The Meter

Transportation (Trucking) Update (12-1-2022)

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Introduction

We at Taylor & Martin would like to wish you a happy, healthy, and safe Holiday Season!

It has been one incredible year for the trucking industry. Actually, almost 2 years! As expected, we have begun to fall from the highs we experienced in the first half of the year. The industry had almost everything it wanted outside of, more trucks and drivers. The need/want for more qualified drivers as we know is a constant.

The rise of costs for trucks and trailers is expected. Today's new costs and talks about future new costs are at different level. The rise in costs we have already seen and the rise potentially with modifications needed in 2027 could be extreme. These increases in new costs will trickle down to the used sector in the end.

The allotments in 2023, will again be a difficult hurdle for dealers to navigate and leave the demand for more new inventory elevated. It is continuing to increase the age of fleets and upping the mileage of trucks ready to be replaced. The issue is slowly improving but it is limiting the number of lower mileage trucks on the secondary market and will continue to do so until we are producing at normal replacement levels for an expended period of time with limited interruptions.

As always, the external issues are going to be key on used equipment values. The railroad strike could be the next issue in the near term. As of now it is looking like congress is going to have to get involved. With any stoppage of rail, trucking needs again will jump and with any long-term strike, backlogs will again help drive rates back up even if it is just for a few months. I don't believe a strike will be allowed to happen but if it would send a ripple effect across our industry very quickly.

The price of diesel cost have also come back down. Costs are still over a $1 more a gallon than last year while spot rates have dropped to where margins are minimal at best. Oil prices have fluctuated most of the summer and fall and are expected to be just as volatile in 2023. Covid in China and the Russia/Ukraine conflict have made consistency in the oil pricing impossible. Don't expect any prolonged dips in oil while major influences in pricing are unsettled leaving diesel costs elevated.

The recession. Lots of talk on what this will mean for used values. Lack of consumer spending will reduce the load quantities and the desire for smaller companies investing in new equipment until they feel more comfortable with the future. Many people have stated any recession as it looks today will be relatively shallow and short lived especially for the trucking sector. It should still have a negative impact on used values but its not looking like a fall off the cliff scenario.

We are in a better place than we typically are in a declining market. As stated in the last newsletter, over production will not happen like it historically has, putting an oversupply of used (trades) on the market drastically reducing values. Values may dip but the quantities of lower mile trucks and late model trailers will not become so high as to create a large supply/demand imbalance, like we have seen in the past.

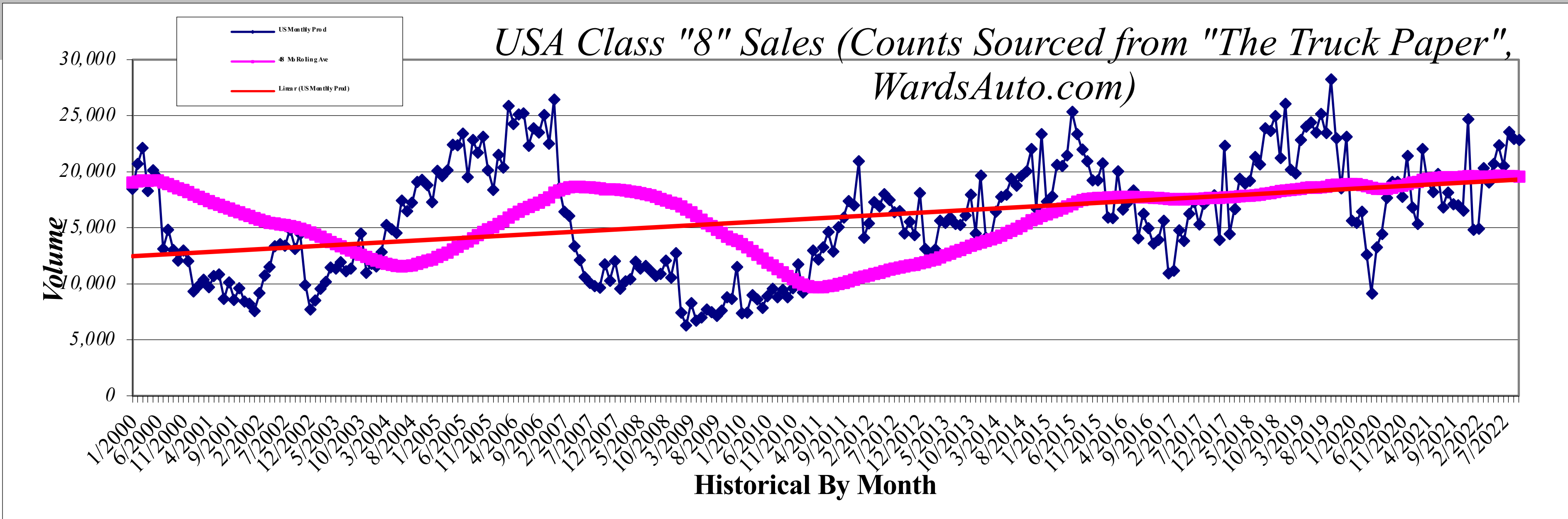
Retail asking prices have begun to shift down from highs. Retail asking prices always lag 3 to 4 months behind auctions with asking prices. Dealers are sometimes invested in trucks at a higher price point and are sluggish to lower price and try to get out of the asset clean. At the peak dealers did not have to negotiate price. Now many sellers have begun to lower asking prices to get equipment moved quickly due to lack of confidence in the market.

Auction values have been steady to slightly down in the last quarter and are expecting to drop another 10% to 15% in Q1 2023. Expectations are that we will start seeing smaller companies close their doors and other companies hold off on spending until we have a little more clarity on what the economy will bring. Overall volumes could also be affected with higher miled trades not being accepted by dealers that are not wanting to certify high mileage trucks. We will typically see these assets come to auction.

Dealers continue to be active in the auctions. We have been seeing dealers purchasing 50% or more at auction. We saw that number as high as 70%. Generally, we like to see that number be closer to 30%. They have started being more conservative on buying prices but staying active on auction day. Most are wanting more equipment but lack of confidence in the market is making many cautious.

So much is going on in this market it is hard to cover it all, and I know you are more interested in the charts and actual sales numbers, so I will let the numbers do the rest of the talking.

Hopefully these 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 avering@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 values 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. We have slipped off the all time high, but it will start on another rise toward the end of 2023.

