

2024 Equipment Market Analysis & 2025 Outlook

The ag equipment industry faced a multitude of challenges in 2024 shaped by declining equipment values driven by higher interest rates, surplus of supply and low farm profitability. We know there is continued uncertainty in the market and the result has increased pressure on equipment dealerships to manage excess inventory and increase aftermarket sales in order to maintain positive cash flow.

While the overall annual trend indicates a downward trajectory of equipment values, we've pulled the data by specific equipment category and some representative Makes/Models to provide a more in-depth analysis for you.

[Delivered in an exclusive industry briefing](#) by Tractor Zoom's Director of Insights, Andy Campbell, you can use these insights to inform your business decisions and position yourself to weather the volatility in the upcoming 2025 calendar year.

This report leverages data and insights from Tractor Zoom's database of over **\$59B** of equipment sales from over **65%** of used equipment suppliers in the U.S.

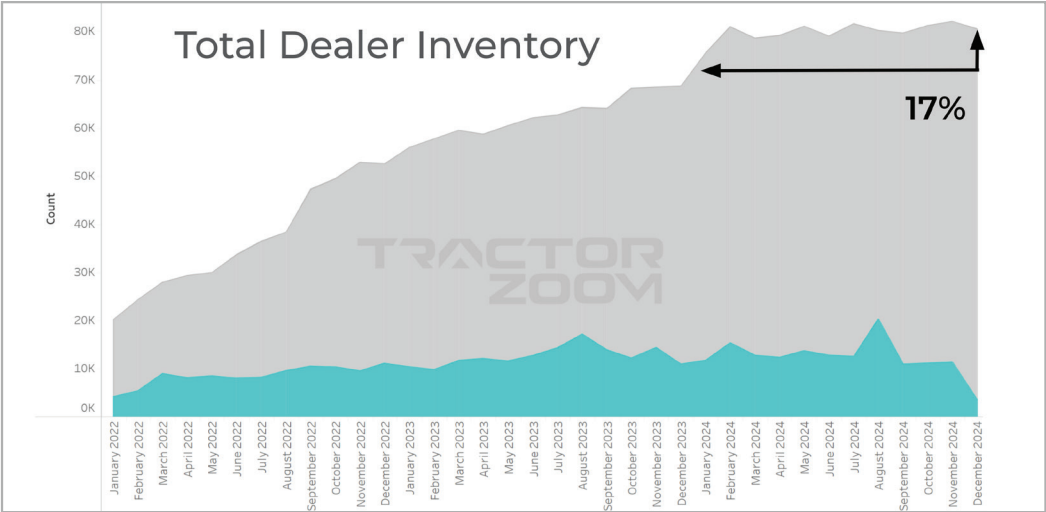
2024 trends that drove the equipment market

In order to project where the farm equipment market may be heading in 2025, it is necessary to understand where it has been, and what has influenced the market actions up to this point. Furthermore, real-time data helps gauge the current market so that fluctuations can be evaluated and acted upon. At Tractor Zoom we rely upon a vast amount of data, collected daily, to understand the current and historical direction of the farm equipment market.

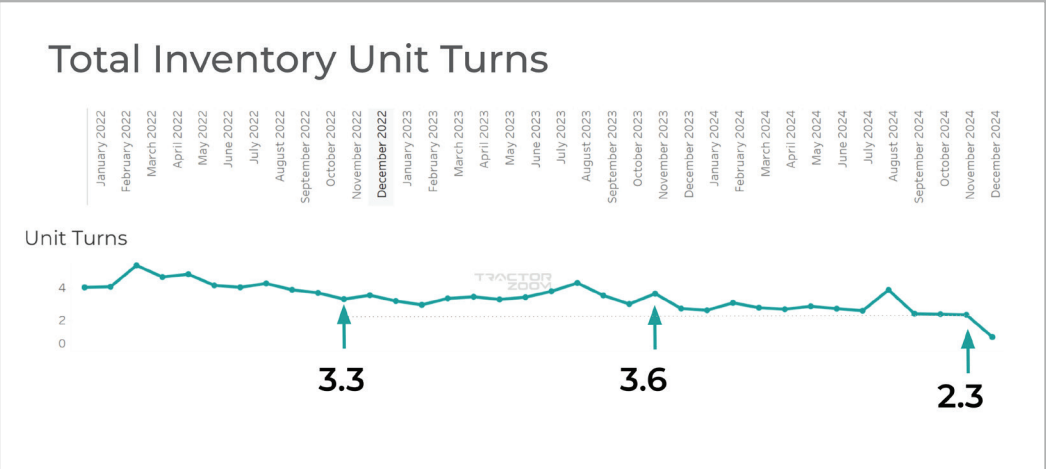
With such close ties to net farm profitability, it's no surprise to see a decline in values this past year. **What your dealership team can do today is pay close attention to your Area of Responsibility and monitor farm profitability** to draw connections between the ebb and flow of supply and demand.

