



# Industry Update

Economics, Transportation  
&  
Commercial Vehicles

Presented by Penske Transportation Solutions



# Webinar Overview



Kenny Vieth,  
President & Sr.  
Analyst



Eric Crawford,  
Vice President, Sr.  
Analyst



Steve Tam,  
Vice President & Analyst



Jennifer McNealy,  
Director, CV Market  
Research & Publications

**NA Economy & Freight Transportation – Kenny Vieth**

**Class 8 – Eric Crawford**

**Used Trucks & Medium Duty – Steve Tam**

**Trailers - Jennifer**

**Q&A– All**



# PREBUY SALE

## AUTONOMOUS COMMERCIAL VEHICLE FORECAST

### YOU'LL RECEIVE:

- WRITTEN ANALYSIS DOCUMENT
- TCO MODEL WITH BASE, SLOW, & FAST SCENARIOS
- EXECUTIVE SUMMARY CALL w/ ACT TEAM
- EXECUTIVE SUMMARY PRESENTATION DECK

AVAILABLE OCTOBER 3, 2022. **ORDER BEFORE SEPTEMBER 20 AND RECEIVE 15% OFF YOUR ORDER OF DRIVING AUTOMATION.**

CONTACT IAN MCGRUFF, ANN RUNDLE, LYDIA VIETH, OR AMANDA WILLIAMS WITH QUESTIONS TO PLACE YOUR ORDER.



## DRIVING AUTOMATION

COMMERCIAL TRANSPORTATION'S PURSUIT OF LEVEL 4 AUTONOMY

# CHARGING FORWARD

NOW ONBOARDING MULTI-CLIENT PARTICIPANTS FOR THE THIRD EDITION OF *CHARGING FORWARD*

## PROJECT COVERAGE:

BATTERY, FUEL CELL, NATURAL GAS, H2 ICE, AND GASOLINE.

## PROJECT SIGN-ON:

THRU JANUARY 15, 2023

## PROJECT COMPLETION:

JULY 2023

CONTACT IAN MCGRUFF, ANN RUNDLE, LYDIA VIETH or AMANDA WILLIAMS WITH QUESTIONS OR TO SIGN-UP.



# RENEWAL SEASON IS HERE

## Have you renewed your subscription?

A renewal letter via email has been sent from Debby Steinbarger, [djsteinbarger@actresearch.net](mailto:djsteinbarger@actresearch.net). If you have not received this email, please contact Debby Steinbarger or Amanda Williams at 812.379.2085.

Have questions about the renewal process, subscription opportunities? Call us at 812.379.2085.



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**11/15**

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# Powerful Forces Diametrically Opposed

## Bad News

- **Inflation & Fed's willingness to bring it to heel**
  - Interest rates up, more hikes inbound
- **Yield curve(s) inverted**
- **Long-term expectations come to pass**
  - Consumer *goods* spending binge over
  - Sharp roll-off in trucking spot rates
- **Major “known unknowns” re global risk**
  - Commodity price roller coaster
  - Global economies wobbling
- **Supply chain constraints persist**

## Good News

- **NA economic demand hanging on**
  - It is better to be a supplier of hydrocarbons during an energy crisis
- **Strong consumer and business balance sheets**
- **Low unemployment and strong job market**
- **Industrial economy has momentum so far**
  - Global slowdown could benefit sourcing for domestic manufacturing and ease prices
- **Pent-up manufacturing demand**



# Tale of the Tape

## CONSUMERS

Ability to Consume	<u>Current</u>	<u>Previous</u>
Disposable Income	Red	Red
Household Debt	Green	Green
Inflation	Red	Red
Yield Curve	Yellow	Yellow
<b>Composite</b>	<b>Yellow</b>	<b>Yellow</b>

-1

Willingness to Consume	<u>Current</u>	<u>Previous</u>
Consumer Attitudes	Red	Red
Unemployment Claims	Green	Green
Hours Worked	Yellow	Yellow
Stock Market	Red	Red
<b>Composite</b>	<b>Yellow</b>	<b>Yellow</b>

-1

Source: ACT Research Co, Copyright 2022

## BUSINESSES

Business Conditions	<u>Current</u>	<u>Previous</u>
Corporate Profits	Green	Green
Debt to Net Worth	Green	Green
Risk Premium	Yellow	Yellow
Producer Prices	Red	Red
<b>Composite</b>	<b>Yellow</b>	<b>Yellow</b>

+1

Business Activity	<u>Current</u>	<u>Previous</u>
Purchasing Managers Index	Green	Green
Capacity Utilization	Green	Green
Industrial Production	Yellow	Yellow
New Orders	Yellow	Yellow
<b>Composite</b>	<b>Yellow</b>	<b>Yellow</b>

+2

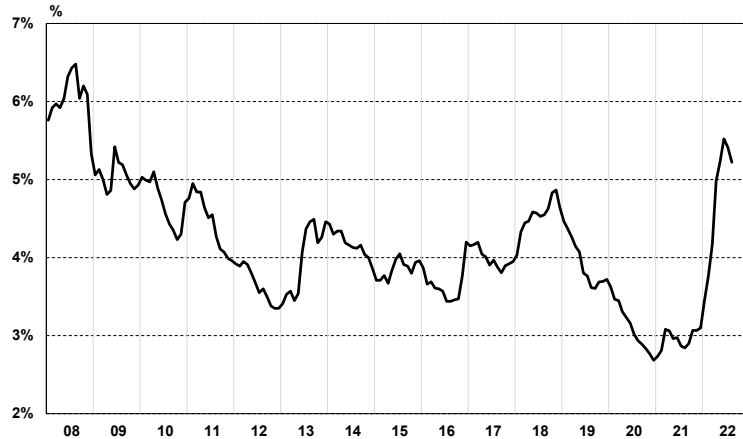
Source: ACT Research Co, Copyright 2022





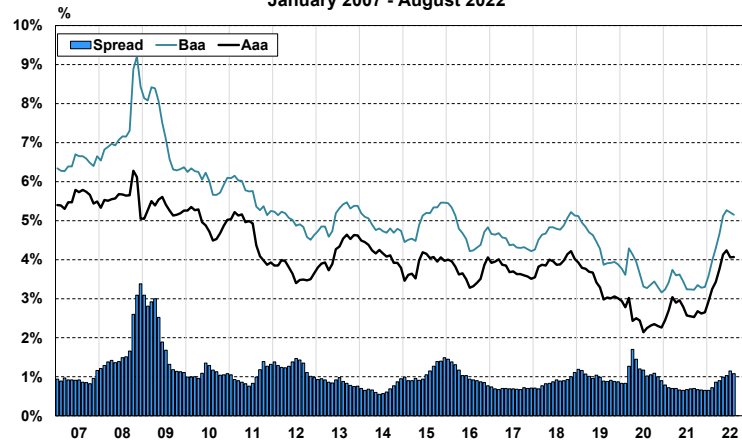
# Borrowing Costs Up, Yield Curve Inverts

