



The Meter

Transportation (Trucking) Update (3-2023)

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Introduction

**Welcome to 2023! I hope you all have a great year.
Cheers to spring coming soon! Hopefully.**

Over the last three years we have seen some unprecedented values in the trucking world. We have been enjoying extremely high numbers both new and used. We now have begun to slide back to more common values. As the numbers will show in the charts, we are still seeing values above historical rates.

The combination of decreased contract/spot rates and increased costs have curbed the elevated demand that drove values through the roof. Larger fleets are still driving demand for new equipment while also trying to get back to the trade cycles they are striving for. As production slowly begins to catch up, expect more higher mileage trade trucks to hit the market.

As we have seen with the decline of used truck and trailer values the first assets that felt the brunt of the decline are Tier 2 and high mileage equipment. At auction we have started to see a larger spread between Tiers. With more availability of used equipment coming to market. Tier 2 equipment is going to continue to wain in comparison to higher end assets. They will be back to more of a pre-pandemic value difference.

Tier 2 equipment was a necessity to the trucking market over the last few years. Companies needed any equipment to move loads and make money were willing to run anything they could find knowing that they could replace it in a few years when production normalized. For example, we were selling new Atro 53 foot dry vans for over \$70,000 when months before they were asking \$40,000 online. Now they are back to bringing in the \$30s at auction.

It's not only trailers that are first to feel the decline. Higher mileage trucks have been affected. Don't get me wrong, all equipment has been on a slide but lower mileage trucks have still been bringing very good prices just of course down from the peak. We are expecting values to level off by the end of Q1 for the most part without any outside influences.

Covid for the most part is in the rear-view window in the U.S. as far as major disruptions in the trucking industry. China on the other hand is still having issues. Experts are speculating that a lack of community immunity and the strict lockdowns have not had the desired effect. This could cause future disruptions in the supply chain.

A slight recession would have an affect on U.S. import demands. This would be beneficial to counteract any other lockdowns or reduced exports that China could face. The major issue with this is that not all industries would feel the recession the same. The U.S. will still have strong demands in many industries. Especially in areas we are still trying to catch up on, including semiconductors.

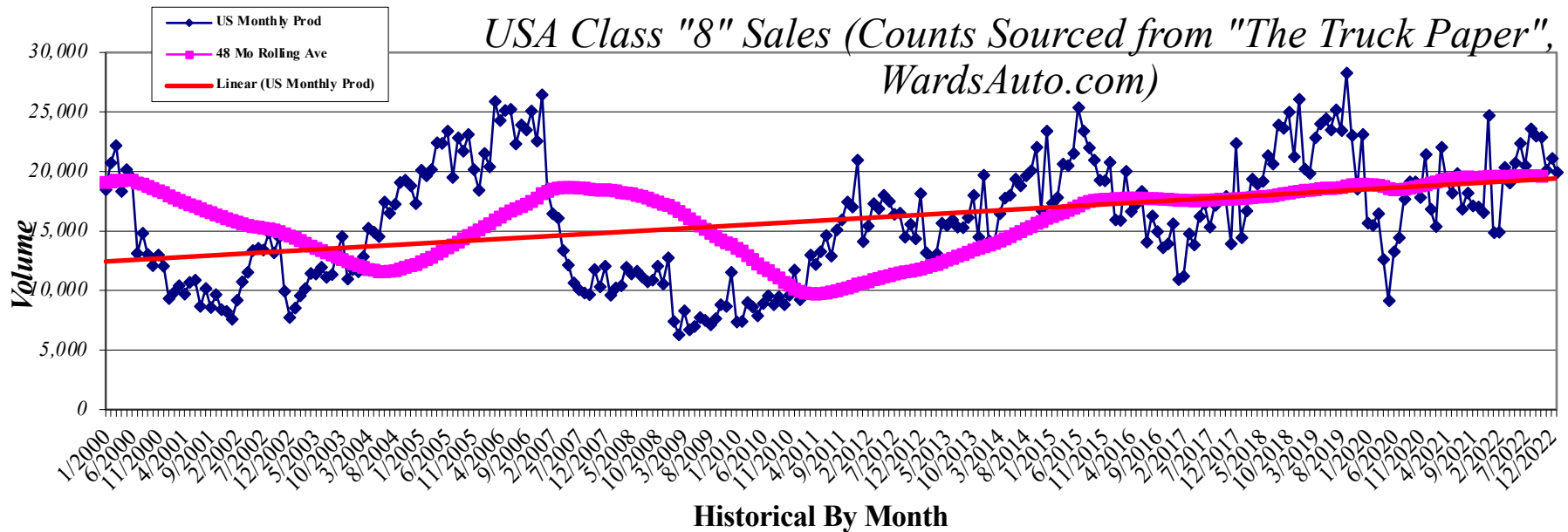
As always, but it seems more evident lately, external factors will hold the cards in the trucking markets this year. We are expecting a steady year for auction values through 2023. Russia, Ukraine, and China's situation could change everything at anytime. Don't want to focus on 'what ifs' but this is a scary situation to keep an eye on.

Auction volumes have been steady. Seeing the discrepancies in equipment is more and more evident. Still seeing a lot of interest in low mileage trucks and quality late model trailers. Both are becoming harder to come by and sellers are being rewarded with higher hammer prices as auction. We could see some further reduction in values this year but expecting them to be minimal.

Dealers have slowed slightly in purchasing at auctions, but they have been bringing more trucks to the auction. Most of these have been in the higher mileage range. Some of the dealers are stating that they are getting rid of some overpriced inventory and looking to restock with inventory based on new market trends. I would expect to see more and more of this at auction. We have also seen a rise in bank repos at auction. Many companies that entered the market over the last couple of years entered near the peak and are faced with loans they can't handle at the lower spot/contract rates.

Take note of the inventory slide and commentary. I feel like it is very telling and has shown us what to expect going forward as far as values. It helps portray the supply/demand dynamic and it seems to show it as early as auctions do. It was interesting to me to see how low volumes got and how long it has taken to get where they are currently.

Hopefully, these charts help explain a little about what I have talked about with real numbers. As always, if you have any thoughts or questions, please feel free to reach out to me anytime avinger@taylorandmartin.com.



What are the data points and trends telling us now? (Some of my comments are repetitive, and may be found in previous newsletters, but again repeating a notable point makes it more likely to be remembered.)