1. Lower demand, high supply

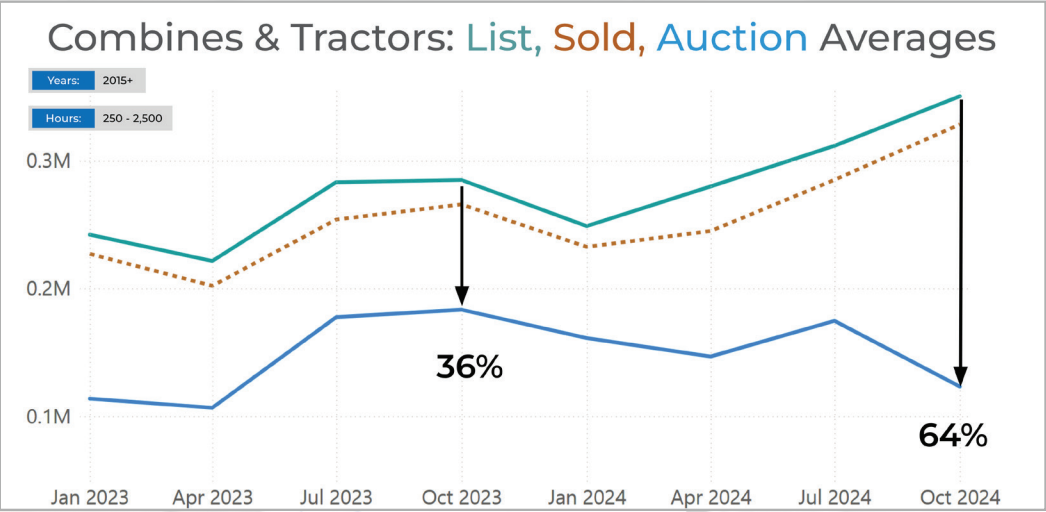
The industry continues to battle with higher supply levels, although not equally across all equipment categories. Over the past year, total dealer inventory rose by approximately 17%, with supplies of tractors and self-propelled sprayers increasing significantly. In contrast, the combine and planter market showed signs of correction, partially offsetting broader inventory pressures.



Despite the rise in inventory, the overall dollar amount has plateaued, suggesting a softening in demand. Slower sales activity has also contributed to a reduced annualized turn rate, now at just 2.3% across all equipment categories.



Some segments, such as tractors and combines, are experiencing more pronounced declines, with a widening gap between dealership listing prices and auction sale prices. We expect selling older used units on your lot is going to be more challenging. The disparity here indicates how important it will be to **closely monitor market conditions to set realistic pricing strategies.**



2. Changing expectations

In August, the USDA released a forecast showing an annual decrease of 9% of projected net farm cash income. A reduction of this magnitude fits with the significant annual price decreases we've seen across almost all equipment categories. Fast forward to early December when they revised their projections up to only a negative 3% annual change, a 6% improvement. This change correlates with a post-harvest uptick in the farm machinery market.

For dealerships, this environment underscores the **need to optimize marketing and sales processes while refining customer segmentation**. As the economic slowdown affects sales velocity, these measures will be critical to maintaining competitiveness and minimizing excess inventory.



