

# RR 301

# Railcar Fleet Management

Will Geiger & David Nahass

# About Railroad Financial Corporation – Bios



**DAVID NAHASS (President)** David joined RFC in 2000 after previous roles at ABN AMRO and CIT Rail. At CIT, David was responsible for developing and maintaining a consistent market presence in the US coal industry. David brings a wealth of experience in the sale and leasing of all types of rolling stock, with a specialty in transaction restructuring. He also serves as Financial Editor at *Railway Age*.

Contact: [dnahass@railfin.com](mailto:dnahass@railfin.com)



**WILL GEIGER (Senior Vice President)** Will joined RFC in 2011. Prior to RFC, Will managed and restructured LyondellBasell's 12,000 railcar fleet through Chapter 11 bankruptcy. Will also spent 3 years in automotive at DaimlerChrysler. Will received his MBA from Northwestern University's Kellogg School of Management and a BS in Business and BA in German from Miami (OH) University.

Contact: [wgeiger@railfin.com](mailto:wgeiger@railfin.com)

# About Railroad Financial Corporation



## **Founded in 1989**

- RFC is the only financial advisory firm with a practice devoted **solely** to the rail equipment industry

## **\$25 Billion**

- RFC has represented clients in transactions on rail equipment value in excess of US \$25 billion

## **Customer Base**

- Primarily industrial commodity shippers

## **\$500 MM – \$750 MM**

- Average annual rail-related transaction volume

## **Diverse Team**

- Former: Shipper, Lessor, Bank Investor, Railroad Operator

## **Annual Rail Equipment Finance Conference**

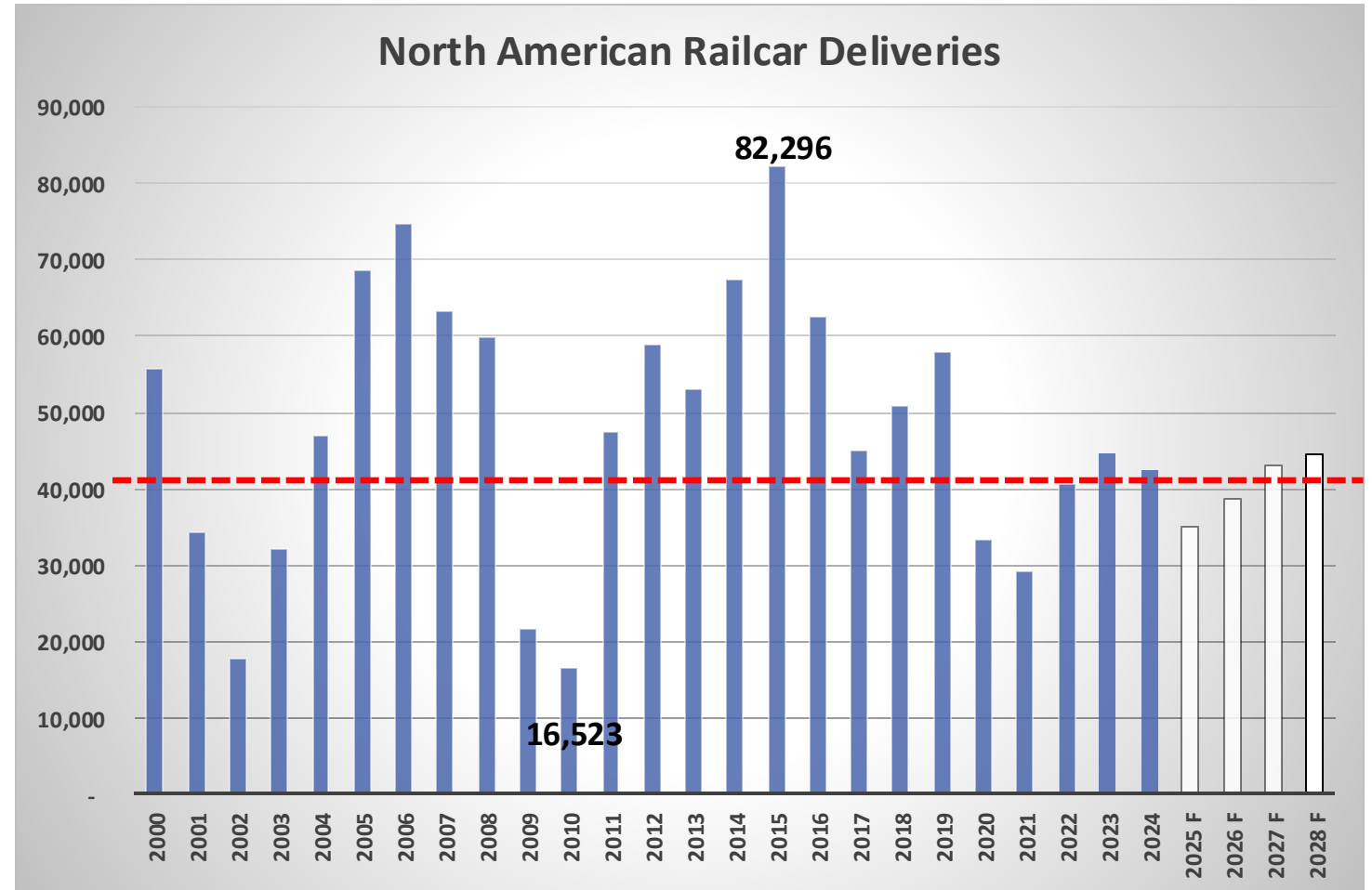
- 2025 was the **39<sup>th</sup>** year (~440 attendees)
- Shippers receive a 50% discount

# Current State of the Railcar Market

# Current State of the Railcar Market

The market for most railcar types have moved to being “scarce”

- Lease rates have been on the rise
  - On average lease rates have gone up +50% from 2018 to today
- New car prices remain elevated
- Most railcars (except for sand/cement) are out of storage and on lease
  
- 2024 the industry delivered 42,486 cars
- 2025 deliveries estimated to be ~35,000
- 2026 deliveries estimated to be ~38,775
- 2027 deliveries estimated to be ~43,000
- 2028 deliveries estimated to be ~44,575





# Current State of the Railcar Market

**Railway Supply Institute**  
**ARCI 2024 4<sup>th</sup> Quarter Reporting Statistics**  
**December 31, 2024**



## Railcar Orders, Deliveries & Backlog

\*Current Quarter & Trailing Four Quarters

	1/1/2025	10/1/2024	7/1/2024	4/1/2024	1/1/2024
<b>Backlog</b>	34,273	39,652	44,238	46,413	51,836

	4 <sup>th</sup> Quarter 2024	3 <sup>rd</sup> Quarter 2024	2 <sup>nd</sup> Quarter 2024	1 <sup>st</sup> Quarter 2024	4 <sup>th</sup> Quarter 2023
<b>Orders</b>	4,520	5,183	9,606	5,864	4,164
<b>Deliveries</b>	9,999	10,619	10,781	11,087	10,994

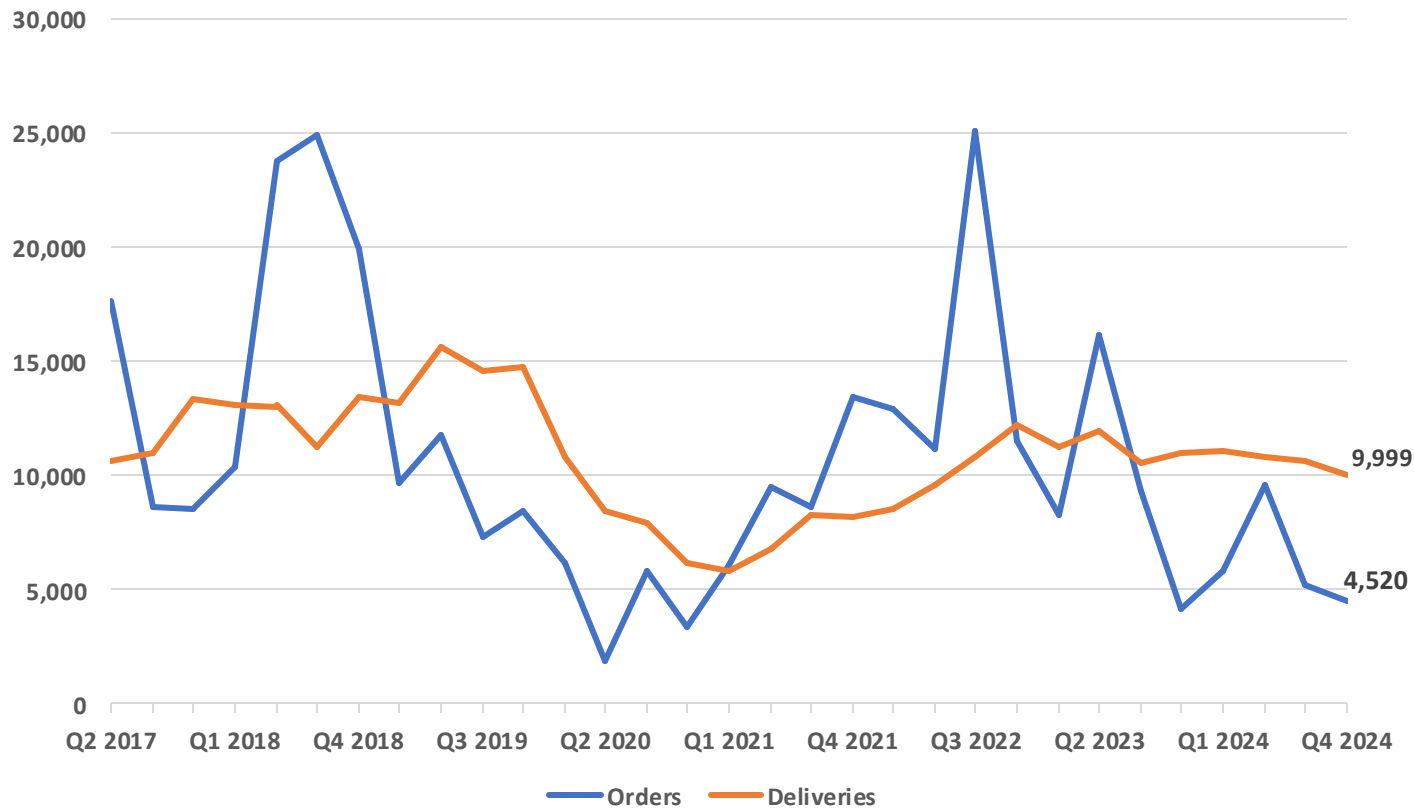
## Twelve-Month Year-End Comparison

	2024	2023	2022	2021	2020
<b>Orders</b>	25,173	38,111	60,734	37,562	17,275
<b>Deliveries</b>	42,486	44,754	40,735	29,280	33,417

\*Backlog data reflects reported amounts on the last day of the quarter.