1: Trucking typically runs in a 7 to 8-year cycle [peak to peak OR trough to trough]. As long as the new sales volume is above the 48MRA, the trend suggests we would see higher builds and values should erode more slowly. Obviously, the market has been thrown out of any typical trend but keeping an eye on what recovery looks like from the past can give us an idea on what to look for. Sales should stay above the 48MRA barring any major economic changes for the next couple quarters.

2: Historical needs have grown from slightly lower than 15,000 Class 8 tractors per month (in the 2000's) to about 17,500-18,000 Class 8 tractors per month now. Since the pandemic low of 9,165 in May of 2020 we have been seeing quantities in the low 20,000s.

3: U.S. Sales ONLY: The 48MRA is the rolling average of all tractors 48 months old or newer. The 48MRA bottomed in 2/2011 (7-year low) with the 48MRA at 9,712. The previous 48MRA high was recorded in 5/2007 at an average of 18,678 (we are now above the high in 2007), which was six months after the actual monthly sales peak in 12/2006, when 26,462 units were sold. We marked a peak for monthly sales in 6/2015 with 25,369 units sold and now again in 9/2019 with 28,258 units sold. This 48MRA Cycle high: (6/2022) 19,654, is a new all-time high. Over the last 8 months we have been hovering in the low 20,000s with strong demand.

4: Actual Class 8 purchases have been down since the year end. December 2019 of 23,119 to averaging 15,271 for the year in 2020 with the low at 9,165 in May. We are currently at 19,453 for 48MMR and as production increases sales will follow until we reach the trucking industry demands.

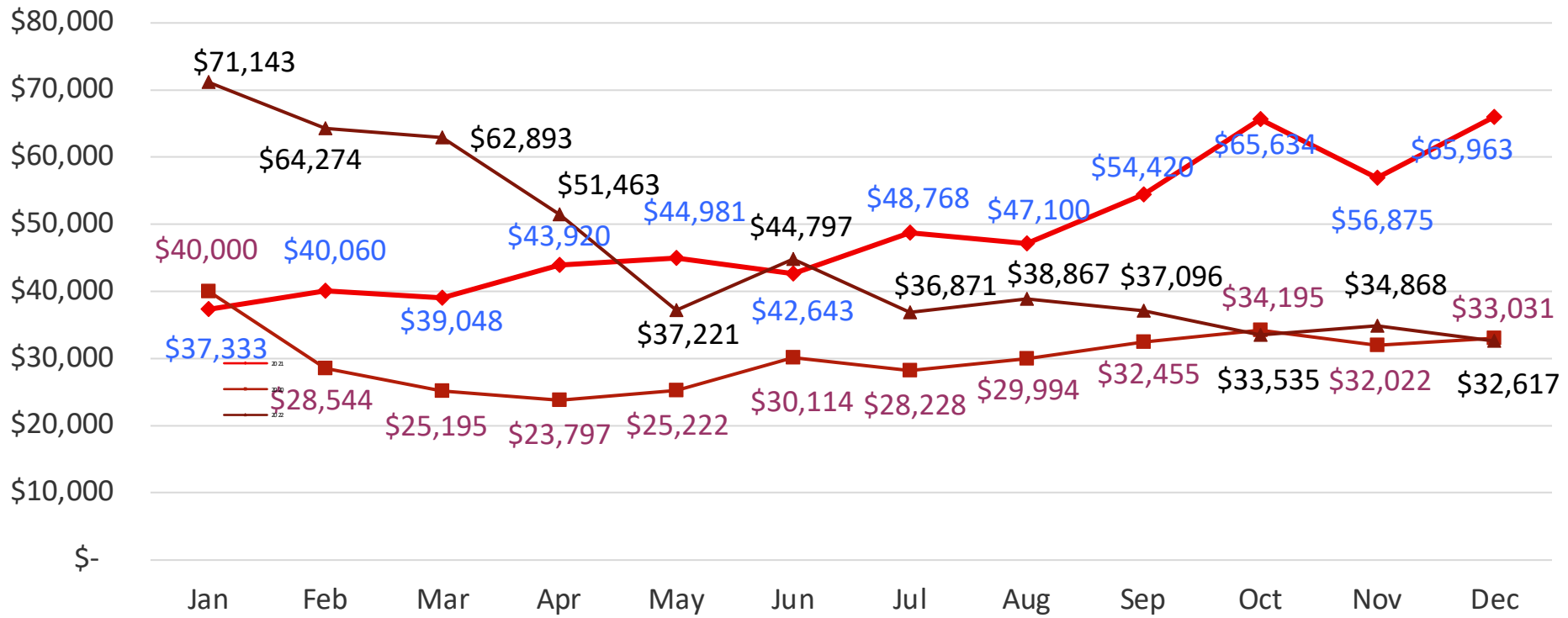
5: Since the drawdown (20%-30%) from July 2015 to July 2017, tractor prices had improved significantly, up until 2019. 2019 was a tough year at the auction level of trade. 2020 showed improvement, and 2021 finished strong. Lack of production has sent buyers to look for used to fill the void until production catches back up with demand.

6: The class 8 truck orders have been leveling off since the peak at the end of 2020 as expected. The overall demand has remained elevated. The supply chain issues have for the most part began to deteriorate. It will be a lot of rebuilding for fleets in 2023 to try and get back to typical trade cycles they are looking for.

7: While markets have cooled the demand for new trucks has remained elevated with larger companies trying to reduce the age of their fleets. That demand should continue for most of this year. Even with rates dipping companies are still working on getting out of older equipment and replacing with new. Expect above average sales for most of the year barring any major international shakeups.

Last run of this chart. Now we are looking at 2016 Cascadia sleeper trucks into 2022. These trucks are now **2 years older** with about 40,000 more miles than when they sold in 2020. The 2022 values of a 2016 FL Cascadia have finally reached the same levels they were at in 2020. As expected, values have remained relatively steady since July with only a slight decline. Barring any external influences to the market I am expecting these values to continue to slowly slide downward. Given the large increase in new costs and continued supply chain difficulties overall I would anticipate “bottom” will be above historical values on 6-year-old trucks.