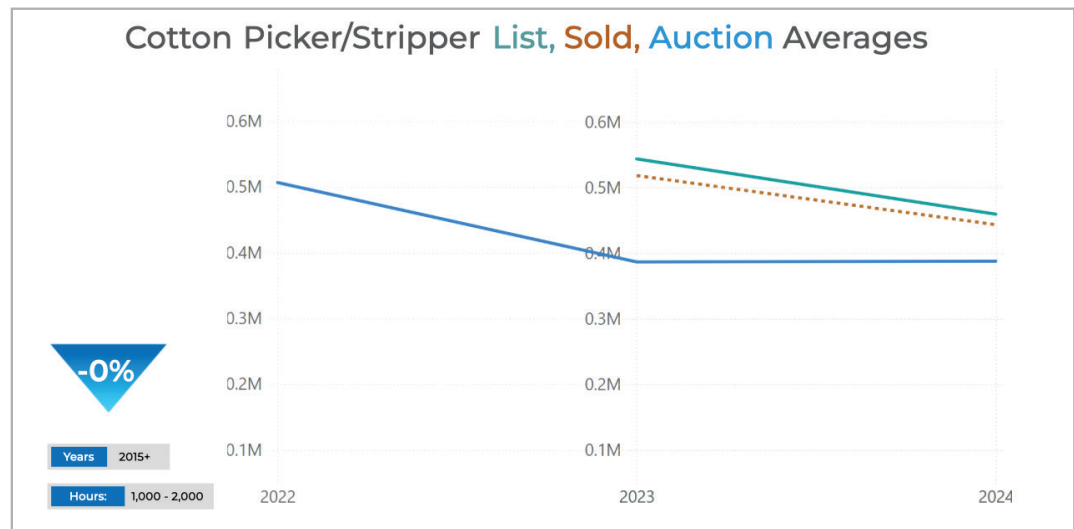
Data-driven insights by equipment category

Understanding the industry factors that affect equipment supply, demand, and values is key to accurately evaluate each equipment category's trends. Below, we've broken down the most influential insights, particularly year-over-year change from 2023 to 2024, relevant to inform strategic inventory decisions you might make in 2025.

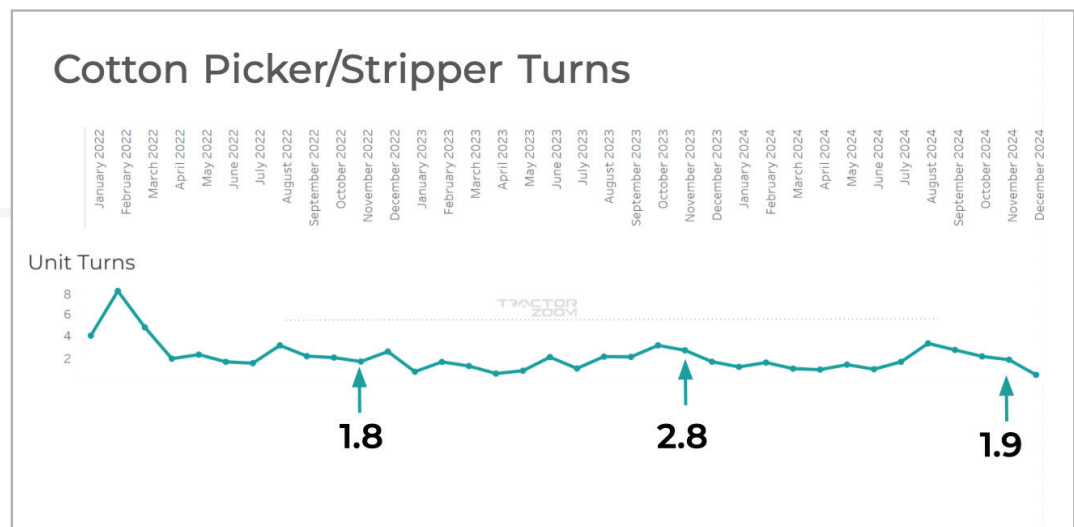
Cotton pickers & cotton strippers

In our analysis, the cotton pickers & cotton strippers market value is relatively stable despite a combined increase in annual supply of about 43% over this time last year. The graph below shows the annual average dealer list value in teal green, the orange dotted line represents the actual sold average value, and the lower blue line represents the average auction value. Filters for this set of data are indicated in the filter buttons in the lower left. The cotton machines represented in this graph are all less than 10 years old and have between 1,000 and 2,000 machine hours on them. Finally, the arrow to the right represents the annual auction value change from 2023 to 2024. It is essentially flat for this subset of cotton picking data.