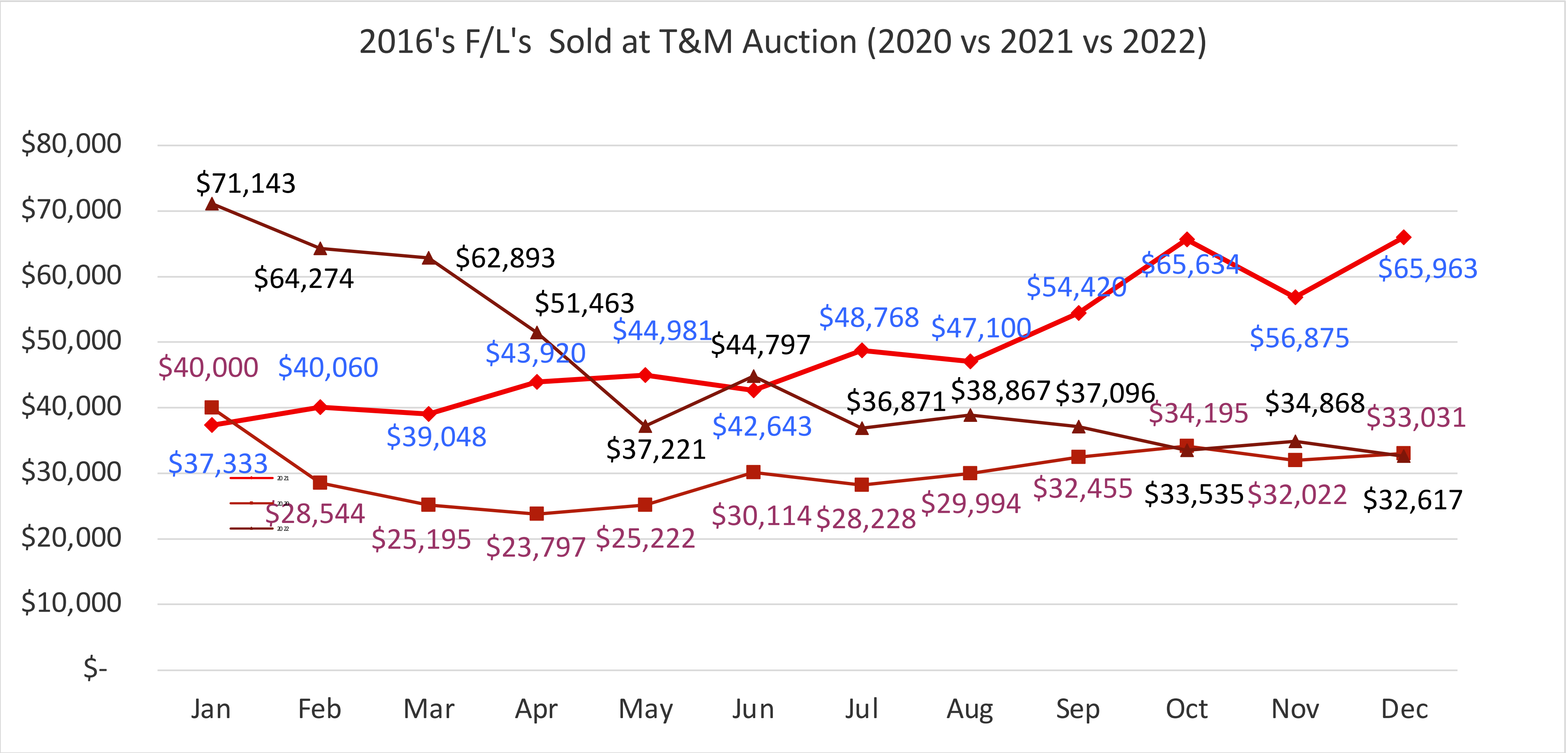
4: Actual Class 8 purchases have been down since the year end. December 2019 of 23,119 to averaging 15,271 for the year in 2020 with the low at 9,165 in May. We are currently at 19,586 for 48MMR and as production increases sales will follow until we reach the trucking industry demands.

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 demand is still there but slow delivery times and lack of open slots have held the actual orders in check. Confidence in current market and delivery times also hold back orders. We will expect orders to be strong in 2023 leading up to the new regulations coming in 2024.

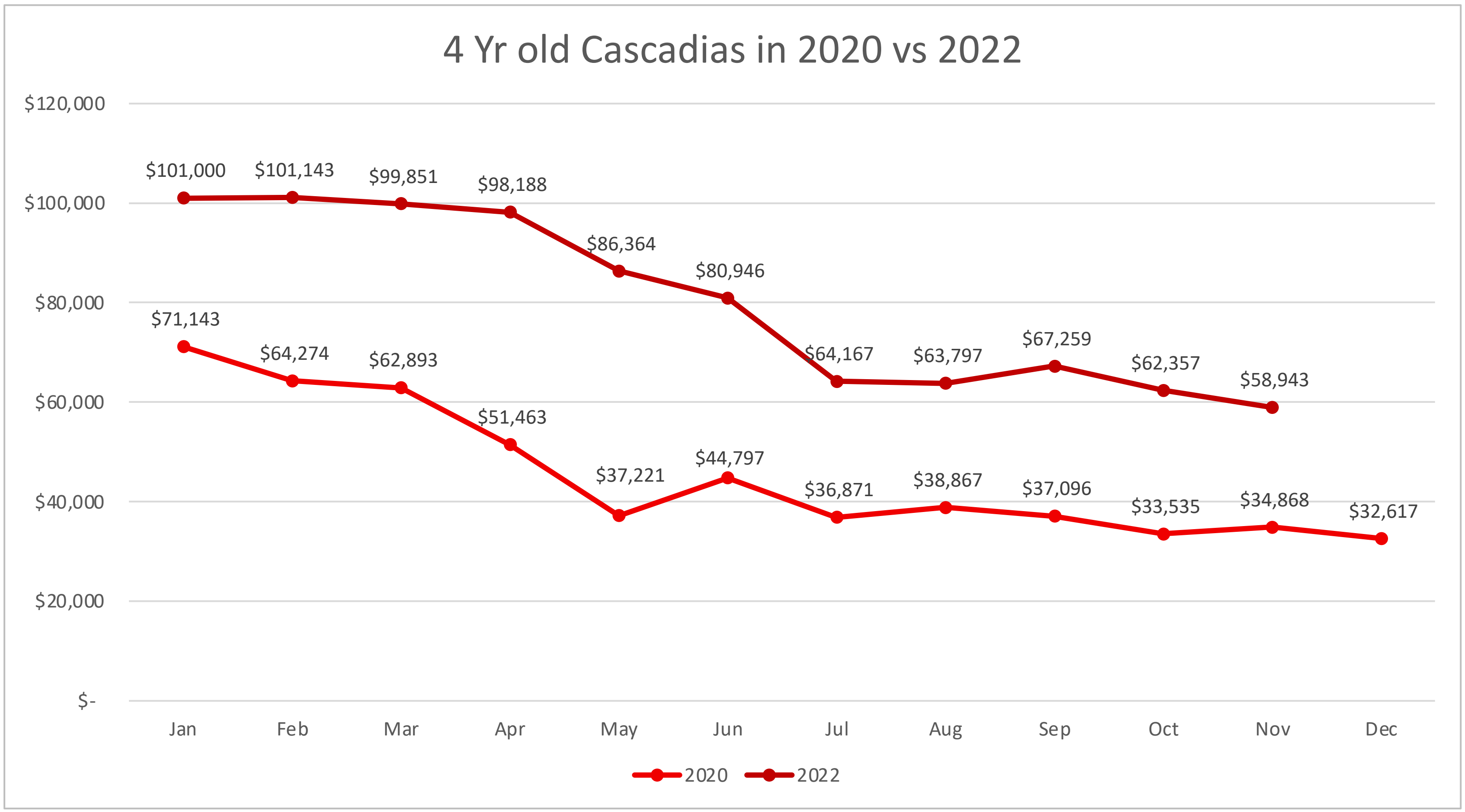
7: While markets have cooled the demand for new trucks has remained elevated with larger companies trying to reduce the age of their fleets. That demand should continue for most of next year. Even with rates dipping companies are still working on getting out of older equipment and replacing with new.

