ So much for H2 improvement? Trendline improving, anyway
 - ▶ Still more hearings (UP)

RAILROADS TODAY (2023), PART 2

▶ Tailwinds:

- ▶ Pent up demand
- ▶ Unfilled demand
- ▶ inflation/oil
- ▶ ESG
- ▶ Graduating crew classes
- ▶ The dollar

RAILROADS TODAY (2023), PART 3

- ▶ Headwinds (besides the obvious):
 - ▶ LABOR (Rail *and* Port)
 - ▶ The FRA!!
 - ▶ Inflation (and its impact on JIC)
 - ▶ The dollar
 - ▶ Perceptions of Management/Performance; reduced Bench Strength? Newcomers

EH, CANADA

- ▶ Regulatory Differences (in light of a rampant STB – and FRA)
- ▶ Grain regulation & Reciprocal Switching
- ▶ PTC/ETC?
- ▶ ITC for short lines (in light of the short line valuation/service boom)
- ▶ Canadian economic risk (household debt, housing)

EH, CANADA, ENCORE

- ▶ Global Trade
- ▶ USMCA Issues (“Buy American”??)
- ▶ Success of CPKC
- ▶ New Leadership/Direction at CN
- ▶ Importance of retaining growth vs margin focus
- ▶ Dual ownership?

RAIL STRIKE –CRISIS AVERTED

(OR, WHEN YOU'RE RIGHT, YOU'RE RIGHT!)

- ▶ This was business-as-usual: Every 5 year three years-plus-back pay negotiations
- ▶ The system (RLA) was *designed* to go slow, cool off, mediate, PEB, etc.
- ▶ Contracts run *in perpetuity* and although nationally negotiated fall down to small historic groups (NS = N&W, Southern, CRR, etc.)
- ▶ The unusual item: Face cards all fell labor's way –Democrats in power, labor shortage, Supply Chain “crisis”, rail record earnings, inflation
- ▶ So rail labor played their cards out – as expected – to the (almost) very last minute

RAIL STRIKE –CRISIS AVERTED, CTD.

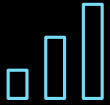
- ▶ Got 24% (including back pay), which was a PEB split-the-baby slight lean Labor; got no real change in benefits, some work rule (attendance, doctor trips) changes
- ▶ The PEB recommendations were ALWAYS going to be the template!
- ▶ Rails did not get consist or other automation productivity reform (as we might have hoped back in 2019); FRA might supersede whatever they achieve in “local negotiations” anyway

RAIL STRIKE –CRISIS AVERTED, FINAL THOUGHTS

- ▶ Worry – with back pay coming so might another bump in attrition
- ▶ Hope – with labor issues resolved for 3+2 years, hiring and retaining thereafter goes back towards normal – shareholder aligned here with labor
- ▶ Truly unusual media reaction to the “*Impending Economic Crisis*” – see Time Magazine (??)
- ▶ From transport to business to the Front Page!
- ▶ Fallacious issue of “paid sick leave”
- ▶ And the issue of crews, retention, scheduling all trace their roots to H2/20 – and The Pandemic

RECURRING AND ACCELERATING RAIL TRENDS

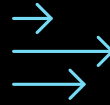
(NOT TO BE CONFUSED WITH RAILTRENDS NOVEMBER 2023!)



The Mix Shift
Towards Higher
Levels of Service



The Parallel Faster
Decline of Coal



The Continuation
and Success of PSR



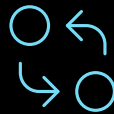
The Continuing
“Cult of the OR”



The Continuing
Fight over FCF –
Share Buybacks
“vs” Capex



The Consistent
“Hype” of EV & AV
Highway
Competition
(response?)



The Remaining
Importance of
Trade (and Tariffs
Remain)



Solid Financial
Results/Good Cash
Flow & Capital
Access



The Continued Lure
of M&A in short
lines/regionals



The Continued
“Hype” on the
Value-Trap of Rail
Consolidation

5+ ENDURING (?) RAILROAD COMPETITIVE ADVANTAGES

1	Labor Advantage (ex: Double-stack LA-Chi – or Rupert-Toronto) ¹
2&3	Fuel Advantage (2A) (4:1 ton/mile; AAR) ² – So 2B is EMISSIONS /Environmental Advantage (see...WMRT, Unilever, etc.)
3	Infrastructure Advantage (after the IHS buildout; user-pay and capex to support changing logistics patterns – ex: transcon) ³
4	Railroads' Excellent Financial Condition, Liquidity, Free Cash flow
5	Railroads' Historic Ability to Reduce Expenses in a Known Slowdown (2009, 2020) ⁴

DEALERS' CHOICE? DEAL-FEVER IN SHORT LINES (STILL)

- ▶ ***Short Lines & Regionals still hot properties***
 - ▶ Multiples have doubled in the last 5 years
 - ▶ No public companies left (GWR)
- ▶ Many small recent deals (OmniTRAX, RJ Corman, etc.)
- ▶ Watco-Dow and CN deals a new prototype?
- ▶ On the market: At least 4? Lake State Railway completed
- ▶ Off Market & Smaller Deals (ex. SLGW)
- ▶ Financial Partnerships (RDC, Watco, etc)

DEALERS' CHOICE? CONTINUED

- ▶ Spanner in the works? Problematic STB?
 - ▶ Massena Line & lawsuits - Withdrawn
 - ▶ WC-Watco, Pan Am finally finished!
 - ▶ KSU? A Slam Dunk? Views from my trip to DC
- ▶ Buyers (all with different WACC, timeframes, ROI expectations):
 - ▶ Strategic (above)
 - ▶ PE (and PE/partner)
 - ▶ Infrastructure Firms
 - ▶ Class Ones as sellers (CN?) and/or Buyers (CP-CMQ, CSX-PAR, BNSF-MRL)?

SHORT LINES TO THE RESCUE OF CLASS ONES?

- ▶ ***Class One service crisis and the impact on/of regulators (STB/FRA) and Legislators***
 - ▶ New focus, data on First Mile/Last Mile (and it ain't pretty!)
 - ▶ Service failures are manna to STB concerned about rail market power (price)
 - ▶ Reciprocal Switching (all about pricing power!) is coming, in modified form
 - ▶ STB use of *common carrier obligations* as a lever (UP/Foster Farms), focused on weekly switches
 - ▶ Declining Class One carload growth since the 2008-9 Financial Crisis

SHORT LINES TO THE RESCUE, CTD.

► SOLUTION? Increased use/creation of Short Lines!!

- Consistently outgrown C1 in carloads
- Offer tailored, customizable switching services
- Better work rules, less severe labor shortages
- Looked upon favorably by regulators and legislators!
- Watco's Dow and Dutchtown Southern (Louisiana/CN) increased weekly switching from 3-5 to 7+ and grew carloads by over *one third* in the first year of operations – win (customer switches)/win (Watco new business)/win for C1 partner CN (more cars for its long-haul business)
- All SLHCs have logistics/switching arms etc.

SHORT LINES TO THE RESCUE, CONCLUSION

- ▶ ***So why is the momentum of C1 strategy seemingly to buy/retake SLs (DMQ/Pan Am/MRL)??***
 - ▶ I support a “feed the beast” strategy (looking to extend a C1 market reach – ex CN 2018-21
 - ▶ However: Should not preclude thoughtful C1-SL partnerships (that solve customer problems!) – ex RailPulse
 - ▶ *No evidence of C leadership taking these steps (yet?)*

COMMON SHORT LINE RELATED QUESTIONS, 1-4

1. New short line spinoffs by Class 1's – *Hopefully* – see slide
2. Will the pace of new shortline creations pick up? Why? *Hopefully* – not a lot of evidence (CN-WC-Watco was a disposition; CN Guismer LA was a creation)
3. What are the drivers? Cost cutting? Economics? Growth? Politics? *Short line/switching creation would solve customer complaints, ease the great political pressures on rail, grow share – and, yes, lower the C1 OR. Also through 45G, US SLs have capex benefits*
4. Which Class 1's are more or less likely? Why? *Likely US based, perhaps NS under new management; after the Massena Line sale to CN collapsed, CSX took it off of the market*

COMMON SHORT LINE RELATED QUESTIONS, 5-8

5. How will the next cycle differ from the past? *The period from Staggers in 1980 through the beginning of this century saw Class Ones sell, spin or lease out low density short lines for focus on their core main lines; that reversed after rail pricing power ('03)*
6. Will there be a reverse cycle? Class 1's buying shortlines? *That is occurring*
7. What would the benefits or threats be to the other stakeholders? customers, labor, wall street, DC, suppliers, etc.? *Short lines use outsourced track/mechanical/etc; assuming done well all of those stakeholders would benefit.*
8. **So why isn't it being done?** *FOMO? Hyundai? A negative fallout from the positive C1 focus on maintaining their network advantages? No time to think strategically in a crisis? Historic lack of creativity?*

TO MEET COMING “EXISTENTIAL THREATS”
RAIL **TECH**/INNOVATION IS ACCELERATING (T10)
2023 BUDGETS WILL BE CRITICAL

Inspection Portals (from CN to the world)

Track Inspection
Cars (at speed) and
other preventive
MoW)

New loco power
(BN-WAB, PHL, CP!)

Rail Pulse – a game-changer (and other EODB efforts)

Moving
Blocks/Quasi-
moving Blocks
(BNSF) – unlocking
PTC

Outside
Investments –
CN/UP+Tu Simple;
KSU (etc?)

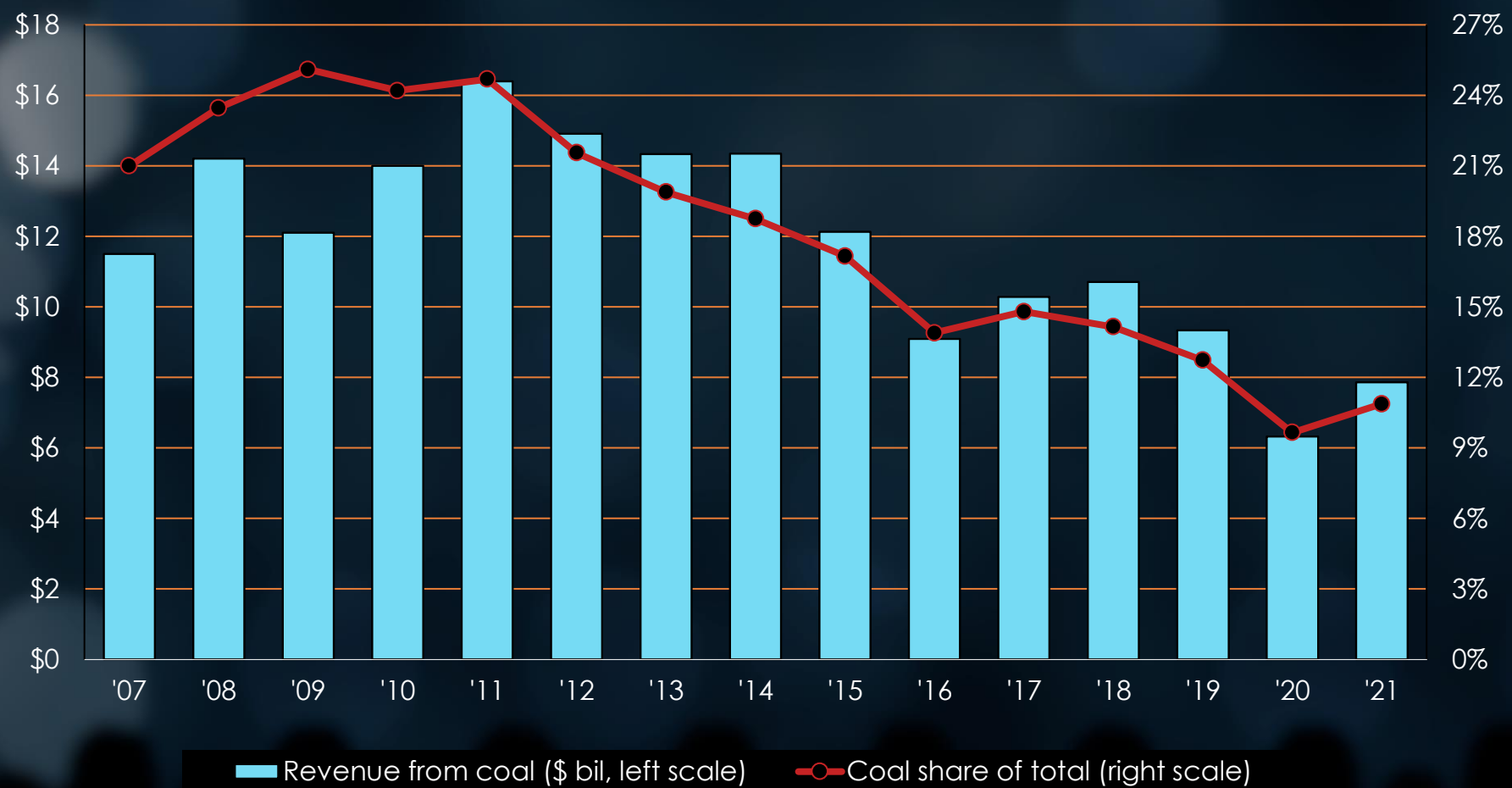
Big New Hires at
CN (WAB) and UNP
(WMRT);
Innovation; LOS to
the CEO?