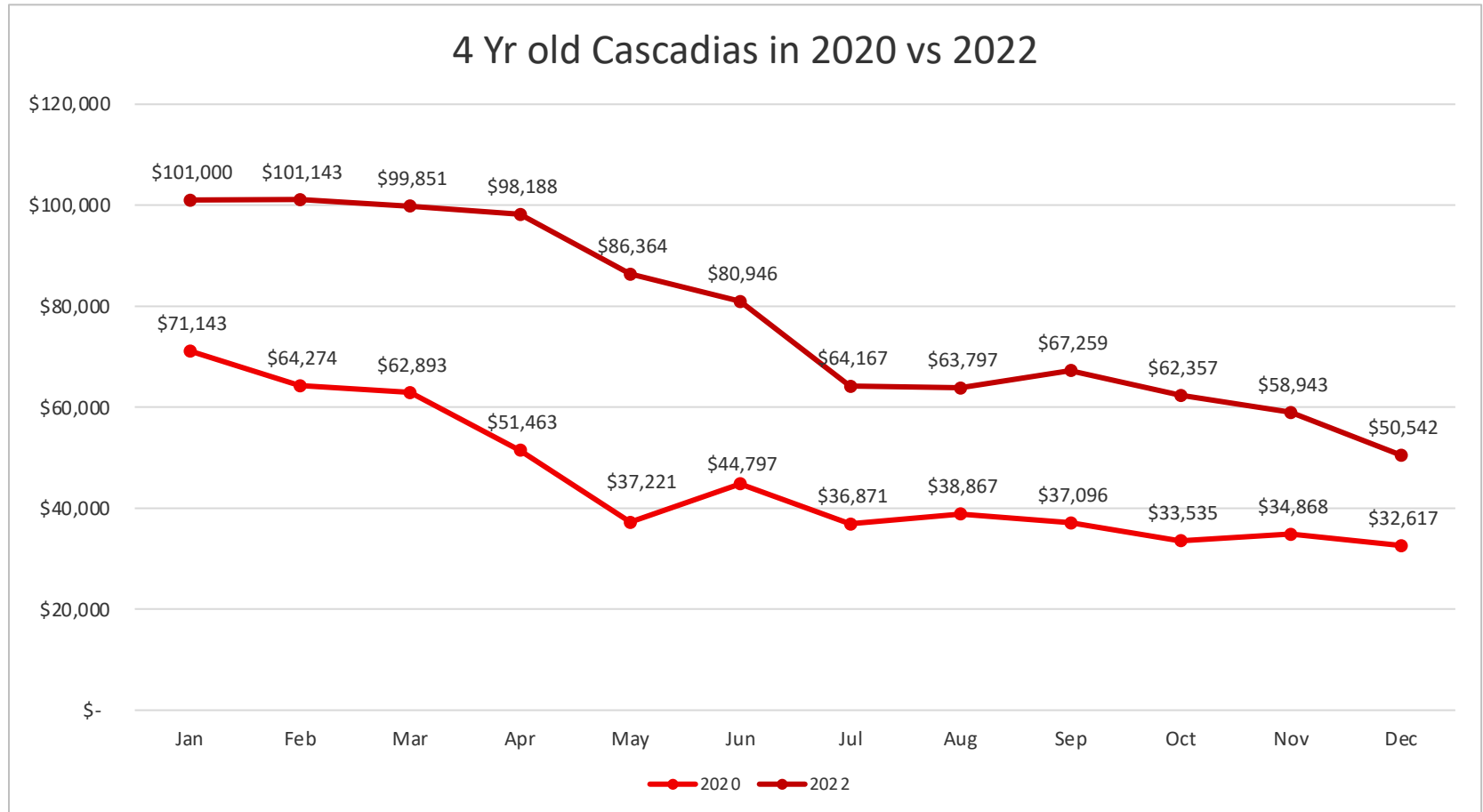
2016's F/L's Sold at T&M Auction (2020 vs 2021 vs 2022)



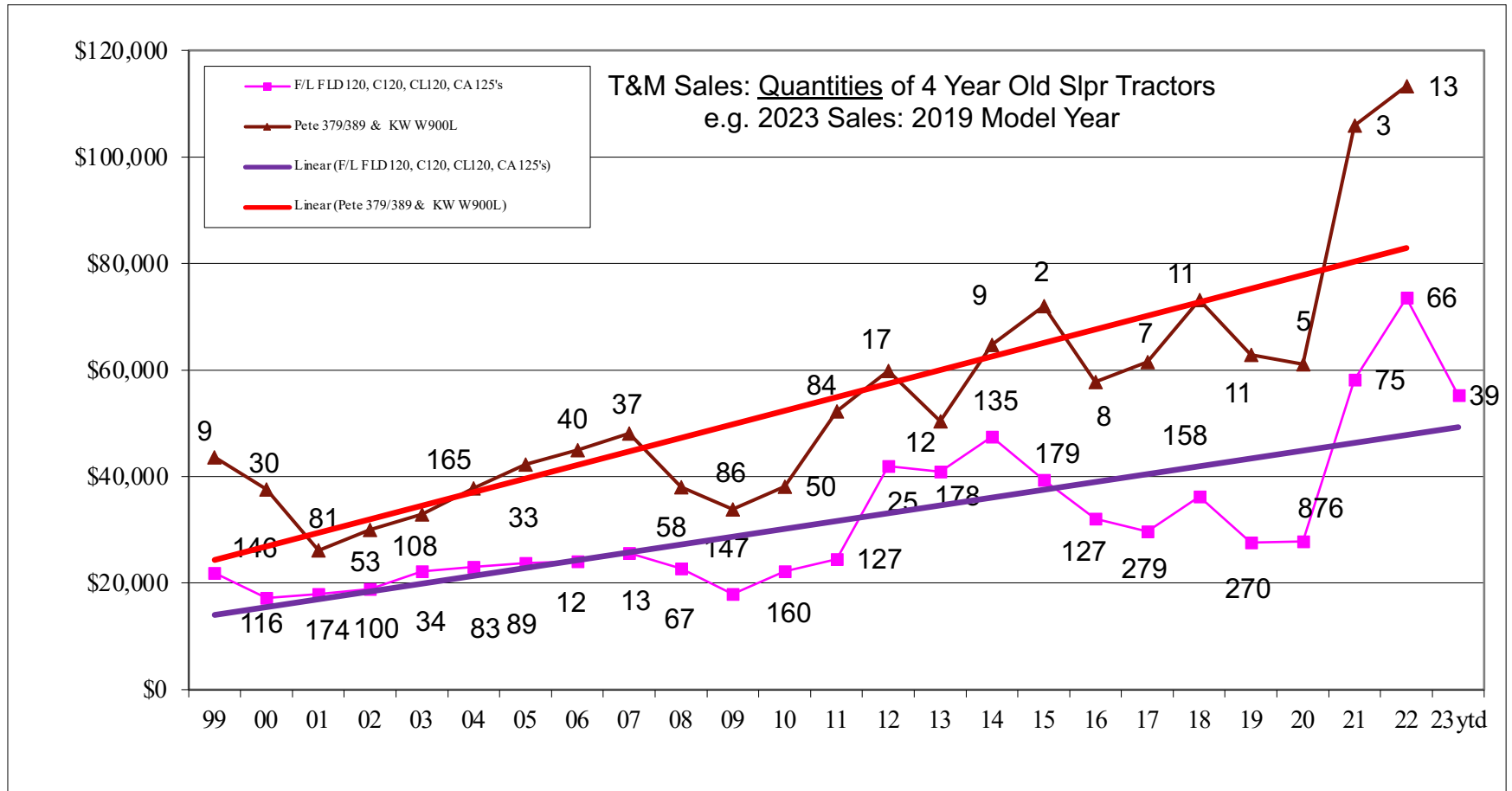
4 Yr Old Cascadia's 2020 vs 2022 (Auction Values)