I have decided to keep this chart going. 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.

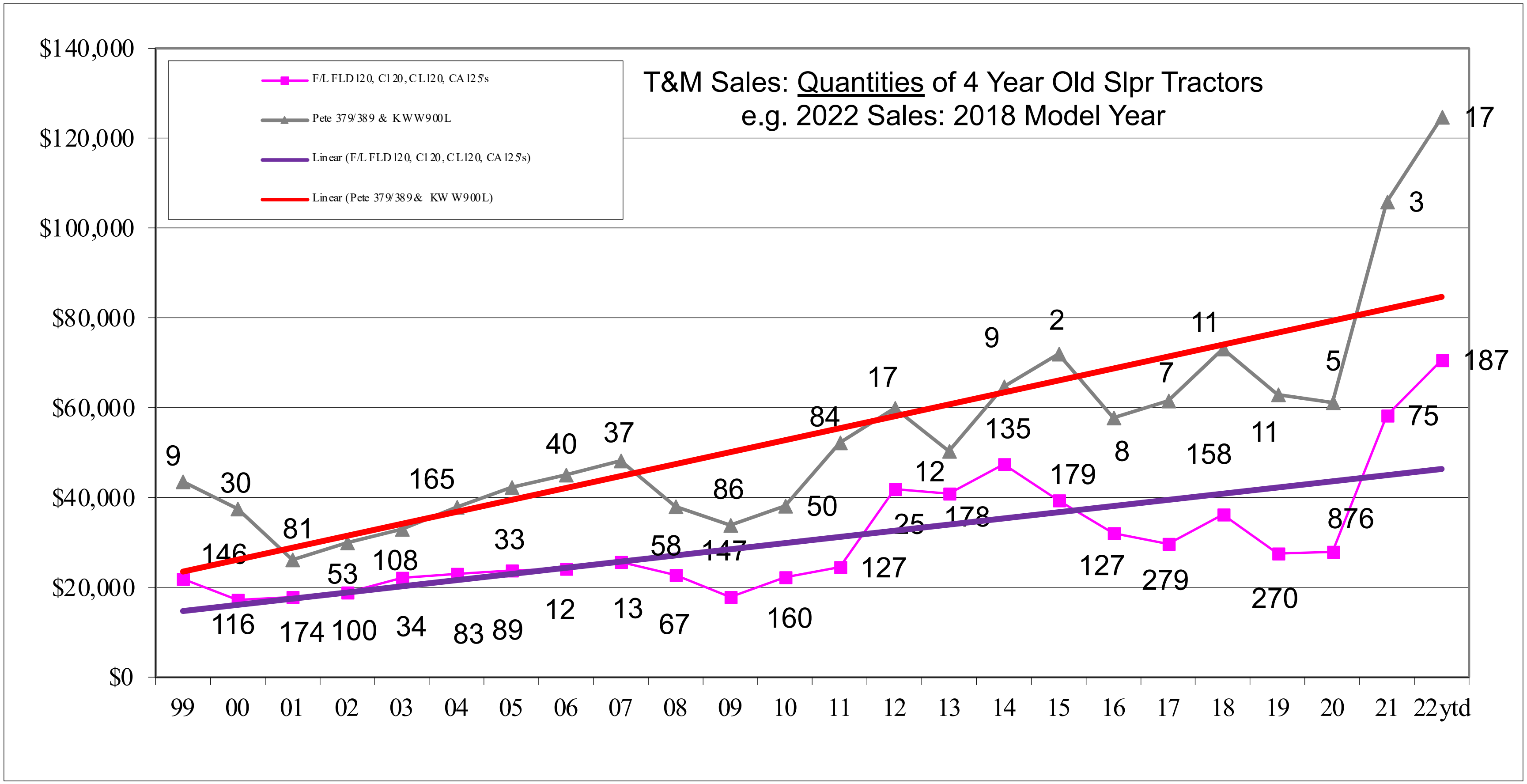


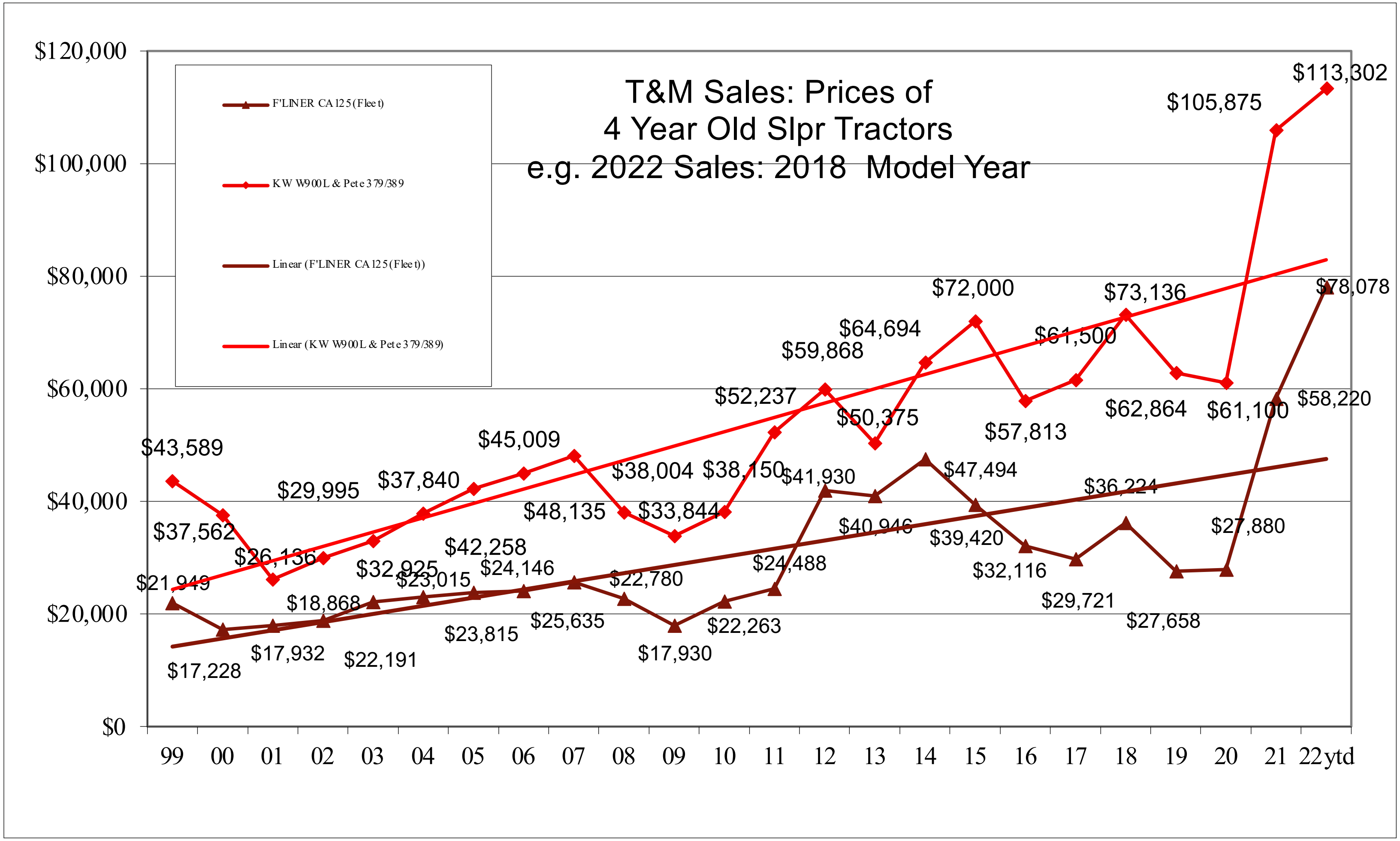
4 Yr Old Cascadia's 2020 vs 2022 (Auction Values)

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. We are still expecting these values to decline but in more of a typical depreciation rate due to age and mileage.



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.
Values have remained elevated with quantities being above 2021 levels.