Simulation (UP's "Train Builder")

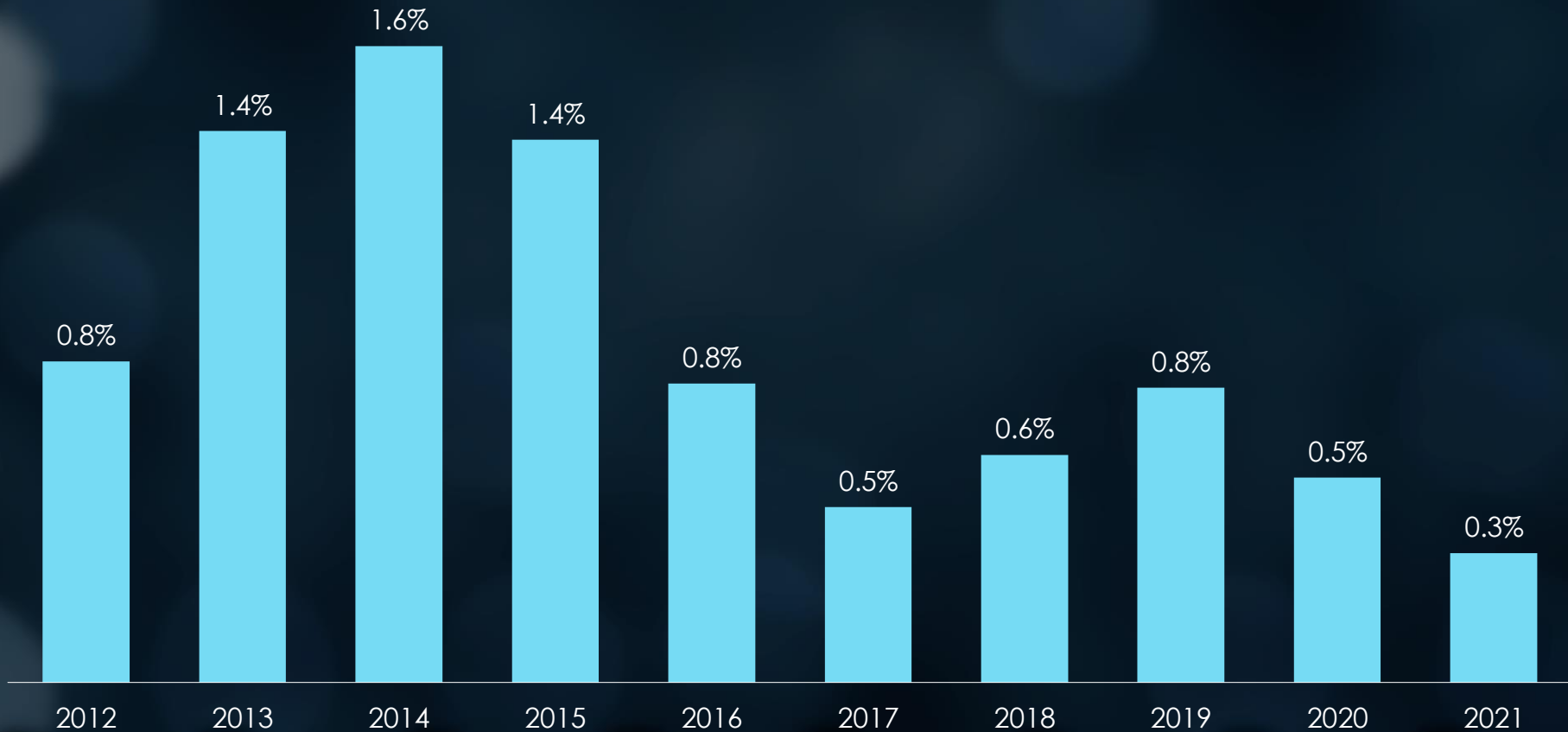
Remote meetings,
virtual crew offices,
zoom (sigh)

AVR – the “Holy Grail”, change the RR strategy?
Terminals....

U.S. RAIL REVENUE FROM COAL

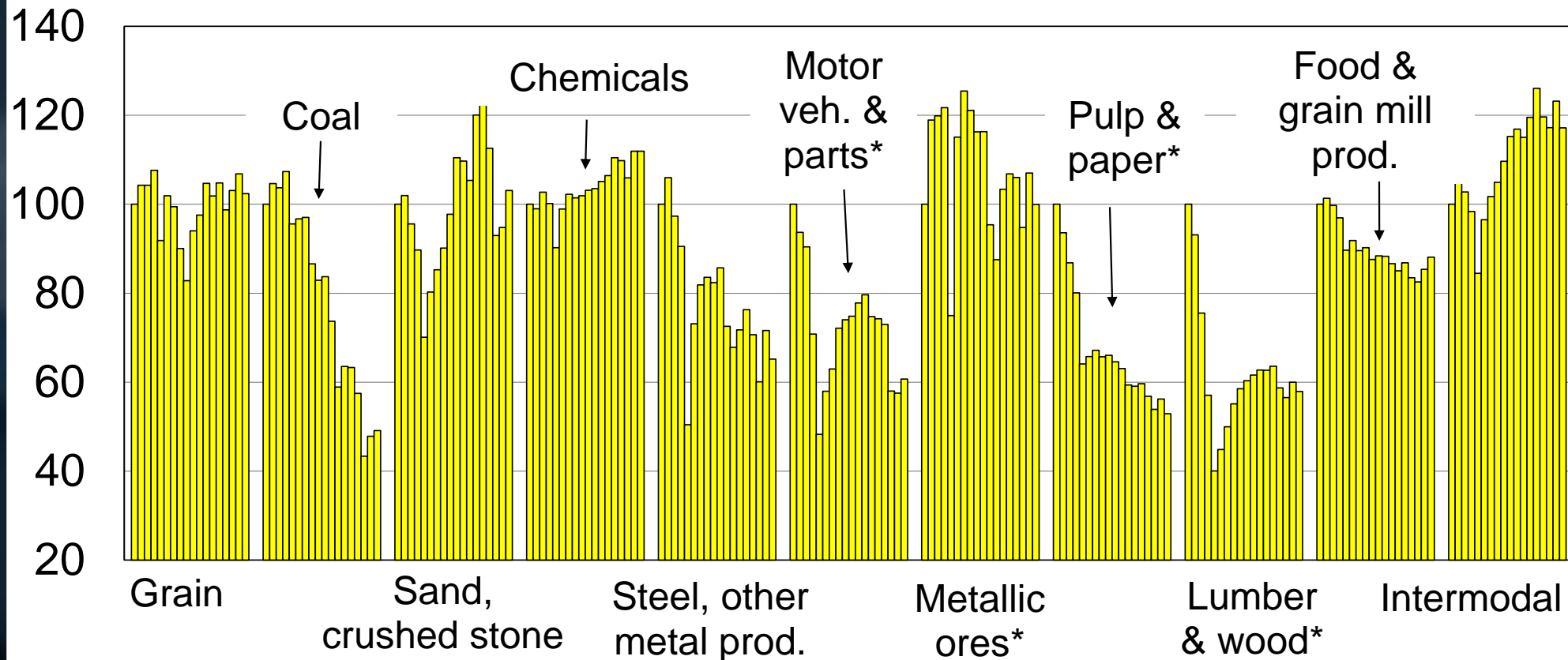


CRUDE OIL'S SHARE OF U.S. RAIL CARLOADS



Rail Markets Are Constantly Changing

Annual Rail Carloads by Commodity: 2005-2022
(index 2005 = 100)



*Combined U.S. + Canadian carloads.

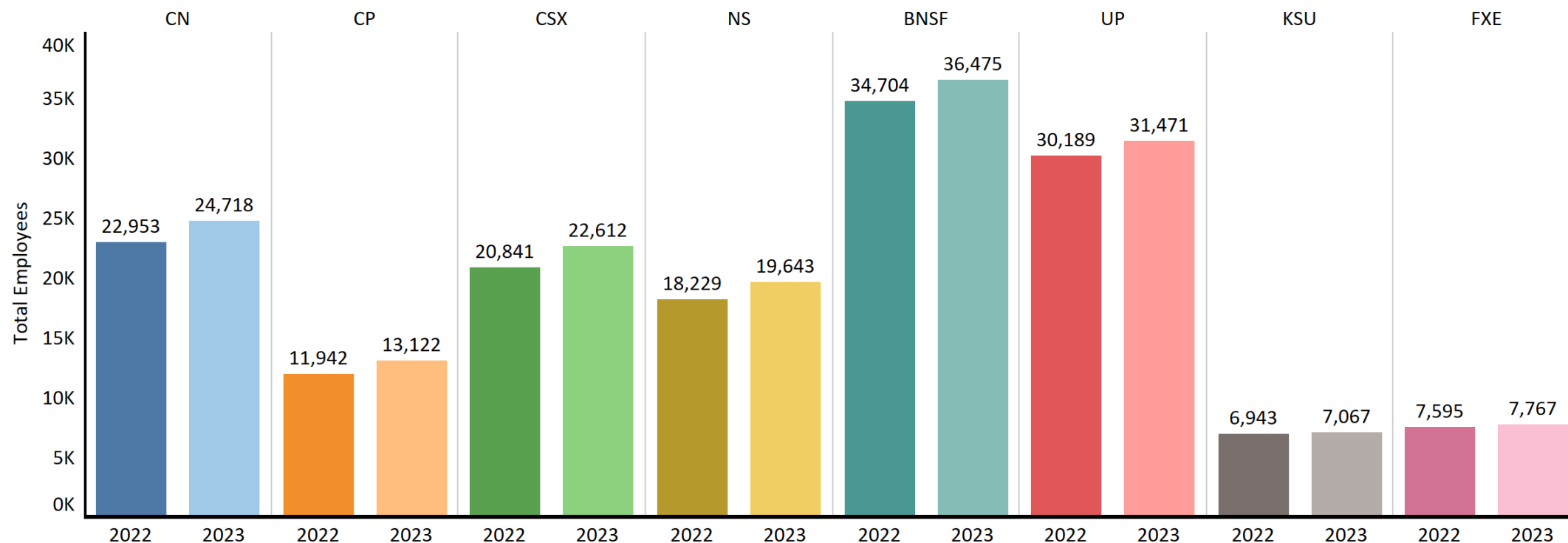
Source: AAR *Rail Time Indicators*

Employees

Employee counts have increased at every reported railroad

Total Employees

Q1 2023 compared to Q1 2022



Percent year-over-year

	CN	CP	CSX	NS	BNSF	UP	KSU	FXE
2023	7.7%	9.9%	8.5%	7.8%	5.1%	4.2%	1.8%	2.3%

Note: KCS's total employees number reflects the company's operations in both the US and Mexico

Sources: Industry financial reports; railroad company press releases; Surface Transportation Board, Quarterly Wage Form A & B; and Oliver Wyman analysis

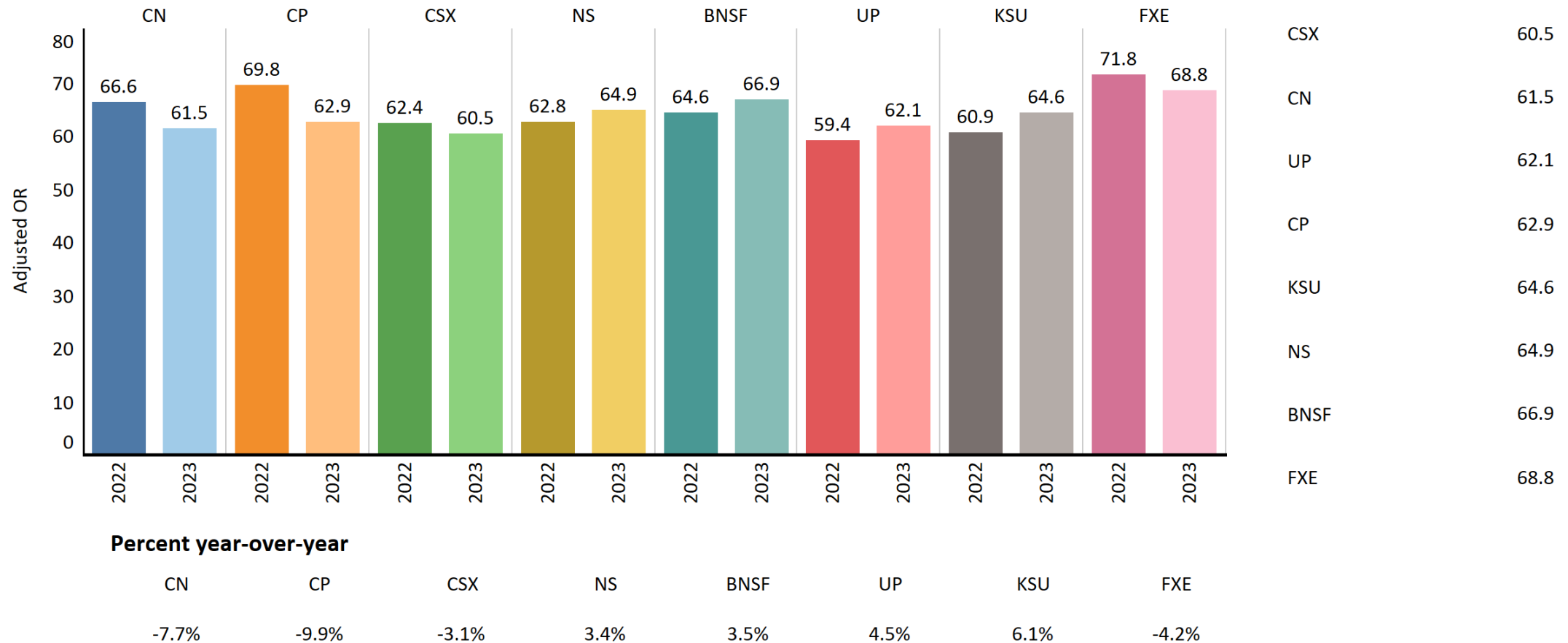
Adjusted Operating Ratio

OR increased across U.S. railroads, year-over-year, except at CSX



Adjusted Operating Ratio
Q1 2023 compared to Q1 2022

Adjusted Operating Ratio
Current ranking



Note: Unadjusted operating ratios in Q1 2023: CP (63.4%), NS (77.3%) and KCS (65.6%). Unadjusted operating ratios in Q1 2022: CN (66.9%), CP (70.9%) and KCS (62.6%).