# Current State of the Railcar Market

Quarterly Orders & Deliveries



## New Car Orders & Deliveries:

New car demand has tapered

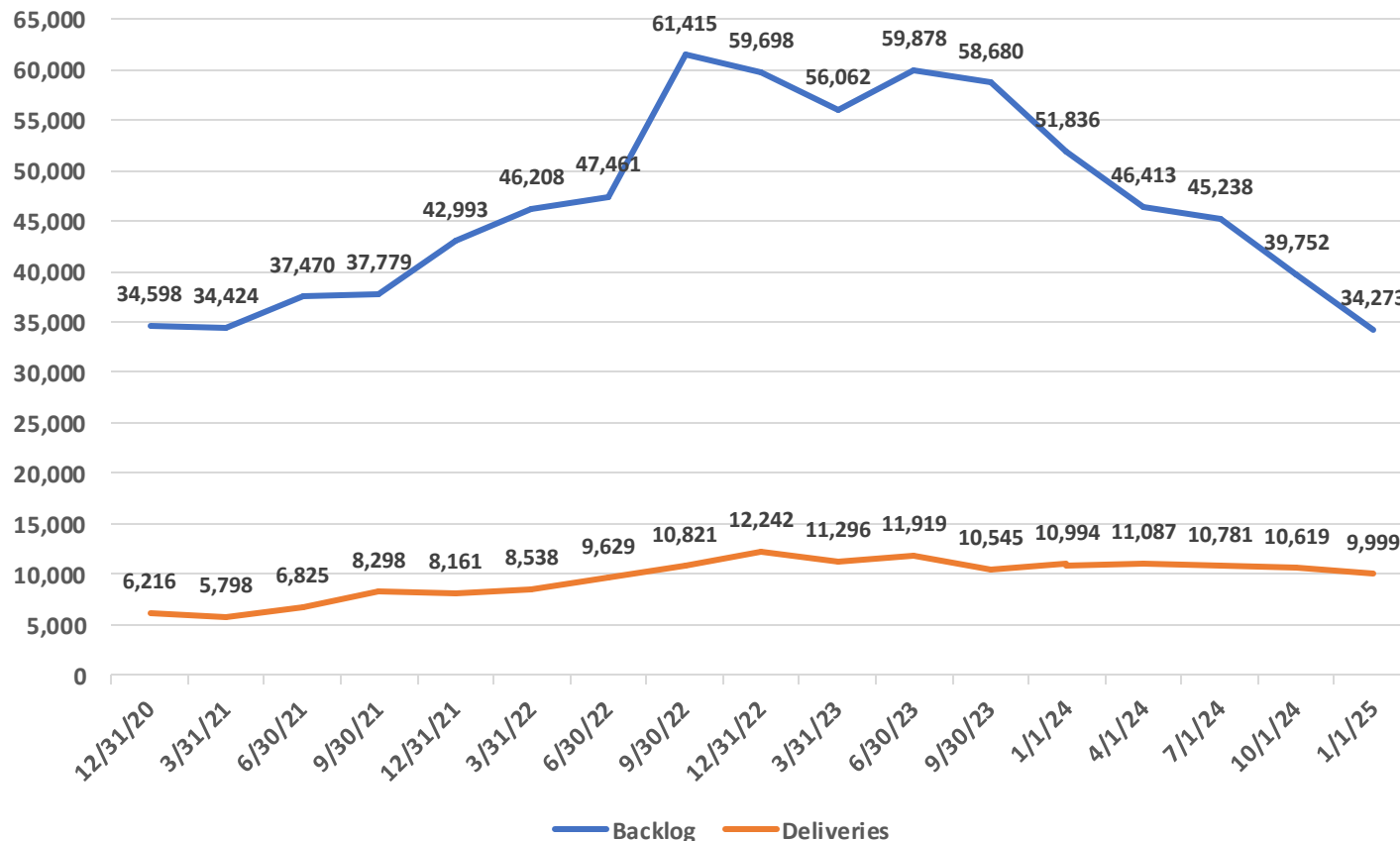
- High costs of raw materials
- Supply chain and labor disruptions
- Economic uncertainty
- Political uncertainty
- Interest rates
- Componentry & Surcharges

Orders have been below replacement demand the previous 6 quarters

Deliveries have been averaging 10,000 since Q2 2022 but are projected to drop in 2025 and 2026

# Current State of the Railcar Market

Railcar Backlog and Deliveries



## Backlog & Deliveries:

34,723 railcars in backlog

- 23,483 freight cars
- 10,790 tank cars

7 consecutive quarters of backlog decline (since June 2023)

On current deliveries, backlog implies 3.4 quarters of theoretical production visibility



# Railcar Supply Options

# Railcar Supply Options: Builders

19 Production Facilities in 2000



11 Production Facilities in 2025

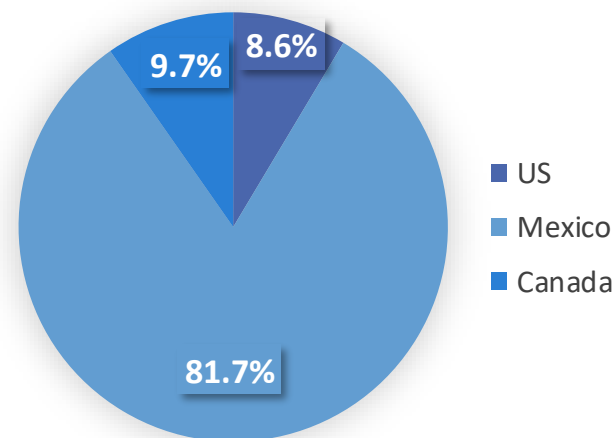
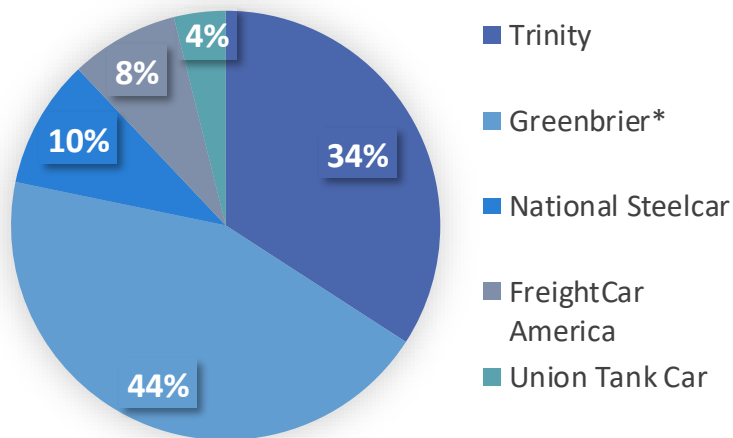


# Railcar Supply Options: Builders

2024 Production	US	Mexico	Canada	Total
Trinity	1,054	16,516		17,570
Greenbrier*	1,362	21,338		22,700
National Steelcar			5,000	5,000
FreightCar America		4,200		4,200
Union Tank Car	2,000			2,000
<b>Total**</b>	<b>4,416</b>	<b>42,054</b>	<b>5,000</b>	<b>51,470</b>

\* Includes sales to Europe & Middle East (~5,000)

\*\* 6309 autoracks delivered in 2024



# Drivers for the Railcar Market

# Drivers for the Railcar Market

- Railcar loadings
- Cost of money – interest rates
- Commodity prices
- Energy prices
- Scrap prices
- Railroad service levels
  - Velocity
  - Labor
  - Dwell

# Railcar Loadings

Total U.S. railcar loads in 2024:

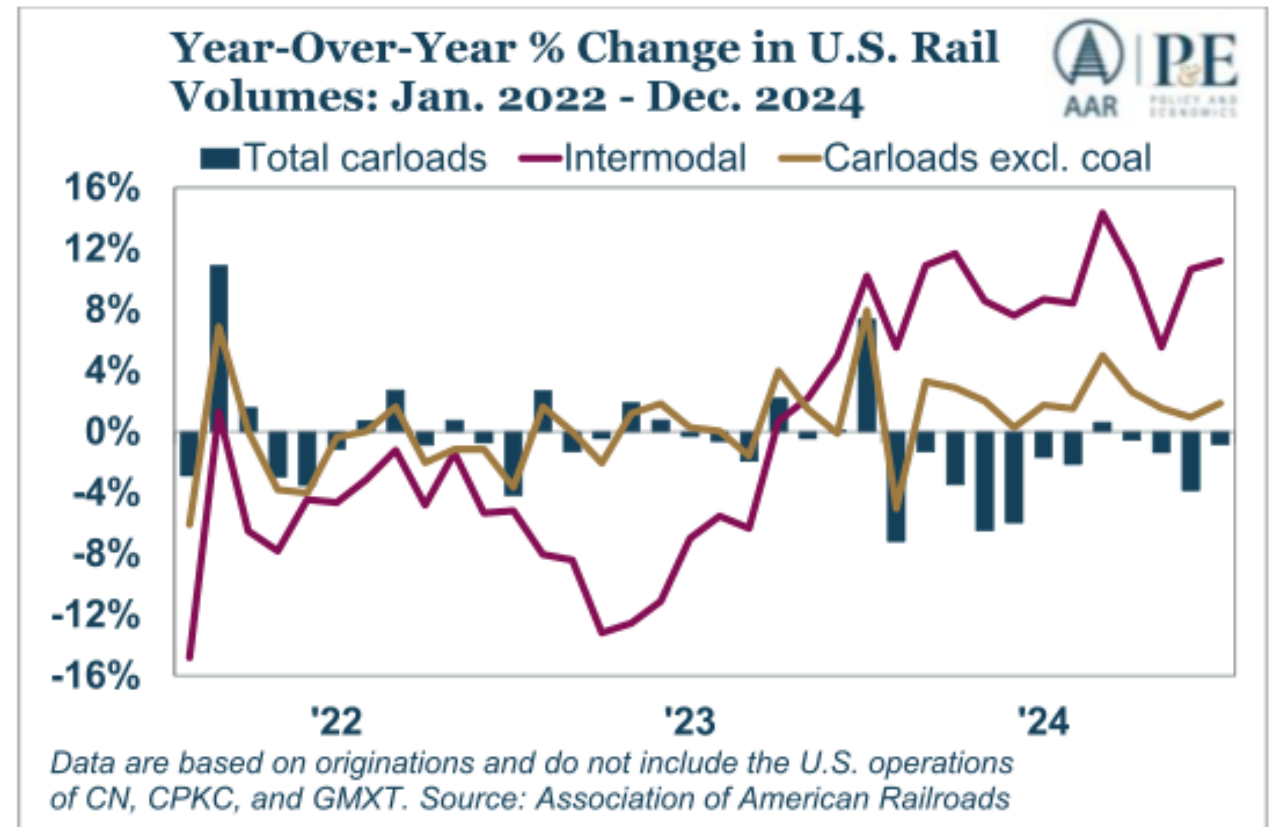
- 11.34 MM (down 2.9% from 2023; 2.3% from 2022)
- Seems bad, but doesn't tell the full story – coal
- Carloads excluding coal were up 1.4% from 2023
- Carloads excluding coal rose on a year-over-year basis in 11 / 12 months in 2024 – that hasn't happened since 2018
- Grain, chemicals & petroleum products were the bellwether commodities in 2024