With new production being held back since the pandemic began volumes have been relatively modest in comparison. We are anticipating on seeing more of the O/O Spec'd trucks in 2023 due to the spot rate decline.



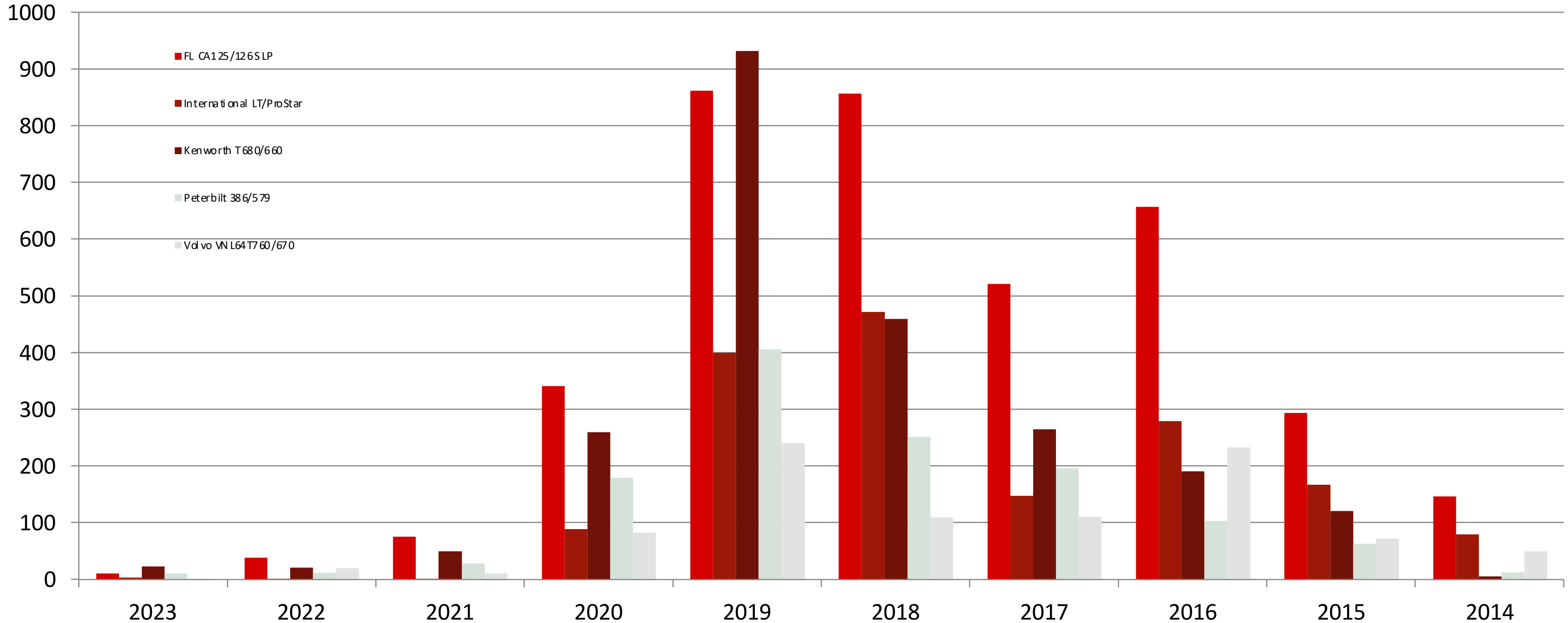


Above are T&M Sales by average annual prices. (As usual, I have combined the Peterbilt 379/389 and Kenworth W900L tractors since both are generally considered to be spec'd as Owner-Operator (O/O) tractors.) As seen in the previous slide overall sale values are well above the trendline.