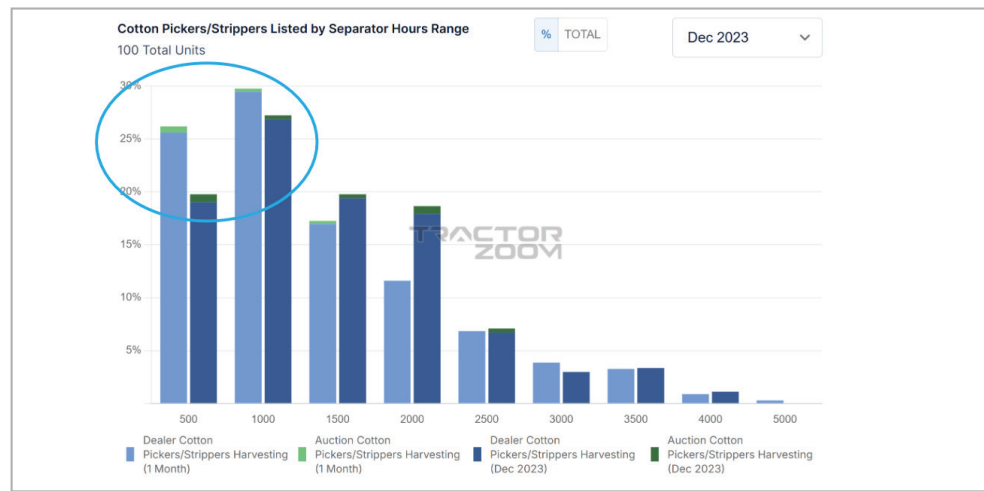
**Stable
values, yet
low-houred
inventory is
stacking up.**



An increase in inventory has largely led to the 30% decline in the unit turn rate, a metric calculated by sales divided by inventory.



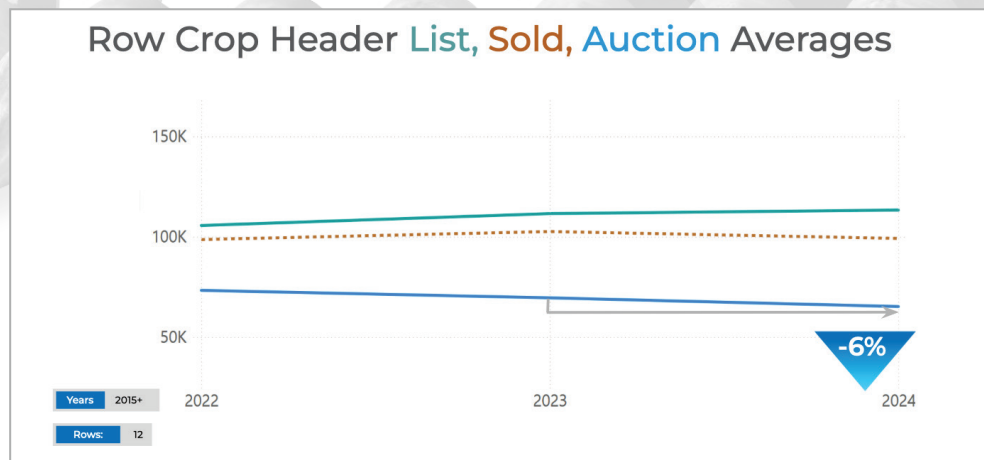
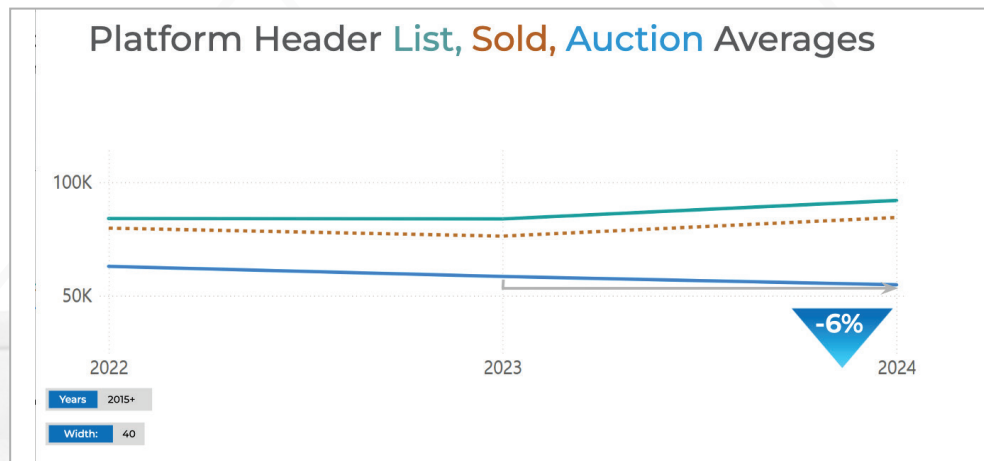
One major concern to look out for: According to Tractor Zoom data, the average length of days these units sit on dealer lots unsold has increased by about 70 days. This increase in average aging is largely due to lots that have already been sitting at the dealership for more than 90 days, and the fastest growing segment is those with less than 1,000 separator hours. Refer to the graph on the following page.