Note: All operating ratios are calculated and may differ marginally from those reported by carriers.

Note: BNSF is BNSF Railway, not BNSF, LLC

Note: KCS's operating ratio reflects the company's operations in the US and Mexico.

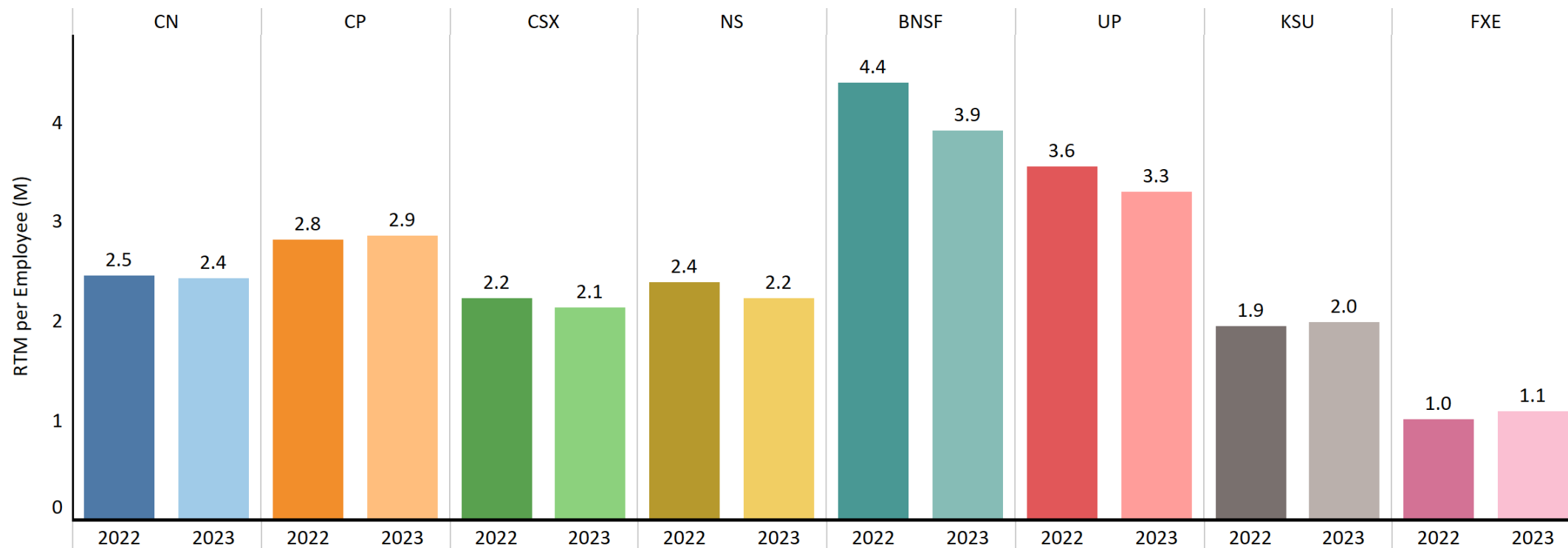
Sources: Industry financial reports; railroad company press releases; Surface Transportation Board, Quarterly Revenue, Expenses, and Income; and Oliver Wyman analysis

RTMs per Employee

RTMs per employee have either decreased or remained flat, as we've seen an increase in hiring and a decrease in rail traffic

RTM per Employee

Q1 2023 compared to Q1 2022, in millions



Percent year-over-year

	CN	CP	CSX	NS	BNSF	UP	KSU	FXE
2023	-1.5%	1.4%	-3.9%	-6.8%	-10.7%	-7.1%	2.1%	6.9%

Note: BNSF is BNSF Railway, not BNSF, LLC

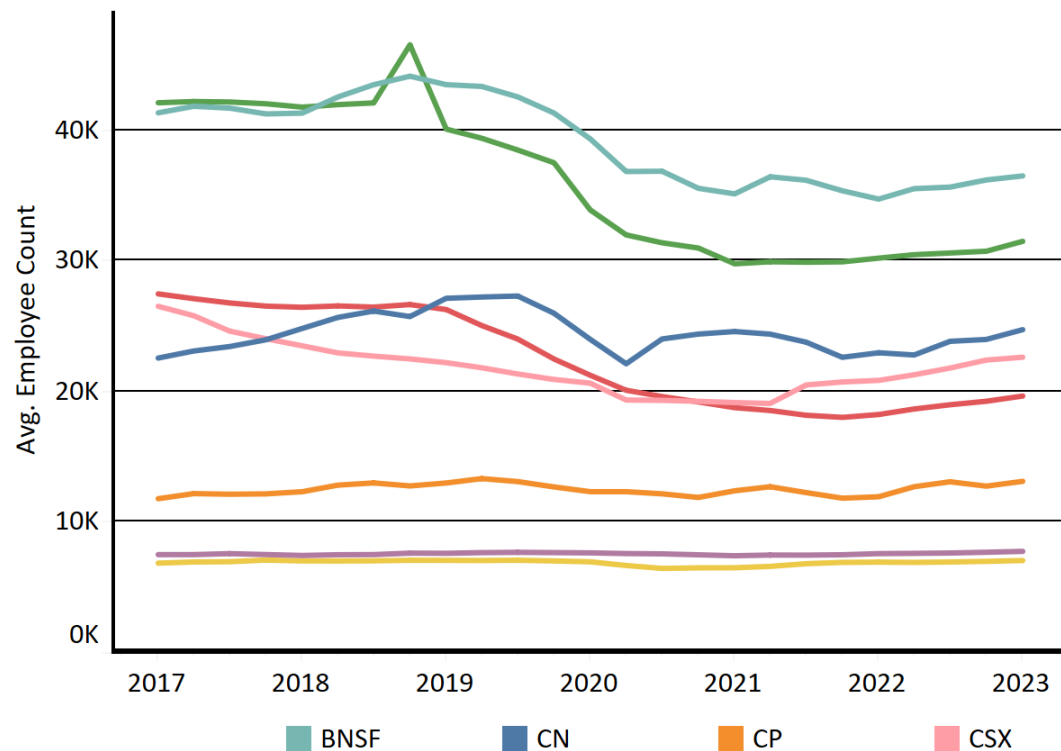
Note: KCS's revenue ton-miles per employee figure reflects the company's operations in both the US and Mexico

Sources: Industry financial reports; railroad company press releases; Surface Transportation Board, Quarterly Revenue, Expenses, and Income; and Oliver Wyman analysis

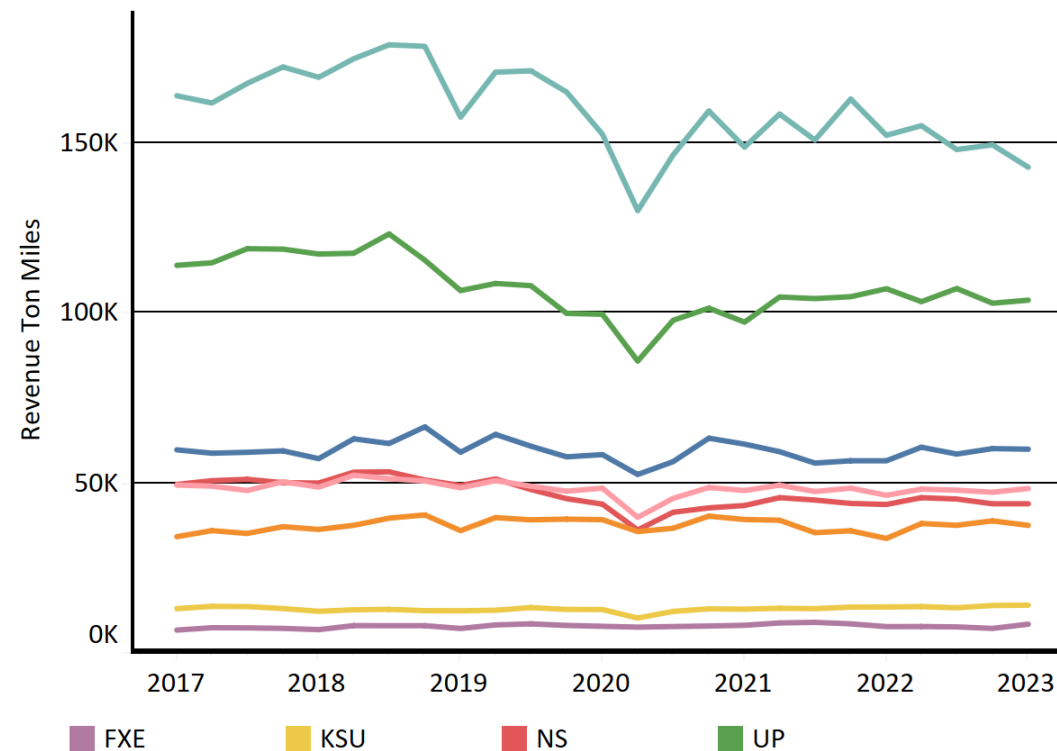
Employee Count and Revenue Ton Miles

RTMs per employee have either decreased or remained flat, as we've seen an increase in hiring and a decrease in rail traffic

Average Employee Count



Revenue Ton Miles



Average Employee Count (Q1 2017 vs Present)

CN	CP	CSX	NS	BNSF	UP	KSU	FXE
9.6%	11.3%	-14.7%	-28.4%	-11.7%	-25.2%	2.9%	3.3%

Revenue Ton Miles (Q1 2017 vs Present)

CN	CP	CSX	NS	BNSF	UP	KSU	FXE
0.3%	9.8%	-2.0%	-11.5%	-12.8%	-9.0%	7.7%	25.8%

Note: KCS's total employees number reflects the company's operations in both the US and Mexico

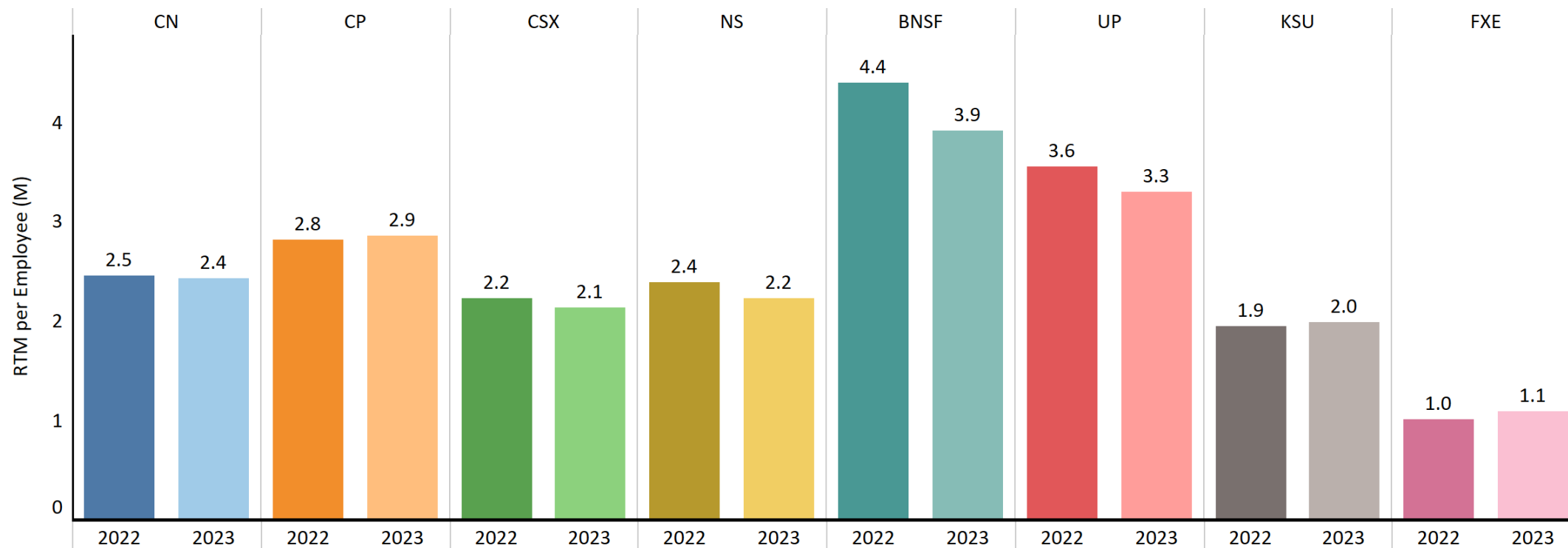
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RTM per Employee