**30-Year Conventional Mortgage Rate**  
January 2008 - August 2022



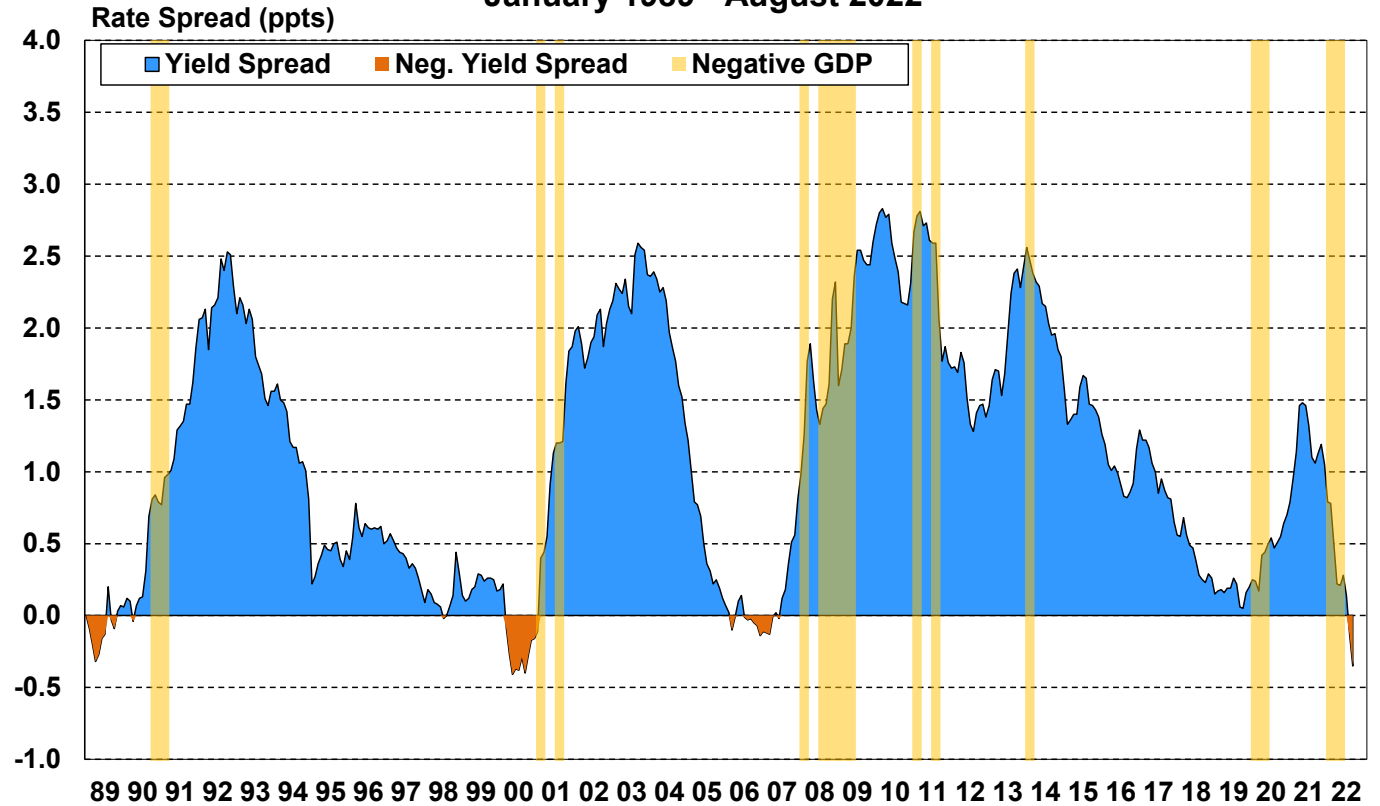
Source: FHLMC, ACT Research Co. © 2022

**Moody's Seasoned Aaa and Baa Corporate Bond Yields**  
Percent Change Y/Y  
January 2007 - August 2022



Source: Federal Reserve Board, ACT Research Co. © 2022

**Yield Spread**  
2-Year and 10-Year Treasuries  
January 1989 - August 2022

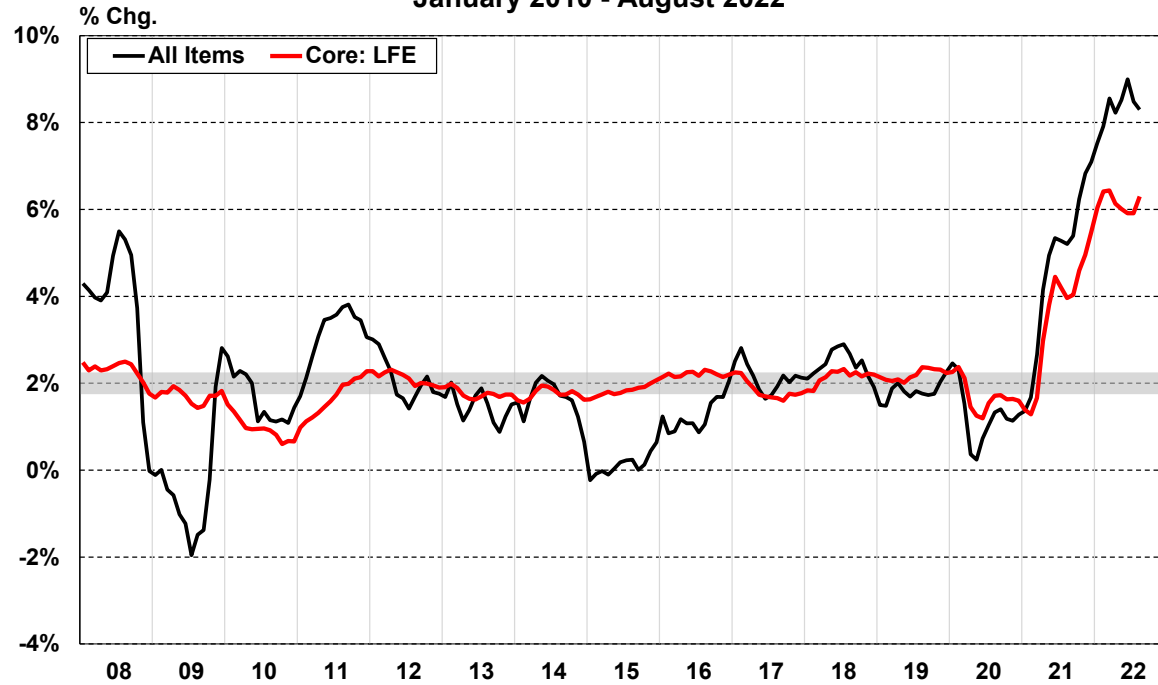


Source: Federal Reserve Board, ACT Research Co. © 2022



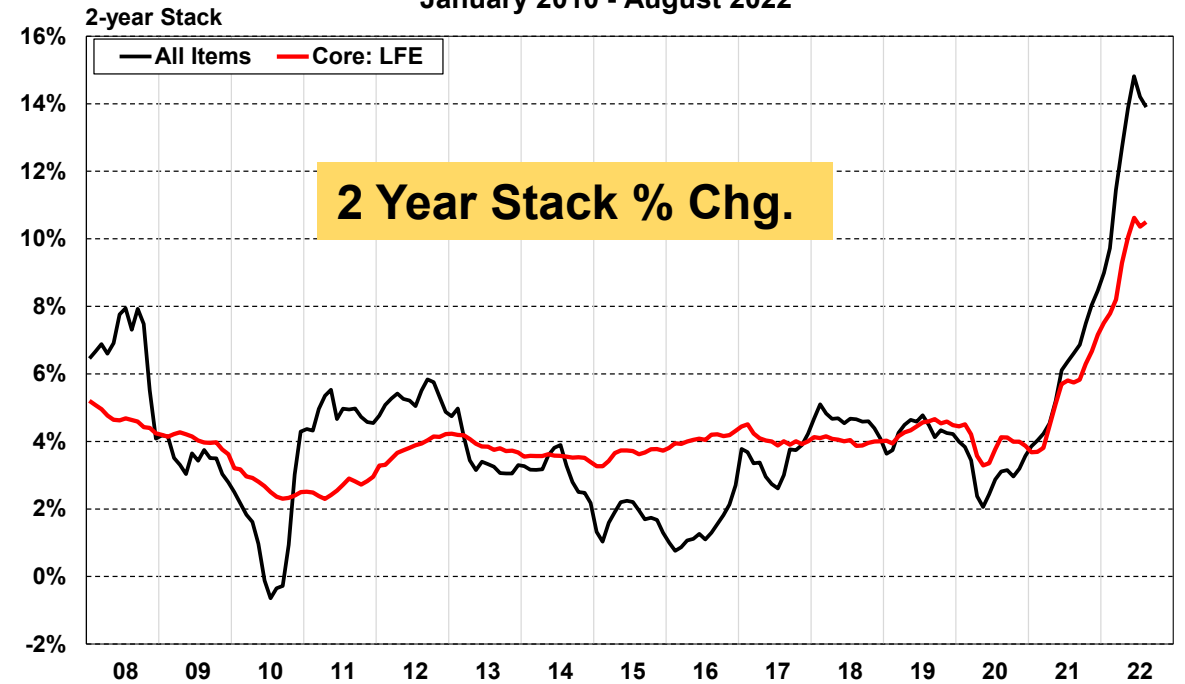
# Corrosion

**Consumer Price Index:**  
All Items and Core Rate  
January 2010 - August 2022



Source: BLS, ACT Research Co. © 2022

**Consumer Price Index:**  
All Items and Core Rate  
January 2010 - August 2022



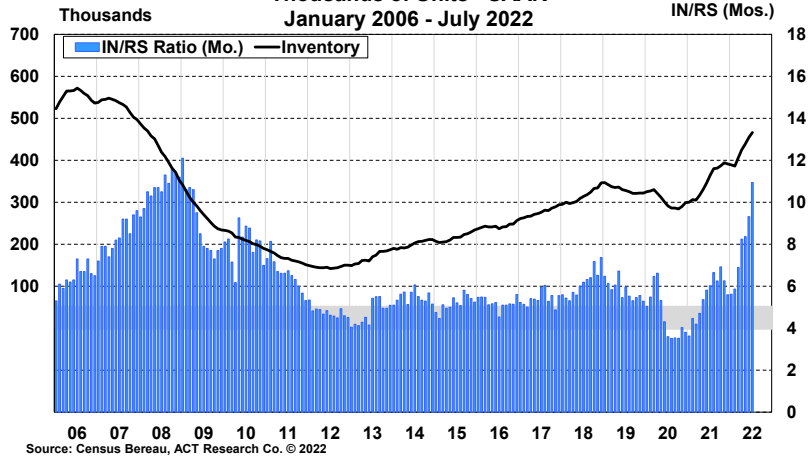
Source: BLS, ACT Research Co. © 2022



# Housing Weakness from Place of Strength

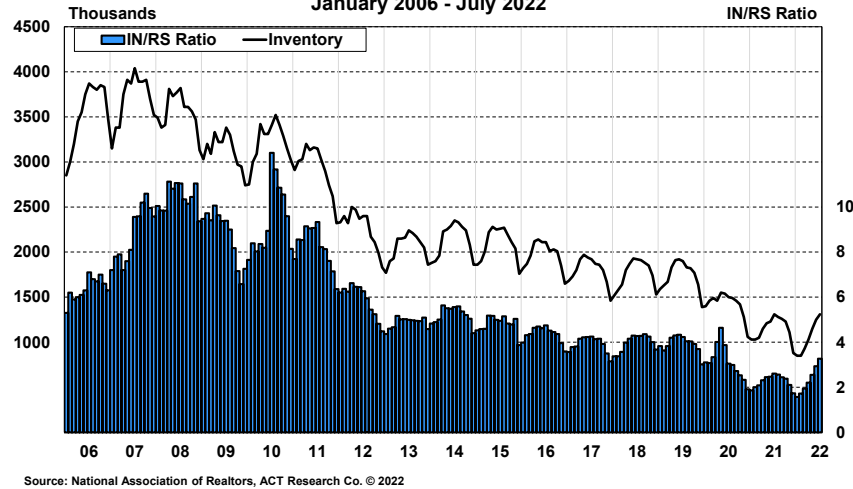
## New Home Inventory & IN/RS

Thousands of Units - SAAR  
January 2006 - July 2022



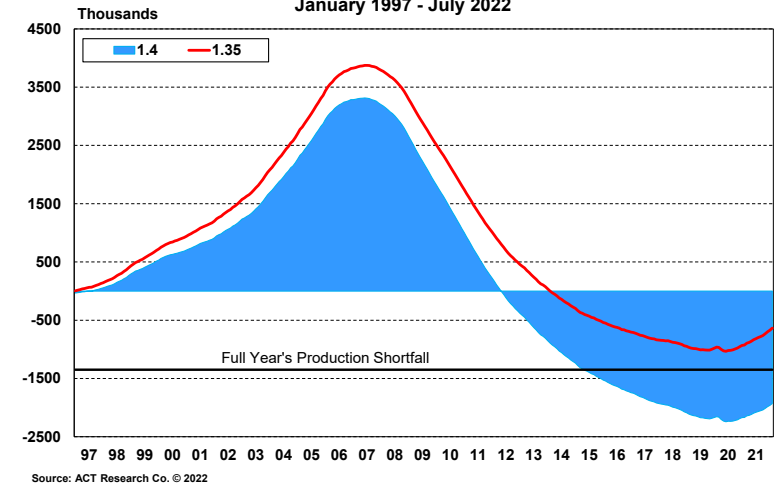
## Existing Home Inventories & IN/RS

Thousands of Units - SAAR  
January 2006 - July 2022



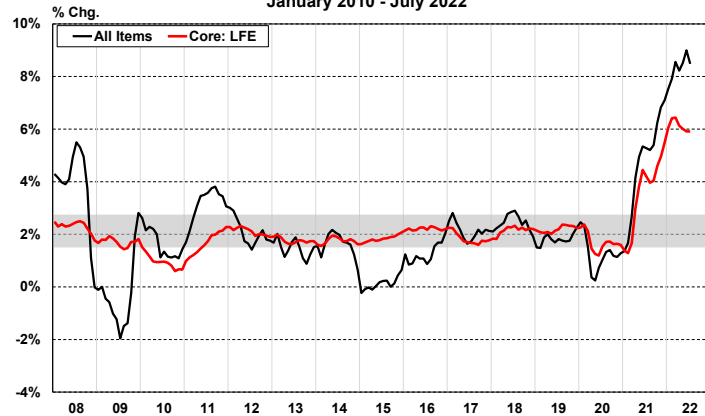
## U.S. Housing Starts Relative to Household Formation

Assuming Replacement + New Demand @ 1.35 & 1.40m Units/Year  
January 1997 - July 2022



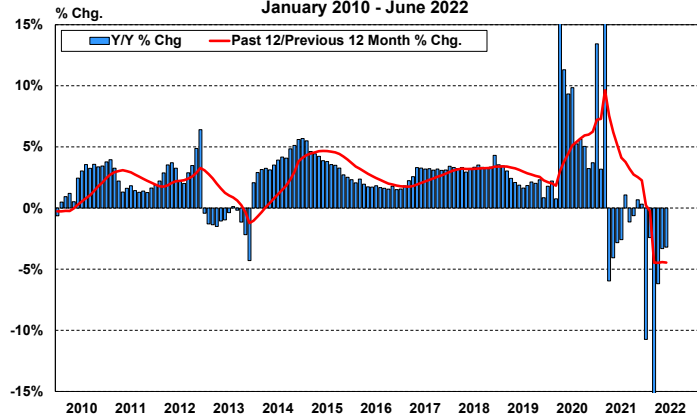
# Conceptually,

**Consumer Price Index:**  
All Items and Core Rate  
January 2010 - July 2022



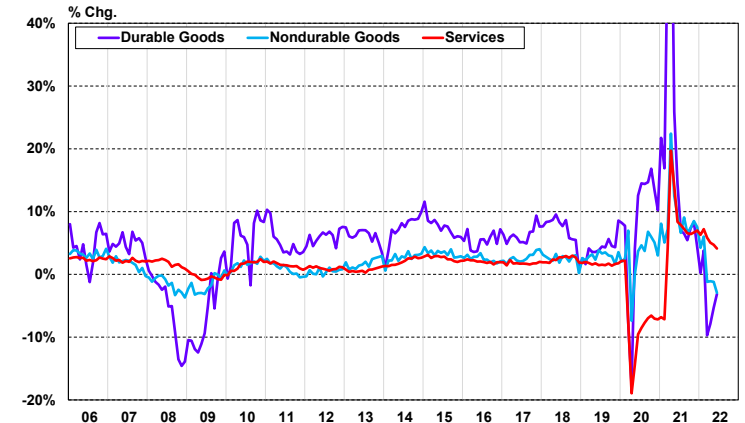
Source: BLS, ACT Research Co. © 2022

**Real Disposable Personal Income**  
Percent Change Y/Y  
January 2010 - June 2022



Source: BEA, ACT Research Co. © 2022

**Real Personal Consumption Expenditures**  
January 2006 - June 2022



Source: US Bureau of Economic Analysis, ACT Research Co. © 2022

# Improving Prognosis: The Cure for High Prices



# PSA: Economic History Changes on 9/30

## U.S. ECONOMIC ACTIVITY

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
	(A)	(A)	(F)	(F)
Real GDP (bil. US\$12)	-3.4%	5.7%	1.5%	0.0%
Personal Consumption (bil. US\$12)	-3.8%	7.9%	2.5%	1.2%
PCE: Durable Goods (bil US\$12)	7.7%	18.1%	-1.9%	-4.3%
Nonresidential Fixed Investment (bil. US\$12)	-5.3%	7.4%	5.2%	-1.0%
Residential Fixed Investment (bil. US\$12)	6.8%	9.2%	-4.1%	-1.9%
Net Exports as % of GDP	5.1%	6.6%	7.6%	7.6%
ACT Freight Composite Index (2004=100)	-2.3%	10.9%	2.1%	-3.2%
Consumer Price Index - All (82-84=100)	1.2%	4.7%	8.3%	4.3%
Unemployment (%)	8.1	5.4	3.7	4.0
Industrial Production	-7.0%	4.9%	4.1%	-0.6%
Oil Price Assumption (US\$/Bbl.)	39.7	67.5	96.0	77.9

## U.S. ECONOMIC ACTIVITY Real GDP & Components

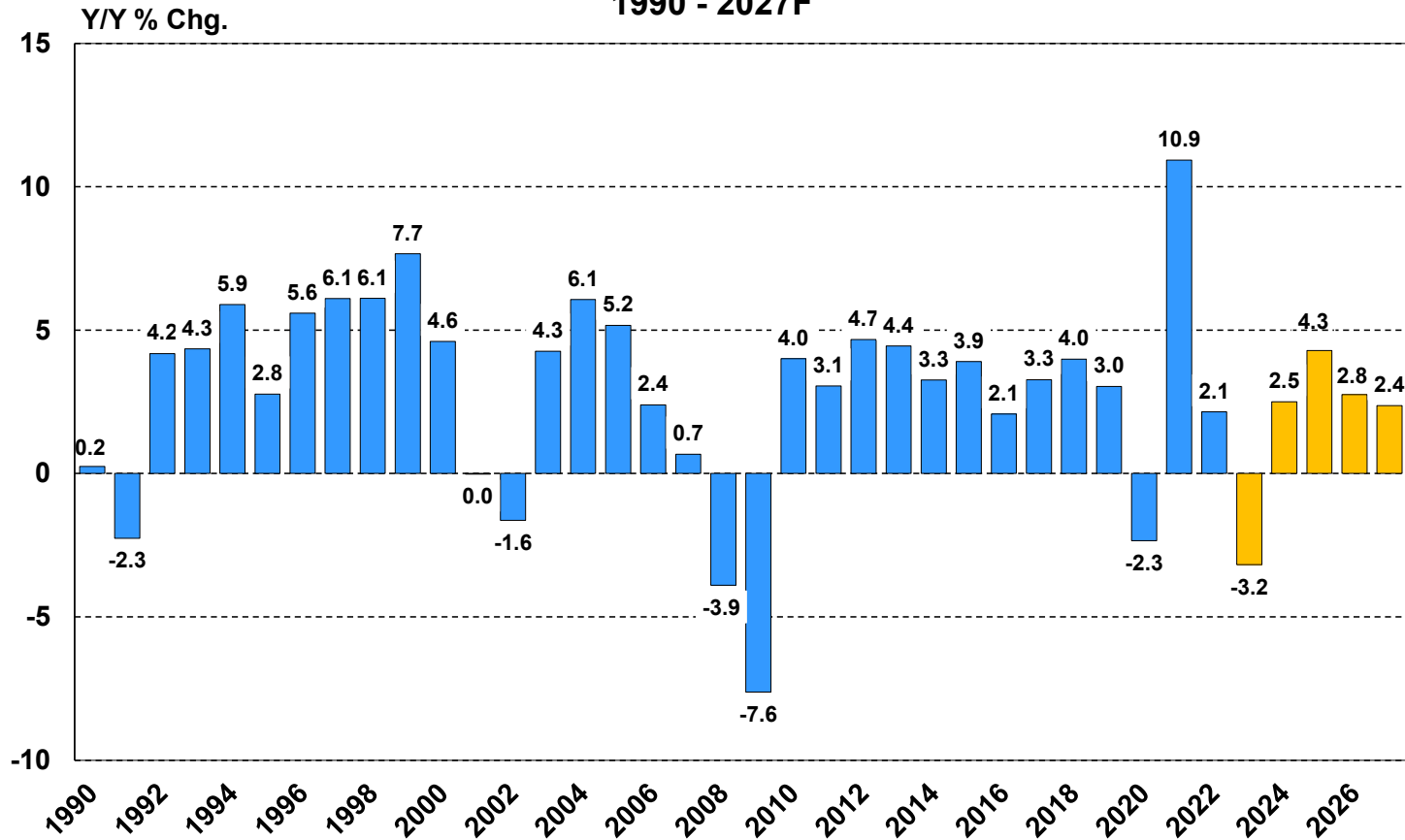
	<u>Q1 2022</u>	<u>Q2 2022</u>	<u>Q3 2022</u>	<u>Q4 2022</u>	<u>Q1 2023</u>	<u>Q2 2023</u>	<u>Q3 2023</u>
	(A)	(P)	(F)	(F)	(F)	(F)	(F)
Real GDP (bil. US\$12)	19727.9	19699.5	19748.5	19719.9	19647.1	19648.3	19742.6
Q/Q % Chg. @ SAAR	-1.6%	-0.6%	1.0%	-0.6%	-1.5%	0.0%	1.9%
Personal Consumption (bil. US\$12)	13881.1	13931.5	13996.3	14053.7	14071.3	14099.5	14145.5
Q/Q % Chg. @ SAAR	1.8%	1.5%	1.8%	1.1%	0.5%	0.8%	1.3%
Nonresidential Fixed Investment (bil. US\$12)	2975.4	2975.1	3038.8	3080.9	3014.6	2967.9	2976.0
Q/Q % Chg. @ SAAR	10.0%	0.0%	8.5%	5.0%	-8.6%	-6.2%	1.1%
Residential Fixed Investment (bil. US\$12)	698.7	668.6	675.4	673.0	662.9	661.2	666.2
Q/Q % Chg. @ SAAR	0.4%	-16.2%	4.0%	-2.0%	-6.0%	-1.0%	3.0%
ACT Freight Composite Index (2004= 100)	152.7	152.0	150.7	149.4	146.9	145.9	146.1
Q/Q % Chg. @ SAAR	5.3%	-1.7%	-3.6%	-3.4%	-6.5%	-2.6%	0.3%

(A): ACTUAL, (I): Initial, (P): Preliminary, (F): Forecast  
Source: ACT Research Co.



# Context

## ACT U.S. Freight Composite Year Over Year 1990 - 2027F



Source: ACT Research Co. © 2022

**ACT's Freight Composite is a weighted, GDP-based, metric that recognizes that different economic segments create freight at different rates**

# Freight Overview

**Marco:** recession maybe  
**Freight:** recession  
certain

- **RUS-UKR exacerbates problematic post-pandemic period**
- **Corrosive effect of inflation on consumption**
- **Goods hangover: Reversion to services**

**Trucking:**  
Inflation trims volumes

- **Substitution back to services, less restocking**
- **Volumes flat to down – not a sharp downturn**
- **Should help ease supply chain pressures & inflation**

**Drivers:**  
supply-side loosens on  
schedule

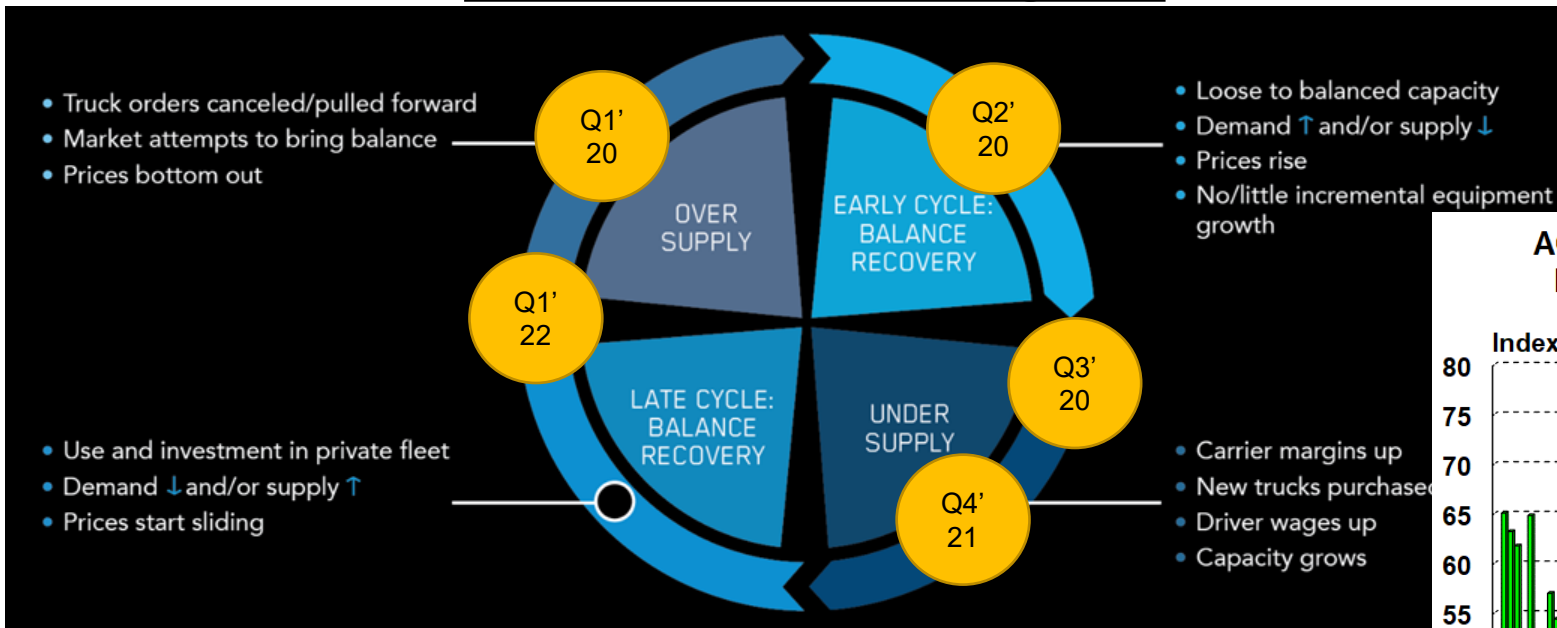
- **Not just freight demand, but driver supply**
- **ACT Driver Supply metric to “where the cycle turns” levels since January, 2022**
- **Driver schools full, BLS Employment strong**