13.84 MM intermodal loads originated

- 3<sup>rd</sup> most ever (behind 2018 & 2021)
- Up 9.3% over 2023

The AAR's Freight Rail Index rose 2.2% in Dec. 2024 reaching its highest point since Jan. 2021 and nearly at an all-time high.

- Despite manufacturing weakness and policy uncertainties, the broader economy is on firm ground as we begin 2025



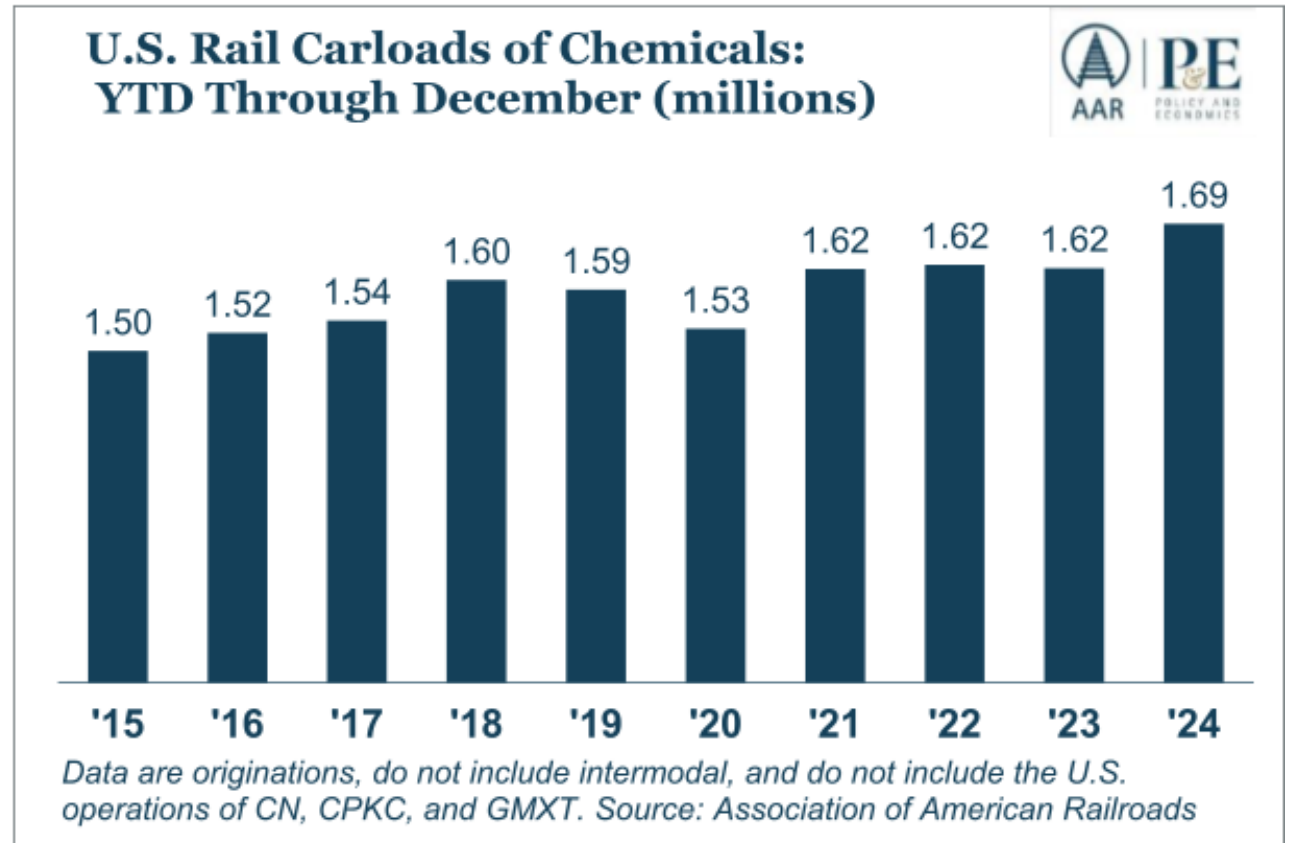
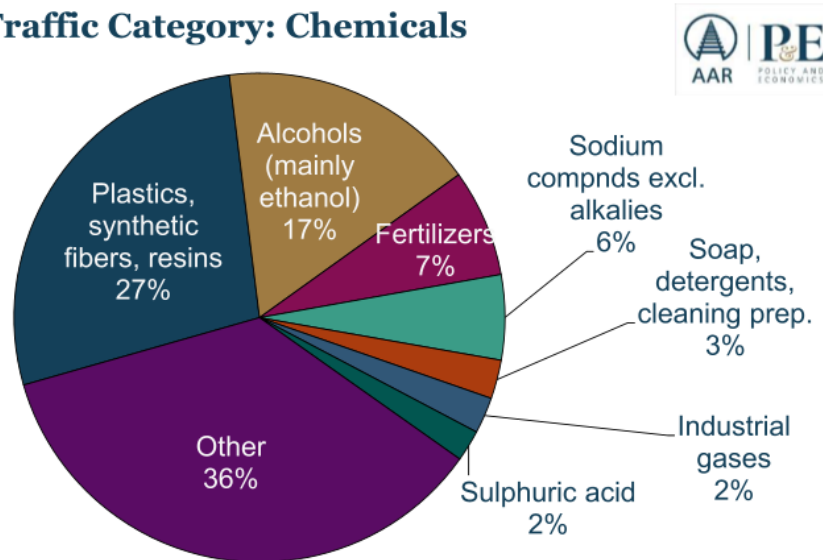


# Railcar Loadings – Chemicals

Total U.S. railcar chemical loads in 2024:

- 1.7 MM (up 4.1% from 2023)
- **Most** ever recorded (dating back to 1985)
- Plastics & ethanol comprise ~45% of chemicals volume
- Benefitted from exceptionally low feedstock compared to the rest of the world (nat gas)

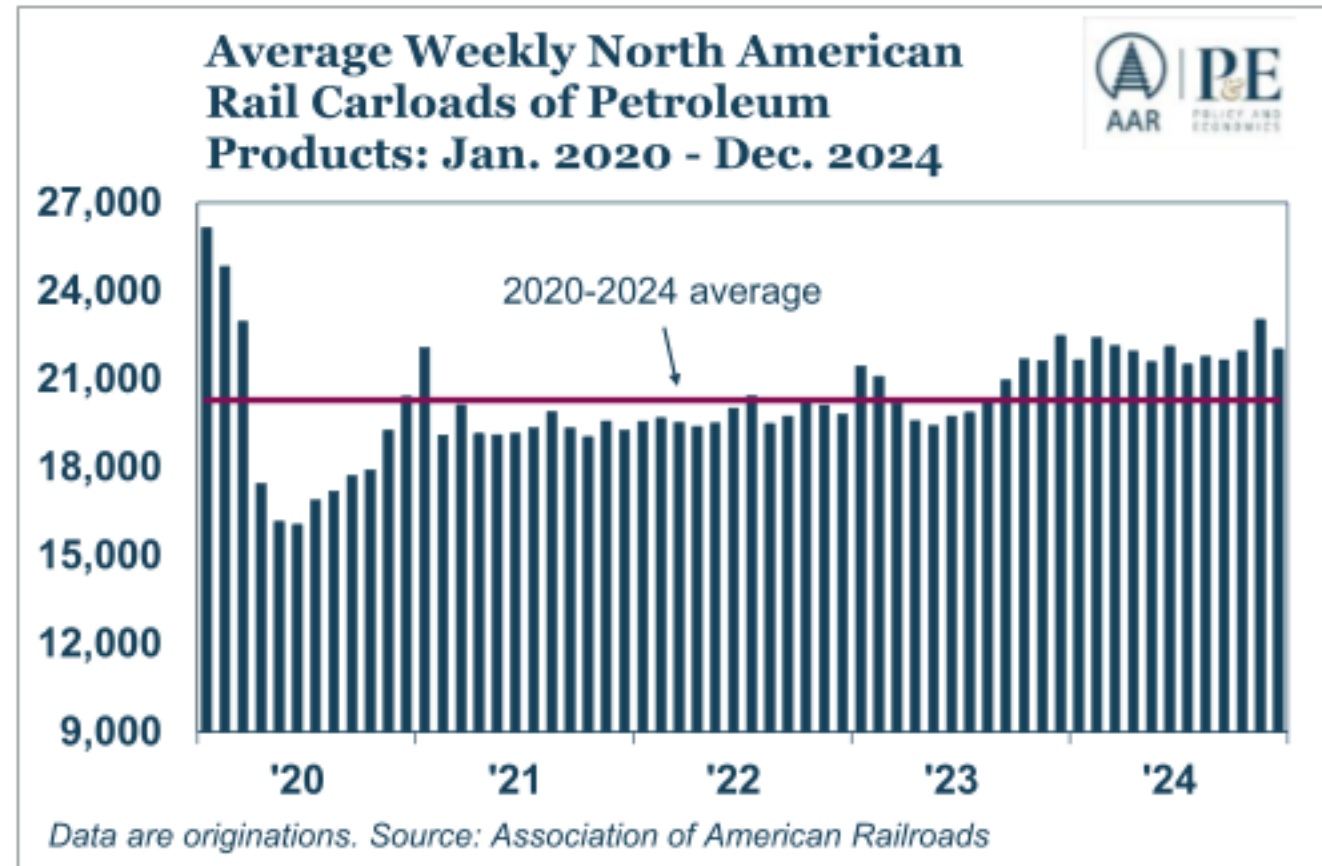
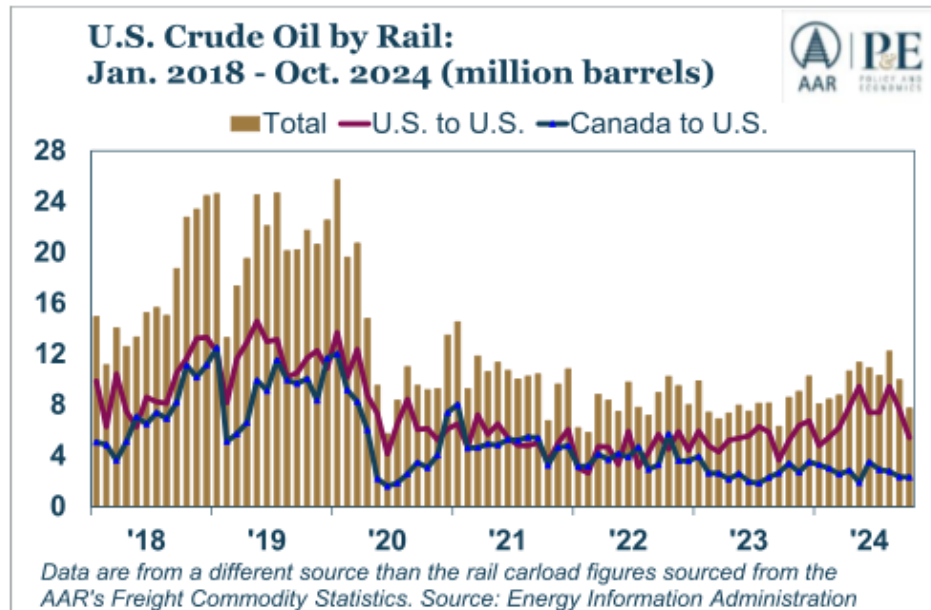
AAR Traffic Category: Chemicals