Q1 2023 compared to Q1 2022, in millions



Percent year-over-year

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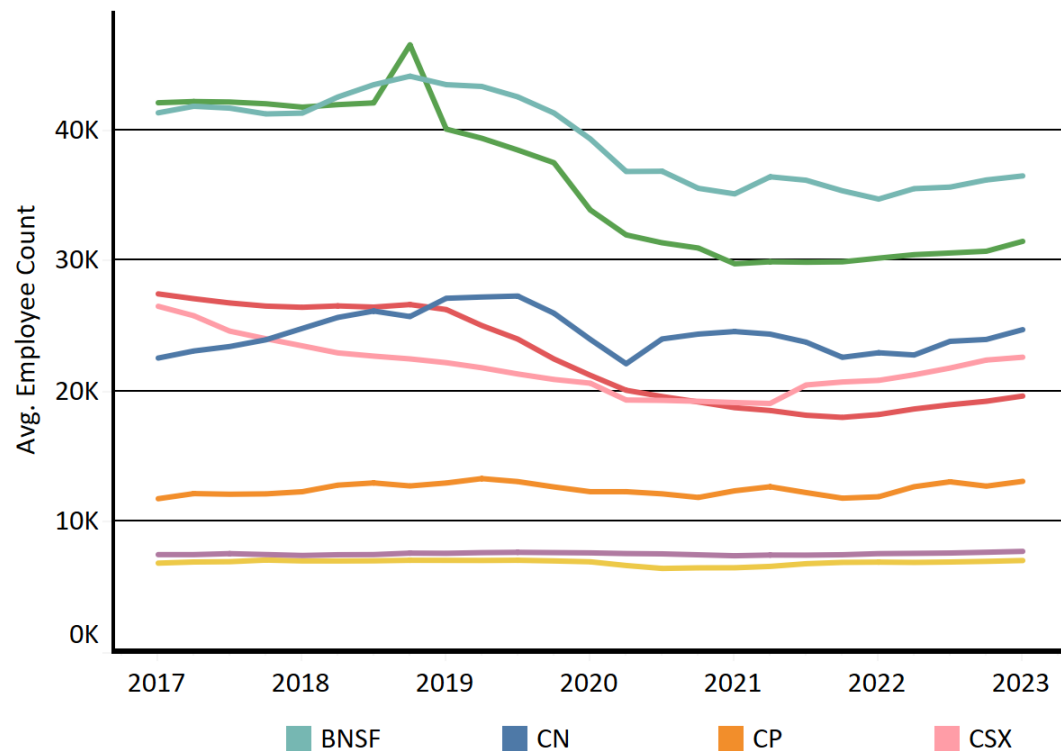
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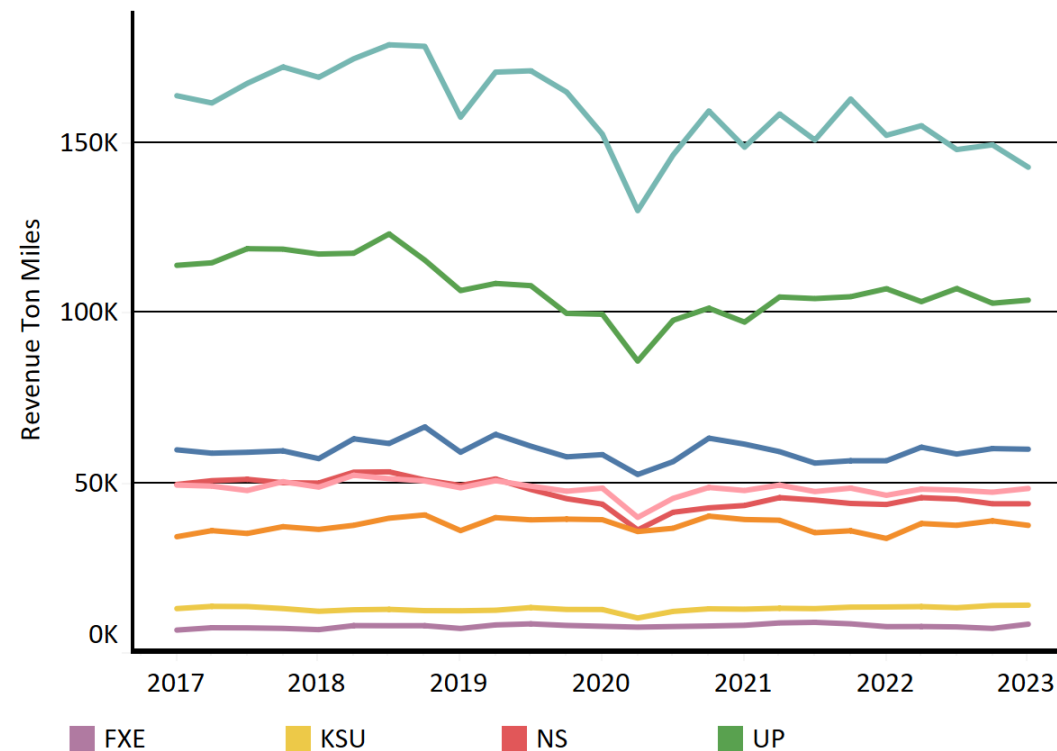
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Revenue Ton Miles



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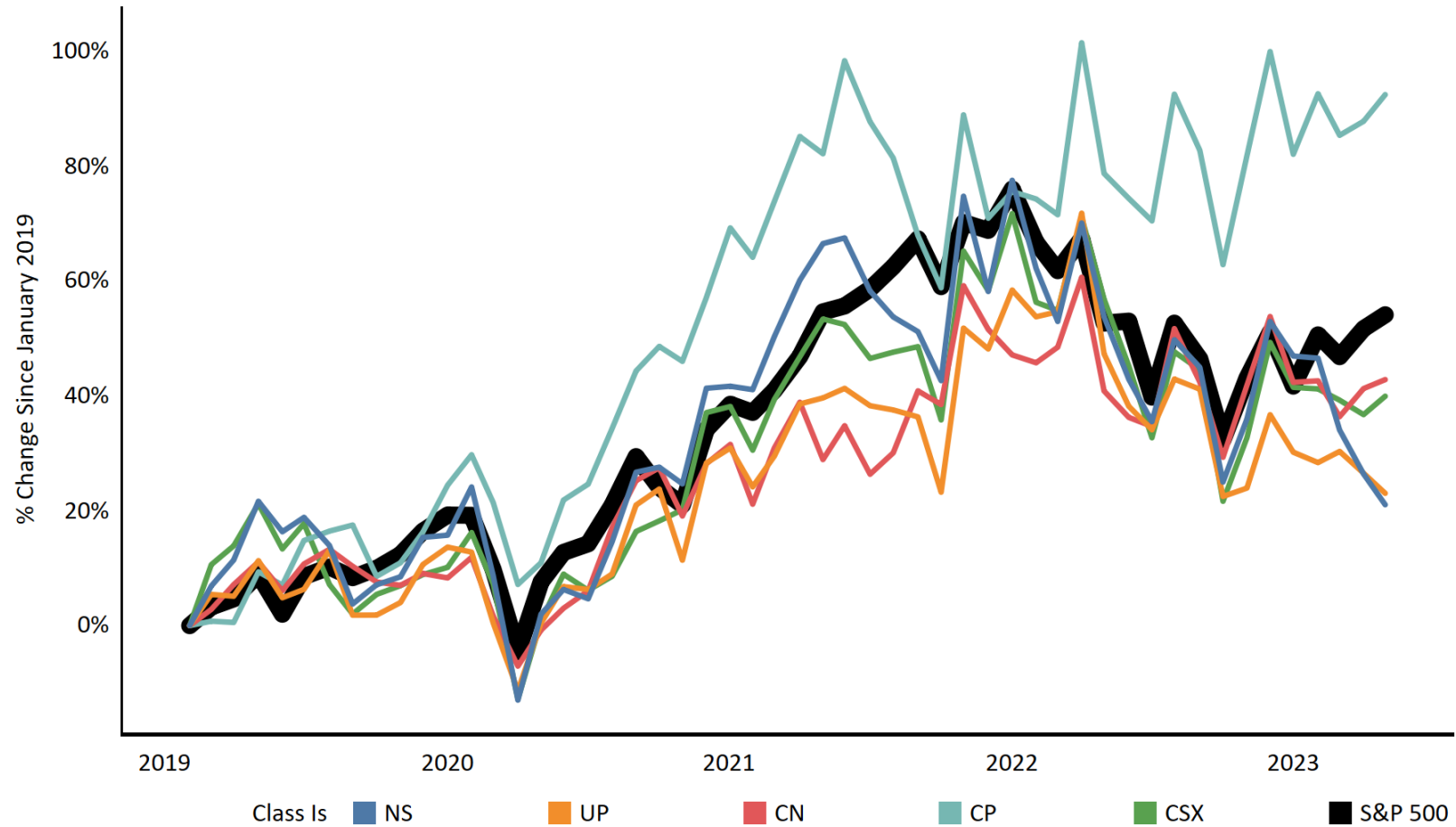
Sources: Industry financial reports; railroad company press releases; Surface Transportation Board, Quarterly Wage Form A & B; and Oliver Wyman analysis

Class 1 Stock Prices

Canadian Pacific is the only Class I to outperform the S&P 500



Class I Stock Price Performance Indexed
Three-year trend



Stock Price

3/31/2023

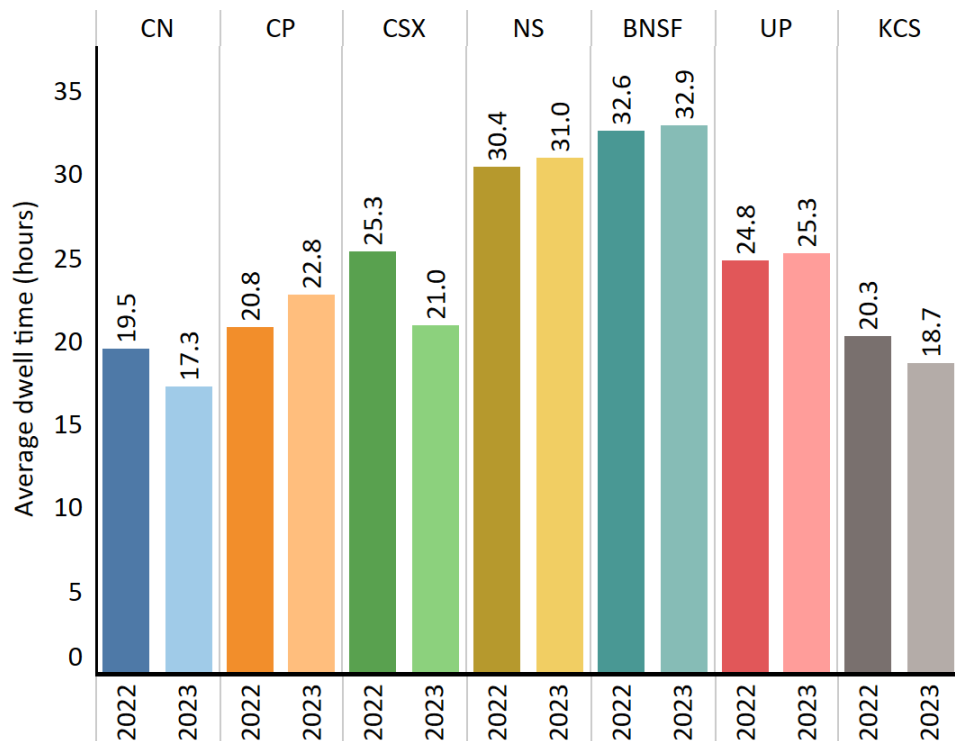
CN	\$117.97
CP	\$76.94
CSX	\$29.94
NS	\$212.00
S&P 500	\$409.39
UP	\$201.26

Operating Metrics

Operating metrics are a mixed bag, with little evidence to support an increase in overall network fluidity