As mentioned in the previous page with quantities, values are still well above trendlines. We should continue to work our way toward trend, but it will be some time before we get there. I will say the 2022ytd numbers have consistently been on the decline to steady in the second half of 2022.

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. Both averages are well above the trend line and should remain there for most of 2023.

What is available to the marketplace today? (Nov 21, 2022) We have not had a lot of growth in inventory on Truck Paper since Aug. I expected this overall number of 9,973 to have been higher. Inventory should grow with production continuing to increase. A lot of pent-up demand has limited the number of used trucks being listed for sale. The total number of trucks for sale should grow through most if not all of 2023. I don't expect to get to over supply numbers i.e. 25,000+ but do expect larger volumes in 2019 and older assets especially. New and late model trucks have not hit the open market, yet.



21-Nov-22	Sleeper Tractors For Sale On TruckPaper.com: November 21, 2022									Ave. Age	2016.87	
Make	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	Total	% of Total
FL CA125/126 SLP	11	39	76	341	862	857	521	657	294	147	3,805	38.153%
International LT/ProStar	4	2	2	89	400	472	148	279	167	80	1,643	16.474%
Kenworth T680/660	23	21	50	260	932	459	265	191	121	6	2,328	23.343%
Peterbilt 386/579	11	12	28	180	406	252	196	103	63	13	1,264	12.674%
Volvo VNL64T760/670	2	20	11	83	240	110	111	233	73	50	933	9.355%
Year	51	94	167	953	2,840	2,150	1,241	1,463	718	296	9,973	100.000%

Additional Factors…

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

- Crude Oil has been falling since June 8th but still above the normal levels from the past six years. Currently WTI has been consolidating between $75 to $90. Oil producers have warned of weaker than expected output, citing ageing wells, shortage of labor and materials, and rising cost. Some say the biggest factor behind the slowdown in growth is that company's commitment to profits over production, which is a major reversal from the preceding decade when they increased output at almost any cost. Russia's oil exports could drop by as much as 2 million barrels per day due to the EU's sanctions on Russian oil products, coupled with restrictions on insurance and shipping which is due to take effect on December 5th, 2022. Analysts forecast oil prices will begin to rise in the second half of 2023.

- Building Activity (Home, Office, etc.): Home building in the U.S. dropped 4.2% month over month in October, and comparing housing starts to October 2021 fell 8.8%. Analysts predict mortgage rates will peak around 8% next year then fall back down. Quantity of homes for sale project to fall between 7-15% in 2023, while home values are expecting to maintain flat with a possible 5 to 10% dip then retrace. Home prices have continued to grow despite higher mortgage rates, the national median listing price for a single-family home was up 8.4% and new homes are up 14% from the same time last year. The nations average rate for a 30-year mortgage loan is 6.6%.

- Divers: Shortage! Analysts estimate about 231,100 job openings for heavy and tractor-trailer drivers are projected each year, on average over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force. They added just over 32,000 new drivers this year so far. Since the spring of 2020 growth in the local haul driving jobs have outpaced long-haul trucking in the general freight trucking industry. Currently at least 3,000 truck drivers are unemployed due to companies closing their doors, one of the reasons is the shortage of movement of goods. This will be the number one question going into 2023, if there is a recession how bad it will be.

- Ports: Volumes of imported containers to the US fell by more than 8% in September compared to August. Rates to ship a 40-ft container from Asia to US West Cost have come down by more than 80% since the end of April. Assuming U.S. imports continue to fall month over month, ports should continue to bring down ship backlogs. 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. As of right now the discussion is stalled for about three months after dockworkers decline to discuss contract issues pending the dispute at Seattle. Officials say when bargaining resumes, it will take many more months to resolve the remaining issues such as wages and the use of automated machinery on the docks. Some ships are diverting to other ports based on uncertainties that could emerge.

- Construction: PPI (Producer Price Index) for construction materials have increased 14% on average for this year. Analysts are forecasting a 6.6% increase in total construction for 2023. With Residential being 2.9% and Nonresidential buildings 13.4%. From January to September of this year total construction has increased 11.4%. Supply chain disruptions and price volatility will continue to be a big factor going forward. Construction materials will be gravitating back to normal in prices and in supply chain issues. But for some it will take a lot longer which will get more challenging over the next year or two. Over the medium to long term, demand should be sustained by heightened infrastructure spending in the U.S due to bipartisan infrastructure law, the CHIPS Act, and the Inflation Reduction ACT.

- Politics: Railroads could possibly be on strike again based on sick leave. President Joe Biden wants Congress to intervene before December 9th to avoid any disruptions. Unions asked for 15 paid sick days and the railroads settled on one personal day in the prior negotiations. Some companies have begun rerouting cargo shipments from railroads to trucks in preparation for potential shutdown.

- Inflation: CPI was 7.7% in October and 8.2% in September. The lowest since January of this year which was 7.5%. Core CPI month over month in October was 0.3% and 0.6% in September. PPI (Producer Price Index) month over month in October was 0.2% and 0.4% in September. As of right now there is a 75% chance of 50-basis point hike in December verse only 25% chance of a 75-basis point hike, but it could easily change after the November CPI.