# Railcar Loadings – Petroleum Products

Total U.S. railcar chemical loads in 2024:

- Up 6.2% from 2023
- Consists primarily of:
  - Crude Oil
  - Refined Products (LPG, aviation fuel, oils)
- Renewable diesel continues to grow rapidly



# Railcar Loadings Year over Year



## Change in U.S. Rail Traffic: Jan.-Dec. 2024 vs. Jan.-Dec. 2023

Total carloads: -343,156, -2.9%

Total carloads excl. coal: 117,264, 1.4%

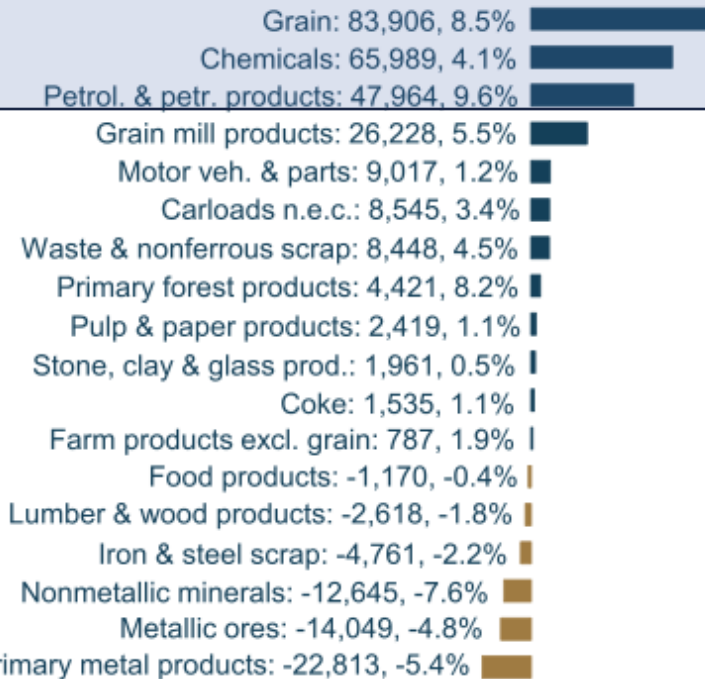
Intermodal: 1,174,698, 9.3%

Bars are based on originations, do not include intermodal, and do not include the U.S. operations of CN, CPKC, and GMXT.

Source: AAR

Coal: -460,420, -13.6%

Crushed stone, sand, gravel: -85,900, -8.0%



## Change in North American Rail Carloads: Jan.-Dec. 2024 vs. Jan.-Dec. 2023

Total carloads: -480,474, -2.8%

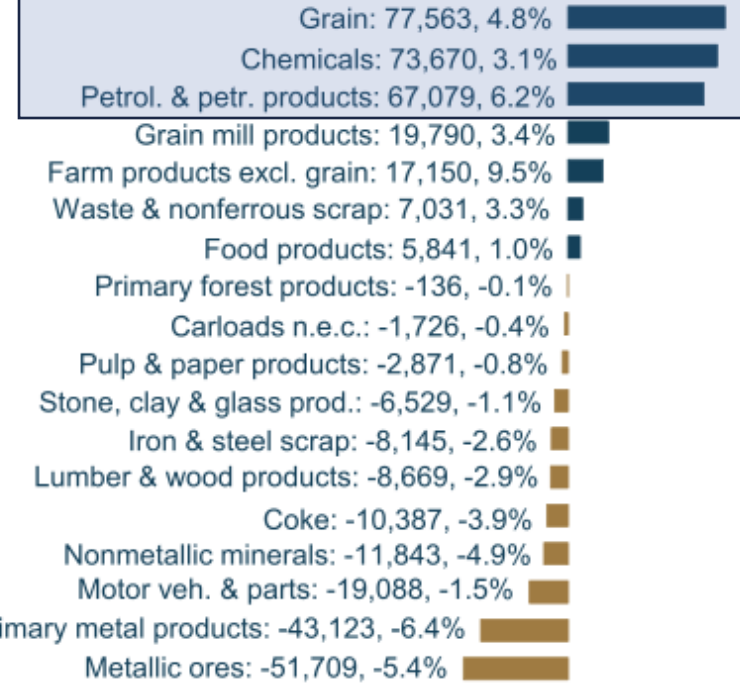
Intermodal: 1,265,213, 7.5%

Bars are based on originations and do not include intermodal.

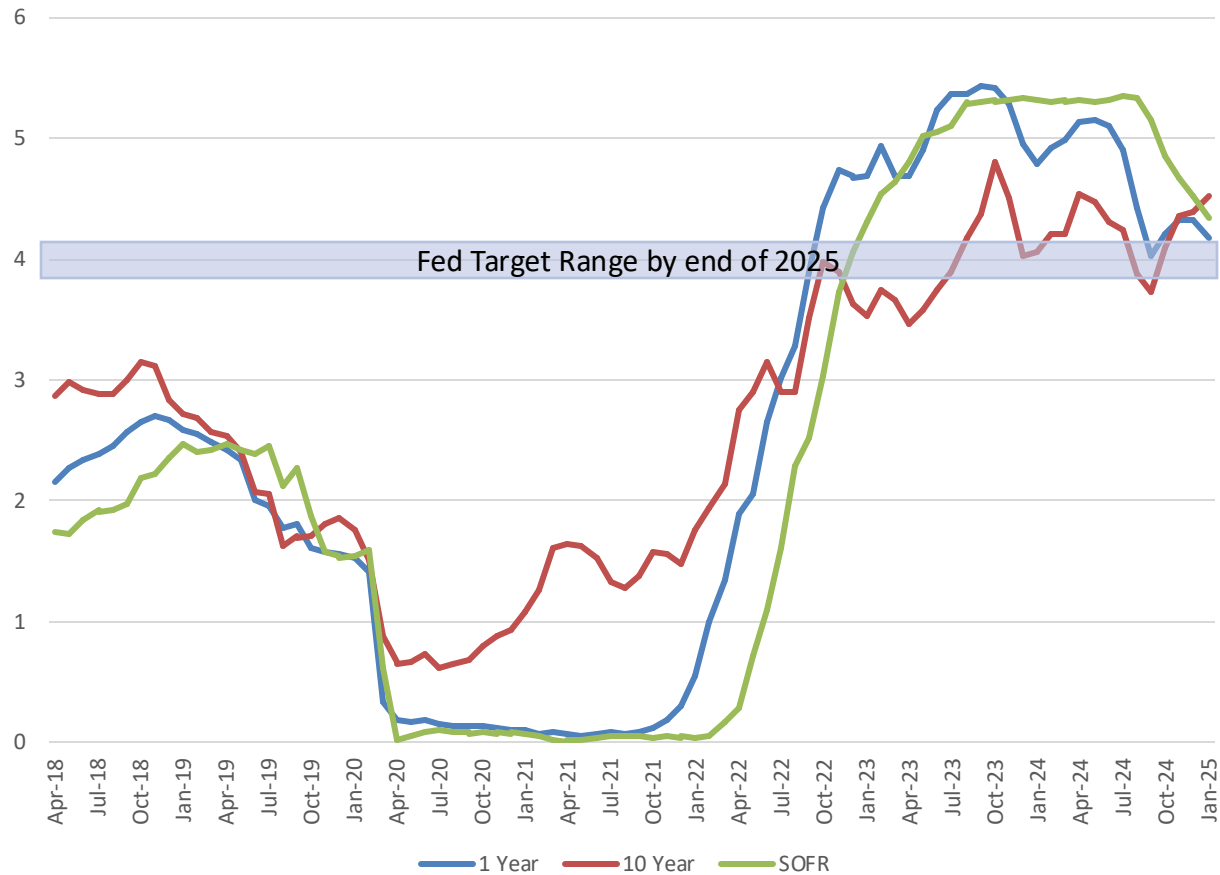
Source: AAR

Coal: -492,341, -12.9%

Crushed stone, sand, gravel: -92,031, -6.6%



# SOFR, 1 & 10 Year Treasury Rates



75 bps reduction since mid 2024

- 50 bps in September
- 25 bps in November

Commander and Chief Influence?