Average Dwell Time

Q1 2023 compared to Q1 2022

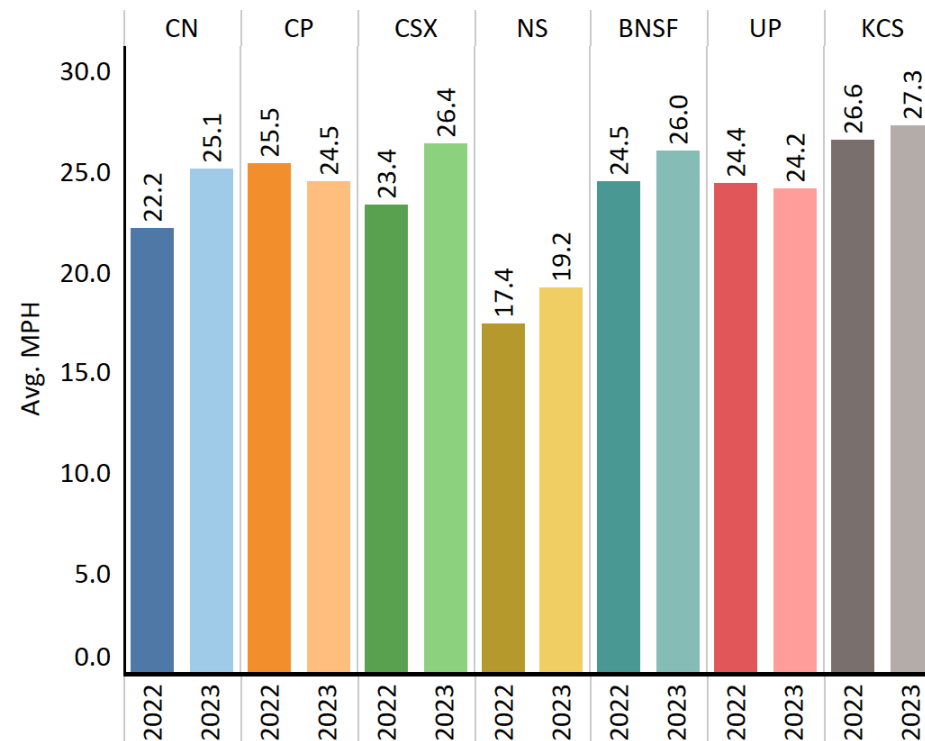


Average Dwell, Year-over-Year Change

	CN	CP	CSX	NS	BNSF	UP	KCS
2023	-11.3%	9.6%	-17.3%	1.8%	1.0%	1.9%	-7.9%

Average Velocity

Q1 2023 compared to Q1 2022



Average Velocity, Year-over-Year Change

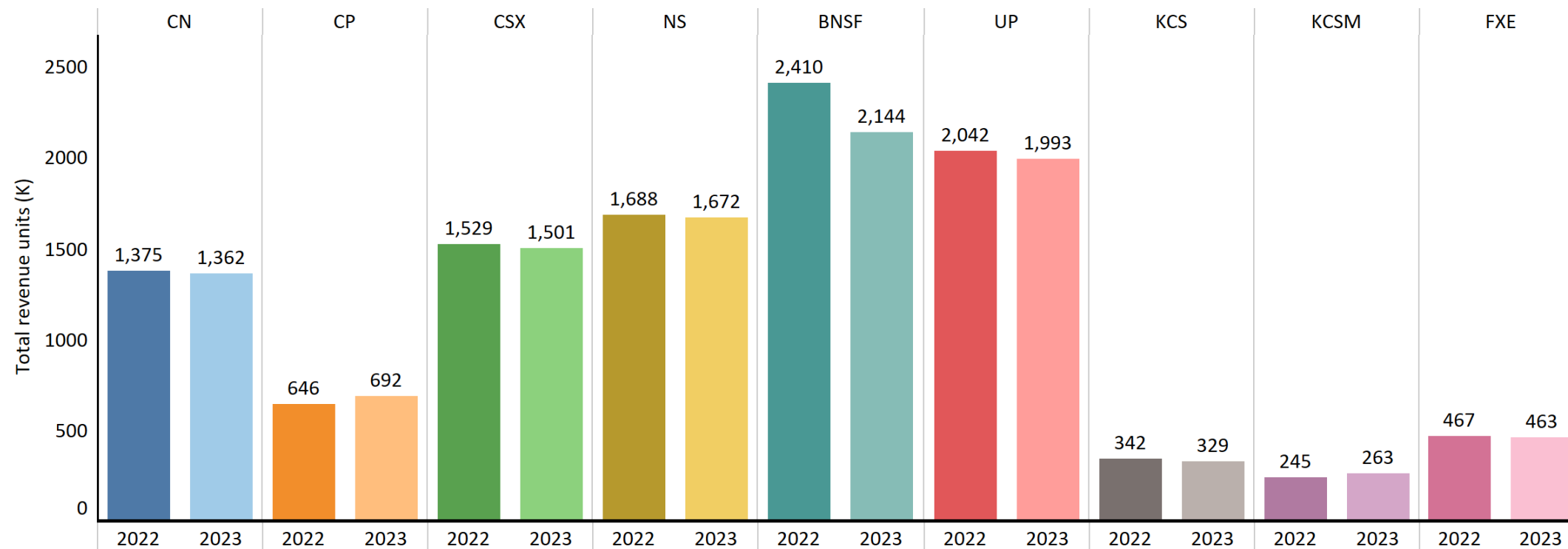
	CN	CP	CSX	NS	BNSF	UP	KCS
2023	13.3%	-3.7%	13.0%	10.4%	6.1%	-1.2%	2.6%

Year-over-Year Rail Traffic

Total rail traffic is down for each railroad, except CP and KCSM

Total Revenue Units (Carload and Intermodal)

Q1 2023 compared to Q1 2022, in thousands



Total Revenue Units, Year-over-Year Change

	CN	CP	CSX	NS	BNSF	UP	KCS	KCSM	FXE
2023	-1.0%	7.1%	-1.8%	-0.9%	-11.0%	-2.4%	-3.9%	7.2%	-0.8%

Note: Carload figures come from AAR weekly reports, which may vary marginally from the figures reported in the company financial statements

Note: Percentages may be slightly off, due to rounding

Note: Carload figures for FXE reflect Grupo Mexico Transport's overall operations in both the US and Mexico

Note: Carload figures for KCS reflect the company's operations in both the US and Mexico

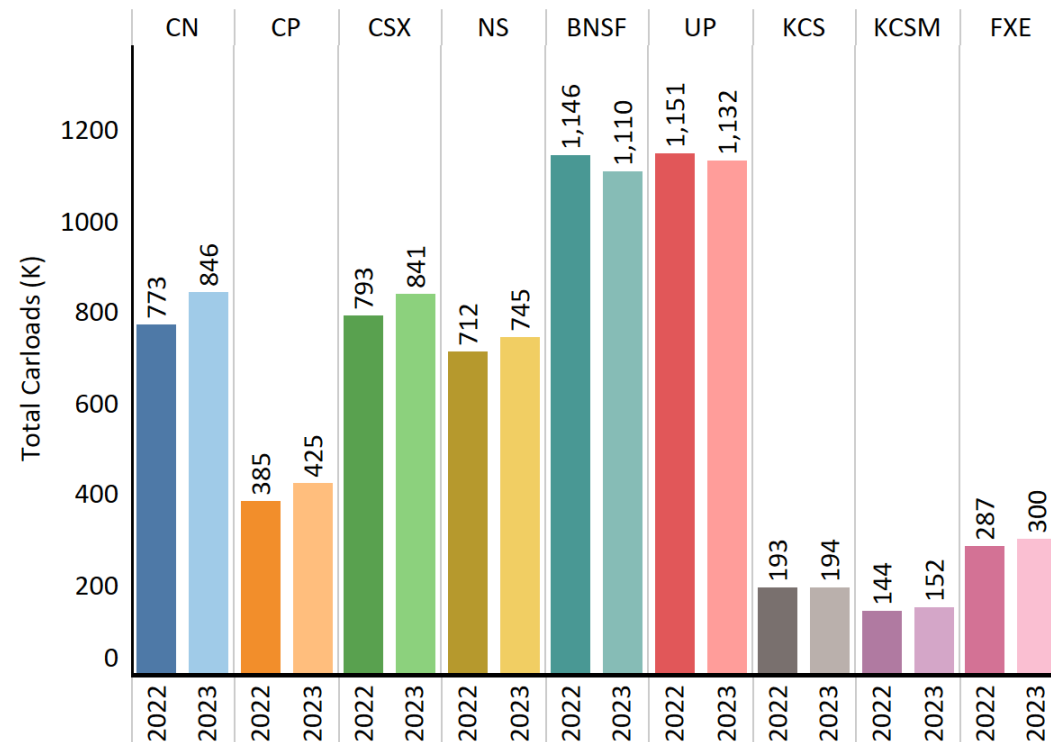
Sources: Industry financial reports, AAR data, press releases, and Oliver Wyman analysis

Year-over-Year Rail Traffic 2/2

Carloads have generally increased across railroads, with intermodal being the biggest drag on rail traffic

Carload Traffic

Q1 2023 compared to Q1 2022, in thousands

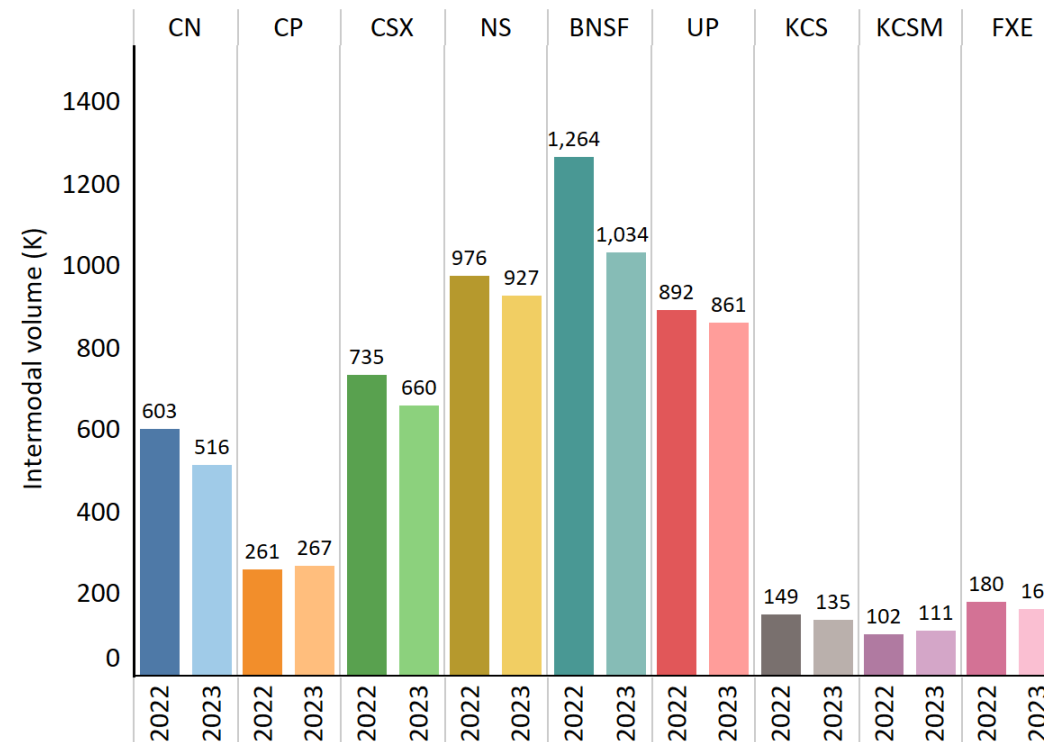


Commodity Carloads, Year-over-Year Change

CN	CP	CSX	NS	BNSF	UP	KCS	KCSM	FXE
9.4%	10.2%	6.0%	4.6%	-3.1%	-1.6%	0.5%	6.0%	4.6%

Intermodal Units

Q1 2023 compared to Q1 2022, in thousands and % YoY



Intermodal Units, Year-over-Year Change

CN	CP	CSX	NS	BNSF	UP	KCS	KCSM	FXE
-14.3%	2.5%	-10.3%	-5.0%	-18.2%	-3.4%	-9.5%	8.8%	-9.4%

Note: Carload figures come from AAR weekly reports, which may vary marginally from the figures reported in the company financial statements

Note: Carload figures for FXE reflect Grupo Mexico Transport's overall operations in both the US and Mexico

Note: Carload figures for KCS reflect the company's operations in both the US and Mexico

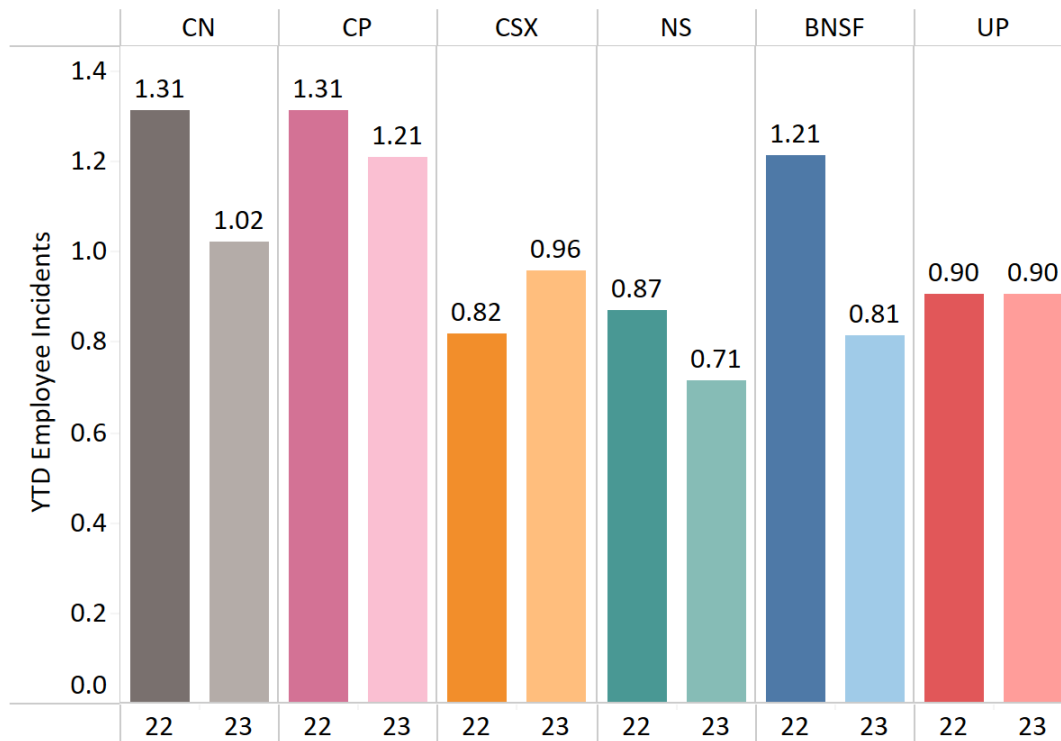
Sources: Industry financial reports, AAR data, press releases, and Oliver Wyman analysis

FRA Incidents

Employee and equipment incidents were generally down year-over-year, except for CSX, who saw an increase in both