Platform & row crop headers

Dealer turn rate has dropped by 50-60% for platform and row crop headers, widening out the difference of units listed vs. units sold on dealerships' lots. An annual supply increase of 33% for platform and 29% for row crop headers is driving down both true sold and auction values, with the latter dropping 6% annually. You can see the annual value changes for the two categories of headers below.

Values continue to drop into the end of the year.



When analyzing the recent post-harvest auction sales, Tractor Zoom results indicate that both the row crop and platform header values continue to wear down, falling another 5-6% in just the last 60 days.

Combines

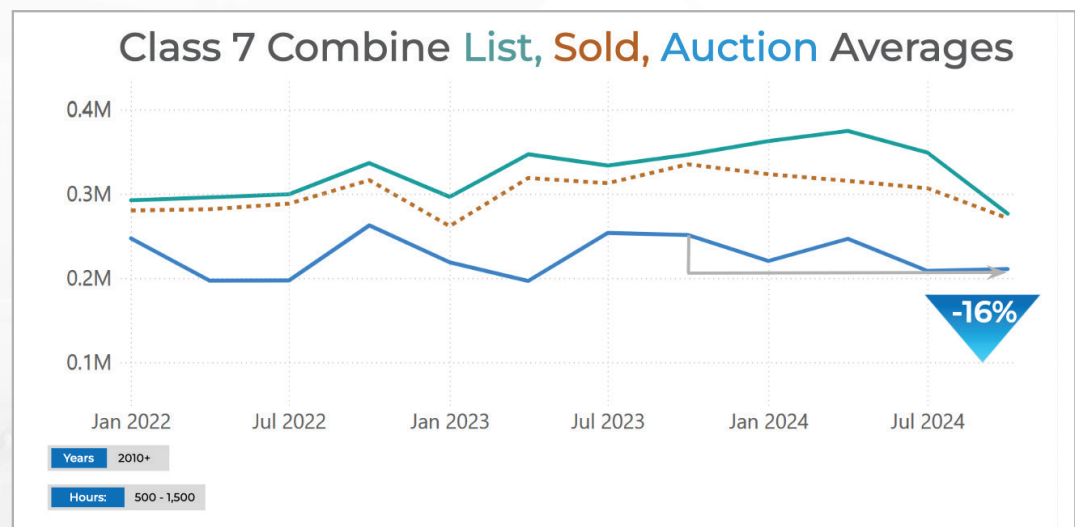
One positive in the market over the past 60 days has been a slight rebound in auction values for Class 7 and 8 combines. This appears to be driven, in part, by tempered growth in dealership supply and a better than expected harvest in many parts of the country.

Class 7 & 8 combines have had a soft post-harvest rebound.