- Fed Powell's chief critic "demands" that rates drop immediately
- Powell said he has "no contact" with the president

January Meeting Comments

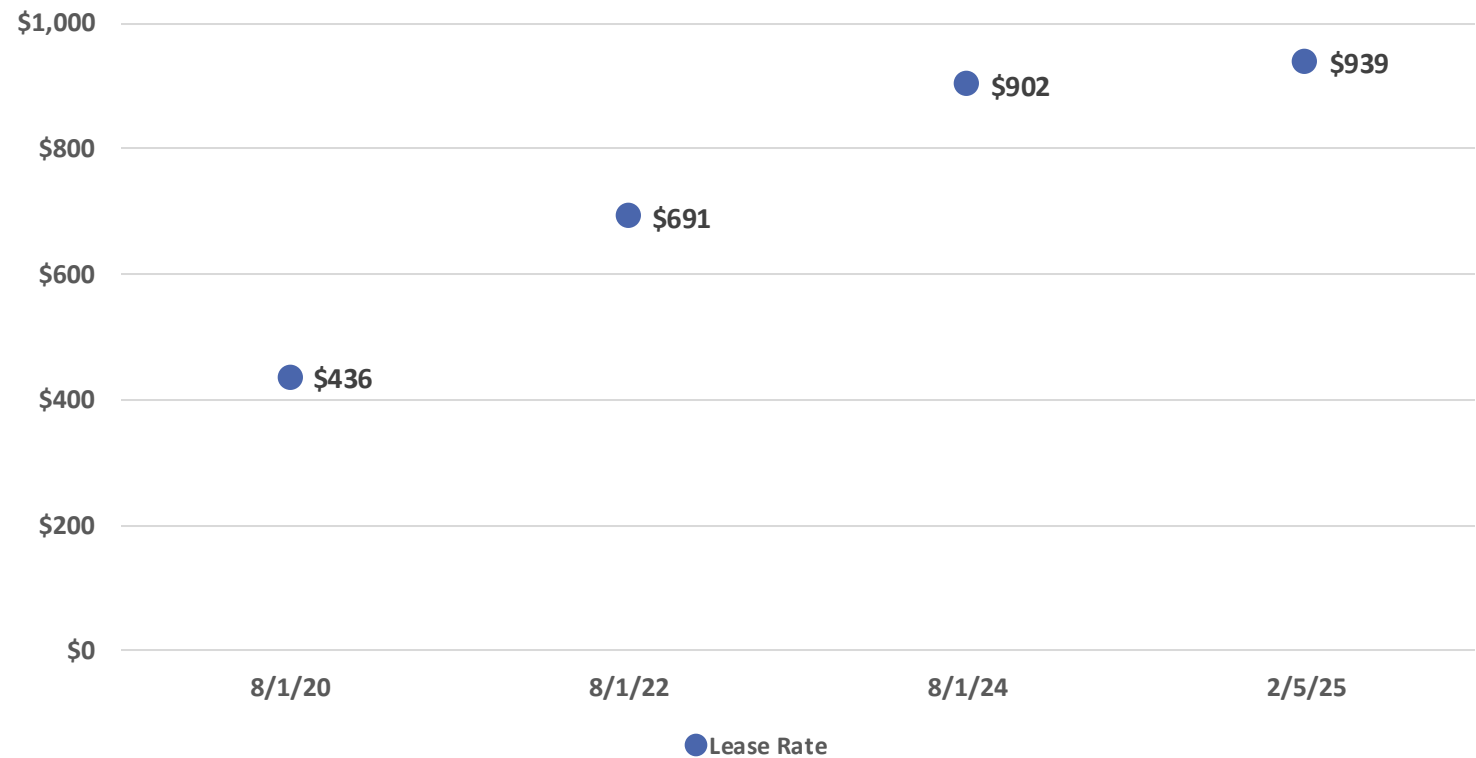
- "Real progress on inflation" or weakness in the labor market → for further rate cuts
- Did not answer questions on tariffs

Next Fed meeting is concurrent with SWAR – March 18-19

# Lease Rate Adjustment Impact

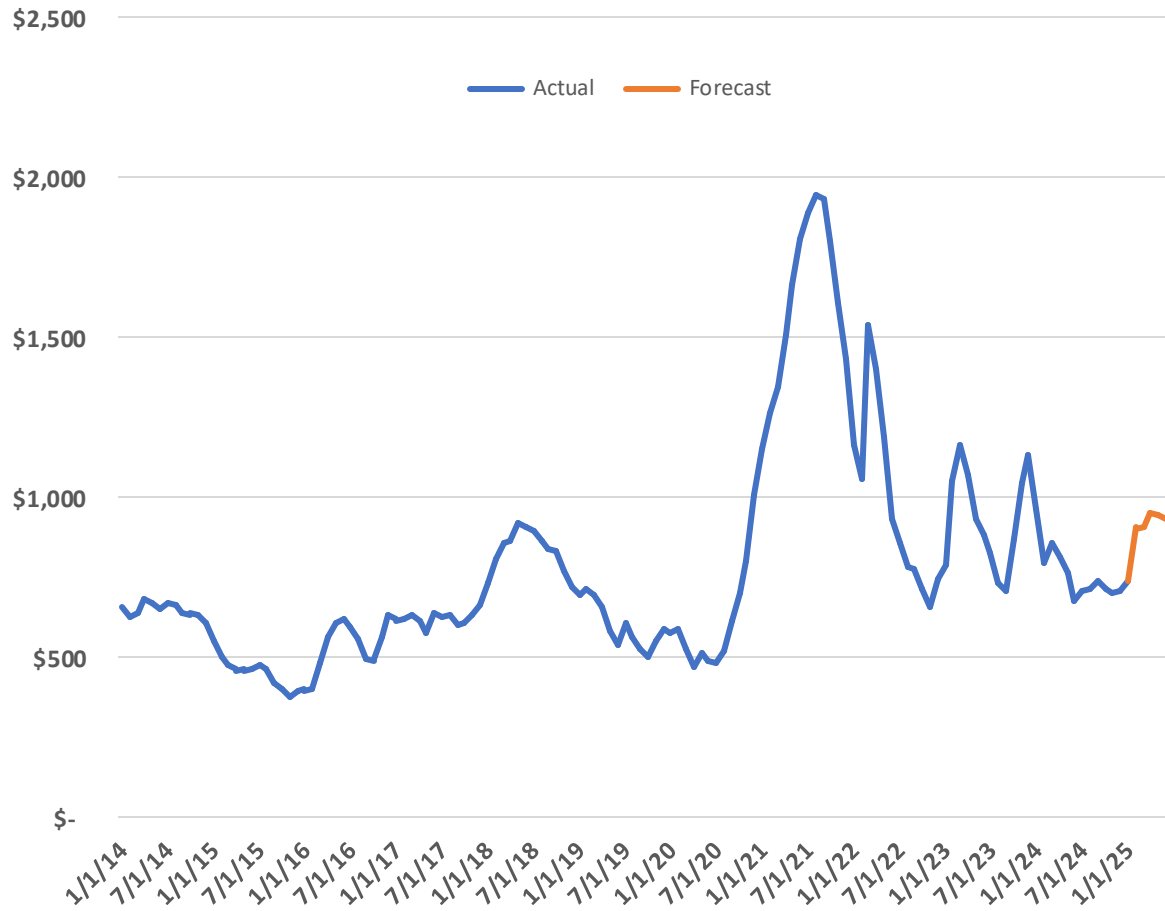
BBB Credit

Index	Date	10 Year	Car Cost
1	8/1/20	0.58%	\$100,000
2	8/1/22	2.75%	\$110,000
3	8/1/24	4.09%	\$120,000
4	2/5/25	4.54%	\$120,000



# Steel Prices

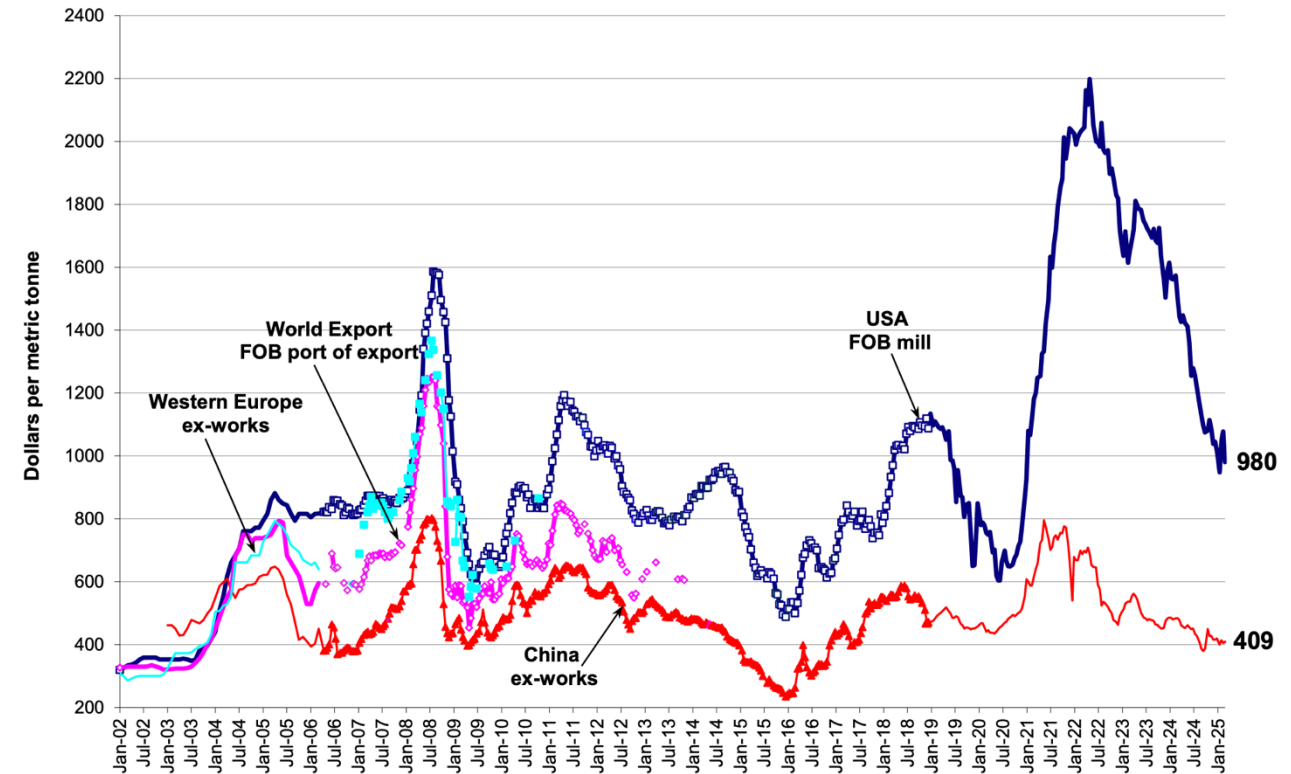
Hot-Rolled Coil Steel Historical & Future Prices