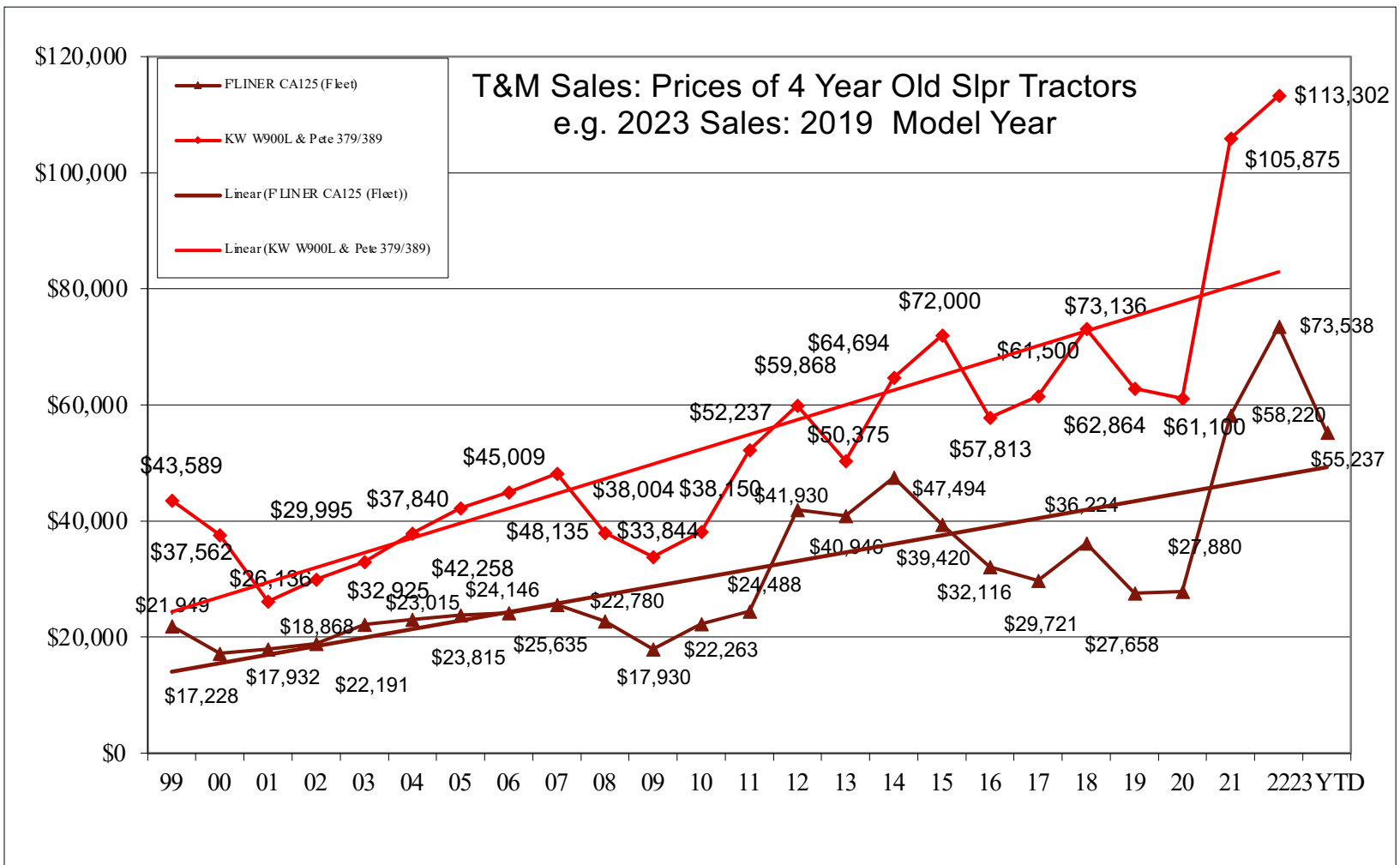
To go along with the previous chart this one depicts 4-year-old Cascadia's then and now. This shows how much of a drop in values would have to occur to get back to where we were 2 years ago. Another note the 4-year-old truck in 2020 averaged 507,000 miles and currently at our auctions a 4-year-old truck is at 540,000 miles. As you can see, we have continued the decline in December.

Also worth noting, we are still about \$18,000 above 2020 values.



True Value Guide Quantities of 2018 model year trucks.
 Here are total actual sales of the Freightliner Cascadia (Fleet) and the O/O Spec'd Petes and KWs.
 I would expect volumes of the 2018 model year trucks to go up later in the year with new orders being delivered.
 We saw a very limited number in 2022 with production issues.