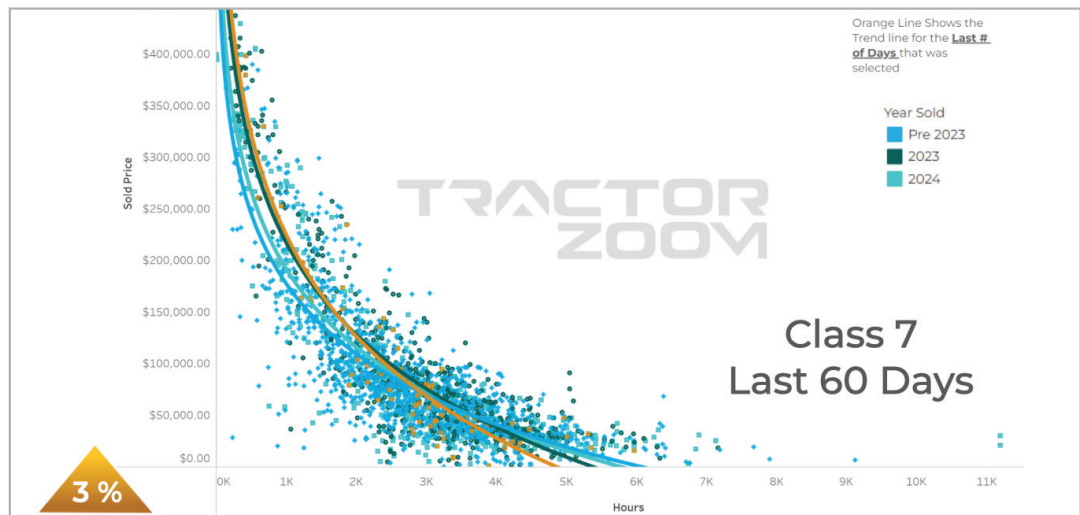
Class 7 combines

Class 7 combines have experienced an overall annual change in auction values by -16%. This decline has been steady for almost a year, whereas the downturn in average dealer list values has occurred just in the last two quarters.

Growth in supply is slowing.



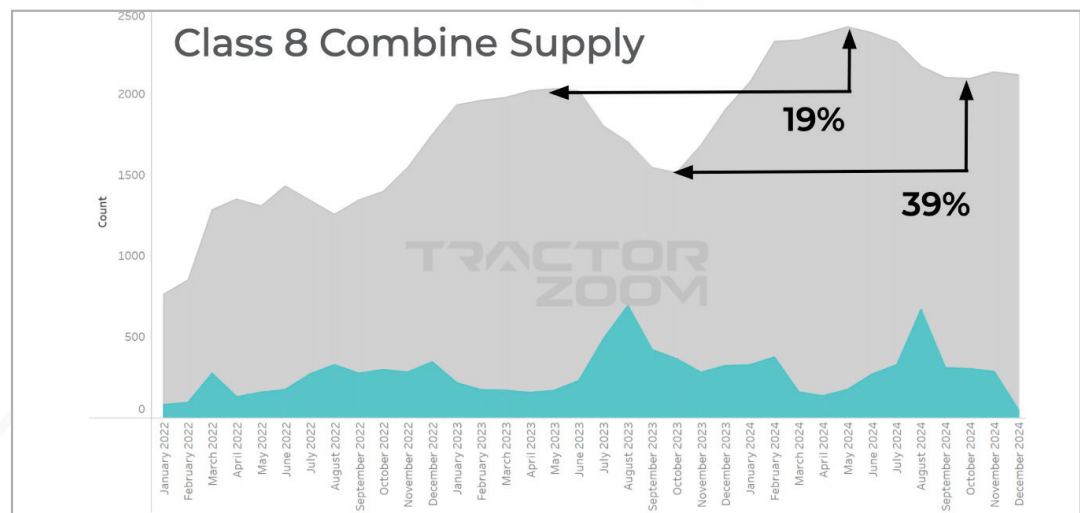
Unit turns have dropped from 3.1 annualized turns in November of 2023 to 2.1 in November of 2024. Because the industry is not seeing a rampant supply increase like we did last year, there hasn't been as big of a push to move combines off the lot and onto the auction block. This relative reduction in auction supply, coupled with higher yields may have contributed to the slight increase in auction values witnessed in just the last 60 days.



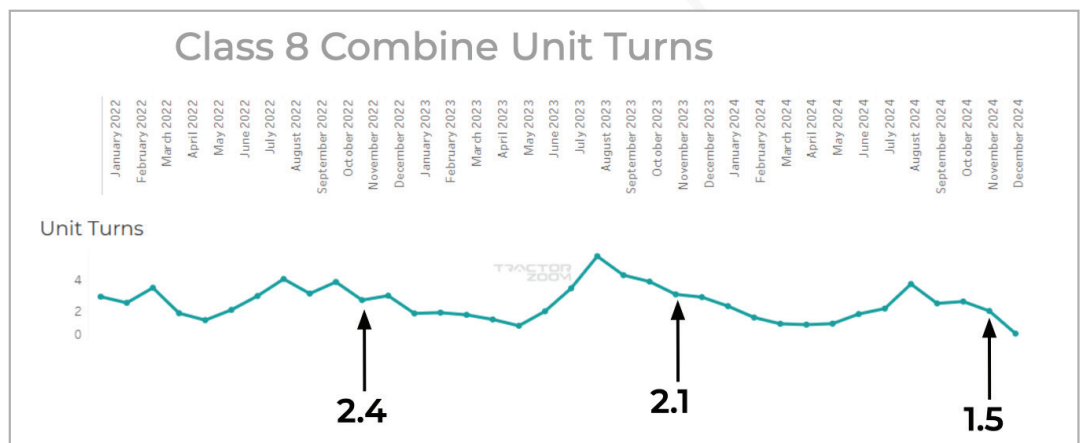
Class 8 combines

Class 8 combines have behaved similarly to Class 7s, just a little more extreme. Their supply issues, while not increasing as fast as they did last year, have still increased almost 40% since last fall.