**SteelBenchmarker™ Plate Price**

**USA, China, Western Europe and World Export**  
 (WSD's PriceTrack data, Jan. 2002 - March 2006; SteelBenchmarker data begins April 2006)

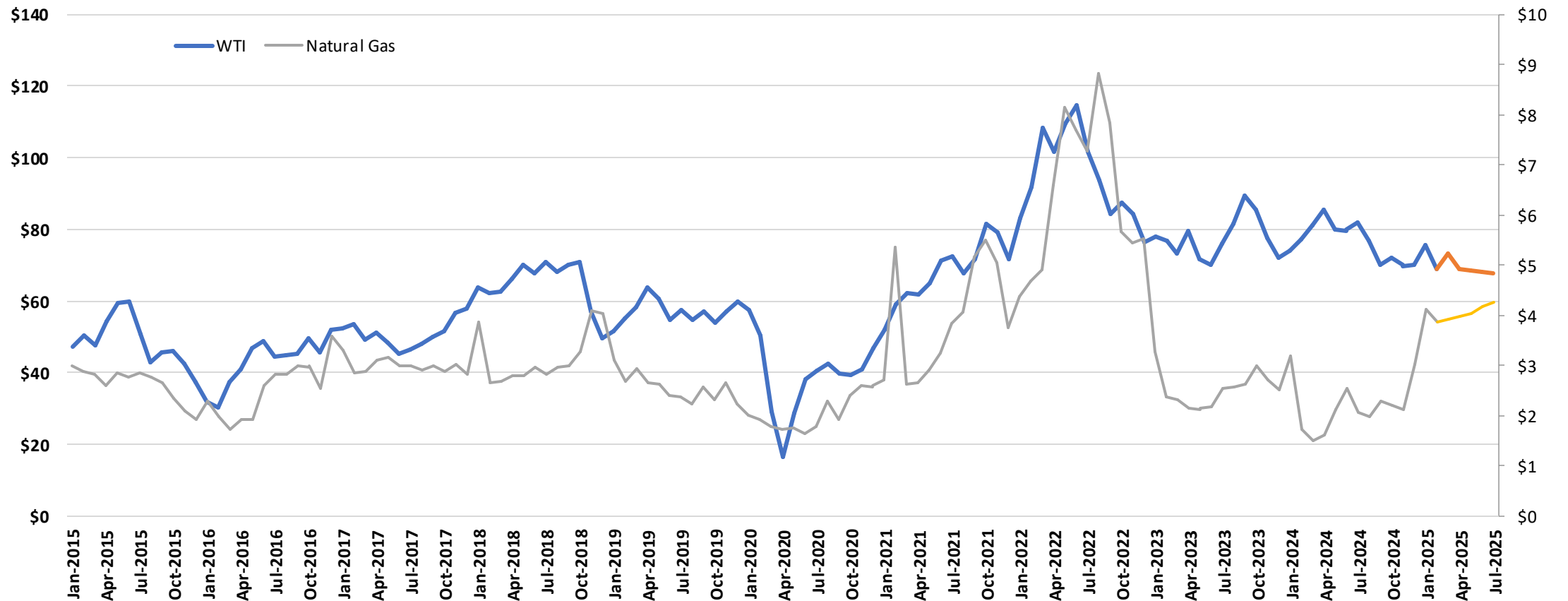
February 24, 2025





# Energy Prices

## Natural Gas & WTI

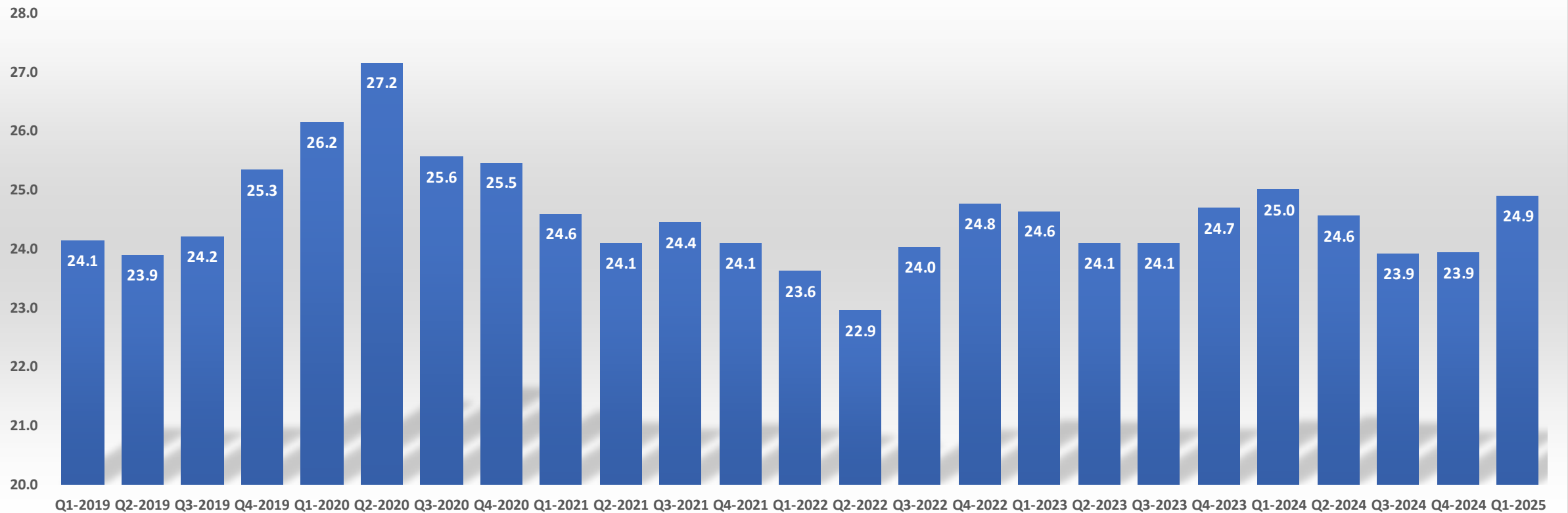


# Scrap



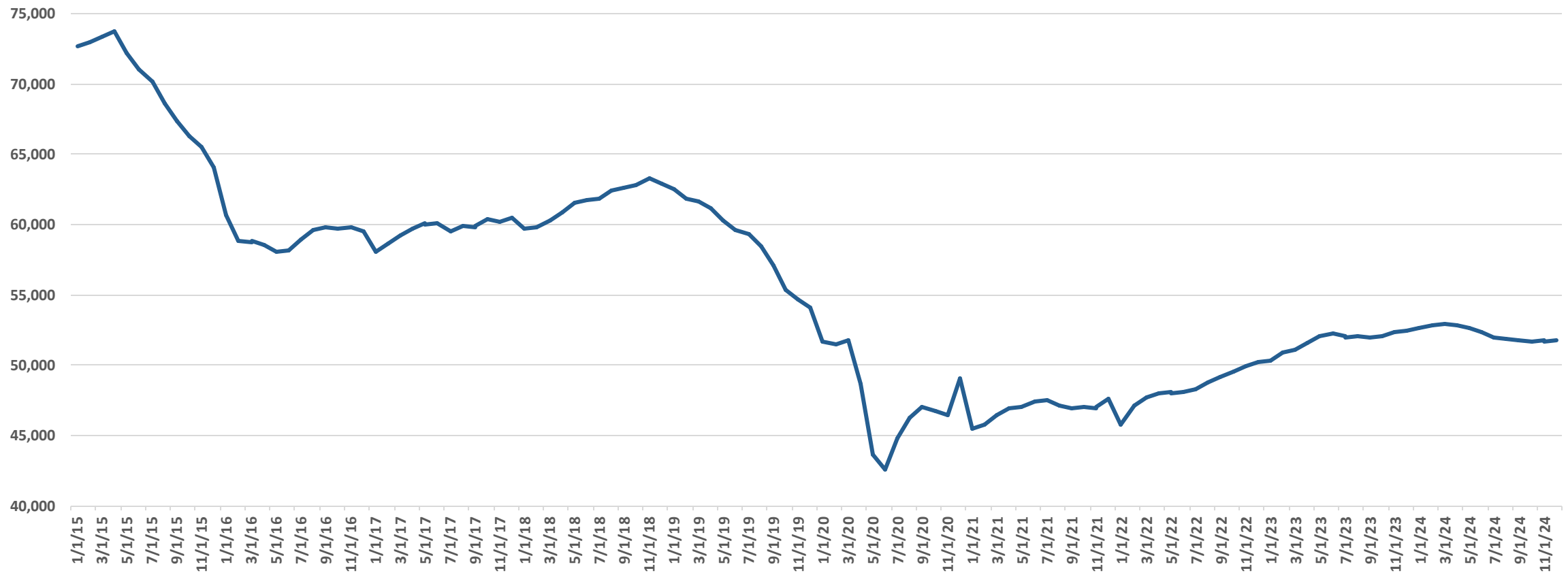
# Railroad Service: Velocity

Average Train Speed (mph): All Class I's



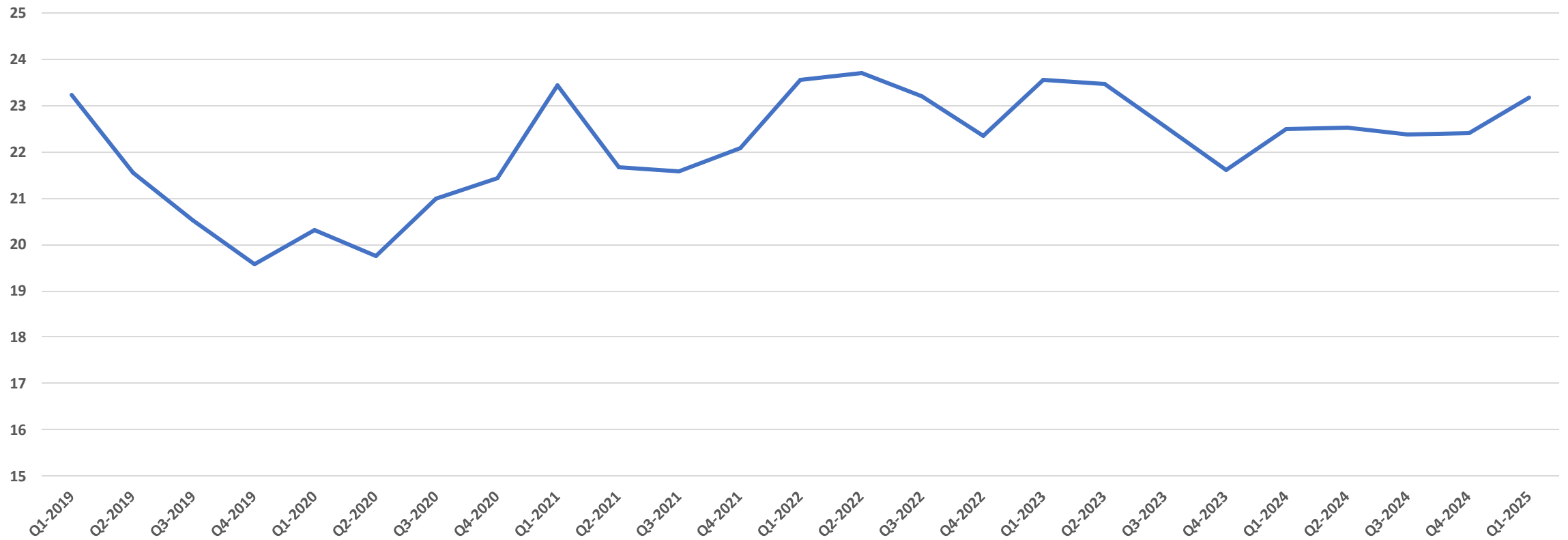
# Railroad Service: Labor

Class I Train & Engine Labor



# Railroad Service: Dwell Time

Average Terminal Dwell Time (Hours): All Class I's



# RR 301

# Railcar Fleet Management

Roger Pederson



# Introductions

## **Roger Pederson**

Sawtooth Caverns LLC

VP, Business Development, Refined Products

Roger.Pederson@sawtoothcaverns.com

Today, Roger is responsible for leading terminal development projects in Refined Product storage for Sawtooth Caverns LLC, in Delta, UT. Sawtooth owns and operates the largest petroleum products underground salt cavern storage terminal in the West. Roger also manages commercial rail activities, along with rail, truck and pipeline logistics infrastructure expansion planning for Sawtooth. Previously, Roger was Director of Logistics and Terminals at Covia (Unimin Corp), and a 15-year veteran of CSX Transportation, where Roger served in various account management, and sales leadership roles.

Roger has an MS: Transportation Management from the University of Denver, and a BS: Business Management. 20+ years of supply chain and logistics experience, most of which has been devoted to rail transportation and terminal development within the energy, petrochemicals, oil and gas, and metals industries.

Roger lives in Salt Lake City UT with his spouse, Lisa. They both enjoy mountain living; hiking with their dog (Rosie), and nature watching.

# Fleet Sizing and Measurement Considerations

# Fleet Sizing

- The decision to own or lease railcars (and cover freight payments) requires several considerations:
  - How many years do you plan to ship a particular product and volume by rail?
  - Is the business ratable/consistent? Would you need options to increase or decrease your fleet to stay in sync with your changing business needs?
  - Could the car type become obsolete due to new regulations or a change in the preferred package and associated freight rates?
  - Does the shipper have the staff and expertise to manage the repair and maintenance of a rail car fleet, access to approved shops, engineers, regulatory experts, and administrate the review and payment of freight invoices?
  - Is capital better invested in your core business or in a rail car fleet?

Determining fleet sizing is more of an art than a science but here's an example

# Generic Example of Fleet Sizing Exercise

Origin City	Dest City	Dest State	Forecasted Carloads/Qtr	Annualized Carloads	LOADED Transit (Days)	Car Dwell at Dest	EMPTY Transit (Days)	Total Cycle Time (Days)	Origin Dwell	Total	Turns/Yr.	Cars Required
Plant 1	ANYTOWN	QC	5	20.0	19.5	46.5	18.0	84.0	4.0	88.0	4.1	4.8
Plant 1	ANYTOWN	TX	6	24.0	17.1	10.7	20.1	47.9	4.0	51.9	7.0	3.4
Plant 1	ANYTOWN	NY	108	432.0	14.7	7.1	10.1	31.8	4.0	35.8	10.2	42.4
Plant 1	ANYTOWN	PA	58	232.0	19.5	6.3	13.0	38.8	4.0	42.8	8.5	27.2
Plant 1	ANYTOWN	IA	4	16.0	12.6	11.8	11.9	36.3	4.0	40.3	9.1	1.8
Plant 1	ANYTOWN	AB	1	4.0	20.3	10.3	22.0	52.7	4.0	56.7	6.4	0.6
Plant 1	ANYTOWN	PA	15	60.0	13.1	15.7	10.6	39.3	4.0	43.3	8.4	7.1
Plant 1	ANYTOWN	WV	15	60.0	12.0	14.0	14.0	40.0	4.0	44.0	8.3	7.2
Plant 1	ANYTOWN	TX	8	32.0	15.1	54.2	15.5	84.8	4.0	88.8	4.1	7.8