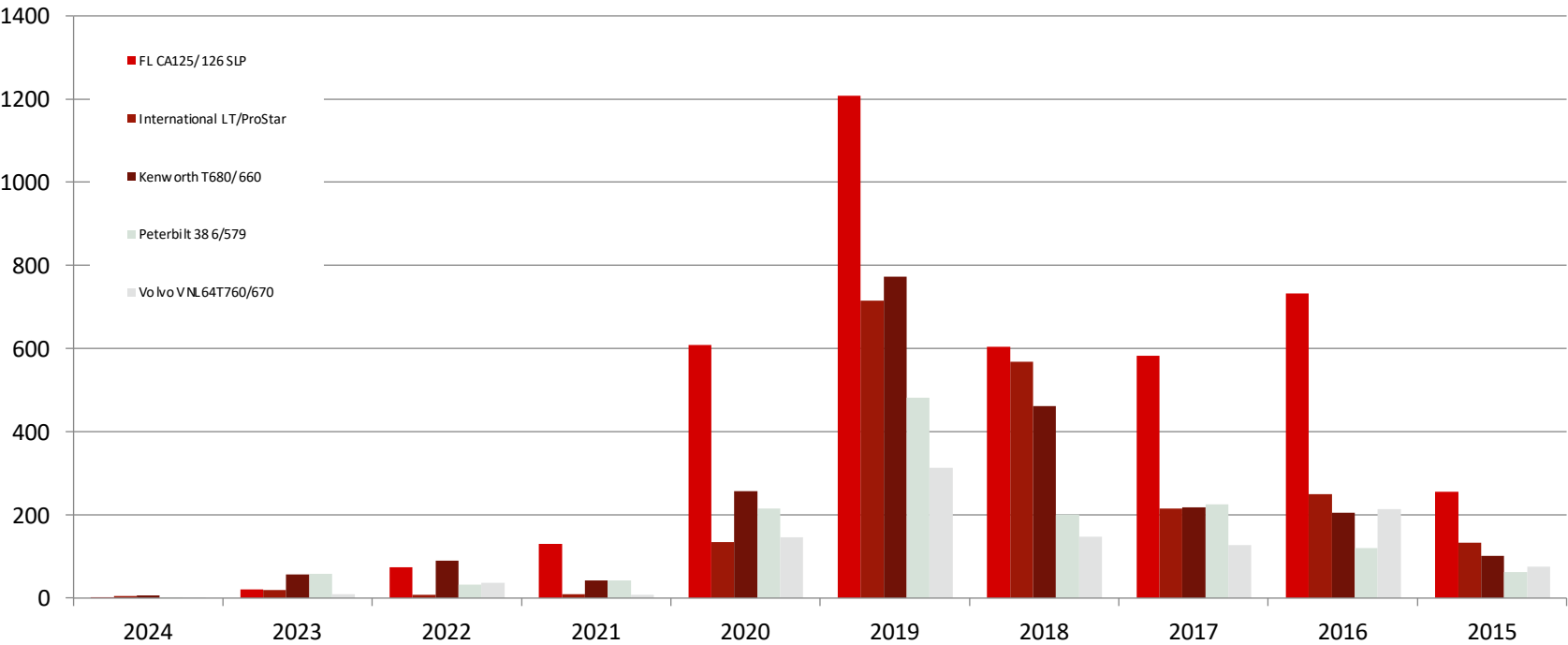


Above are T&M Sales by average annual prices. (As usual, I have combined the Peterbilt 379/389 and Kenworth W900L tractors since both are generally considered to be spec'd as Owner-Operator (O/O) tractors.) As seen in the previous slide overall sale values are well above the trendline.

Don't have any of 2019 Model year 389's or W900's yet this year but would expect a slight decline. Fleet truck values have remained on the decline. Higher miles and market conditions have contributed to the decline. Still above the historical trend, but still anticipating a small pullback. I think we are getting close to the used truck bottom.

The trends (red and purple lines) over time have been higher, but the price declines are clearly evident (2001-2003 & 2008-2011 & 2015-2017 & 2019 and 2020). Remember, RCN is up (from material costs, EPA requirements, technology and safety/comfort improvements); additionally, inflation is included in the sale prices, thus the upward trend line.

What is available to the marketplace today? (Feb 20,2023) As shown below very little new or late model equipment up for sale on TruckPaper. Overall, 11,010 of these models total. Compared to the low of 4,086 in Nov 2021 and high of 25,114 in Dec of 2019 we are still on the low end of inventory. Typically, we have 2,000 to 4,000 new trucks being offered and currently we have 182 total showing that demand for new is still strong and the market has not caught up yet. This is representing that low mileage late model equipment will remain scarce for the next few months holding their values up.



20-Feb-23	Sleeper Tractors For Sale On TruckPaper.com: February 20, 2023										Ave. Age	2017.29
Make	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>Total</u>	
FL CA125/126 SLP	2	21	74	131	609	1208	605	583	733	255	4,221	
International LT/ProStar	5	19	8	10	134	715	568	216	250	133	2,058	
Kenworth T680/660	7	57	90	42	257	773	462	218	205	102	2,213	
Peterbilt 386/579	2	58	32	42	216	482	201	225	120	62	1,440	
Volvo VNL64T760/670	1	10	37	8	146	313	147	127	214	75	1,078	
Year	17	165	241	233	1,362	3,491	1,983	1,369	1,522	627	11,010	

Additional Factors...

Additional factors to consider for a bias (positive or negative)

- Crude Oil has been consolidating in the 70–80-dollar range since December of 2022. Analysts believe that through the year 2023 oil should stay between 70-105 dollars a barrel. The biggest concern is the pace on how fast China's economy will recover and by how much it will affect oil prices. Oil reserves in the U.S have dropped by almost half from the start of 2021 but it's leveling off since the start of 2023. Global oil demand is set to rise in 2023 with nearly half the gain from China. Jet fuel remains the largest source of growth.
- **Building Activity (Home, Office, etc.):** Home building in the U.S. dropped 4.5% month over month in January, Single-family housing starts fell 4.3% and with five units or more decreased by 5.4%. While interest rates did level off through January, causing some homebuyers to re-enter the market with a recent uptick in rates suggest the market is going back to a standstill. Many economists remain mixed about whether home prices will continue to decelerate throughout 2023 or even drop at all. Analysts believe the lower inventory should remain throughout 2023. The median existing home sales price was up 2.3% in December compared to year ago. Month-over-month existing home sales prices continued their downward trend and are roughly 11% lower than their record high in June. The nation's average rate for a 30-year mortgage loan is 6.93%.
- **Drivers:** Shortage! Analysts estimate about 231,100 job openings for truck drivers are projected each year, on average over the decade. The causes of driver shortage include high number of retirements, low representation of women and the challenging lifestyle that comes along with being a truck driver. Some analysts believe that the driver shortage isn't the problem they argue that these large trucking companies have a retention problem. In 2019 the average turnover rate was 91% which means 91 out of 100 drivers quit/transfer to a different carrier within a year. The trucking industry has been increasingly becoming more competitive. Which makes it even more difficult for companies because if you raise wages, you then must raise freight rates, etc. The customer base of retailers and manufacturers would then go to one of the many other trucking fleets which offer lower, more competitive prices. Then companies would likely have to slash wages again if it would like to stay in business. In 2022 the U.S. truck driver shortage was around 78,000 compared to 80,000 in 2021. In 2021 the pool of drivers employed by trucking firms shrank as high freight rates encouraged many drivers to start their own companies. The slowdown in volume in the second half of 2022, combined with rising fuel and other costs forced a growing number of those entrepreneurs to seek employment again back at carriers.