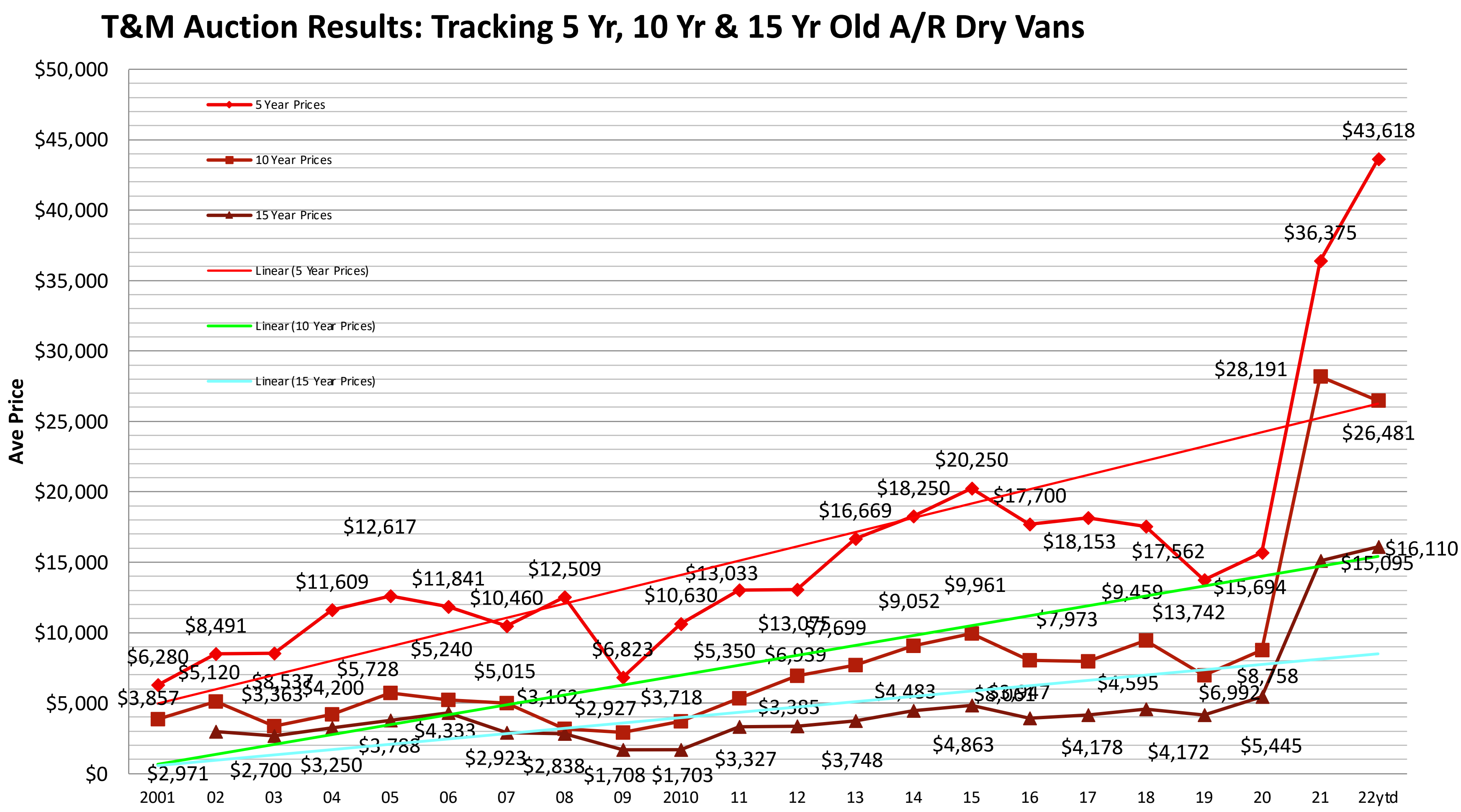
Trailers

- Production issues continue to hold up new and used equipment values. Vans and reefers are still bringing higher values prior to covid at auction. The first quarter of auctions were very strong, but from the end of April till now the values have continued to drop. The values should remain above pre pandemic levels throughout the rest of 2022 and into the first quarter of 2023.
- **Ag Trailers:** Demand is steady but starting to see a slowdown in quantity at auction, but prices are still strong. Fertilizer and Corn has come down from the end of April highs, fertilizer is back to where it was at the start of the year while corn is slightly above. Analysts are predicting farm income to decline in 2023 and 2024 as commodity prices recede more rapidly than input costs. Grain trailer backlogs and net orders are staying steady throughout 2022.
- **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. New costs are still rising with a 4-8 month wait. Bulk Tank back logs and net builds are slowly increasing.
- **Flatbeds and Drop Decks:** Overall market has been staying steady with continuing increasing new costs but at a slower rate. Should still expect to maintain normal to less than normal depreciation going forward. The national spot rate is currently around 2.83 which is below where it started at in 2022. Load-to-Truck Ratio has continued to fall but at a slower pace, which usually forecasts a continuing lower spot rate, and vice versa. Load-to-Truck Ratio is higher when there are more loads and less trucks to fill those loads and vice versa. Backlogs have been slowly decreasing while net builds have more than doubled in September and October compared to their normal net builds for 2022. Since the beginning of the year, quantity of units for sale on the public market has been roughly the same, besides in August were there was a 10-15% uptick in for sale units and has continued to grow.
- **Heavy Haul Trailers:** Demand is steady. Back logs are still increasing while net builds are staying steady. Backlogs are 35% higher than the two-year average, while net builds are slowly picking back up but still around their two-year average.
- **Chassis Trailers:** Some analysts believe that chassis needs will be fulfilled sometime in 2023. Based on the demand of imports continuing to fall at least through the first quarter of 2023. New competitors have started to manufacture chassis trailers just like they did in dry vans. Backlogs have finally started to trend down sine June but still about double what the five-year average is. Net builds have continued to stay above the five-year average with October doubling the past four months 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 June but since then the quantity has stayed relatively flat. Back logs on Reefers have been staying the same while Dry Vans have been slowly decreasing. Net builds for Reefers and Dry vans in the month of October doubled the average per month for 2022. Spot rates and Load-to-Truck Ratio has continued to slowly come down and still below where it started at the beginning of this year.
- 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 first quarters highs, they should stay relatively flat overall with possibilities of very small dips in values through end of the year and into first quarter of 2023.
- Overall, the trailer market is still steady compared to pre pandemic levels but could see a slight dip running into the end of the year and into quarter one of 2023. Supply issues will help maintain the higher-than-normal values, but the uncertainty of the overall economy could create a small pullback on prices going into the new year.