Employee Incidents per 200,000 Employee Hours

2023 vs. 2022, YTD

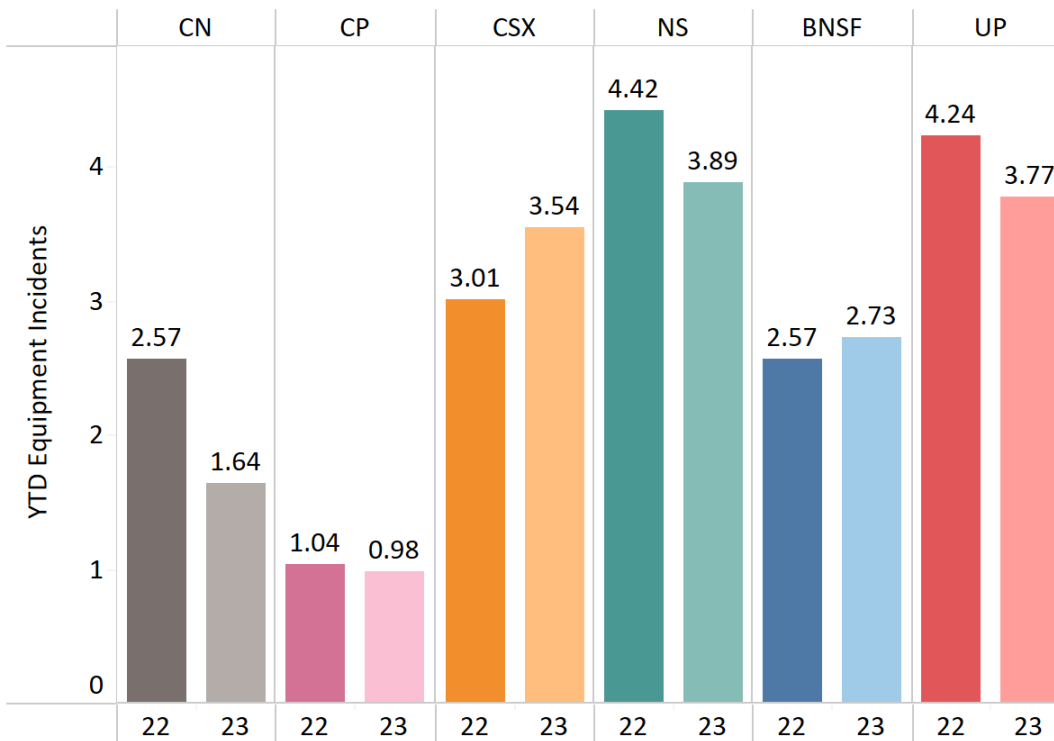


YTD Employee Incidents, Year-over-Year Change

CN	CP	CSX	NS	BNSF	UP
-22.1%	-7.6%	17.3%	-17.9%	-33.0%	-0.1%

Equipment Incidents per 1M Train Miles

2023 vs. 2022, YTD



YTD Equipment Incidents, Year-over-Year Change

CN	CP	CSX	NS	BNSF	UP
-36.2%	-5.8%	17.8%	-11.9%	6.3%	-11.0%

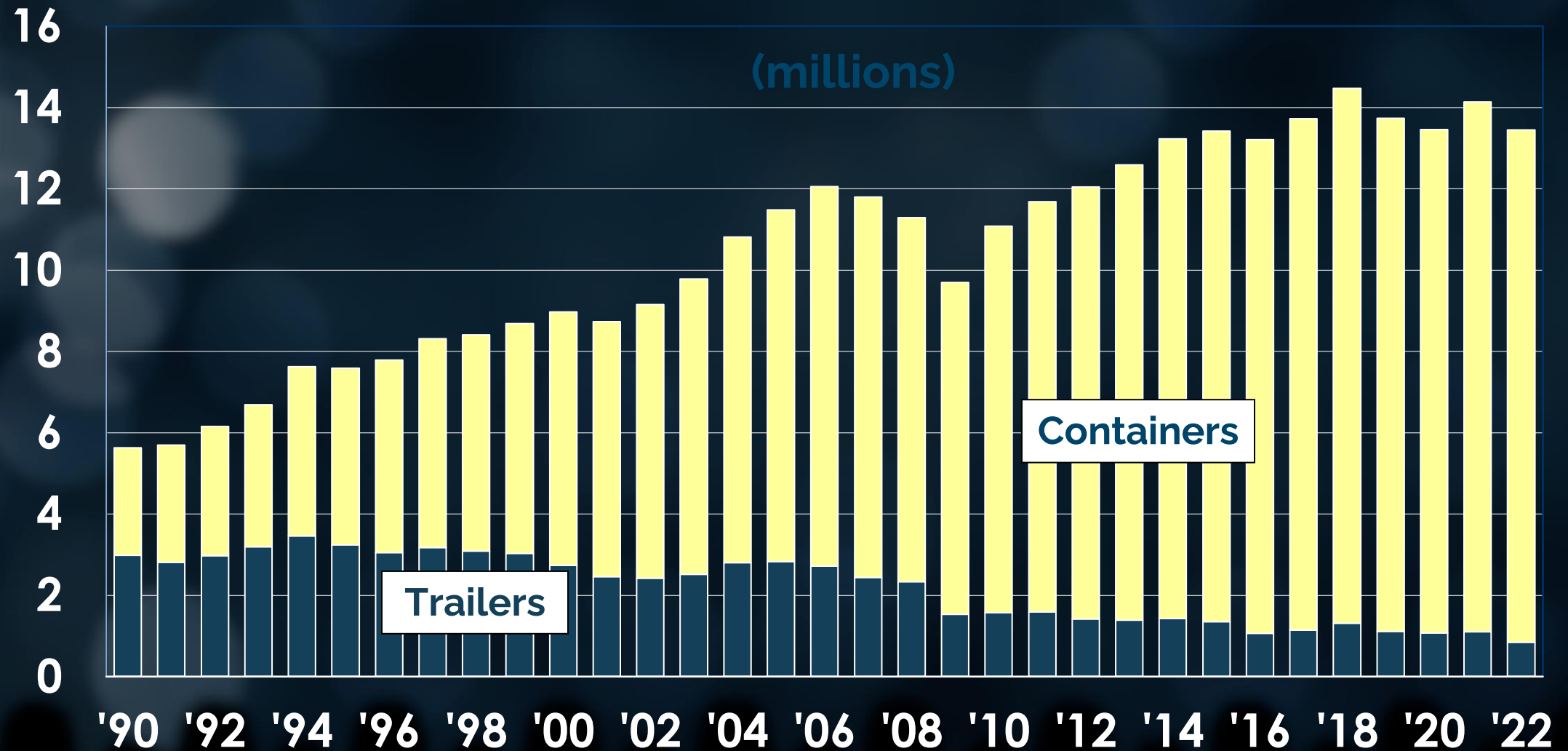
Note: Percentages may not line up perfectly, due to rounding

Note: Through February 28, 2023

Note: Data for KCS is for its US operations only

Sources: Federal Railroad Administration, corporate financial reports, and Oliver Wyman analysis

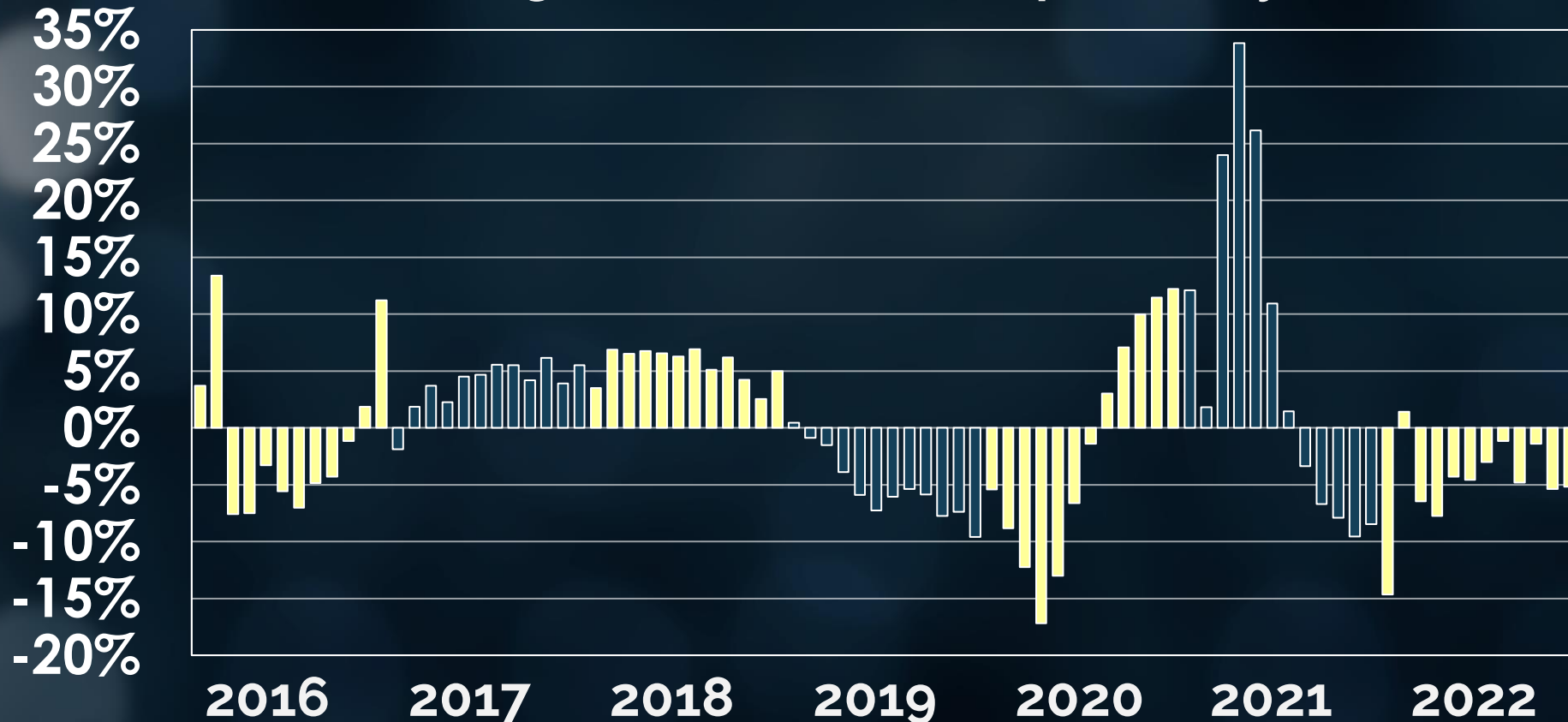
RAPID INTERMODAL GROWTH



Source: AAR Rail Time Indicators

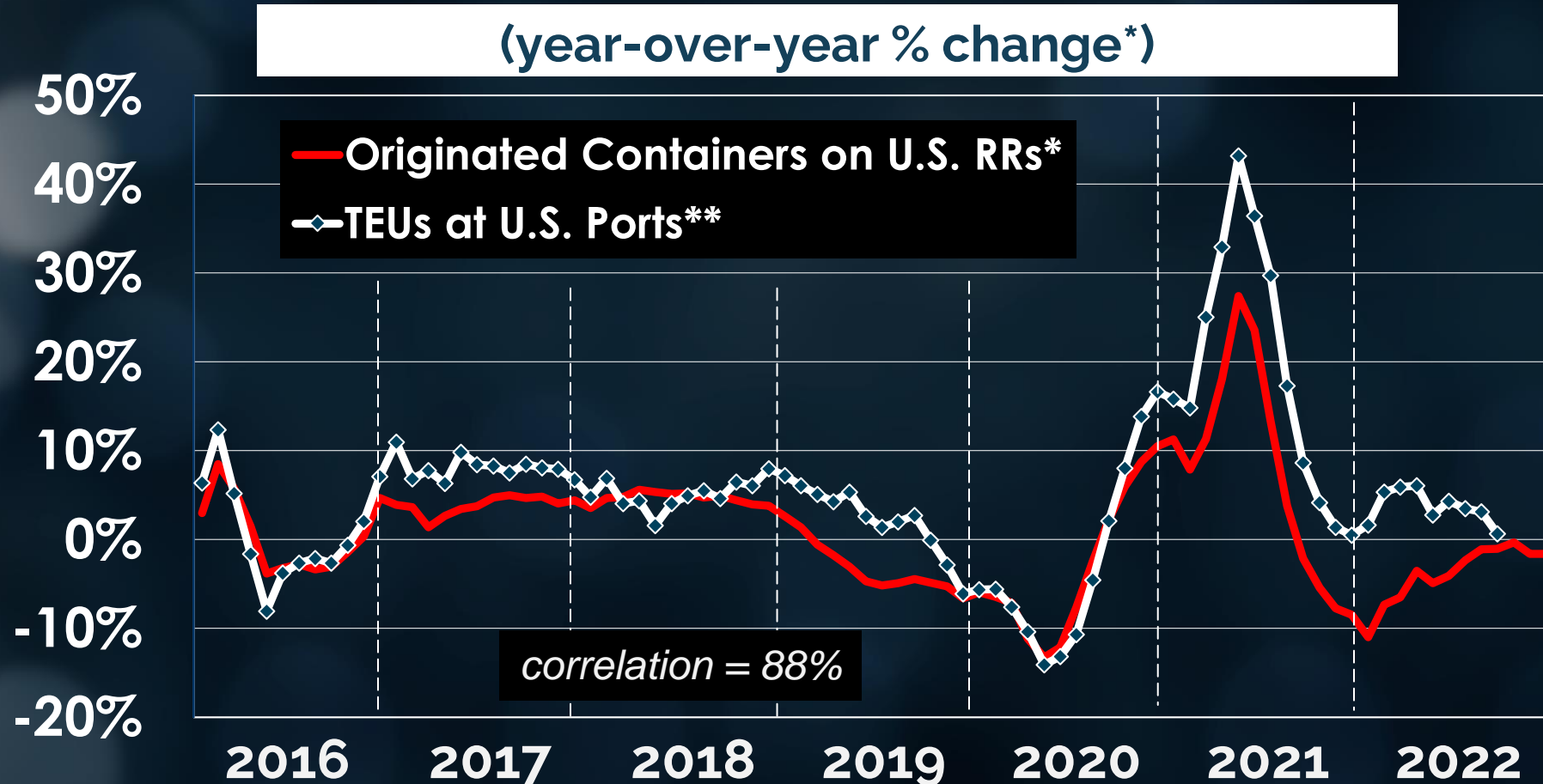
U.S. Rail Intermodal

(% change from same month previous year)