Additional Factors...



- **Ports:** Import cargo volume is expected to drop to nearly its lowest level since the beginning of the pandemic in the first quarter of 2023. Analysts are comparing this year to the pandemic as in the uncertainty of what the economy will do. Cargo volumes are down, and the economy is in a contradiction of rising employment and wages while there is high inflation and rising interest rates threaten a recession. But the economy is far from shut down, but the degree of uncertainty is very similar. December freight was down 2.6% from November and 17% down from December 2021. They are forecasting February to be down 25.6% from February of 2022. They expect cargo to climb slowly throughout the year 2023. Towards the end of 2022, freight for a 40-foot container delivering from Shanghai to Los Angeles has dropped by 80% from January of 2022. Analysts describe the year 2023 as the year where ocean transportation will normalize. Another bottle neck to watch out for is the labor contract between the International Longshore and Warehouse Union and its employer group which on July 1st expired. The last time this contract expired back in 2014 it took more than nine months to reach a new contract agreement. The lengthy dispute included work slowdowns and lockouts that created massive traffic jam on the docks. Since this began there has been more shipments diverting to other ports on the east coast based on uncertainties that could emerge. In surveys nearly one third of those that diverted may not come back to the west coast once the labor contract is finalized. In that same survey 40% of the respondents indicated that they initially changed course due to the uncertainty of the dockworker contract.
- **Construction:** PPI (Producer Price Index) for construction materials have possibly peaked with November 2022 PPI for construction materials showed a year-over-year average increase of around 3%. Pricing will remain challenging especially in the first half of 2023 but should start to see a cooling of inflationary prices in the back half of the year. As of October 2022, while it's going down the PPI index stood at 41.9% above pre pandemic levels. Spending forecast for non-residential buildings is 18.5% higher than 2022, while residential spending is forecasted to decline 2-6% in 2023 with inflation. There are a lot of bond measures that will be paying for education improvements, roads, bridges, clean energy, water, and sewer that will move forward in 2023. The highest spending forecast for construction in 2023 will be in the industrial sector with expected increase of more than 30%. The year 2023 will be a year of cautious optimism with the economic uncertainty. Many challenges that face residential and nonresidential is limited availability of skilled labor many are choosing other careers over the trades.
- **Politics:** The Biden administration is interested in increasing truck parking along highways/interstates to help the shortage of spots available to park overnight. The American Trucking Associations wrote a letter to DOT last year citing that 98% of drivers reported problems finding safe parking. Also, they are trying to push for guaranteed overtime pay for truck drivers, but the bill has not yet been pushed forward.
- **Inflation:** CPI was 6.4% in January and 6.5% in December. Core CPI month over month in January was 0.4% and 0.3% in December. PPI (Producer Price Index) month over month in January was 0.7% and -0.5% in December. As of right now there is a 67% chance of 25-basis point hike in March verse only 33% chance of a 50-basis point hike. As of 2023 the way the CPI is calculated changed, instead of weighting different sections every two years it now will be every year. But as you can see inflation isn't coming down as aggressively as it has been. Which could turn out to having additional rate hikes and the bonds just recently priced in no rate cuts for the year 2023.

Trailers

Production issues continue to hold up new and used equipment values. Vans and reefers are still bringing higher values prior to covid at auction. Starting to see a plateau in falling prices from the highs of first quarter of 2022 but should still see a small decrease in values throughout 2023.

- **Ag Trailers:** Demand is slow and quantities at the auction have been lower than usual based on the season. Fertilizer has continued to steadily decline. Corn has been fluctuating between 6-7 dollars for the past 6 months. Analysts are forecasting a net farm income decline of 15.9% compared to 2022, but the net income in 2023 will be 26.6% above its 20-year average. Grain trailer backlogs and net orders have stayed relatively the same the past year, but net orders had a small uptick in January of 2023.
- **Pneumatic Trailers:** Steady demand for large capacity trailers. 1000-1050s still struggling. Still high quantities of the small cubes on the secondary market are holding values down. Quantities for sale on the open market is slightly down from last report in September. New costs are still rising with a 4-8 month wait. Bulk Tank back logs are still slowly increasing while net builds in the past two months have been lower than average.
- **Flatbeds and Drop Decks:** Overall market has been staying steady with continuing increasing new costs but at a slower rate. Since new cost has come up so much in the past couple of years the depreciation for the first 6-8 years will be harder than normal. But from then on, the depreciation rate will be lower than normal. The national spot rate has been continuing to erode slowly and is currently sitting around 2.70. Load-to-Truck Ratio has been increasing from the start of 2023, which usually forecasts a raising spot rate in the near future. Load-to-Truck Ratio is higher when there are more loads and less trucks to fill those loads and vice versa. Backlogs have been increasing since September 2022 while net builds have stayed relatively the same besides a big month in September 2022. Since the 4th quarter of 2022 the quantity of units for sale on the public market have been increasing slowly.
- **Heavy Haul Trailers:** Demand is steady. Back logs and net builds are staying flat. Backlogs are 53% higher than the two-year average, while net builds are slowly picking back up but still slightly below their two-year average.
- **Chassis Trailers:** Some analysts believe that chassis needs will be mostly caught up towards the end of 2023. Based on the demand of imports continuing to fall at least through the first half of 2023. New competitors have started to manufacture chassis trailers just like they did in dry vans. Backlogs have stayed the same since last year but still about double what the two-year average is. Net builds have continued to climb while staying close to double the two-year average.
- **Dry Vans and Reefers:** High demand is continuing to keep prices elevated from prior to the pandemic levels. On the public market of for sale units there was an increase in February of this year but since middle of last year the quantity has stayed relatively flat. Back logs on Reefers and Dry Vans had an uptick in the past three months but still about 15-18% higher than the two-year average. Net builds for Reefers and Dry vans did increase in the 4th quarter of 2022 while still 25% above the two-year average. Spot rates have continued to come down slowly and Load-to-Truck Ratio has kept in a range in the past six months with its up and downs throughout.

Sales and orders are remaining high with 6-12 month wait for new while keeping values above pre pandemic levels. While auctions have continued to come down from the highs of the first quarter of 2022, they should still see a continuation of slight decreasing of prices through the first half of 2023.

Overall, the trailer market is still steady compared to pre pandemic levels but could still see a slight dip running into the first half of 2023.