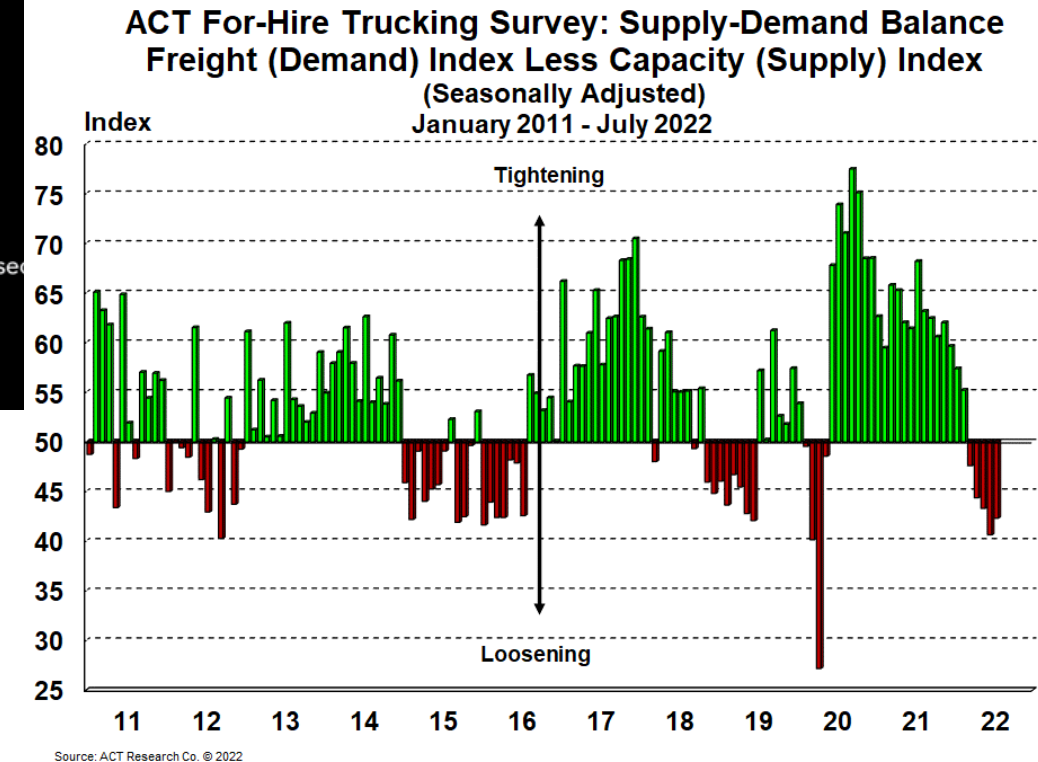


# Cycle Flips from Early to Late in Q1'22

## Classic Truck Cycle



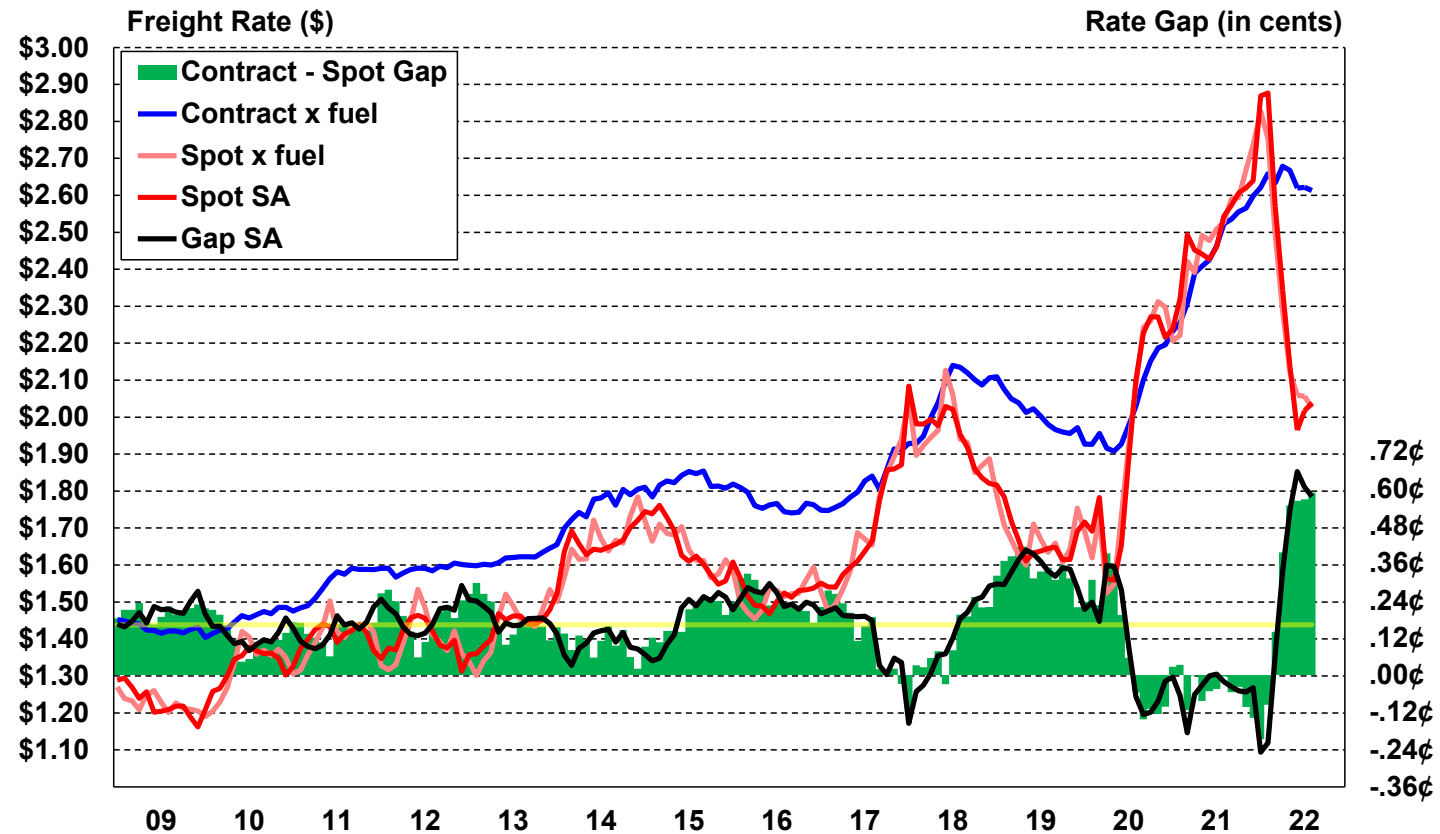
- Undersupply quickly shifted to late-cycle slowdown



# Spot Applies Pressure to Contract

## DAT Trendlines: Aggregate Truckload Rate per Mile

January 2009 - August 2022



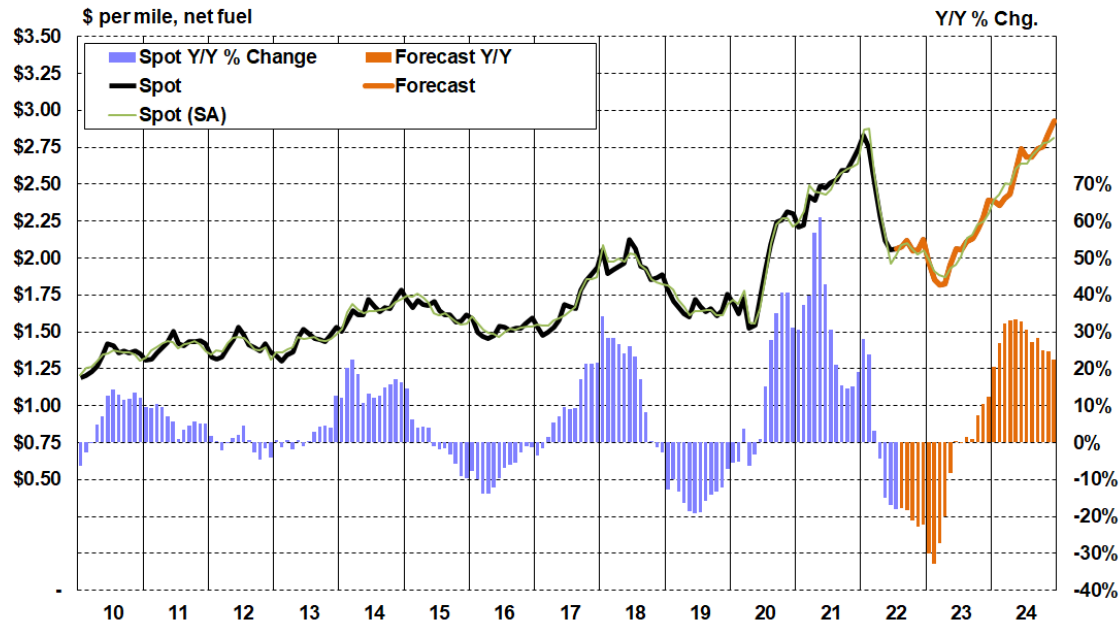
Source: DAT Freight & Analytics, ACT Research Co. © 2022



# Spot Applies Pressure to Contract

## DAT Trendlines Spot Rates: Aggregate

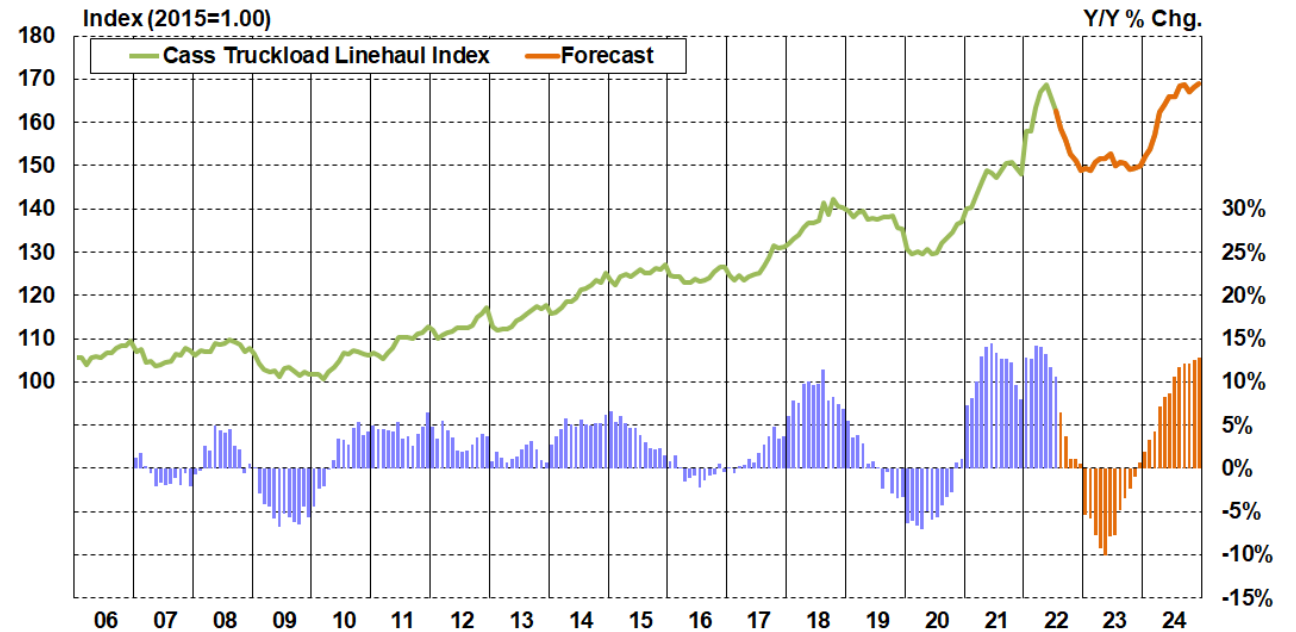
January 2010 - December 2024 Forecast



Source: DAT Solutions, ACT Research Co. © 2022

## Cass Truckload Linehaul Index <sup>(R)</sup>

January 2006 - December 2023 Forecast



Source: Cass Information Systems, Inc., ACT Research Co. © 2022



# Different This Time<sup>2</sup>

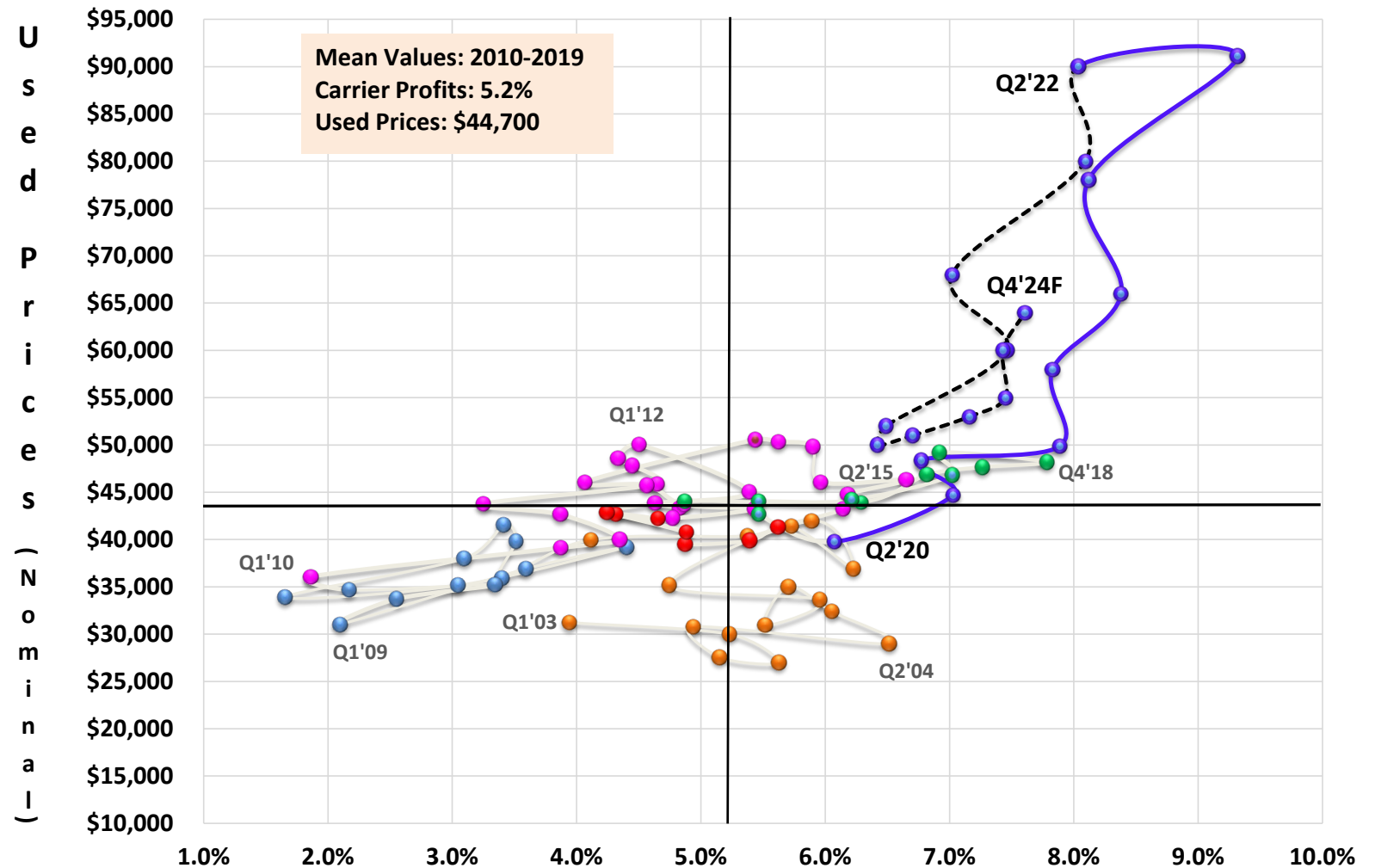
## Notes:

- 1) Used values presented are nominal
- 2) Carrier profits are SA

Strong relationship between carrier profitability & vehicle demand

## ACT: Carrier Ability & Willingness Analysis (Q2'22)

### TL DB Core Carrier Profitability (SA) & Real Used Values



Source: ACT Research Co. @2022

# Lots of Money ...



## Public For-Hire Truckload

### Carrier Database

\$ in millions, except as noted

	2018	2019	2020	2021	2022E	2023E
Transportation Revenue, net fuel	30,411	30,104	30,520	37,814	42,236	41,851
y/y	17%	-1%	1%	24%	12%	-1%
Acquisitions	870	434	127	470	927	109
Organic revenue ex-acquisitions, y/y	13.5%	-2.4%	1.0%	22.4%	9.2%	-1.2%
Fuel Surcharge	3,425	3,140	2,199	3,294	6,162	6,447
y/y	36%	-8%	-30%	50%	87%	5%
Other Revenue	477	818	706	1,343	2,086	2,140
Total Revenue	34,313	34,062	33,425	42,450	50,485	50,438
y/y	18%	-1%	-2%	27%	19%	0%

Pretax Income	2,752	2,363	2,412	3,993	4,753	4,002
Taxes	648	588	597	967	1,216	1,060
Tax Rate	24%	25%	25%	24%	26%	26%
Net Income	2,096	1,755	1,811	3,021	3,529	2,935
y/y	89%	-16%	3%	67%	17%	-17%
q/q						
Net Income Margin	6.1%	5.2%	5.4%	7.1%	7.0%	5.8%
Margin change, y/y	230bp	(96bp)	27bp	170bp	(13bp)	(117bp)



## Public Less-Than-Truckload (LTL) Industry Database

### Financial & Operating History and Outlook

\$ in millions, except as noted

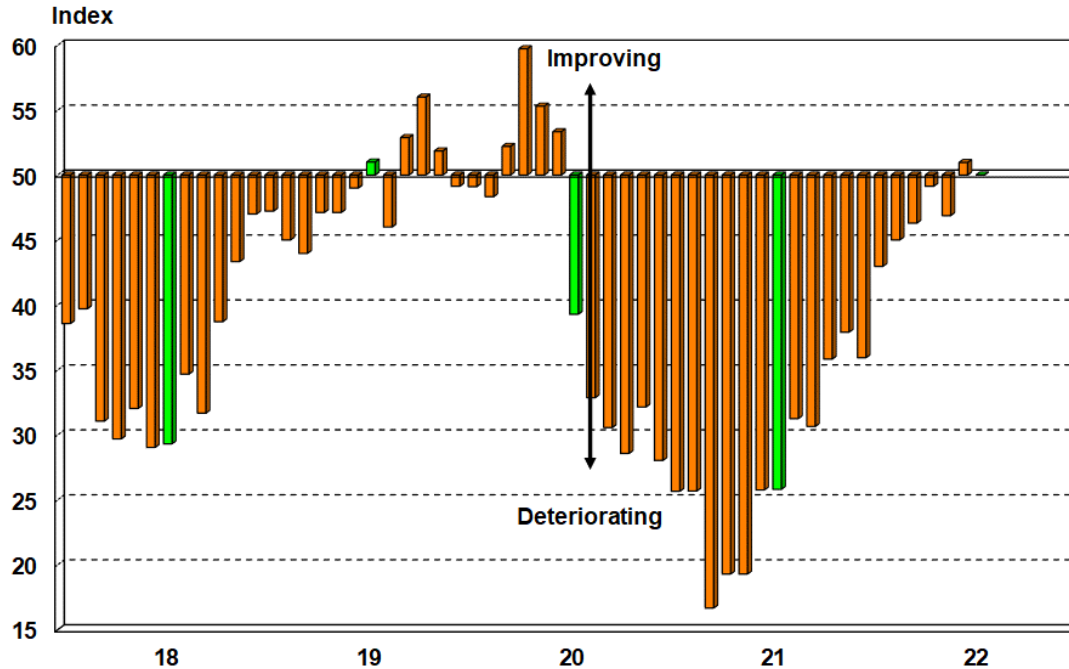
	2017	2018	2019	2020	2021	2022E	2023E
Transportation Revenue, net fuel	22,325	24,721	24,136	23,466	29,047	31,813	31,559
y/y	7%	11%	-2%	-3%	24%	10%	-1%
Acquisitions/(Divestitures)	(332)	21	0	0	0	0	0
Organic revenue, y/y	8.3%	10.6%	-2.4%	-2.8%	23.8%	9.5%	-0.8%
Fuel Surcharge	1,878	2,425	2,355	1,883	2,898	5,060	5,339
y/y	25%	29%	-3%	-20%	54%	75%	6%
LTL Revenue, net fuel	23,051	25,184	25,255	24,492	28,729	31,576	32,013
y/y	6%	9%	0%	-3%	17%	10%	1%
Total Revenue	24,203	27,146	26,491	25,349	31,945	36,874	36,898
y/y	8%	12%	-2%	-4%	26%	15%	0%