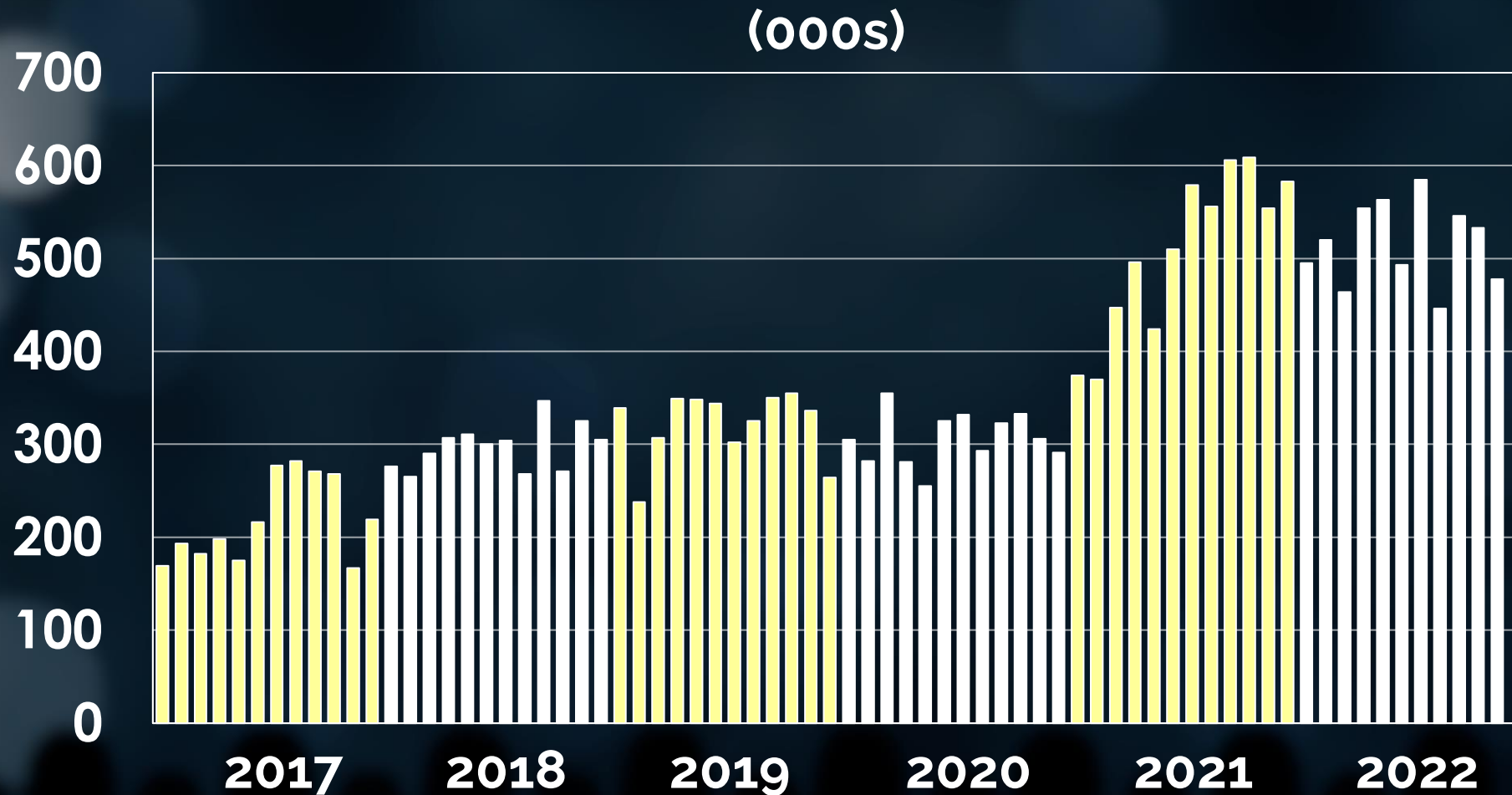
Data are based on originations, are not seasonally adjusted, don't include intermodal, and don't include the U.S. operations of CN, CP, and GMXT. Source: AAR *Rail Time Indicators*

AS PORTS GO, SO GOES INTERMODAL



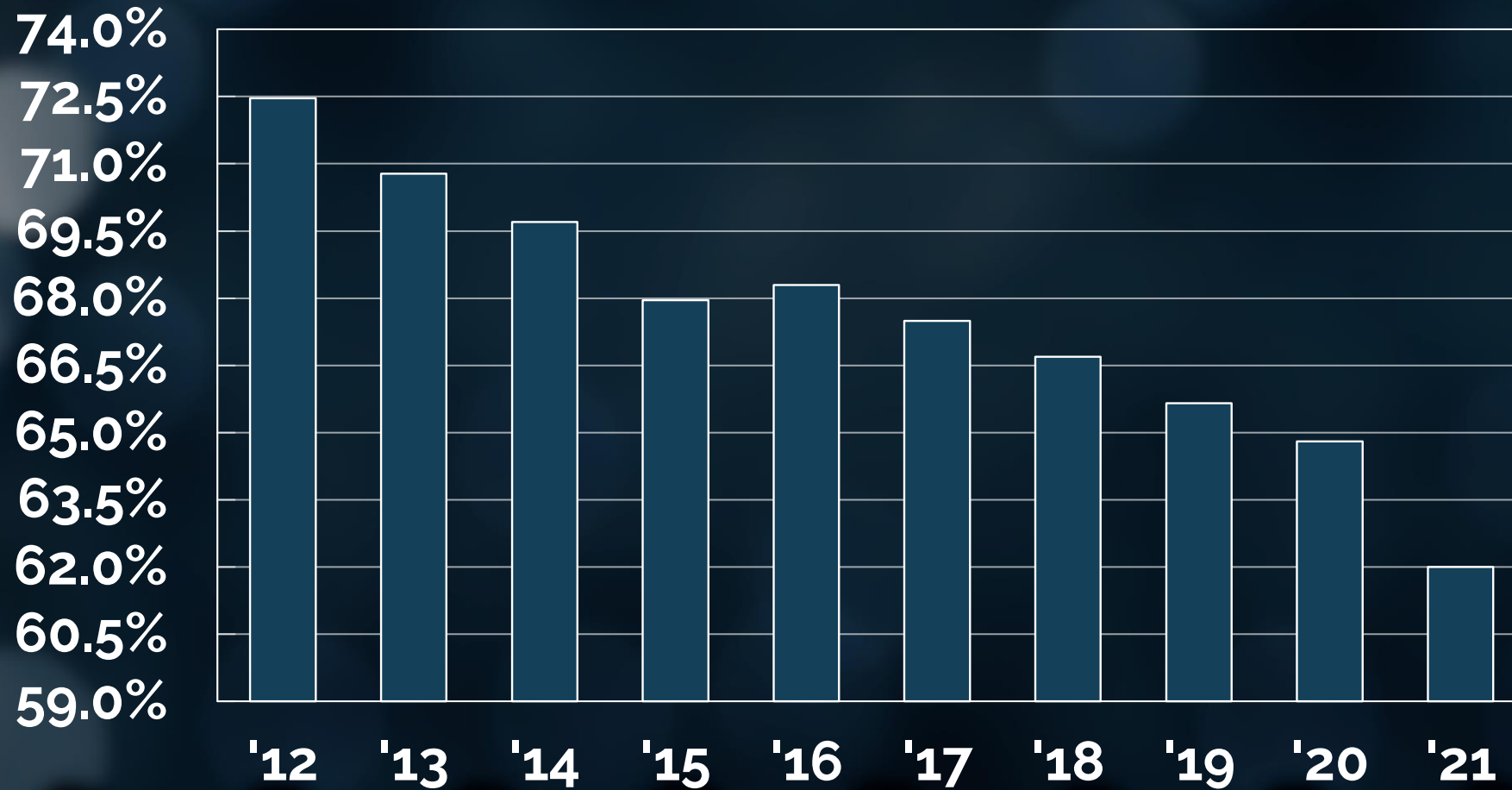
*BNSF, CSX, KCS, NS and UP combined. **Combined loaded + empty TEUs at Baltimore, Charleston, Houston, Long Beach, Los Angeles, New York/New Jersey, Oakland, and Savannah, Seattle/Tacoma, and Virginia. Data are based on 3-month averages. Source: AAR, individual ports

JOB OPENINGS: TRANSPORTATION, WAREHOUSING & UTILITIES



Figures are not seasonally adjusted. Source: Bureau of Labor Statistics

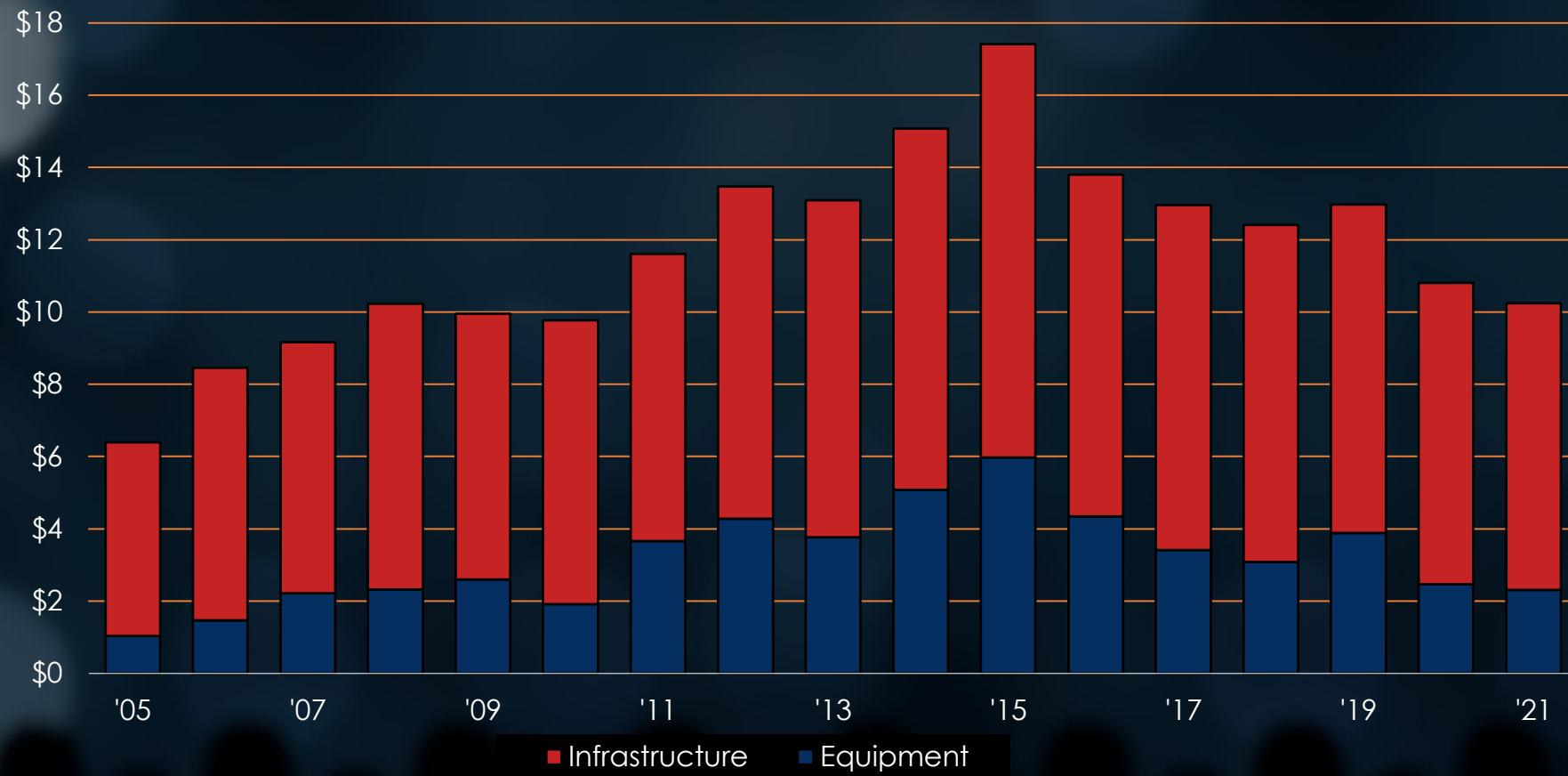
CULT - Class I Railroad Operating Ratio*