Plant 1	ANYTOWN	PA	20	80.0	31.9	5.7	12.7	50.4	4.0	54.4	6.7	11.9
Plant 1	ANYTOWN	MS	7	28.0	17.4	8.4	22.4	48.1	4.0	52.1	7.0	4.0
Plant 1	ANYTOWN	TX	33	132.0	18.5	15.9	17.8	52.2	4.0	56.2	6.5	20.3
Plant 1	ANYTOWN	PA	6	24.0	9.5	46.5	48.6	104.6	4.0	108.6	3.4	7.1
Plant 1	ANYTOWN	QC	2	8.0	13.5	27.5	15.8	56.8	4.0	60.8	6.0	1.3
Plant 1	ANYTOWN	WV	45	180.0	14.0	2.6	13.5	30.1	4.0	34.1	10.7	16.8
Plant 1	ANYTOWN	PA	29	116.0	11.3	10.5	15.3	37.1	4.0	41.1	8.9	13.1
Plant 1	ANYTOWN	BC	14	56.0	30.2	5.0	29.3	64.5	4.0	68.5	5.3	10.5
Plant 1	ANYTOWN	IL	235	940.0	2.0	2.0	2.0	6.0	4.0	10.0	36.5	25.8
Plant 1	ANYTOWN	PA	20	80.0	10.0	10.0	10.0	30.0	4.0	34.0	10.7	7.5
Plant 1	ANYTOWN	QC	12	48.0	13.6	43.1	20.8	77.5	4.0	81.5	4.5	10.7
Plant 1	ANYTOWN	IN	6	24.0	13.0	92.8	13.8	119.5	4.0	123.5	3.0	8.1
Plant 1	ANYTOWN	OK	10	40.0	17.1	37.9	-	54.9	4.0	58.9	6.2	6.5
Plant 1	ANYTOWN	OH	396	1,584.0	10.3	5.9	16.3	32.6	4.0	36.6	10.0	158.7
Plant 1	ANYTOWN	KS	81	324.0	13.4	8.2	14.7	36.3	4.0	40.3	9.1	35.8
Plant 1	ANYTOWN	IN	197	788.0	15.0	26.5	16.3	57.7	4.0	61.7	5.9	133.3
Plant 1	ANYTOWN	PA	7	28.0	7.0	2.5	7.0	38.1	4.0	20.5	17.8	1.6
Plant 1	ANYTOWN	PA	120	480.0	12.4	11.5	14.3	40.7	4.0	42.1	8.7	55.4
Plant 1	ANYTOWN	PA	165	660.0	21.1	6.2	13.4	-	4.0	44.7	8.2	80.8

# Definitions

- LOADED TRANSIT TIME: The number of days from the origin loading point to the customer.
  - Typically measured from when the car is released from the origin facility to when the car is either constructively placed (CP'd) or actually placed (AP'd) at the customer
- CAR DWELL AT DESTINATION or CUSTOMER UNLOAD TIME: The time that it takes the customer to unload the railcar
  - Measured from when the railcar is CP'd or AP'd, to when the customer releases the car as an empty
- EMPTY TRANSIT or EMPTY RETURN TIME: The number of days the car takes to return to the origin facility
  - Measured from when the car is empty released to when the car is either CP'd or AP'd with the customer.
- TOTAL CYCLE TIME: Loaded + Customer Unload + Empty Time = Total Cycle Time
- ORIGIN DWELL or ORIGIN PLANT LOAD TIME: How many days it takes for the Origin to load the car
  - Measured from when the car is CP'd or AP'd, to when a new bill of lading and loaded release is reported
- CARS REQUIRED: How many cars are needed to fulfill the forecasted demand using Total Cycle Time and Origin Dwell

# Generic Example of Fleet Sizing Exercise

## Demand/How many cars do you need – the science?

Origin City	Dest City	Dest State	Forecasted Carloads/Qtr	Annualized Carloads
Plant 1	ANYTOWN	QC	5	20.0
Plant 1	ANYTOWN	TX	6	24.0
Plant 1	ANYTOWN	NY	108	432.0
Plant 1	ANYTOWN	PA	58	232.0
Plant 1	ANYTOWN	IA	4	16.0
Plant 1	ANYTOWN	AB	1	4.0
Plant 1	ANYTOWN	PA	15	60.0
Plant 1	ANYTOWN	WV	15	60.0
Plant 1	ANYTOWN	TX	8	32.0
Plant 1	ANYTOWN	PA	20	80.0
Plant 1	ANYTOWN	MS	7	28.0
Plant 1	ANYTOWN	TX	33	132.0
Plant 1	ANYTOWN	PA	6	24.0
Plant 1	ANYTOWN	QC	2	8.0
Plant 1	ANYTOWN	WV	45	180.0
Plant 1	ANYTOWN	PA	29	116.0
Plant 1	ANYTOWN	BC	14	56.0
Plant 1	ANYTOWN	IL	235	940.0
Plant 1	ANYTOWN	PA	20	80.0
Plant 1	ANYTOWN	QC	12	48.0
Plant 1	ANYTOWN	IN	6	24.0
Plant 1	ANYTOWN	OK	10	40.0
Plant 1	ANYTOWN	OH	396	1,584.0
Plant 1	ANYTOWN	KS	81	324.0
Plant 1	ANYTOWN	IN	197	788.0
Plant 1	ANYTOWN	PA	7	28.0
Plant 1	ANYTOWN	PA	120	480.0
Plant 1	ANYTOWN	PA	165	660.0

- Origin Profile:
  - Serving Carrier(s): Open or Closed?
  - Serving Railroad(s)
  - Switch Day(s): How many days per week does railroad serve, and what days (DOW)?
  - Track Capacities: Total spots, with split on car storage and loading spots
  - Plant Capacities: How many railcars per day, does it operate. Does it operate more than the railroad serves (24/7?)?