Pretax Income	1,075	1,792	1,663	1,325	2,779	3,813	3,486
Taxes	201	429	419	318	704	943	855
Tax Rate	18.7%	23.9%	25.2%	24.0%	25.3%	24.7%	24.5%
Net Income	873	1,364	1,244	1,006	2,075	2,870	2,631
y/y	63%	56%	-9%	-19%	106%	38%	-8%
Net Income Margin	3.6%	5.0%	4.7%	4.0%	6.5%	7.8%	7.1%
Margin change, y/y	121bp	142bp	(33bp)	(73bp)	253bp	129bp	(65bp)

# Driver Ability Key to TL spot Rates

## ACT For-Hire Trucking Index: Driver Availability

January 2018 - July 2022

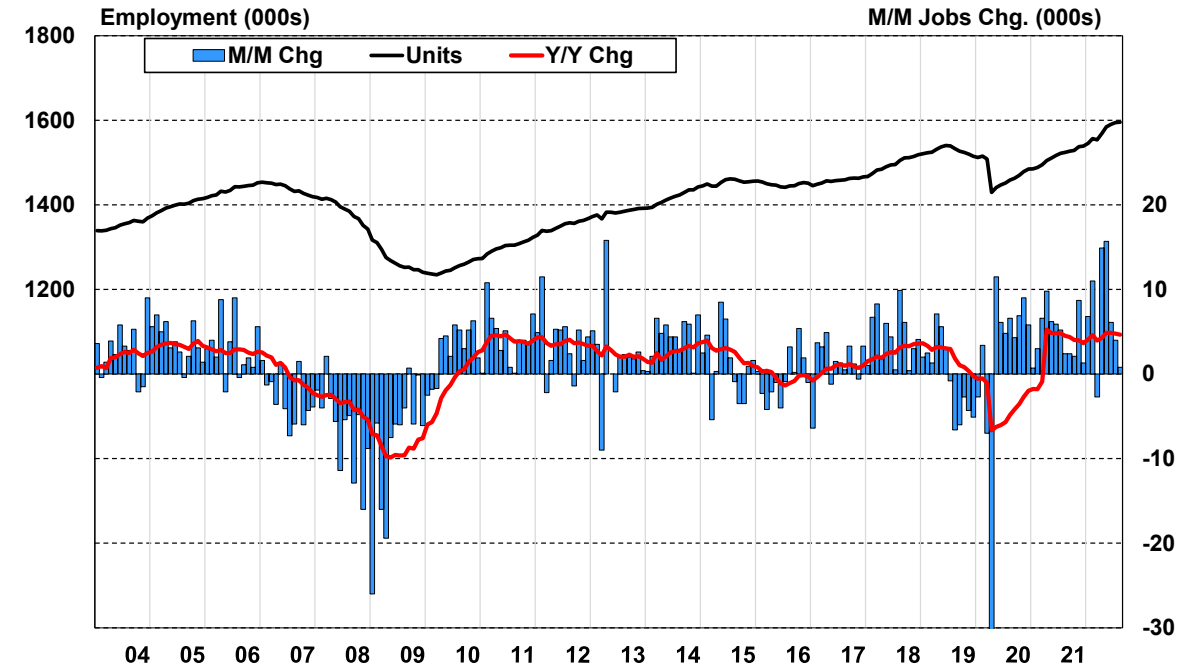


Source: ACT Research Co. © 2022

- 4.5-year average: 39.7
- July: 50.0
- Watch this index

## Truck Transportation Employment

January 2004 - August 2022 (SA)



Source: BLS, ACT Research Co. © 2022

- 5.2% above pre-pandemic level
- 4.7% y/y growth
- Inversely correlated with rate cycle



# Tractor Dashboard: Indicator of Indicators

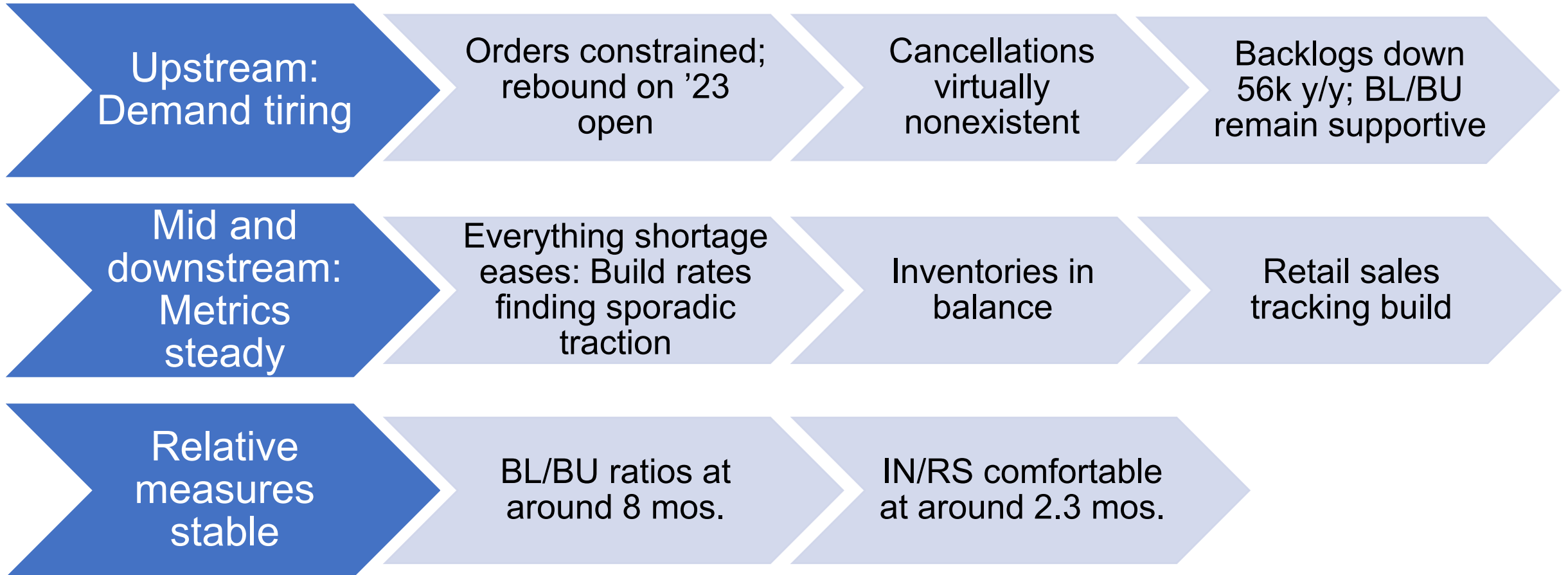
## ACT Research Class 8 Tractor Dashboard

Category	Metric	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
	<b>Green Minus Red Tally</b>	<b>14</b>	<b>15</b>	<b>10</b>	<b>11</b>	<b>11</b>	<b>9</b>	<b>2</b>	<b>2</b>	<b>-3</b>	<b>-4</b>	<b>-4</b>	<b>-4</b>	<b>-2</b>
	Positive Indicators (Green)	14	15	10	11	11	10	6	5	4	4	4	2	4
	Neutral Indicators	1	0	5	4	4	4	5	7	4	3	3	7	5
	Negative Indicators (Red)	0	0	0	0	0	1	4	3	7	8	8	6	6
Macro & Financial	ISM Mfg PMI Index	59.5	59.9	61.1	60.8	61.1	58.7	57.6	58.6	57.1	55.4	56.1	53.0	52.8
	Non-Auto Durables Mfg Output**	9.3	8.3	7.6	6.9	6.5	6.0	5.3	6.2	5.6	6.0	5.5	4.7	4.0
	Consumer Spend, Goods only**	11.4	10.6	9.1	8.7	7.8	4.0	0.5	-0.7	-3.6	-2.4	-1.4	-1.3	-0.9
	Residential Const Expend (real) **	16.9	13.3	9.5	6.0	3.1	1.5	1.8	2.7	3.2	4.0	4.6	3.2	1.9
	Dow Jones Trucking Stock Index	1331	1399	1346	1563	1556	1633	1447	1465	1430	1304	1272	1204	1410
Freight	Cass Freight Shipments**	12.7	9.1	6.3	6.5	7.4	7.2	0.6	-2.7	-4.5	-5.0	-4.2	0.3	1.0
	DAT Loads/Truck	10.0	11.2	8.9	8.6	8.1	10.3	17.0	13.9	7.5	6.1	6.8	4.5	5.9
	DAT Aggregate Contract/Spot Spread	-4	0	-5	-4	-10	-14	-21	-10	14	39	55	55	57
	DAT Dry Van Spot Rate*	30.7	21.4	16.6	15.0	15.8	19.7	28.5	24.5	3.5	-3.4	-14.1	-14.9	-18.0
	Cass Freight/US CI8Tractor Pop Growth Gap	10.4	6.8	4.0	4.3	5.4	5.1	-1.4	-4.4	-5.9	-6.4	-5.6	-0.7	0.3
ACT data	CI 8 Cancellations (SA)	1044	1809	2013	2500	2500	2500	1893	2500	4066	728	2125	557	1310
	CI 8 I/S ratio (SA)	2.16	1.99	2.24	2.06	2.29	2.23	2.22	2.33	2.43	2.35	2.07	2.28	2.35
	Class 8 Inventory Level (000 SA)	41.8	40.3	40.3	41.5	44.5	50.1	52.8	54.2	55.4	58.0	56.5	56.9	55.6
	Class 8 Net Orders to Build (6mma,SA)	1.63	1.59	1.58	1.48	1.38	1.15	0.96	0.79	0.70	0.65	0.69	0.72	0.71
	ACT For Hire - Volume less Capacity	68.2	63.2	62.4	60.6	62.0	59.6	57.4	55.2	47.6	44.4	43.3	40.6	42.3

All measures are levels, except \*=Year/Year % Change and \*\*=12 month CAGR Rate of Change