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

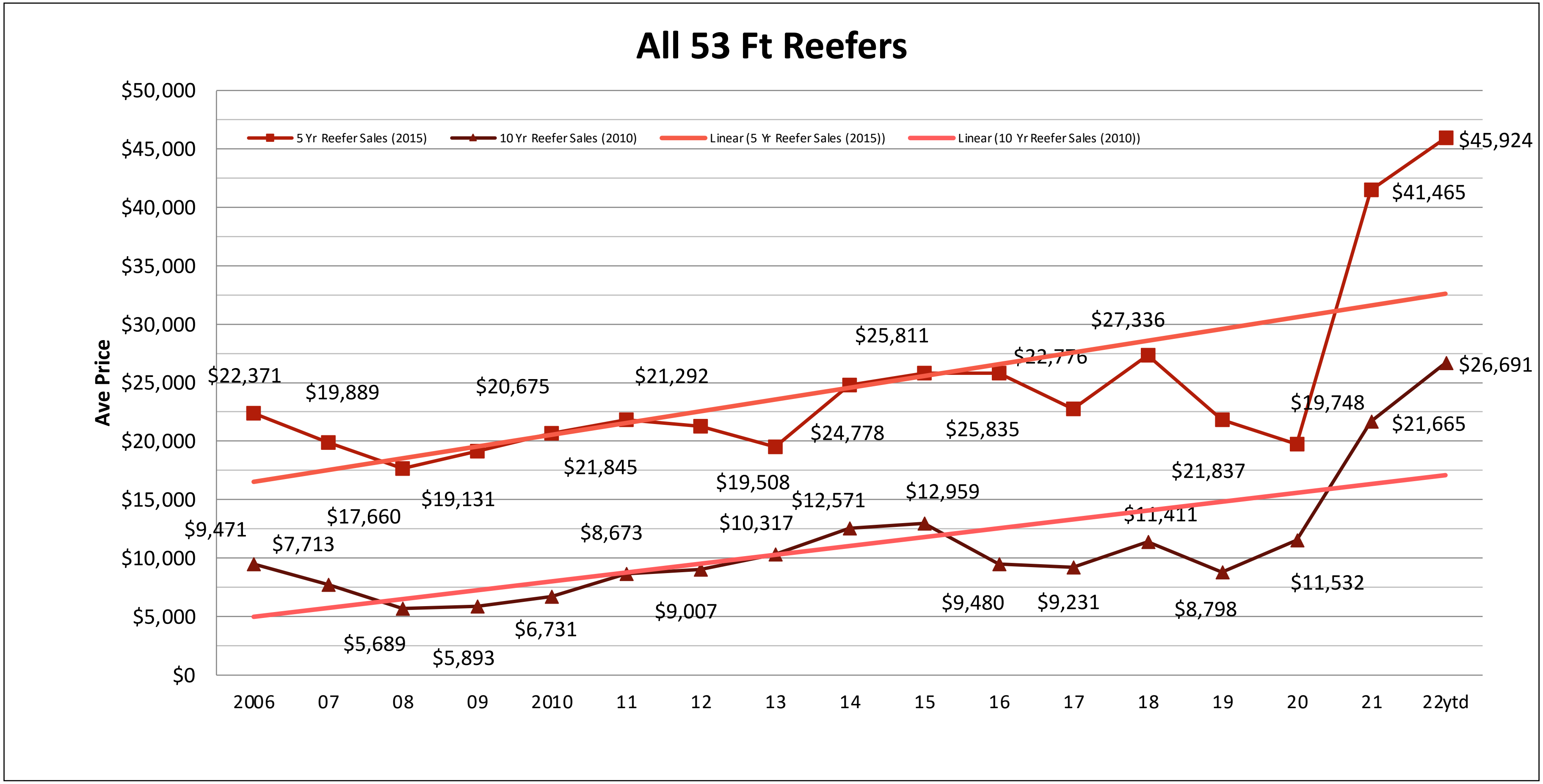
5, 10 & 15 Year old Dry Vans sales (Taylor & Martin Auctions) are charted below:

Vans have begun to descend slowly back closer to where we would expect. This chart still is eye catching but the 2022 values have been constantly dropping since June. Our quantities are up by more than 100% in the 10 and 15 model year trailers. Inventories are still relatively low, but demand has softened with spot and contract rates receding limiting profitability. New cost hikes and low inventories should keep used van values well above trendlines.



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

Reefers: Both 5 & 10 year old (2012). We have seen a slump in reefer late model reefer values at auction. We have not seen many nice or above average reefers as we saw in the first half of the year. We are expecting values to continue to soften through Q1 of 2023. Overall, another 10%-15% down.