How could the above info impact fleet sizing considerations?



# Generic Example of Fleet Sizing Exercise

## Transit and Total Cycle Times

Origin City	Dest City	Dest State	LOADED Transit (Days)	Car Dwell at Dest	EMPTY Transit (Days)	Total Cycle Time (Days)
Plant 1	ANYTOWN	QC	19.5	46.5	18.0	84.0
Plant 1	ANYTOWN	TX	17.1	10.7	20.1	47.9
Plant 1	ANYTOWN	NY	14.7	7.1	10.1	31.8
Plant 1	ANYTOWN	PA	19.5	6.3	13.0	38.8
Plant 1	ANYTOWN	IA	12.6	11.8	11.9	36.3
Plant 1	ANYTOWN	AB	20.3	10.3	22.0	52.7
Plant 1	ANYTOWN	PA	13.1	15.7	10.6	39.3
Plant 1	ANYTOWN	WV	12.0	14.0	14.0	40.0
Plant 1	ANYTOWN	TX	15.1	54.2	15.5	84.8
Plant 1	ANYTOWN	PA	31.9	5.7	12.7	50.4
Plant 1	ANYTOWN	MS	17.4	8.4	22.4	48.1
Plant 1	ANYTOWN	TX	18.5	15.9	17.8	52.2
Plant 1	ANYTOWN	PA	9.5	46.5	48.6	104.6
Plant 1	ANYTOWN	QC	13.5	27.5	15.8	56.8
Plant 1	ANYTOWN	WV	14.0	2.6	13.5	30.1
Plant 1	ANYTOWN	PA	11.3	10.5	15.3	37.1
Plant 1	ANYTOWN	BC	30.2	5.0	29.3	64.5
Plant 1	ANYTOWN	IL	2.0	2.0	2.0	6.0
Plant 1	ANYTOWN	PA	10.0	10.0	10.0	30.0
Plant 1	ANYTOWN	QC	13.6	43.1	20.8	77.5
Plant 1	ANYTOWN	IN	13.0	92.8	13.8	119.5
Plant 1	ANYTOWN	OK	17.1	37.9	-	54.9
Plant 1	ANYTOWN	OH	10.3	5.9	16.3	32.6
Plant 1	ANYTOWN	KS	13.4	8.2	14.7	36.3
Plant 1	ANYTOWN	IN	15.0	26.5	16.3	57.7
Plant 1	ANYTOWN	PA	7.0	2.5	7.0	38.1
Plant 1	ANYTOWN	PA	12.4	11.5	14.3	40.7
Plant 1	ANYTOWN	PA	21.1	6.2	13.4	-

- Obtain LOADED and EMPTY transit time data from:
  - 3<sup>rd</sup> party sources
  - Internal data collection – if you have history on the lanes
  - Railroad tools and/or rail service trip plan and routing info
- Typically, would want to use historical transit times, 3-12 months looking back
- Looking forward, update transit time assumptions (and carload forecast) as needed (monthly or quarterly), particularly under rail service volatility

Many variables not under shippers' direct control- the art

# Generic Example of Fleet Sizing Exercise

## Turns Per Year and Cars Required per Lane and Fleet

LOADED Transit (Days)	Car Dwell at Dest	EMPTY Transit (Days)	Total Cycle Time (Days)	Origin Dwell	Total	Turns/Yr.	Cars Required
19.5	46.5	18.0	84.0	4.0	88.0	4.1	4.8
17.1	10.7	20.1	47.9	4.0	51.9	7.0	3.4
14.7	7.1	10.1	31.8	4.0	35.8	10.2	42.4
19.5	6.3	13.0	38.8	4.0	42.8	8.5	27.2
12.6	11.8	11.9	36.3	4.0	40.3	9.1	1.8
20.3	10.3	22.0	52.7	4.0	56.7	6.4	0.6
13.1	15.7	10.6	39.3	4.0	43.3	8.4	7.1
12.0	14.0	14.0	40.0	4.0	44.0	8.3	7.2
15.1	54.2	15.5	84.8	4.0	88.8	4.1	7.8
31.9	5.7	12.7	50.4	4.0	54.4	6.7	11.9
17.4	8.4	22.4	48.1	4.0	52.1	7.0	4.0
18.5	15.9	17.8	52.2	4.0	56.2	6.5	20.3
9.5	46.5	48.6	104.6	4.0	108.6	3.4	7.1
13.5	27.5	15.8	56.8	4.0	60.8	6.0	1.3
14.0	2.6	13.5	30.1	4.0	34.1	10.7	16.8
11.3	10.5	15.3	37.1	4.0	41.1	8.9	13.1
30.2	5.0	29.3	64.5	4.0	68.5	5.3	10.5
2.0	2.0	2.0	6.0	4.0	10.0	36.5	25.8
10.0	10.0	10.0	30.0	4.0	34.0	10.7	7.5
13.6	43.1	20.8	77.5	4.0	81.5	4.5	10.7
13.0	92.8	13.8	119.5	4.0	123.5	3.0	8.1
17.1	37.9	-	54.9	4.0	58.9	6.2	6.5
10.3	5.9	16.3	32.6	4.0	36.6	10.0	158.7
13.4	8.2	14.7	36.3	4.0	40.3	9.1	35.8
15.0	26.5	16.3	57.7	4.0	61.7	5.9	133.3
7.0	2.5	7.0	38.1	4.0	20.5	17.8	1.6
12.4	11.5	14.3	40.7	4.0	42.1	8.7	55.4
21.1	6.2	13.4	-	4.0	44.7	8.2	80.8

- Total Cars Required = 712 cars
- Would you assign and manage the fleet to 712 cars?
- This shipper elected to add +15% to their fleet sizing assumptions to account for variability in transit times, bad orders/maintenance outages, % of cars needed shopped every year, and variability on dwell at destination and plant, so fleet was defined as ideal at 818 cars

# Indicators of Fleet Health

# Strategies for Managing Volatility in Fleet Sizing Requirements

## Insure Sufficient Plant Rail Capacity

- Size rail capacity to accommodate regular daily/weekly flow, and then some (if you have the space)

## Secure Track to Accommodate Any Overflow

- Do you have a secondary location to build storage track?
- If plant capacity is constrained, secure lease track in local area
- Short-lines or Class 1's?

## Customer and Plant Dwell

- Reach out to destination customers to understand drivers of their dwell – seek improvements if possible. Charges if customer sit on cars too long?
- Increase/decrease plant dwell, if you have rail capacity to absorb overflow

## Plan for Variabilities in Transit Times and Any Seasonality

- Assuming you have some of the above levers to pull, add buffer (15%)?

# Fleet health Measurements

- Fleet health scorecard for each lane:
  - How many cars have you assigned
  - How many cars needed (demand)
  - Define a (+/-) tolerance for each lane
  - Flag a surplus or deficit issue
  - If surplus, or deficit, research why?
- Activate action plans if you determine fleet challenges to be long lasting
  - Can you divert empty cars to other plants/origins – to limit cost, divert on the empty return
  - If you have local lease track, can you send/pull cars from storage
  - Do you need more cars – short term leases available – do any others in the same industry/car type have excess cars?
  - Other Ideas?
- Fully engage with railroads to track, trace and manage car fleets actively
  - Railroad operations are complex and offer many opportunities for failure

# Other Indicators of Fleet Sizing Issues

## Demurrage/Car Storage Assessorial Billings

- Congestion and related railroad demurrage/car storage invoices are a RED FLAG – it's usually better to invest those \$'s in a solution to reduce the cost/risk

## Running Out of Cars to Load/Unload

- If your tolerances are too tight, the plant or your customers may run out of cars/product - missed commitment

# Appendix



# Bonus Depreciation on Railcars

**Table 1. The History of Bonus Depreciation Extensions**

Act	Depreciation %	Effective Dates
Job Creation and Worker Assistance Act of 2002	30%	Sept., 2001 – Dec. 31, 2004
Jobs and Growth Tax Relief Reconciliation Act	50%	May, 2003 – Jan. 1, 2006
Economic Stimulus Act of 2008	50%	2008
American Recovery and Reinvestment Act of 2009	50%	2009
Small Business Jobs Act of 2010	50%	2010
Tax Relief, UCR, and Job Creation Act of 2010	100%	Sept. 9, 2010 – Dec. 31, 2011
Tax Relief, UCR, and Job Creation Act of 2010	50%	2012
American Taxpayer Relief Act of 2012	50%	2013
Tax Increase Prevention Act of 2014	50%	2014
Protecting Americans from Tax Hikes Act of 2015	50%	2015 – 2017
Protecting Americans from Tax Hikes Act of 2015	40%	2018
Protecting Americans from Tax Hikes Act of 2015	30%	2019
Tax Cuts and Jobs Act	100%	Sept., 2017 – Dec. 31, 2022
Tax Cuts and Jobs Act	80%	2023
Tax Cuts and Jobs Act	60%	2024
<b>Tax Cuts and Jobs Act</b>	<b>40%</b>	<b>2025</b>
Tax Cuts and Jobs Act	20%	2026

- Originally a way to restart markets post Sept. 11, 2001
- After 25 years of continued incentive to invest, Bonus is quickly tapering to a close...?
- Will it be on the agenda for the current administration to extend?
- Impact of 20% in bonus value over a 10-year lease is equal to ~20 bps in investor yield which could equal up to \$100 pcpm in lease rate!

- Traditional 7-year MACRS depreciation

Recovery Year	7-year Property
1	14.29%
2	24.49%
3	17.49%
4	12.49%
5	8.93%
6	8.92%
7	8.93%
8	4.46%