*Italics denotes special cancellation treatment*

# Current Market Conditions

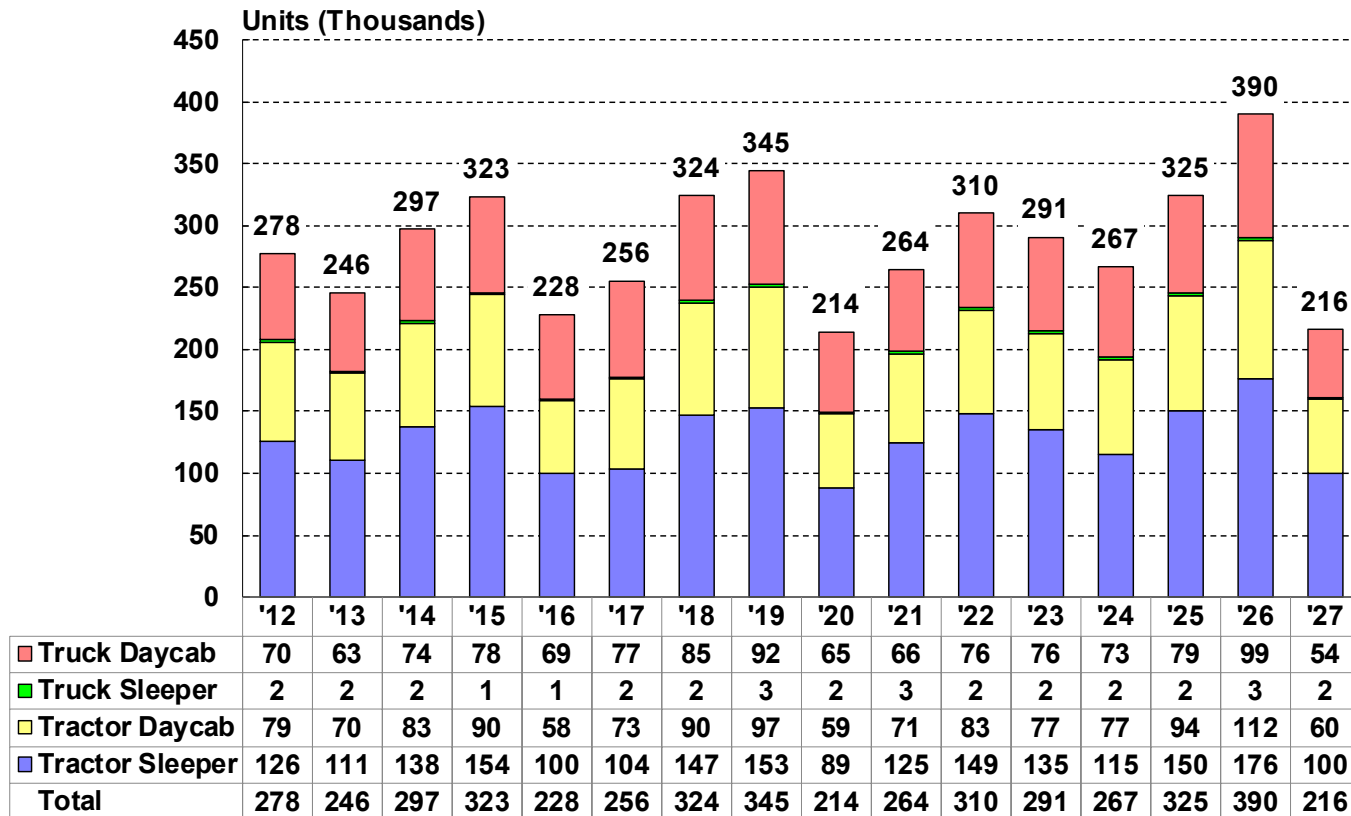




# Where are we in the cycle?

## N.A. Class 8 Production

2012 - 2027



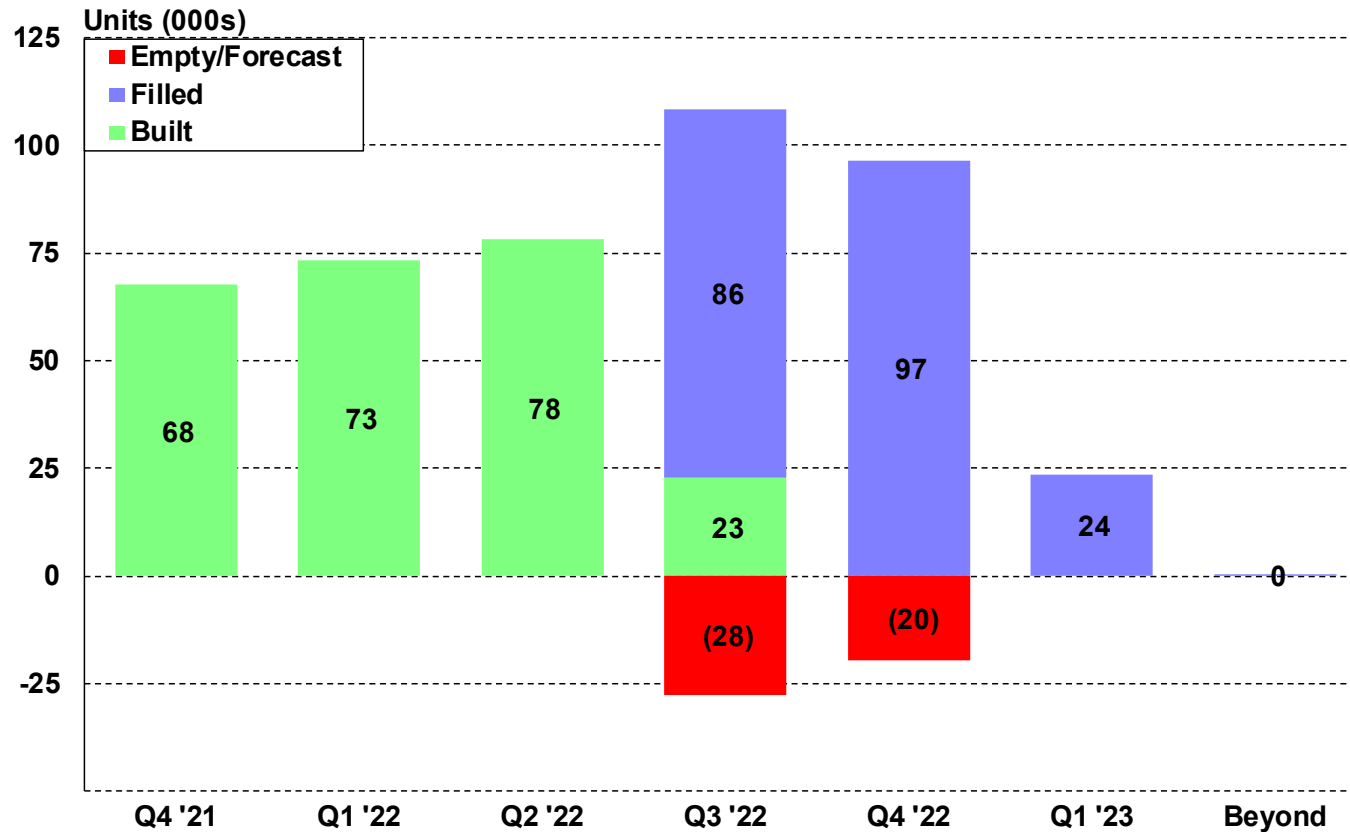
Source: ACT Research Co. © 2022



# Near-term Backlog: Oversubscribed

## Class 8 Backlog Fill/August Outlook Forecast

July 2022 Ending

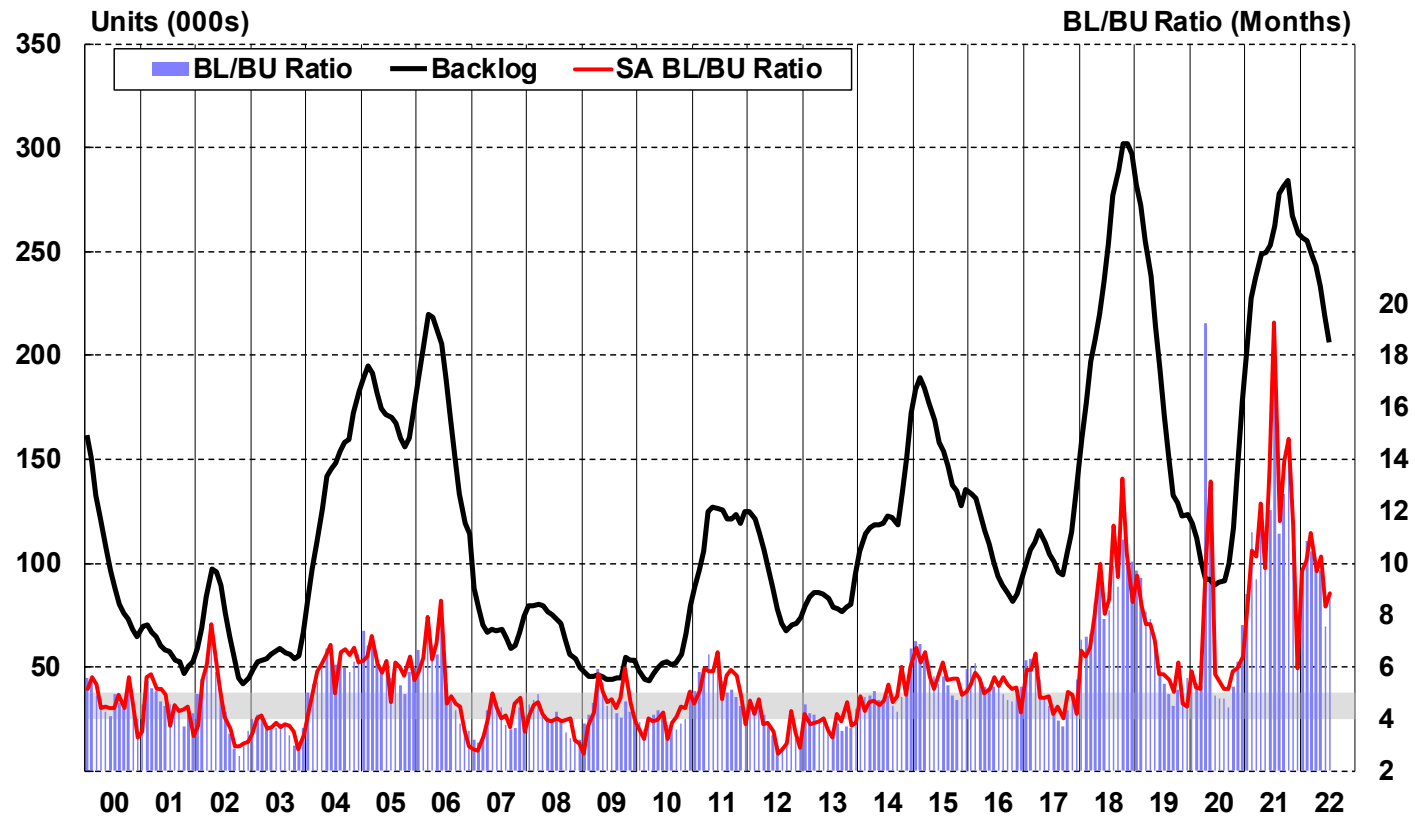


Source: ACT Research Co. © 2022

# Key Ratio: Backlog/Build

## Total Class 8: N.A. Backlog & BL/BU Ratio

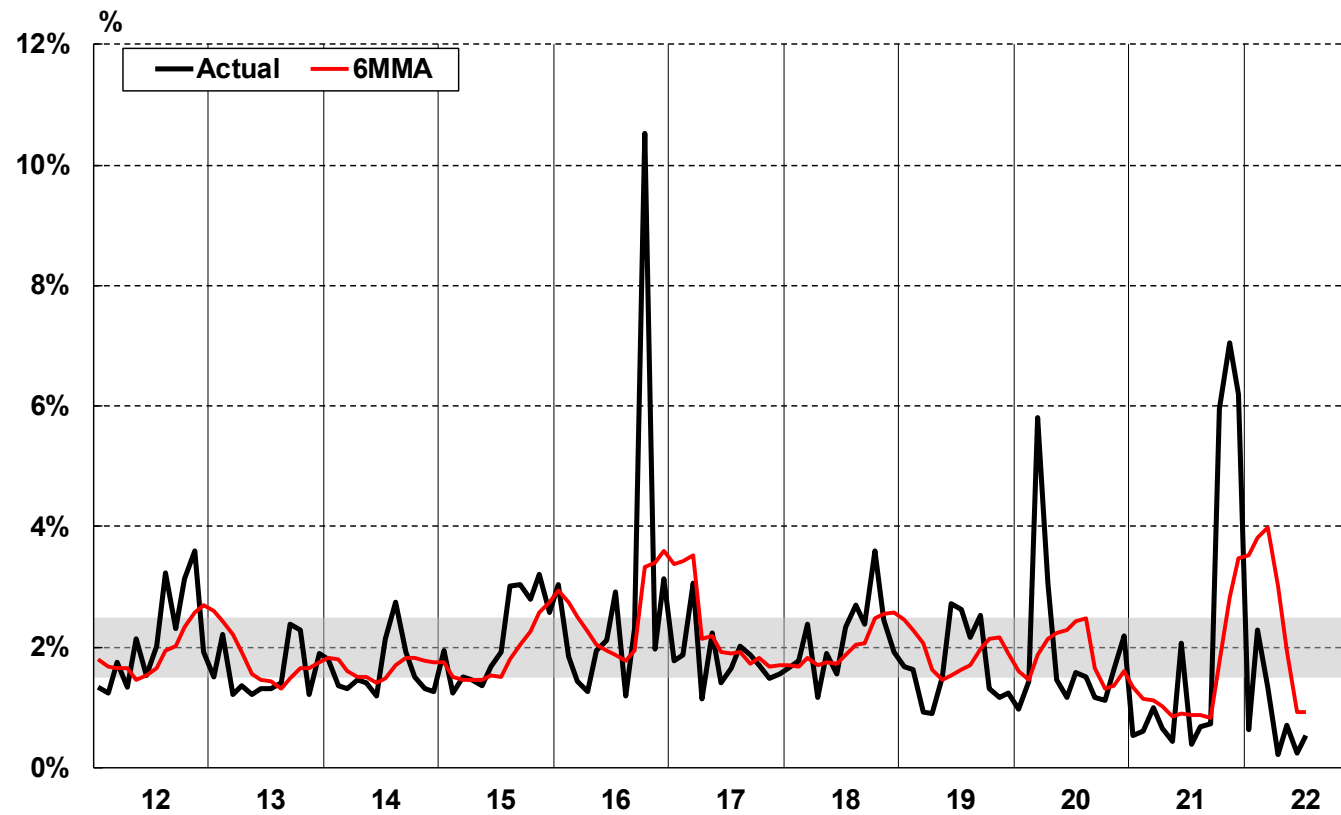
January 2000 - July 2022



Source: ACT Research Co. © 2022

# Cancellations: Miniscule by historical standards

**Total Class 8: N.A. Cancellation Rate**  
Expressed as a percentage of Backlog  
January 2012 - July 2022

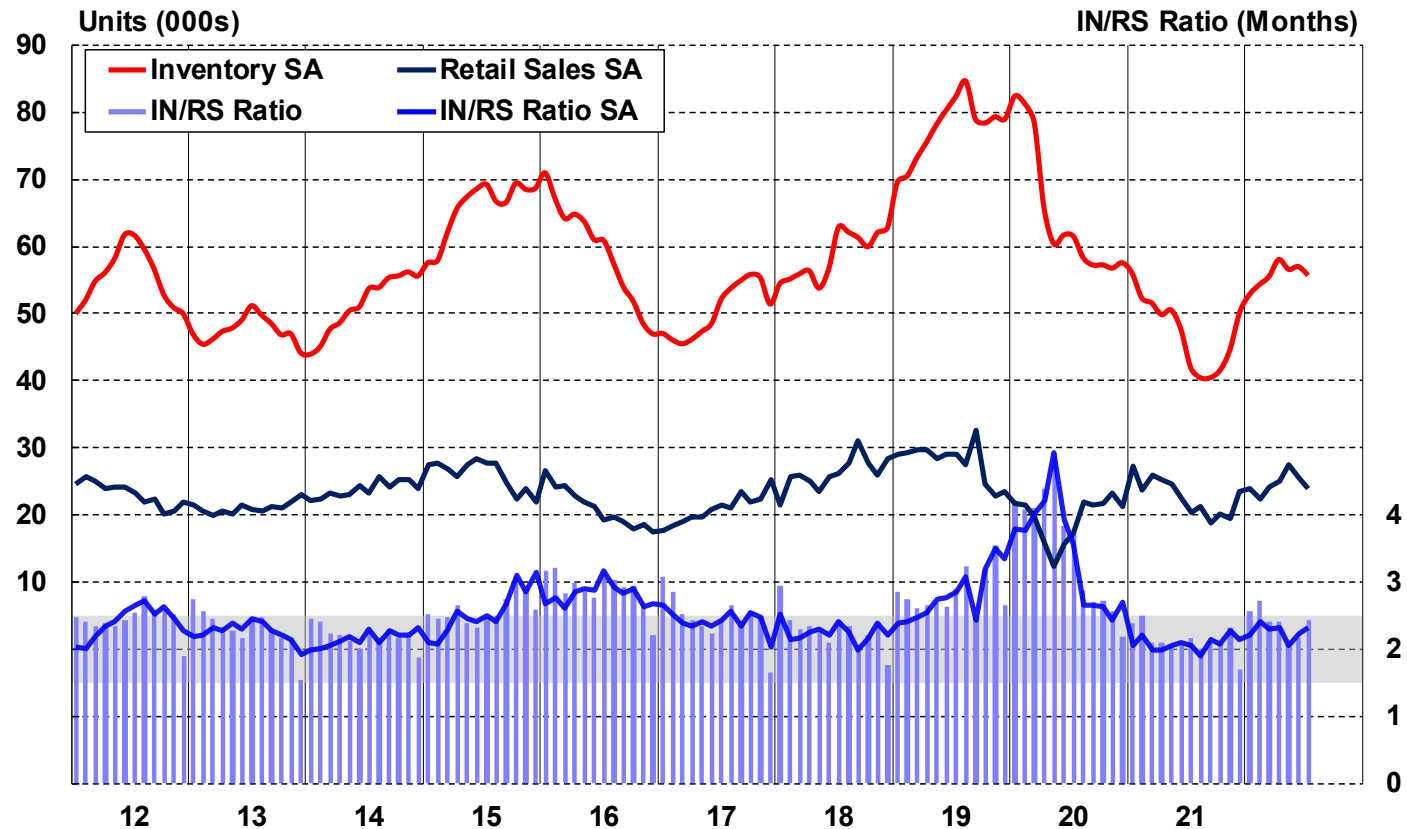


Source: ACT Research Co. © 2022

# Key ratio: Inventory/Retail Sales

## Total Class 8: N.A. Inventory/Retail Sales Ratio

January 2012 - July 2022



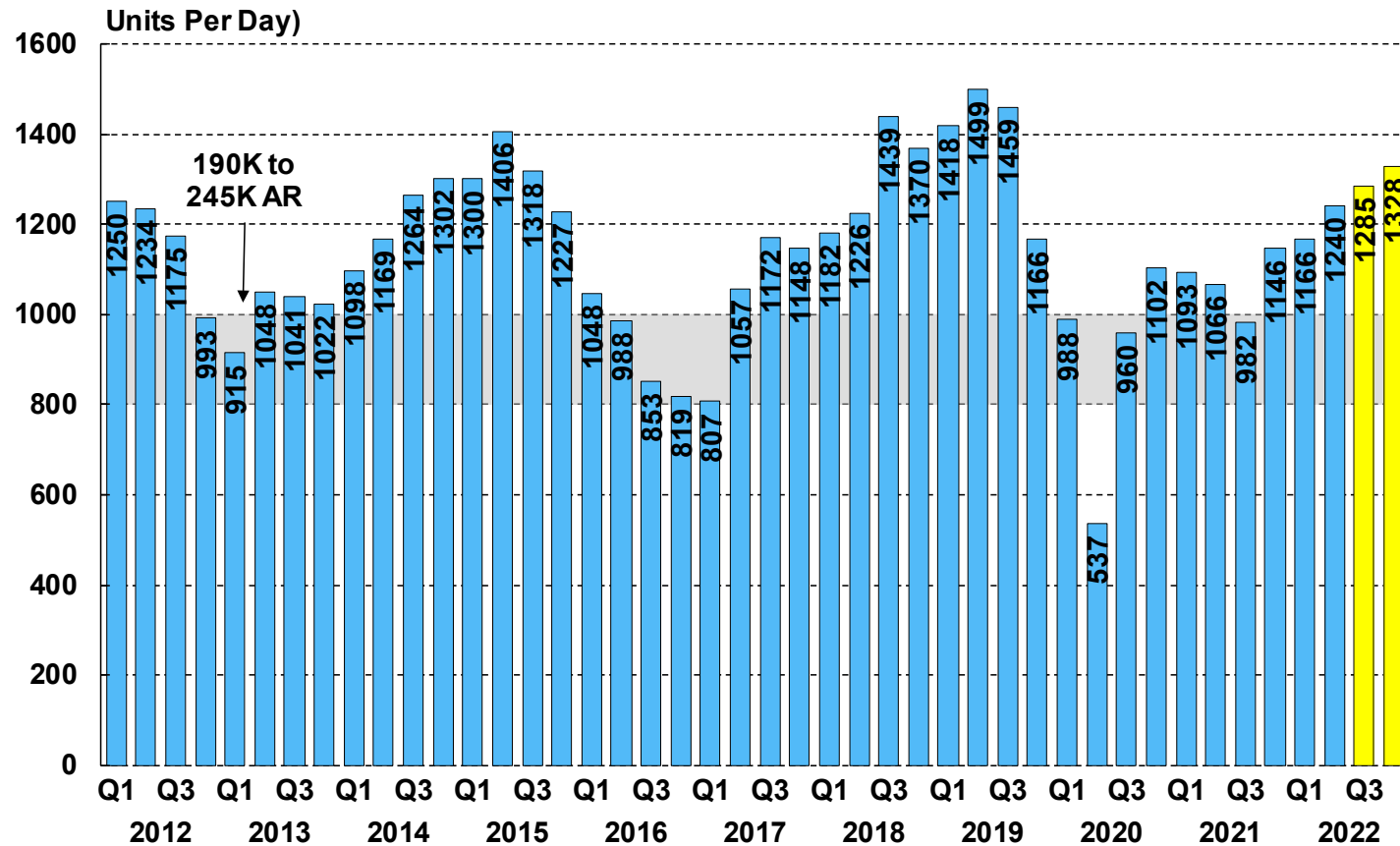
Source: ACT Research Co. © 2022



# What to expect: 2022

## Total Class 8: N.A. Build Per Day

Q1 2012 - Q4 2022 Est.