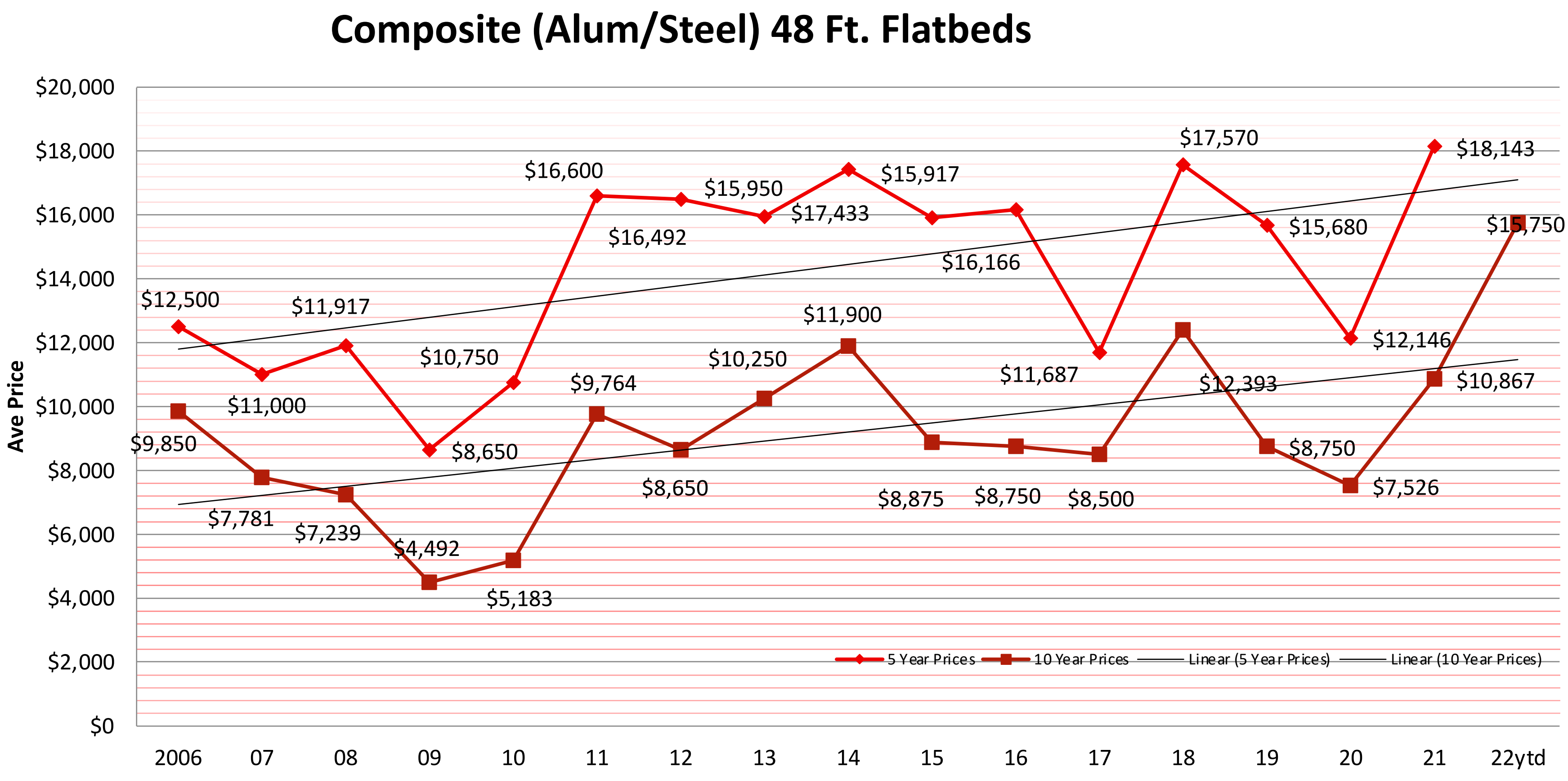


5 & 10 Year Old Composite Flatbed Sales (Taylor & Martin Auctions) are charted below:

Combo Flatbeds (Alum/Steel Composite) enjoyed a small rise in values and demand over the late spring but have begun to soften. Overall prices are up since 2020 but we have not had enough move through the auction to definitively say we have a strong used market at auction.

The flatbed market has recovered from the 2015-2017 pullback. Actual sales numbers (2019) were very low. Considering previously mentioned cautions, and the current number of flatbeds offered in the retail market, this segment is showing significant stress as well. Load rates have improved and started a small growth in the flatbed market, but it still has a long way to go.

Not a lot of activity in the flatbed world at auction. Values have been steady without the extremes of the van/reefer market. New costs have risen and late model trailers have been bringing increased values but have been steady in the older years.



Harvest is finished in the midlands. Shortages this season ranged from early concerns for heat units to inputs like fertilizer, water and of course always labor. Yet, agriculture was graced with a harvest diligently protected throughout the 2022 growing season. In a time when national security is heightened, crop and food security rising, availability of almost everything is slowed there are some new trends surfacing in agriculture.

The pandemic stifled production and increased input costs yet 2021 *global agricultural production acres increased* some 63 million acres since 2016. This expansion was not uniform over all crops as oilseed and soybeans dominated nearly 73% of this growth per a July article in Syngenta's Thrive, noting growth in countries like Brazil, India, South America, Russia, and the Ukraine. Despite unrecognized record USDA soybean yield expectations for 2022, Global expansion will slow at some point helping to ease the current global supply demands. Until then, the growth only helps new energy stocks and better meal pricing.

Sustainability in ag is stepping towards reality as six institutions are in *collaboration on a sustainable fertilizer*. Texas Tech, Georgia Institute of Technology, Florida Agricultural and Mechanical University, Case Western Reserve University, Massachusetts Institute of Technology and U.S. National Science Foundation are creating CASFER (NSF Engineering Research Center for Advancing Sustainable and Distributed Fertilizer Production). Their goal to transform the U.S. and the world from nitrogen pollution economies to a nitrogen circular economy that recycles nitrogen-based fertilizer (FBF) by decarbonized nitrogen-based fertilizers for food and crop uses. Currently only 20% of NBFs are used in food production while the rest is lost in the environment.

US food safety moves under a single agency, the Food Safety Administration, and away from the FDA which currently also regulates about 80% of the nation's food supply. Tasked by the Dept of Health and Human Services to ensure the safety of the nation's food supply, create food safety policy, reduce product contamination and food recalls while strengthening oversight under accountable unified leadership. Protecting our nation's food supply has progressively stepped to the forefront from second fiddle. Food security is the next global focus as Ukraine has placed this very issue in the spotlight. Much of the world is learning how real this issue of protecting our food sources has become.

Economics focus. As the latest segment of the recession plays out many banker's concerns turn to agricultural loan repayment while producers are fixated on the fall harvest. The July Rural Mainstreet Economic Index reflected recent growth below neutral once again. Growth constraints have growers feeling the effects of recently escalated interest rates, continued increasing inputs and volatile commodity prices after a nationwide drought going into winter. Commodities are generally better in 2022, but *future input cost increases threaten profitability before any crop concerns can even surface for the 2023 growing season.*

Recent post-pandemic studies in conjunction with public health officials show surveillance of outbreaks of *foodborne pathogens are being timely identified and removed from the marketplace.* The Economic Research Service and US Centers for Disease Control and Prevention with state public health officials ran test models as a replicated case study involving pre-packaged food from a midwestern grocery store chain that was identified and pulled in under 5 days across eight states. Enough information over the subsequent 4 days provided consumer warnings to avoid the product identified. A methodology with great future application.

USDA's Commodity Credit Corporation (CCC) will be funding two pools of expenditures to implement The Partnerships for Climate-Smart Commodities in Agriculture. Fiscal Year-end overages will not require any new Congressional action to replenish these CCC funds which will adequately fund the initiative tagged to "increase the competitive advantage of US agricultural both domestically and internationally" per USDA secretary of Agriculture, Tom Vilsack. *Expanding markets and revenue streams* ranging from traditional corn to specialty crops, engaging climate-smart production practices to 20-25 million additional acres, sequestering the equivalent of 10 million gasoline-powered vehicles from the road in a year and seeking 50 universities help to advance projects. Trends now in-place helping agriculture gain better position for 2023.

John L. Seymour, ASA Senior Appraiser

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