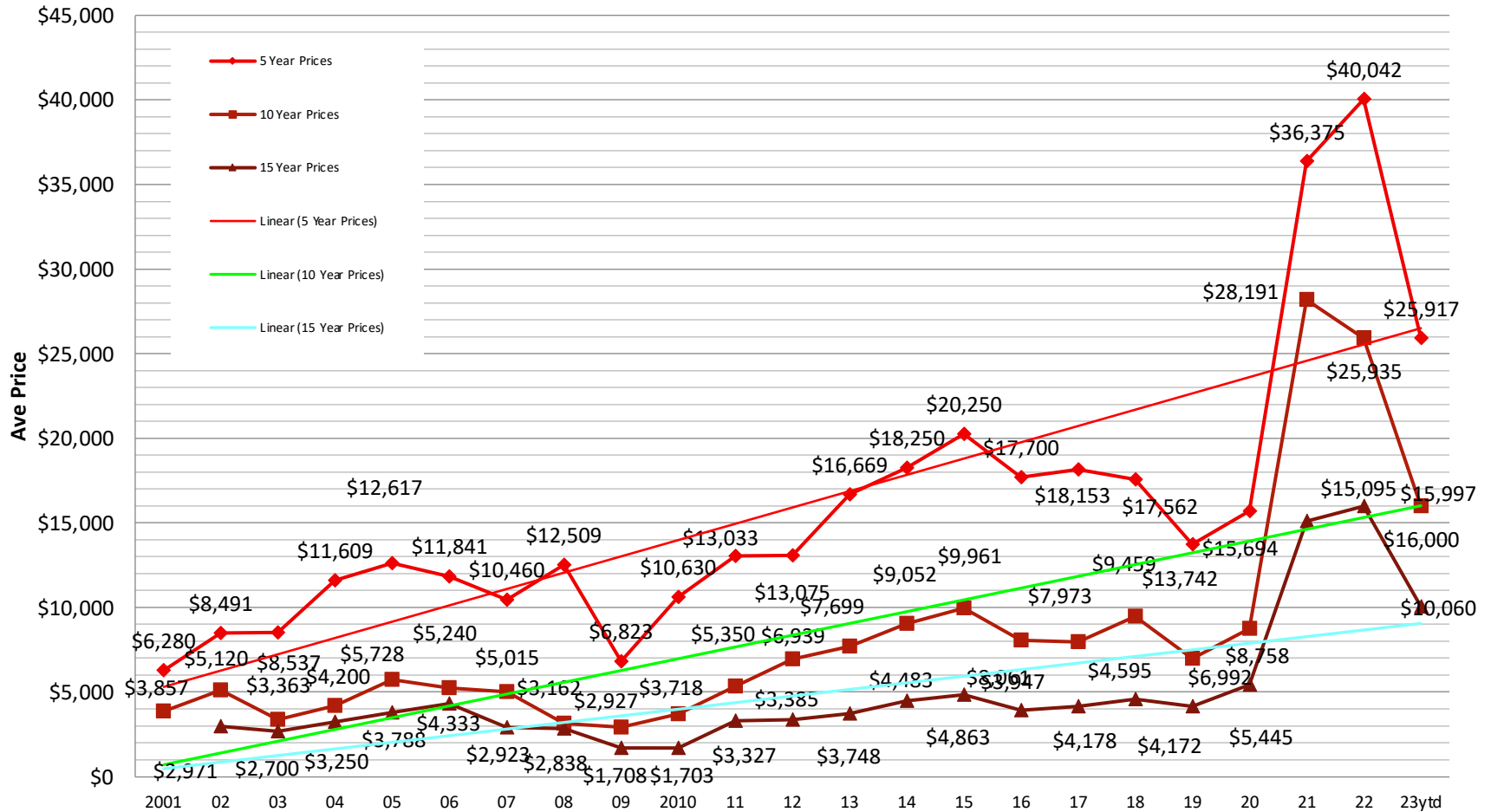
Supply issues in Dry Vans & Platform Trailers are the component shortages and labor, Refrigerated Trailers are the refrigeration units due to the shortage of compressors and semiconductors. Supply issues will help maintain the higher-than-normal values, but the uncertainty of the overall economy could create a small pullback on prices through 2023.

T&M Auction Results:
Tracking 5, 10 & 15 Year Old A/R Dry Vans

5, 10 & 15 Year Old Dry Vans sales (Taylor & Martin Auctions) are charted below:

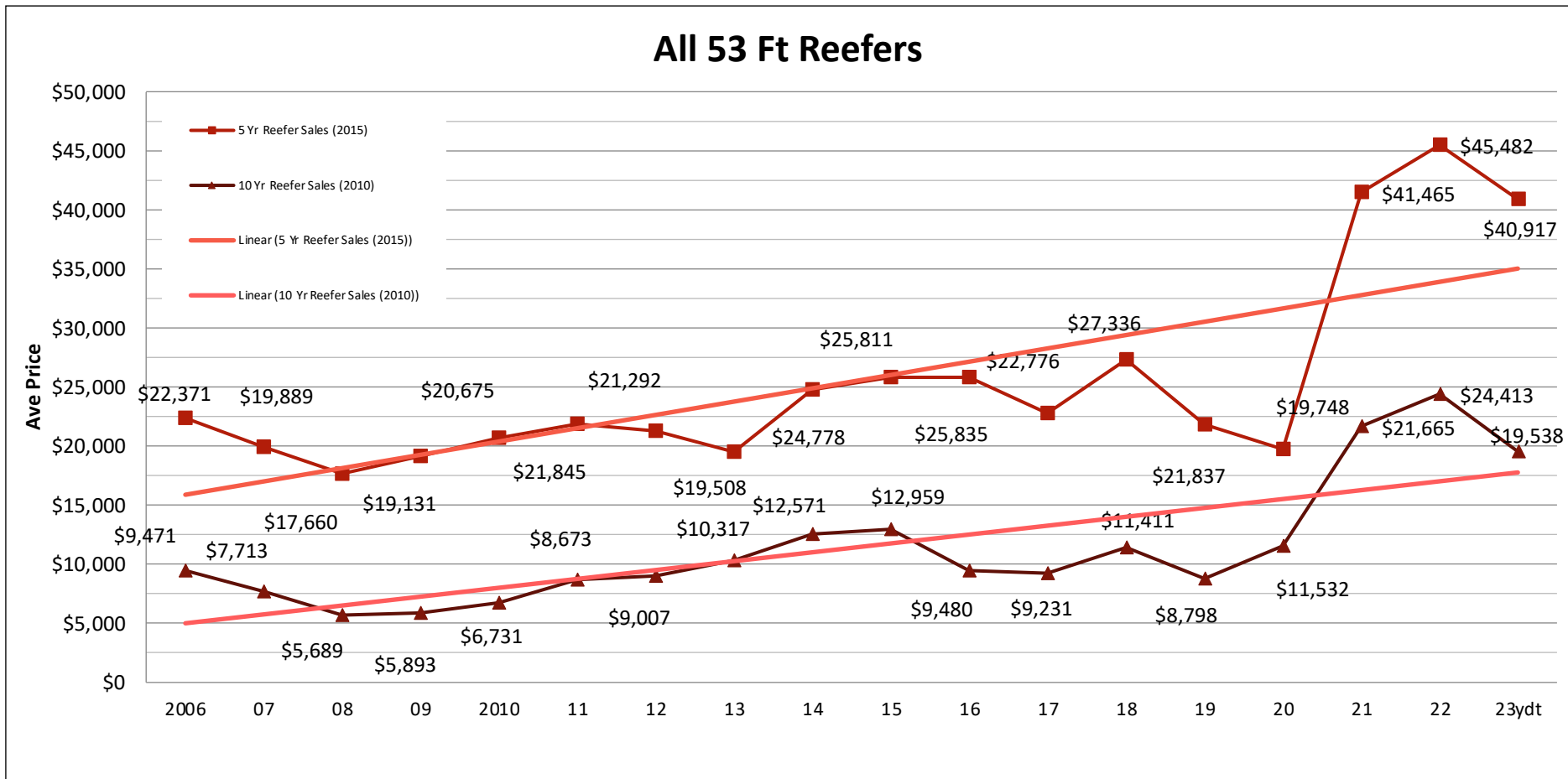
Don't be overly alarmed by this chart. We have had limited numbers of the 2018 model vans sold so far in 2023. The YTD numbers in the first edition of the year sometimes are misleading. Van values are declining at auction but not as dramatically as this chart indicates. Don't forget 5 years ago a new 53 ft. dry van was less than they averaged all of last year. I would expect the 23ytd numbers will level off to be higher than current indications.

T&M Auction Results: Tracking 5 Yr, 10 Yr & 15 Yr Old A/R Dry Vans



5 & 10 Year Old Refrigerated Trailer sales (Taylor & Martin Auctions) are charted below:

Reefers: Both 5 & 10 year old (2013). Refrigerated trailers are down slightly from the 2022 average as expected. We still are hanging above the trendline but not as dramatic of a drop as vans. Reefers also did not see quite the exaggerated rise as the vans did. We expect late model reefers to hold strong with a slight continued dip in older well used trailers.



Inflation is a key topic after fall harvest, holiday purchases, mid-term elections plus a strong year of buying in 2022. Aggressive demand has led to price increases seen in farm inputs, labor, transportation, and most other costs of business. Looking forward agriculture requires sustainable, unified efforts in connecting food security concerns with yield and farm production concerns to propel future efforts of agriculture to reach major goals in global environment viability, operation profitability and feeding the world.

Ag equipment demand has been strong like other market sectors such as housing and automobiles yet has not taken the hits these sectors have experienced after the Federal Reserve's 2022 moves to curb inflation. Good used equipment has been limited in the marketplace and new ag production has not flooded dealer lots, yet. Even more noticeable is that brand loyalty has eased over the last few seasons to what is available. The question... will this trend continue or will patronage return with new equipment volumes. That answer lies in the relationship. While most buyers have a favorite brand, many are shopping more than two serious alternatives on each new purchasing decision per Iron Solution predictive analyst, Prescott Shibles, who stated dealers have more relationship loyalty potential than even OEMs (Original Equipment Manufacturer).

Despite new buyer age groups, equipment sales flourish in positive, financially healthy markets. A robust farm policy helps create growth in the agriculture sector, generally without partisanship. Ethanol is one area that has created friction yet strong support for the ag sector. Bipartisan support will most likely catapult good growth in this sector in the next decade as fossil fuels lose some growth to sustainable substitutes and labor tightens. Most OEMs already have produced or are pairing with engine manufacturers on EV (Electric Vehicle) engines in preparation for future market shifts in demand. CNH has autonomy and EV currently working the field to provide solutions towards sustainably advanced farming. CNH CFO, Scott Wine, anticipates these advanced technologies will build 10-15% annual growth in the next 2-3 years. CNH has introduced two Raven integrated autonomous projects of driver assisted harvest solutions and driverless tillage solutions. The CIH Trident applicator previously unveiled the partnered project on methane powered NH tractors using liquified natural gas. New Holland is working on electric powered tractors and external generators for attachments.

New ag iron continues to move through generational use, even with shortages and production delays easing. *Supply chain resolution will not look the same post-COVID environment* but will take on more dealer, supplier, and end-user collaboration. CARB (California Air Regulations Board) regulation tightening continues to be forefront as an industry goal while manufacturers strive for current implementation on-the-farm. New ag inventories are up per most sales experts, though the present concern is whether the equipment on-hand is what buyers are wanting in 2023. Updating new equipment is a current demand decision vs. major buying volumes by any one farming operation. Looking ahead is the key to adapting in this environment, forecasting the many attributes needed like tires, after-market parts, guidance and more on any new sales order.

Despite forecast predictions, technology is becoming one of the most sustainable solutions present to farmers. ExactShot is one of the newest equipment options. John Deere has implemented autonomy and technical precision in spraying to literally spot spraying verses total field application of herbicides via cameras and automation. The next challenge is to reduce the initial cost, developing options of retrofitting. Driving technology to provide water, food and fuel to the world begins with data to connect the demand in supplying solutions for the need per Travis Senter, an Arkansas farmer in John Deere's recent Consumer Electronics Show in Las Vegas. Every family farm must evolve, technology has been a proven direction in that evolution.

Farm income strength is an essential in application of any technology evolution as is the US trade deficit. Despite touting record ag exports for the marketing year, the industry is still in a trade deficit. A slowing global demand and strong US dollar pushed goods exports to a seven-month low in 2022 increasing the trade deficit 5.4% (to \$78 billion) per Reuters. China slowing its soybean imports does not help. Connecting these areas of concern is a healthy goal, but a goal worth achieving for the world and the farm.

John L. Seymour, ASA Senior Appraiser



John Seymour's thoughts on
Agricultural equipment,
"filling the Ag Hopper"
in The Meter!