Source: ACT Research Co. © 2022

# What to expect: 2023/2024

## 2023

- Pent-up demand early, prebuying late
  - Prebuy in ~10% of market ahead of CARB's 2024 Clean Truck initiative
  - Exacerbating capacity overhang
- Tailwinds from infrastructure should ease manufacturing decline

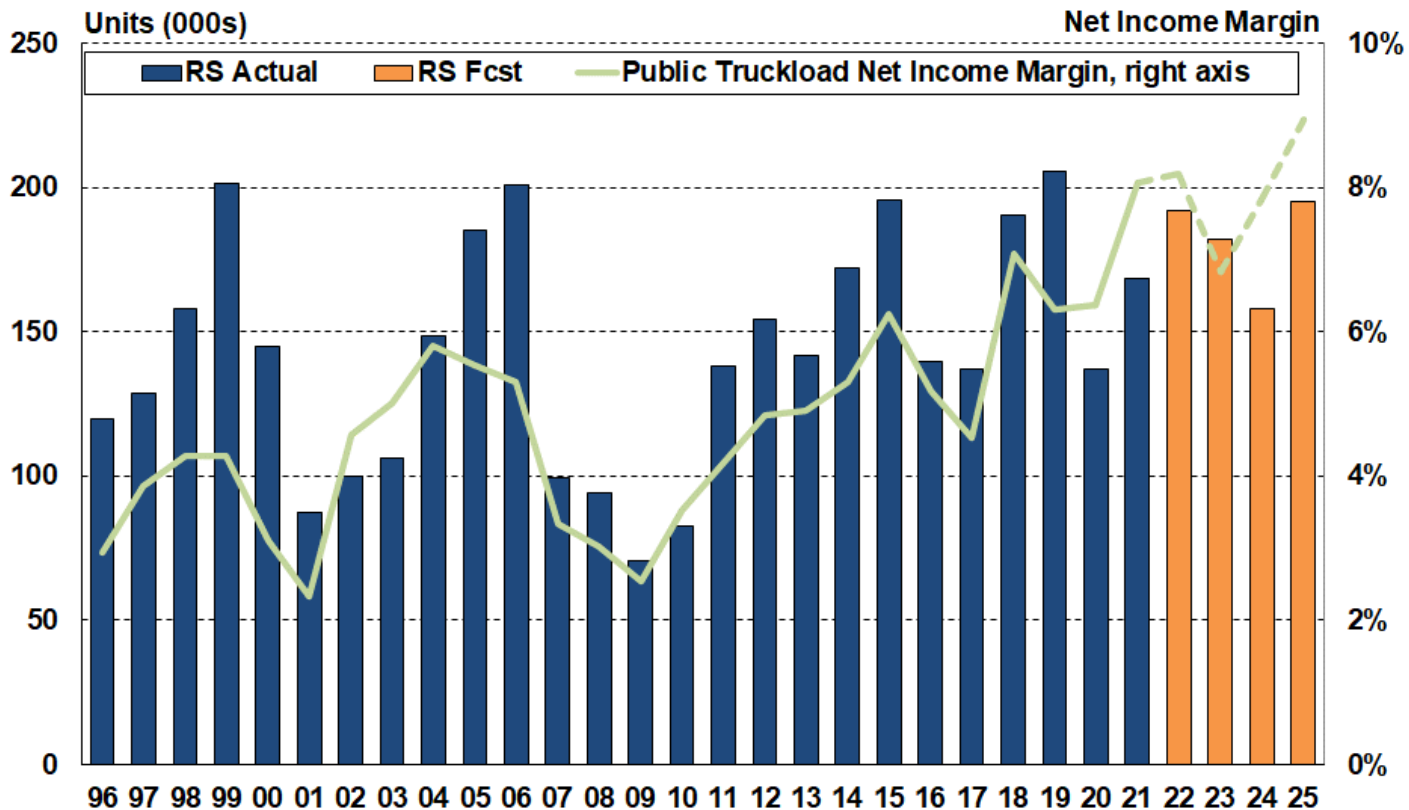
## 2024

- Another ~10% of market prebuying as states follow CARB mandate
- Economic rebound underway
- Spot rate recovery begins in earnest, planting seeds for CV demand cycle



# Record Truckload Profitability

## U.S. Class 8 Tractor Retail Sales 1996 - 2024E



Source: ACT Research Co. © 2022

### Best-ever financial conditions

- Risk of a larger downturn mitigated by higher industry cost base
- Public fleet performance likely much better than average fleet



# Used Class 8 Trucks

Average retail at \$91,900 in July (F)

- -1% m/m, +43% y/y, +69% ytd

Demand lagging, mainly due to slower freight markets

Lack of inventory also challenging volumes, but supporting prices

Miles and age continue trending up subtly

Exports reflecting waning supply higher prices, global “troubles”

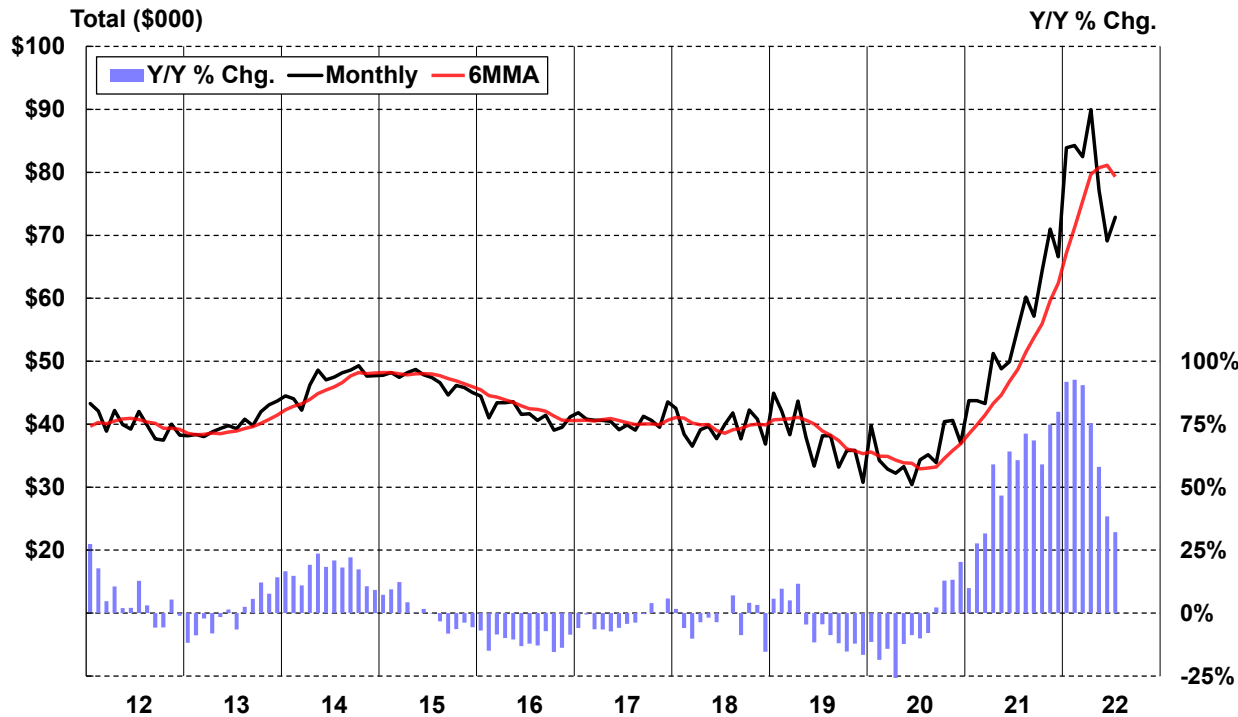
- -7% m/m, -58% y/y, -55% ytd



# Prices Now On the Backside of the Wave

## Class 8: U.S. Used Truck Average Sale Price

January 2012 - July 2022

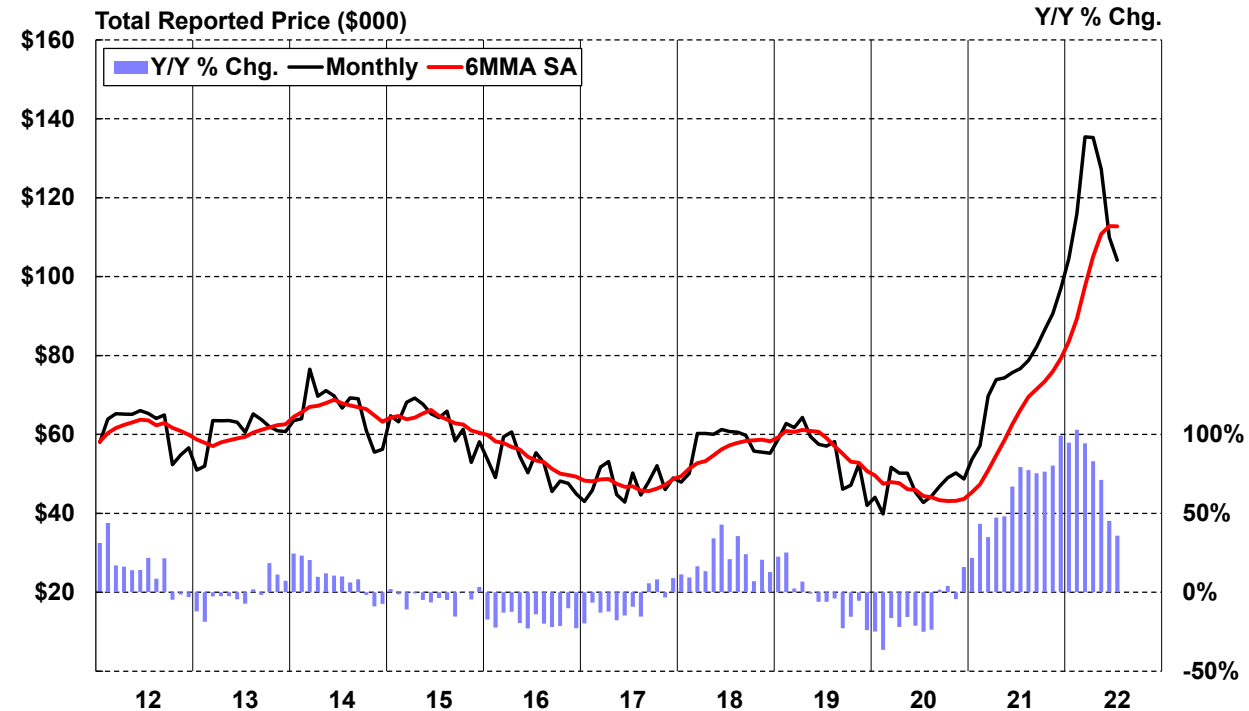


Source: ACT Research Co. © 2022

## Class 8: U.S. 4 to 5 Year Old Used Truck Average Sale Price

4 to 5 year old, 400-500,000 miles legacy

January 2012 - July 2022

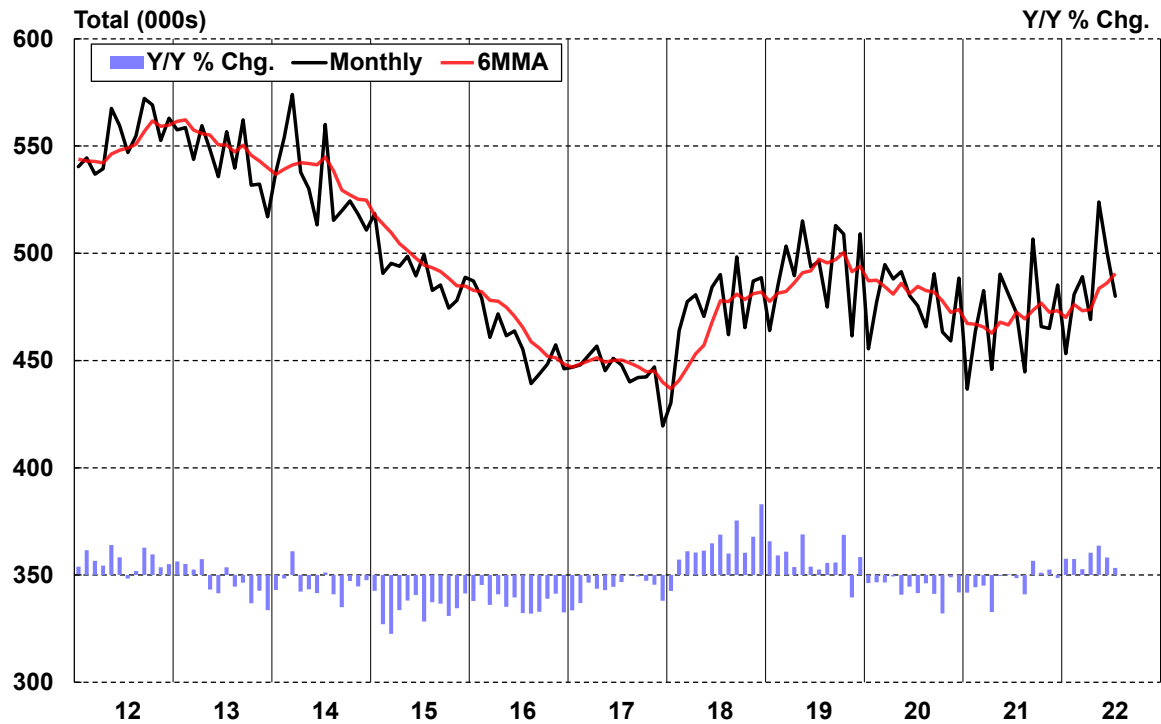


Source: ACT Research Co. © 2022

# Miles and Age Trending Higher

## Class 8: U.S. Used Truck Average Miles

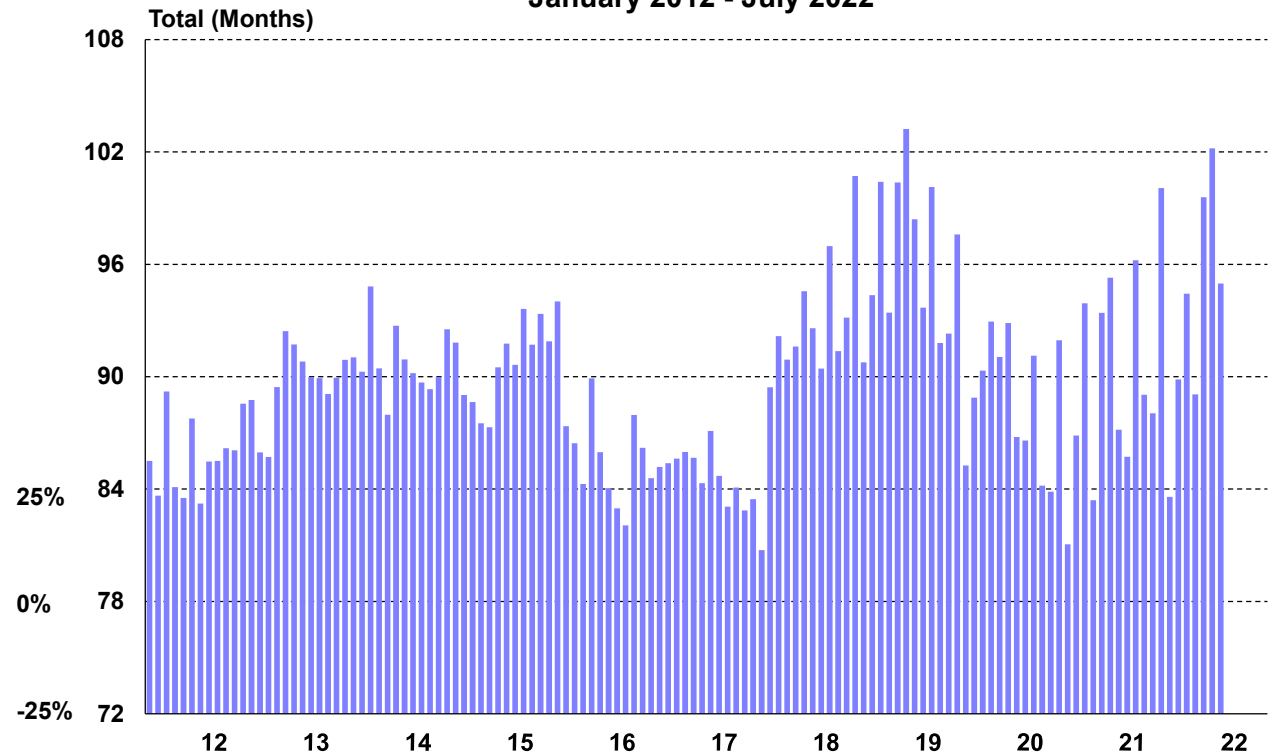
January 2012 - July 2022



Source: ACT Research Co. © 2022

## Class 8: U.S. Used Truck Average Age

January 2012 - July 2022



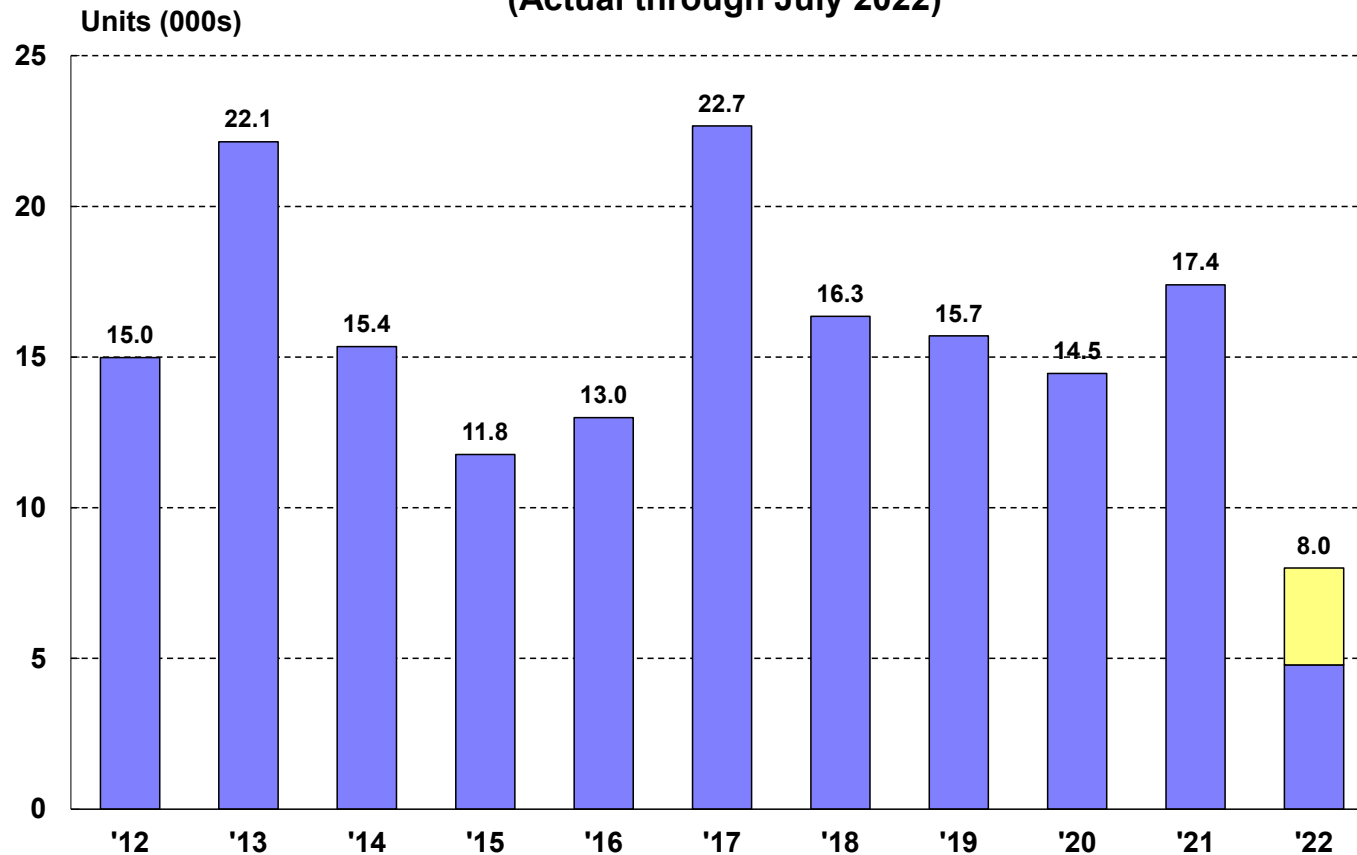
Source: ACT Research Co. © 2022

# Exports Epitomize Broader Challenges

## Used Class 8 Tractor Exports

2012 - 2022

(Actual through July 2022)