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

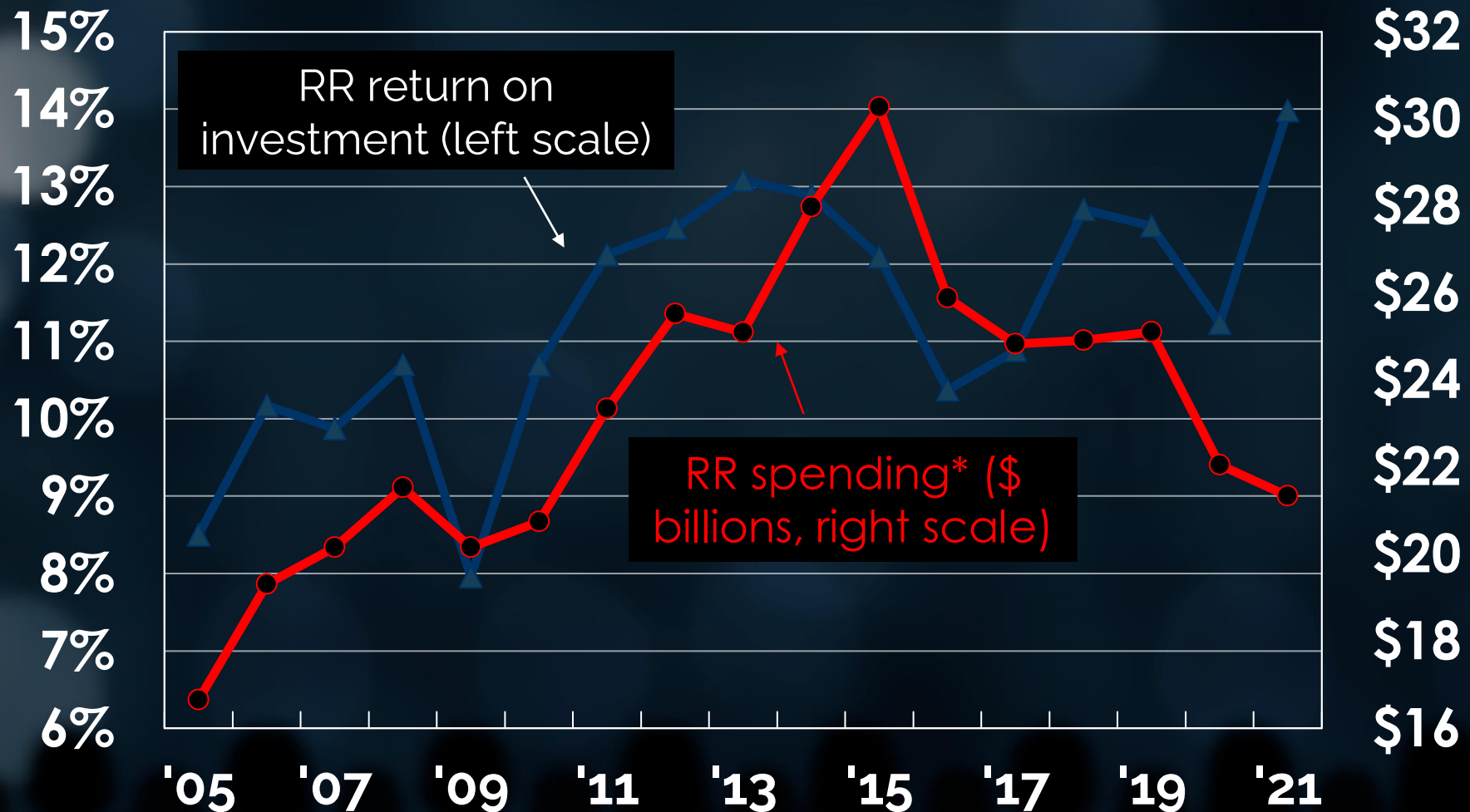
RAILROAD CAPITAL SPENDING

► (\$ billions, current dollars)



Data are for Class I roads. Source: AAR

Historically, a Strong Positive Correlation Between RR ROI and Spending



*Capital spending + maintenance expenses. Source: AAR

RECENT DECADE WAS SAFEST EVER

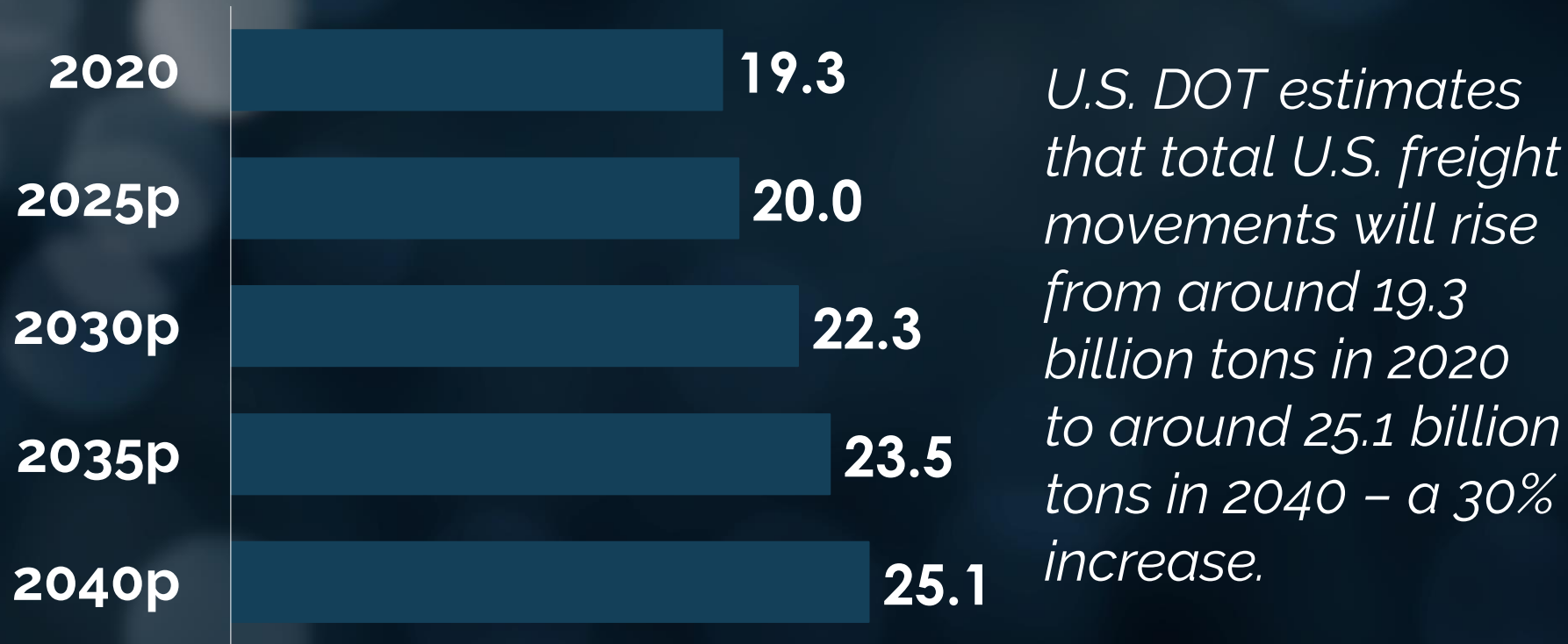
(Index 2000 = 100)



% = change in rate from 2000-2021. 2021 is preliminary. Source: FRA

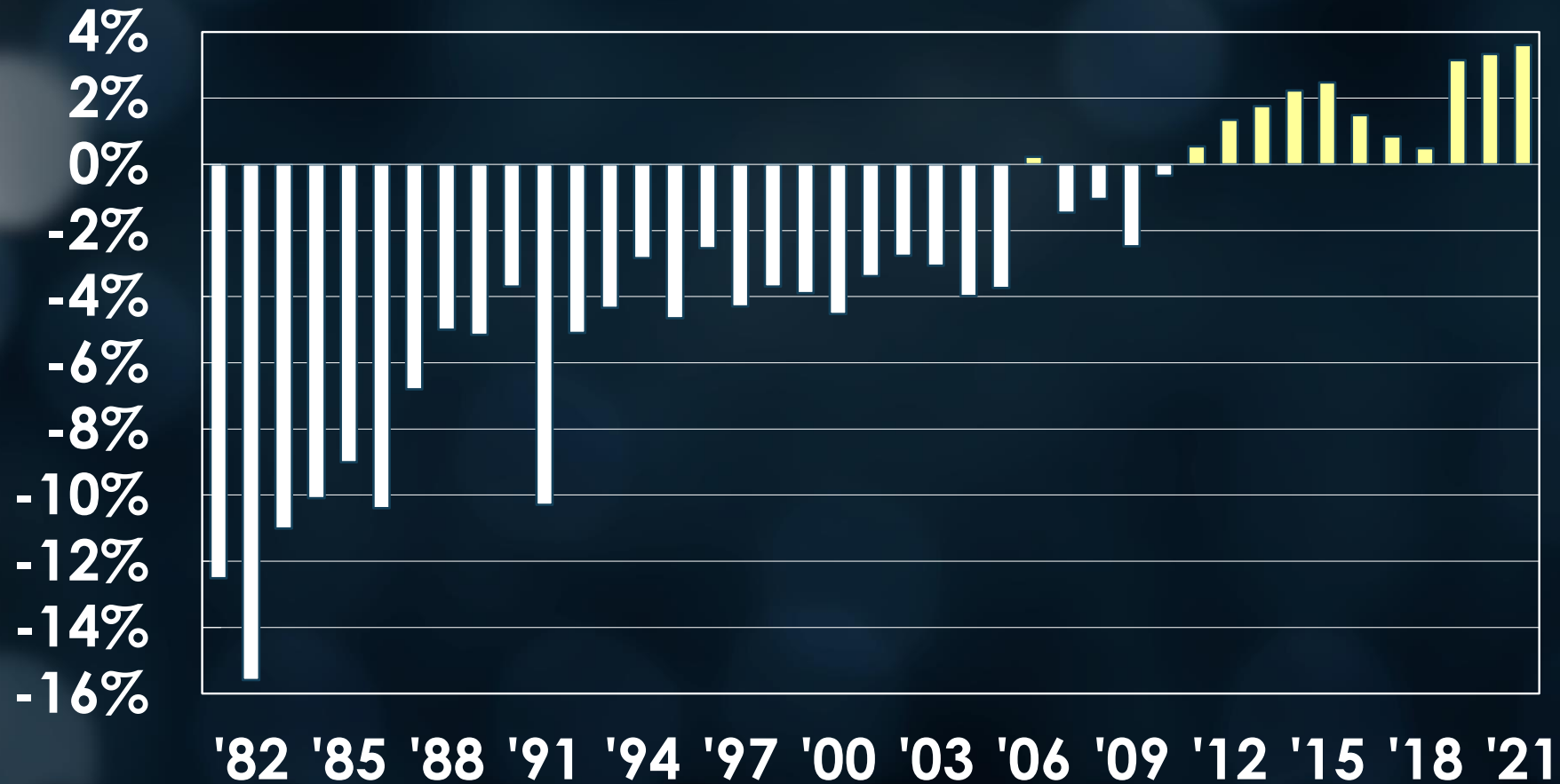
LONG-TERM DEMAND FOR FREIGHT TRANSPORTATION WILL GROW

Billions of Tons of Freight Transported in the U.S.



p – projected Source: FHWA - Freight Analysis Framework, version 5.4.1

Spread Between Rail Industry's Return on Investment & Cost of Capital



*In 2006, the Surface Transportation Board significantly changed the method by which it calculates the rail industry cost of capital. Source: STB

LONG-TERM DEMAND FOR FREIGHT TRANSPORTATION WILL GROW

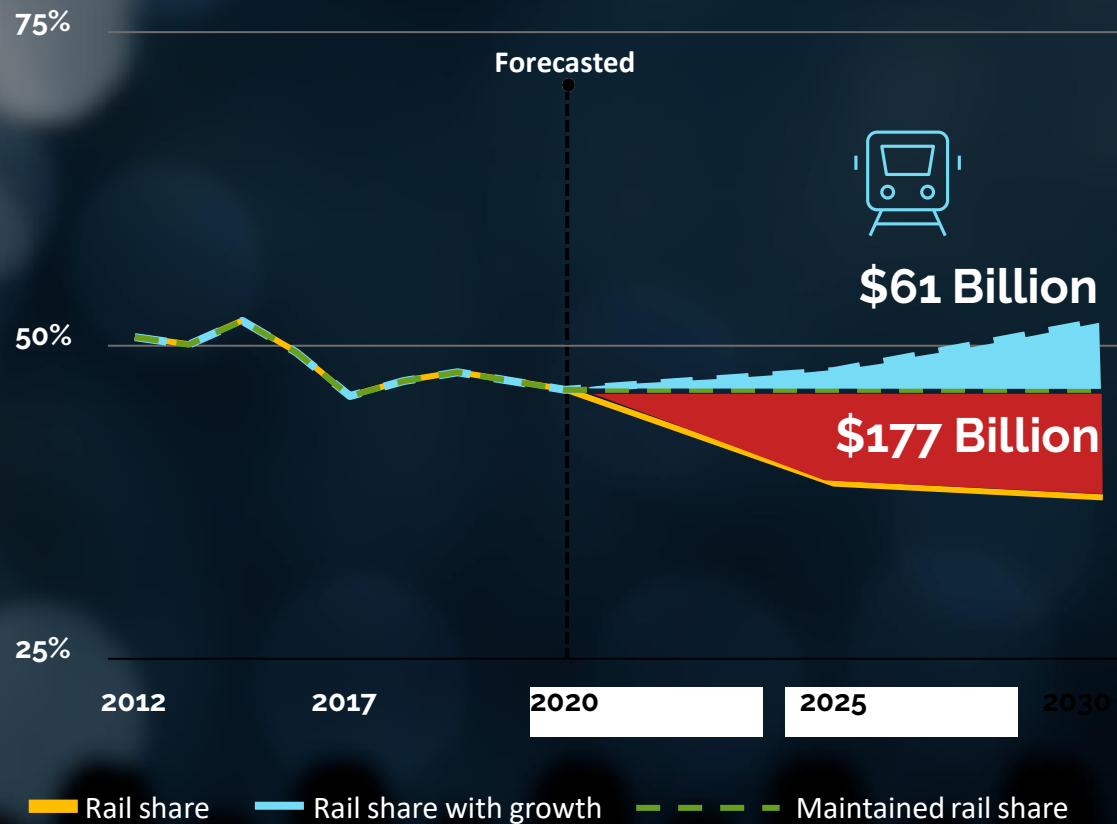
- Billions of Tons of Freight Transported in the U.S.



U.S. DOT estimates that total U.S. freight movements **will rise from around 19.2 billion tons in 2020 to around 24.9 billion tons in 2040** – a 30% increase.

USING AVAILABLE CAPACITY, RAILROADS COULD ADD \$61BN MORE IN GROWTH REVENUE – WITH LIMITED CAPEX

► Freight market share analysis and forecast by ton-mile



Gaining a half point of share per year delivers growth that by year 10 fills current available capacity



Assumes no material technology advancements