Source: ITC, ACT Research Co. © 2022



# Medium Duty

- MD Customers are finally seeing some progress
  - Backlog rolled-over, but still 3x average
  - BL/BU coming down, but still high
  - Still playing second fiddle to more profitable trucks
- IN/RS ratio going the wrong direction
  - Sales trending lower, inventory drifting higher
- Market forecast has tipped further into decline
  - 2022: Build (-2%) and retail sales (-6%)
  - Reversal of fortunes sets expectations for 2023 growth
- Service-centric economic growth supporting MD truck demand



# Payroll Employment

Total 3.9% higher Y/Y (152.7M)

Goods up 2.7% Y/Y (21.2M)

Services up 4.1% Y/Y (109.3M)

Government up 4.4% Y/Y (22.2M)

Employment exceeded pre-COVID  
levels in August, sooner than expected



# Consumer Spending

Total 1.5% higher in Q1 (2<sup>nd</sup> estimate)

Goods down 2.4%

Services up 3.6%

Activity returned to pre-COVID levels in Q2 2021

Prices are way up; wages also higher, but consumers' purchasing power slipping



# Retail Sales

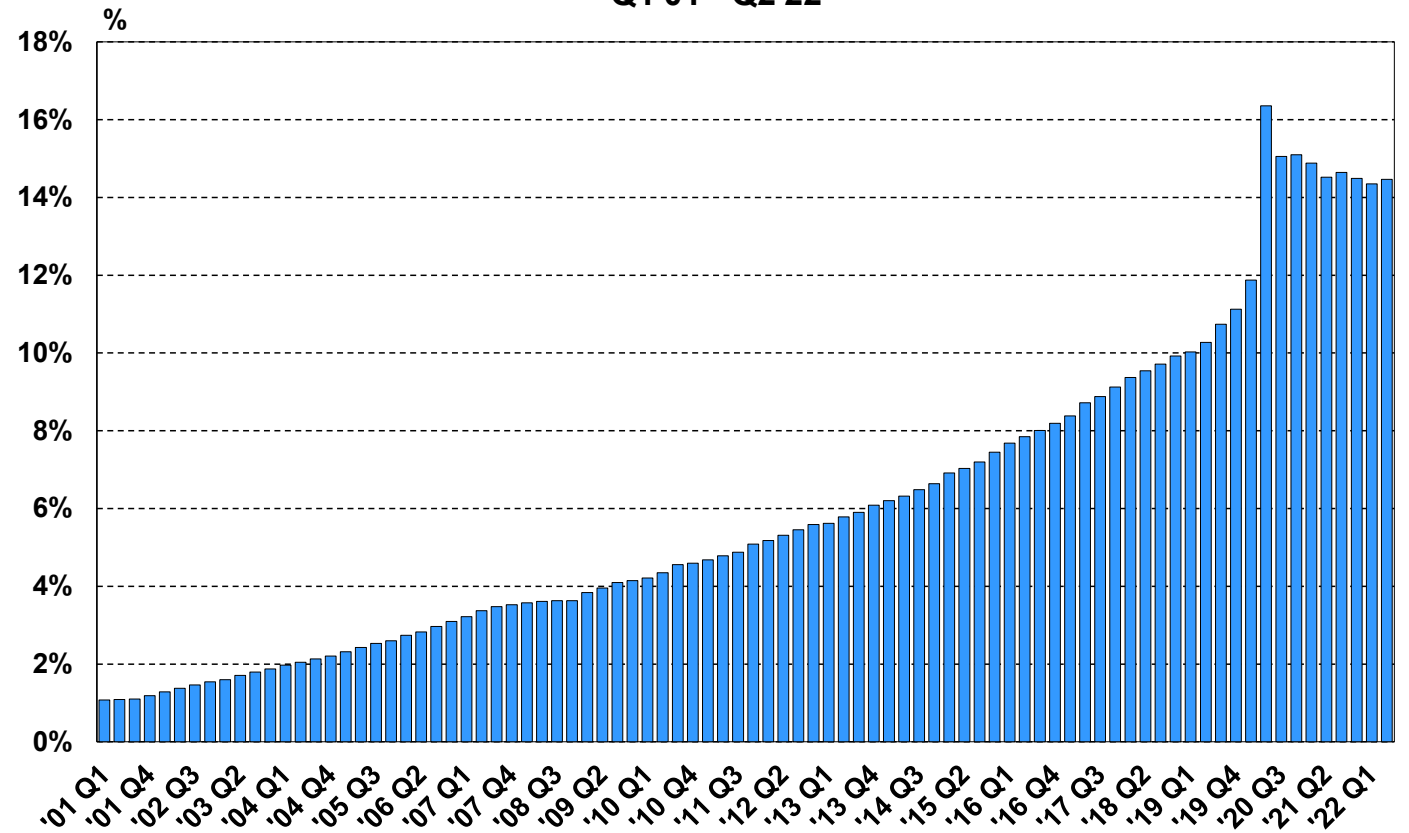
July retail sales\* flat sequentially (+0.0%), but up y/y (+10.3%)

Q2 e-commerce activity, as a percentage of sales, ticked up, slipping to 14.5%.

Full-year 2022 growth expectations range from 6% to 8% - Retail Federation

\*Nominal

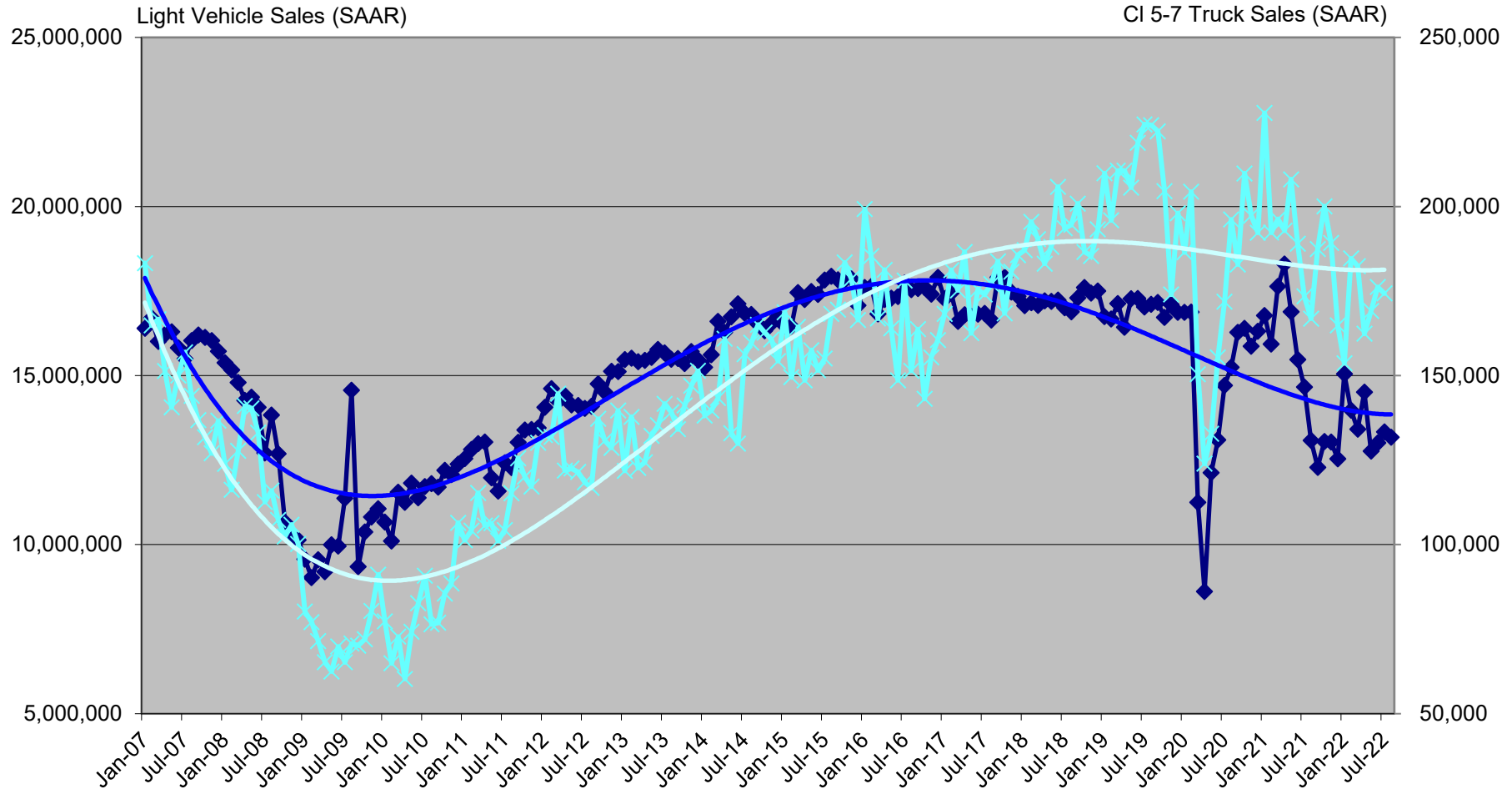
E-Commerce as a Percentage of Retail Sales  
(Excluding Food Service)  
Q1'01 - Q2'22



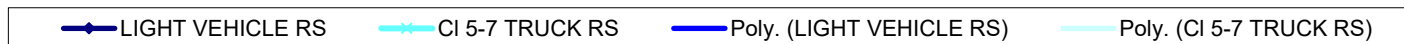
Source: Federal Reserve Board, ACT Research Co. © 2022



# Light Vehicle Sales vs. CI 5-7 Truck Sales

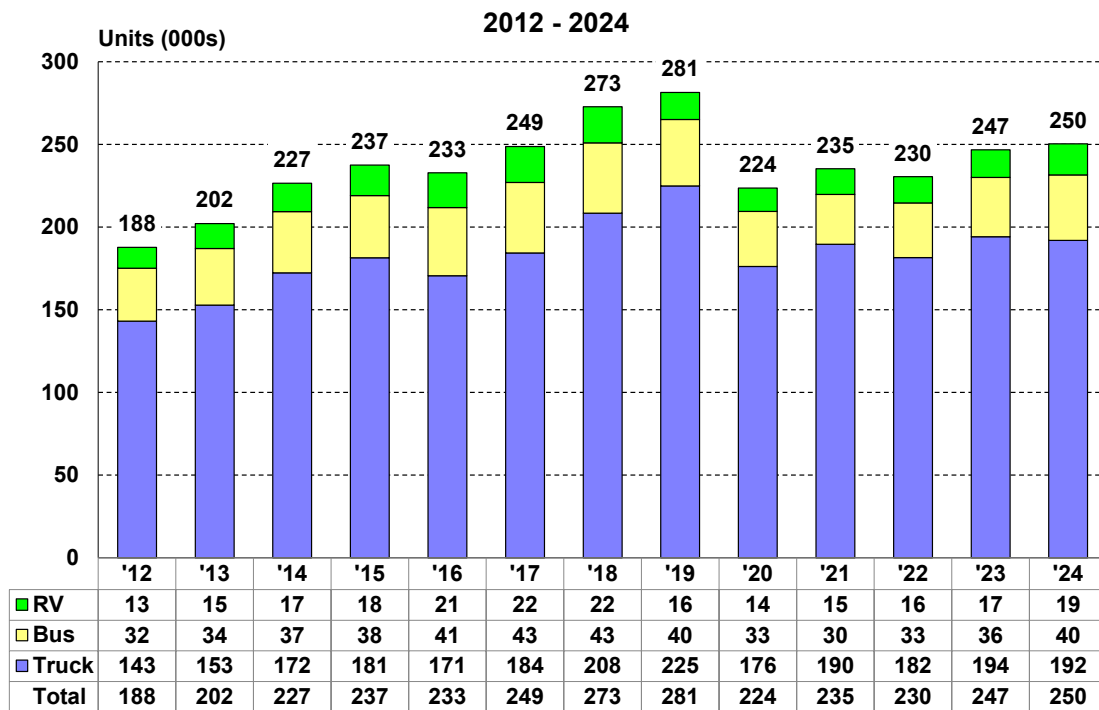


Source: BEA, ACT Research Co. © 2022



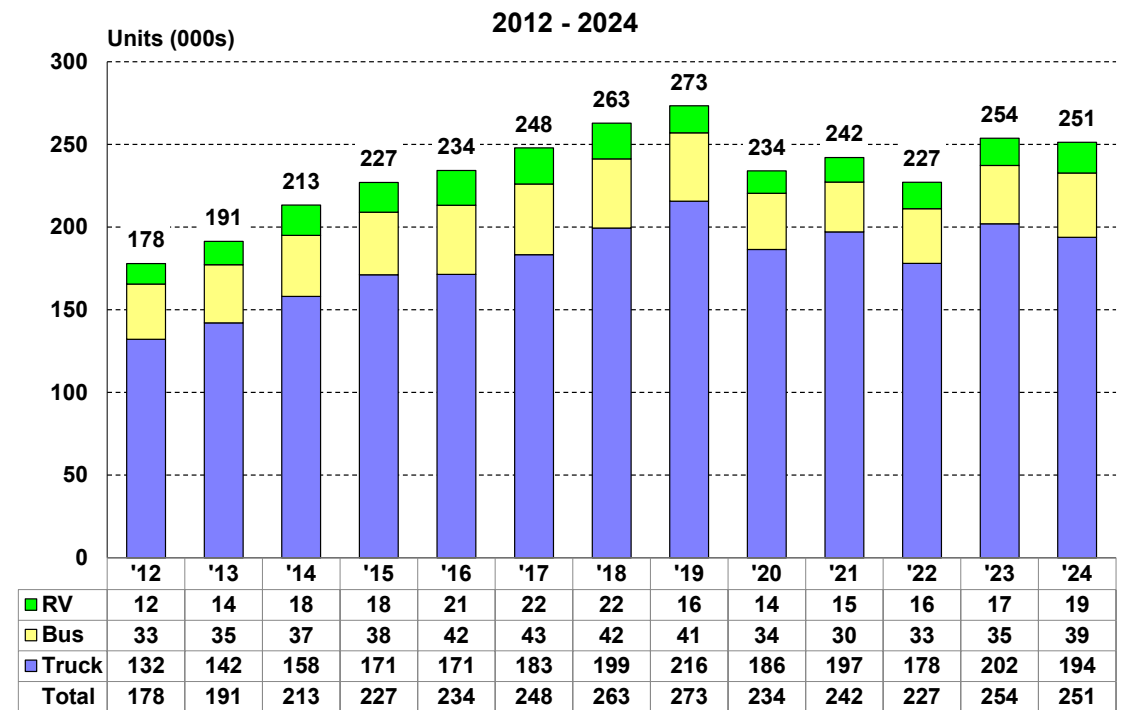
# MD Forecast

## N.A. Classes 5-7 Production



Source: ACT Research Co. © 2022















## N.A. Classes 5-7 Retail Sales



Source: ACT Research Co. © 2022



# Trailer Market Overview

Total Trailers				
Category	Actual		Seasonally Adj.	
	Jul-22	Last 13 Mo	Jul-22	Last 13 Mo
Backlog	185,225		204,195	
Build	23,026		23,034	
Inventory	27,200		24,569	
New Orders	18,291		28,098	
Cancellations	1,294		1,172	
Net Orders	16,997		27,033	
Shipments	22,085		22,479	

Source: ACT Research © 2022 with all rights reserved

- Strong Demand Continues
- Supply Constraints Easing
  - Materials Now Whack-A-Mole
  - Labor Remains Challenging
- 2023 Orderboards Open?
  - Already Full
- Inventory Building Seasonal
- Backlogs Well Into 2023

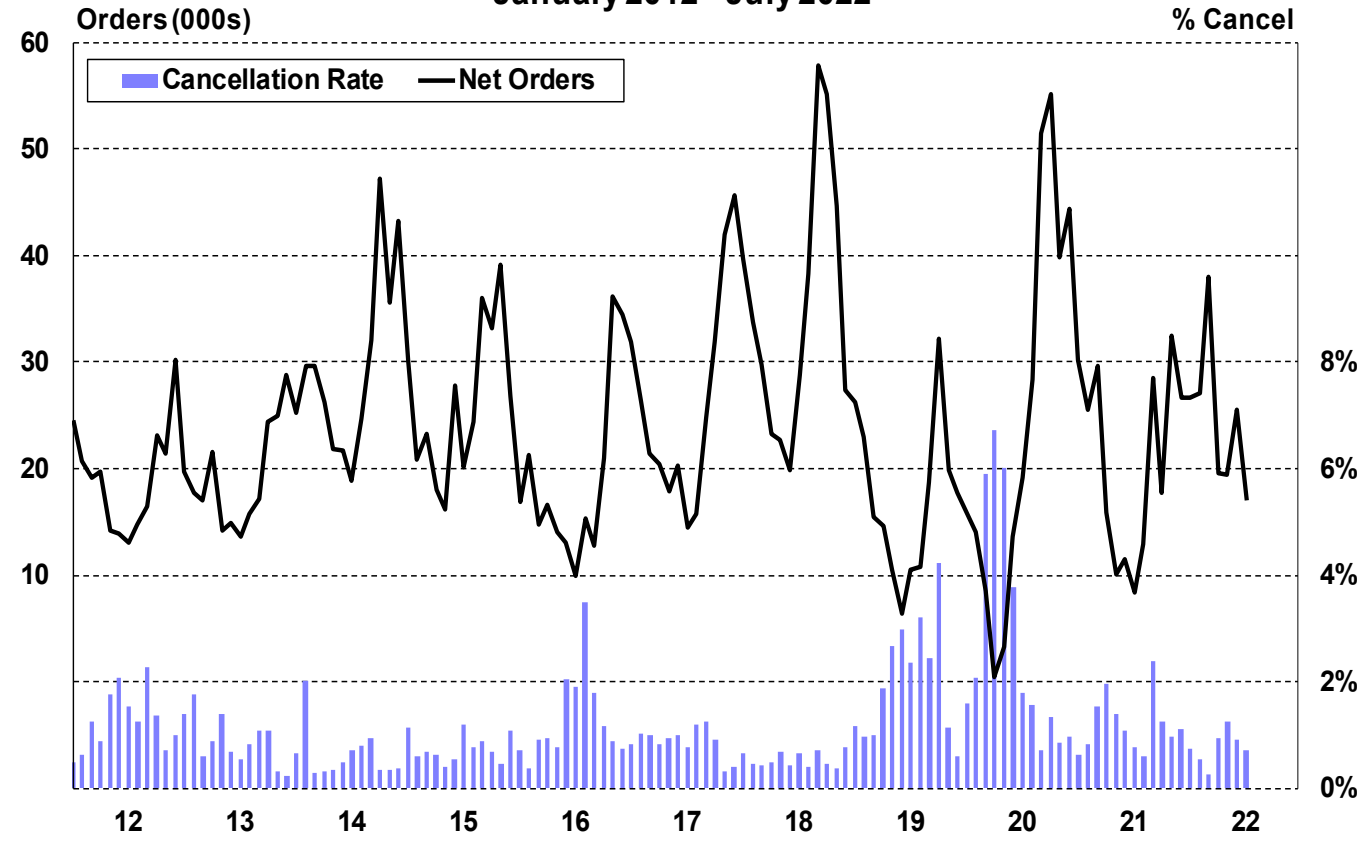


# Orders & Cancellation Rates

## Total Trailers: Net Orders & Cancellation Rate

Expressed as a Percentage of Backlog

January 2012 - July 2022

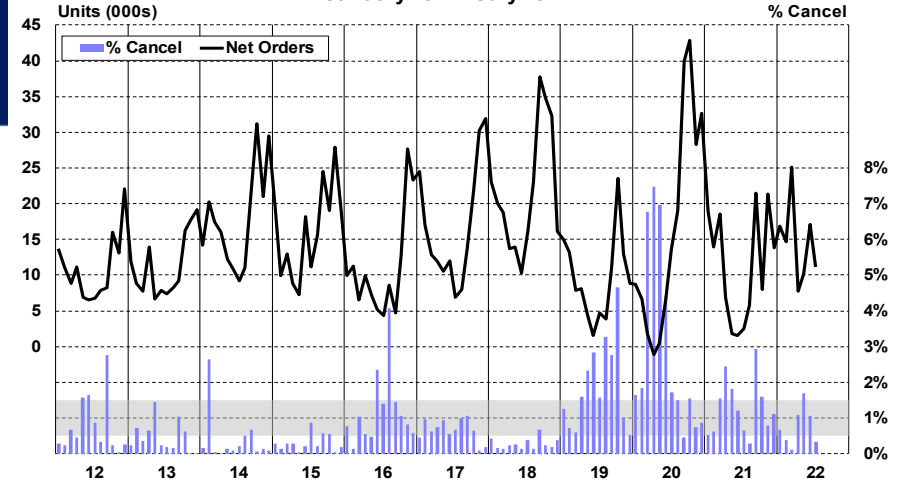


Source: ACT Research Co. © 2022

## Dry Van Net Orders & Cancellation Rate

Expressed as a Percentage of Backlog

January 2012 - July 2022

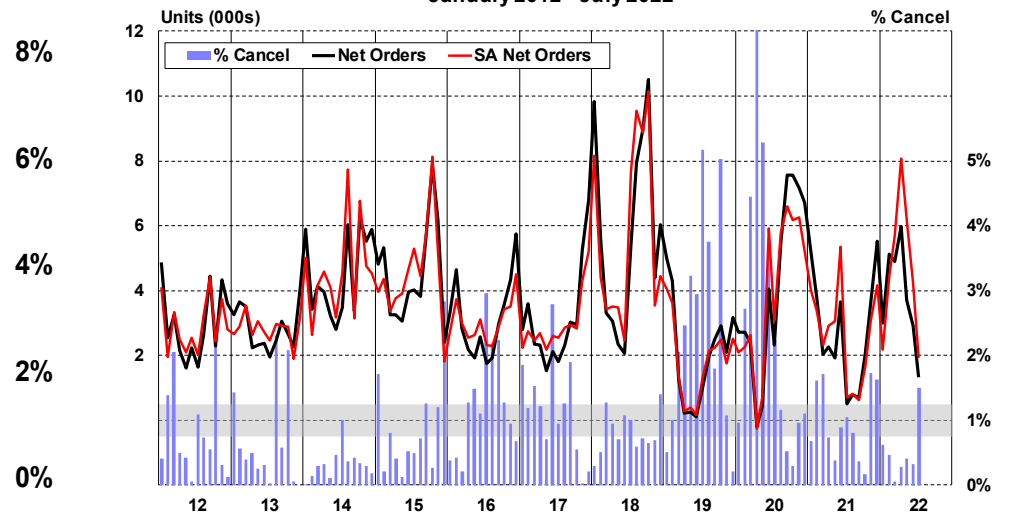


Source: ACT Research Co. © 2022

## Reefer Van Net Orders & Cancellation Rate

Expressed as a percentage of Backlog

January 2012 - July 2022

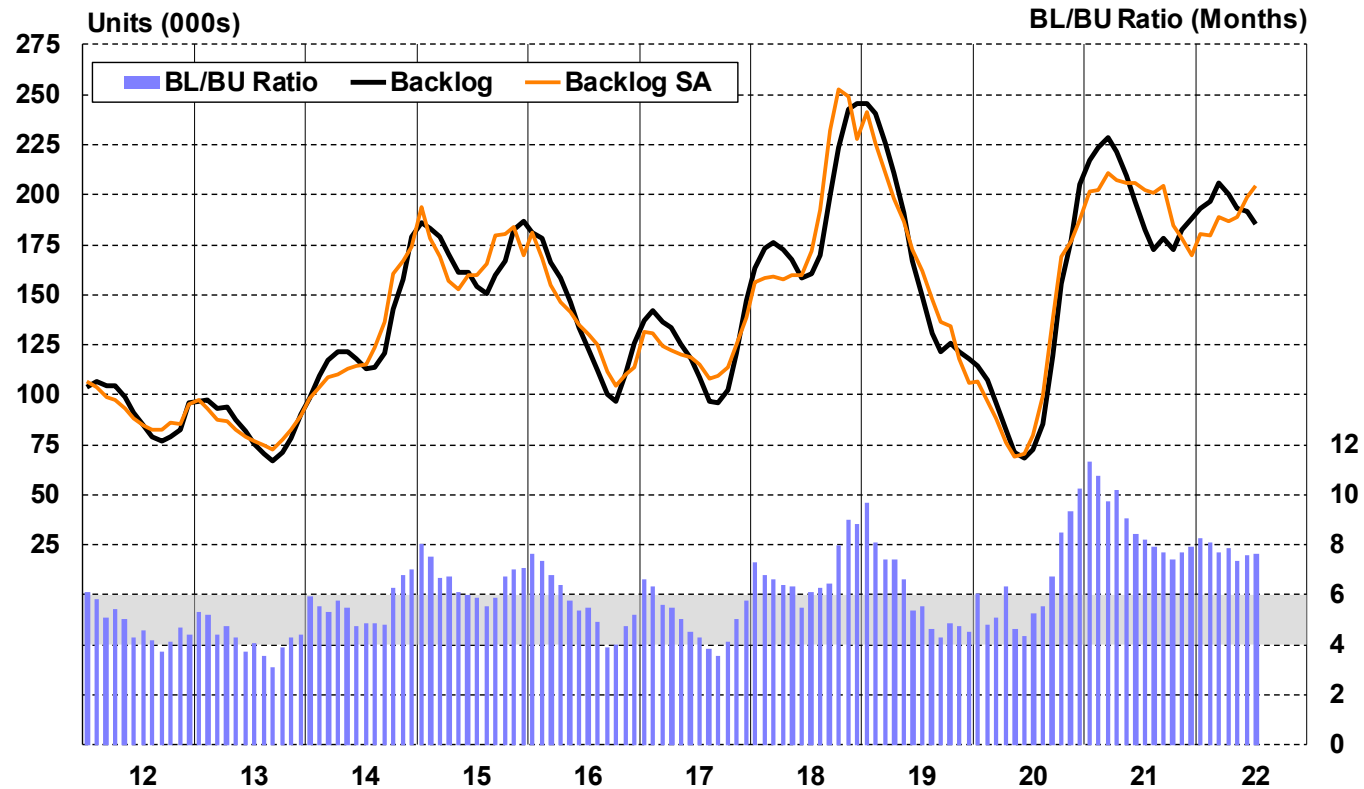


Source: ACT Research Co. © 2022

# Backlog & BL/BU Ratio

## Total Trailers Backlog & Backlog/Build Ratio

January 2012 - July 2022

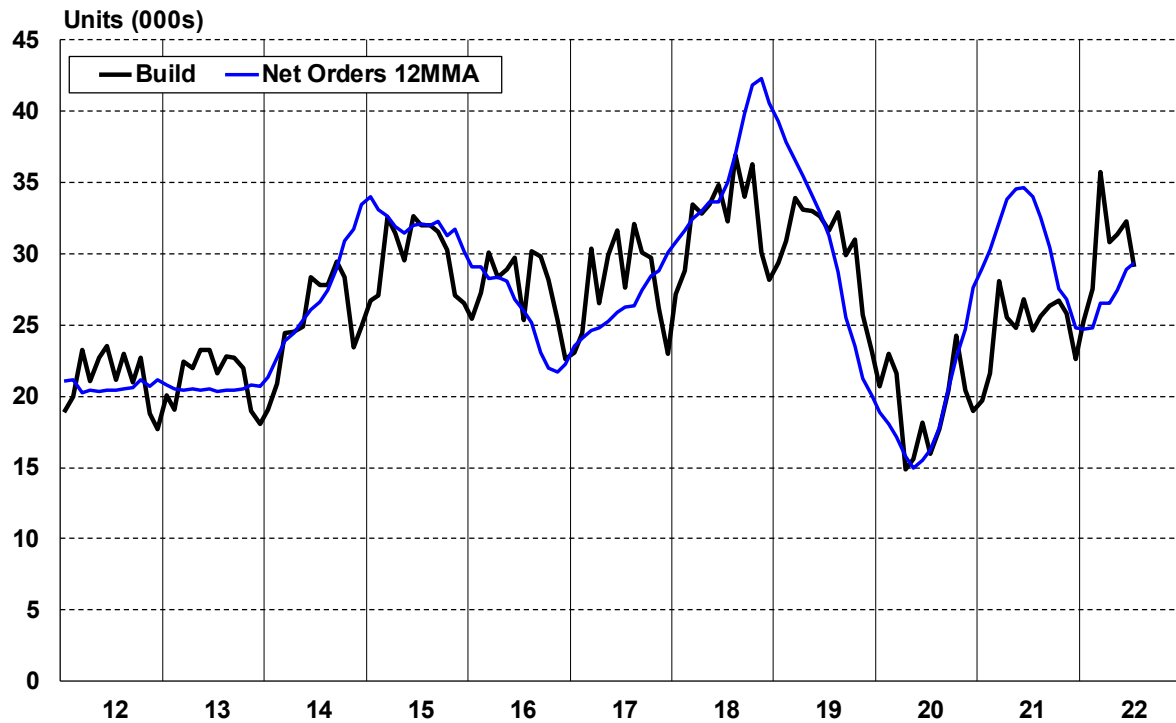


Source: ACT Research Co. © 2022

# Trailer Builds Gaining Traction

## Trailer Industry Net Orders 12 Mo. Avg. and Build

January 2012 - July 2022

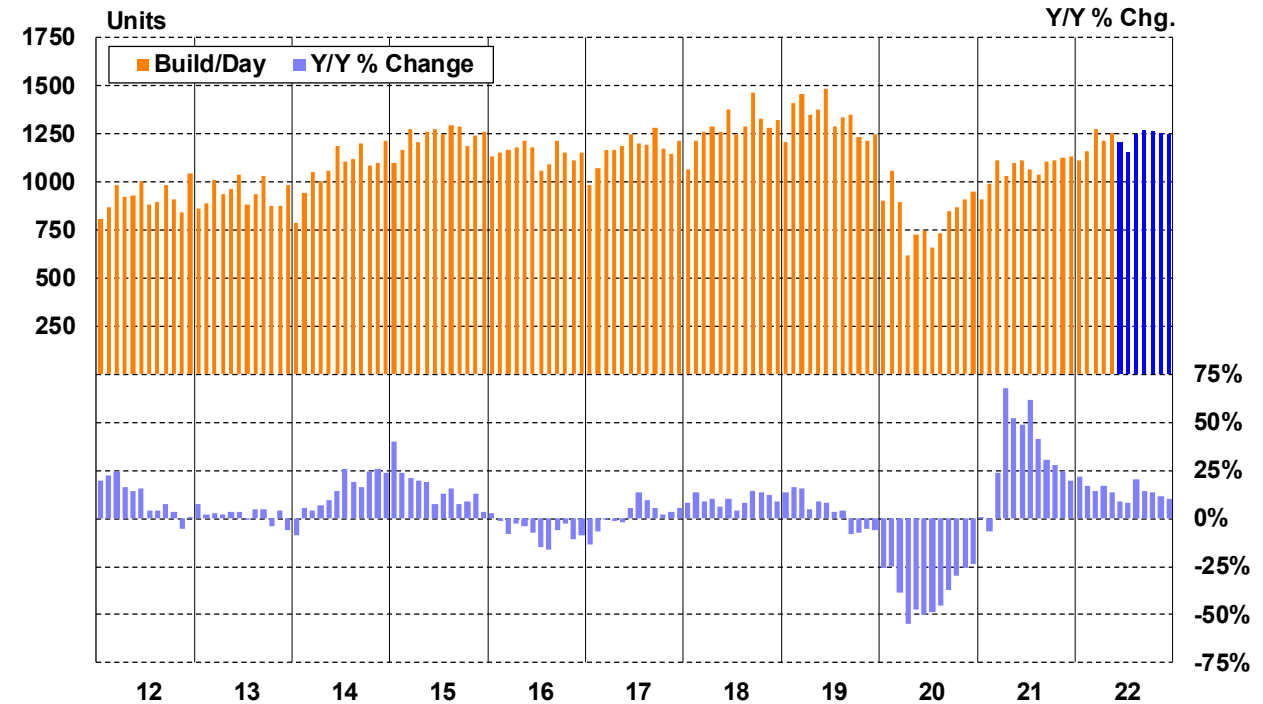


Source: ACT Research Co. © 2022

## Total Trailers: Build Per Day

Year Over Year Percent Change

January 2012 - December 2022



Source: ACT Research Co. © 2022



# US Trailer Build Rate Assumptions

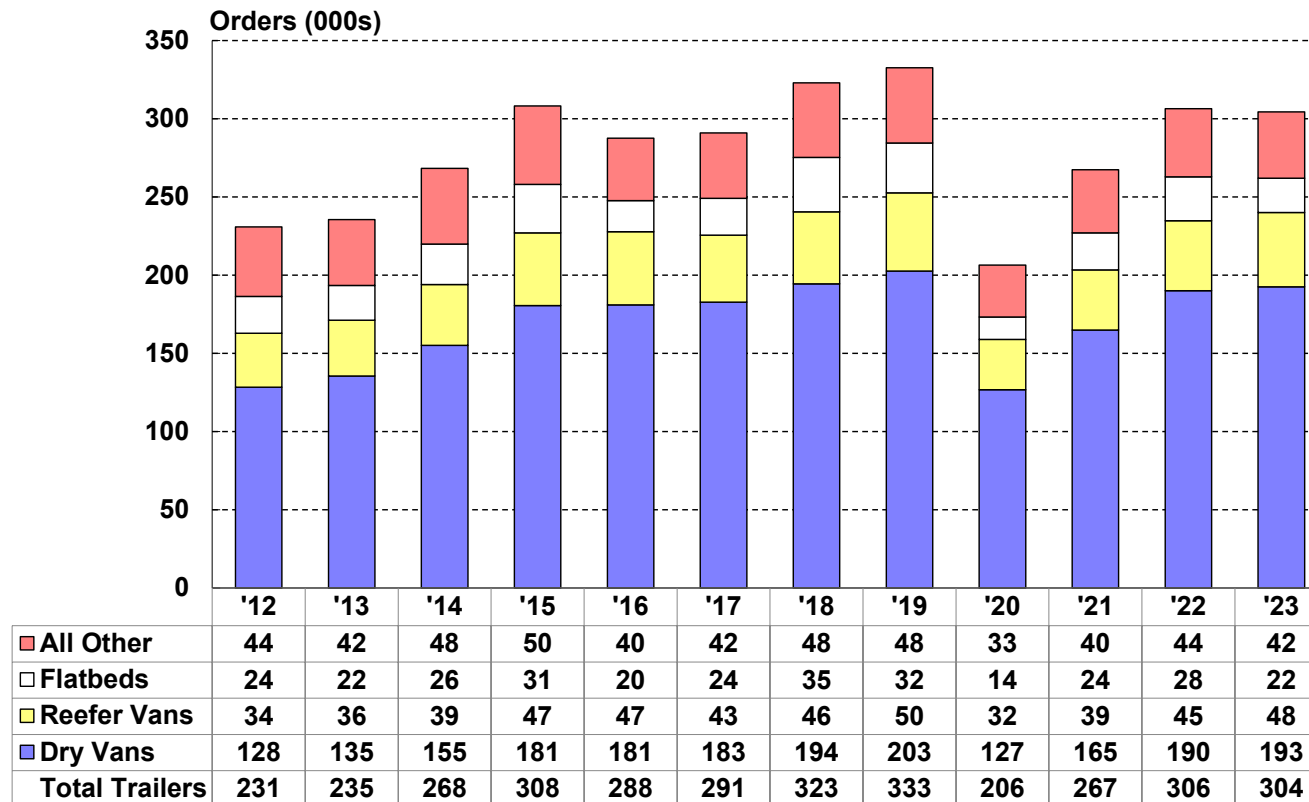
Per Day Build Rate	Q1	Q2	Q3	Q4
2021	1,010	1,080	1,068	1,123
2022	1,187	1,241	1,264	1,295
2023	1,248	1,274	1,223	1,201



# September OUTLOOK Forecast

## U.S. Trailer Production

2012 - 2023



Source: ACT Research Co. © 2022





# THANK YOU

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