**Like Class 7s.
Just bigger.**



From a unit turn standpoint, similar to Class 7s, these machines have reduced their turn rate by about a third.



The similarities don't stop there either. The same factors have been at play with Class 8 combines and their recent auction values have reversed course to the upside by 4% in the last two months.

Class 9+ combines

According to Tractor Zoom data, we're seeing supply continually increase, last year by 40%. For these newer classes of high horsepower combines, a market expansion like this is to be expected. Take John Deere's X9 1100 for instance. Our data has shown a 300% annual increase in current used supply, yet that percent increase is not necessarily concerning when we know there were hardly any used X9 1100s just a few years ago.

New models continue to expand market and has yet to waver.

The unit turn rate has slowed from 1.6 last November to 1.1 last month. This roughly 30% reduction is right in line with the Class 8's we analyzed above.

An important statistics note when analyzing a dynamic category of machines like these newer combines, average values can be very misleading unless you control for all the variables. In these cases, comparing individual transparent sales is likely the best method of trending this category's market. When using Tractor Zoom Pro's search capabilities for auction comparables, there was a significant difference in one-year-old units from mid-2023 to early 2024, but that descent has leveled off since this past summer.

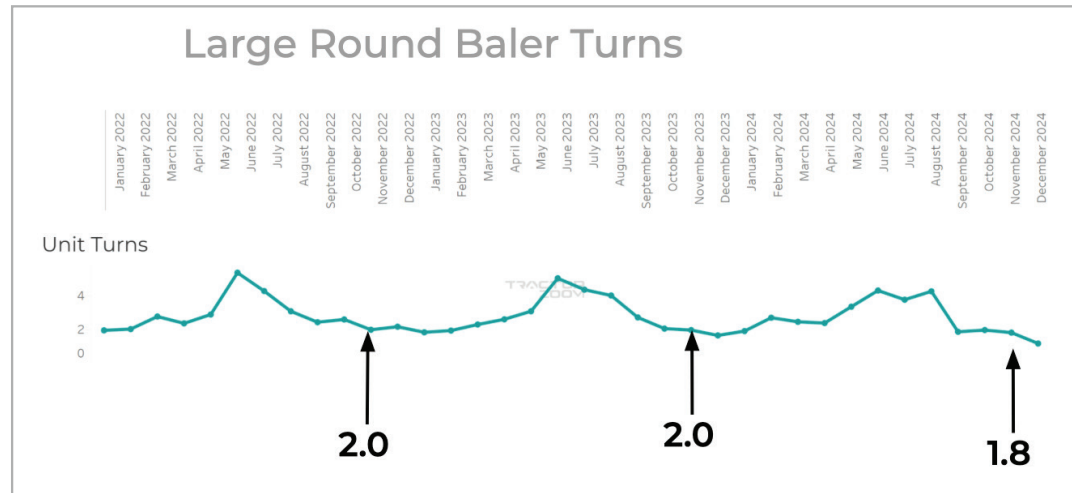
OR....

 X9 1000 AUCTION \$505,750 Sold 12/5/2023	 2023 John Deere X9 1000 AUCTION 395 Hrs 263 Sep Hrs \$450,000 Sold 6/20/2024	 2022 John Deere X9 1000 AUCTION 585 Hrs 403 Sep Hrs \$440,000 Sold 10/22/2024	 2024 John Deere X9 1000 AUCTION 287 Hrs 206 Sep Hrs \$585,000 Sold 12/11/2024
 2021 John Deere X9 1000 AUCTION 768 Hrs 624 Sep Hrs \$535,000 Sold 3/20/2023	 2022 John Deere X9 1000 AUCTION 651 Hrs 495 Sep Hrs \$576,000 Sold 12/8/2023	 2022 John Deere X9 1000 AUCTION 708 Hrs 441 Sep Hrs \$449,000 Sold 12/3/2024	

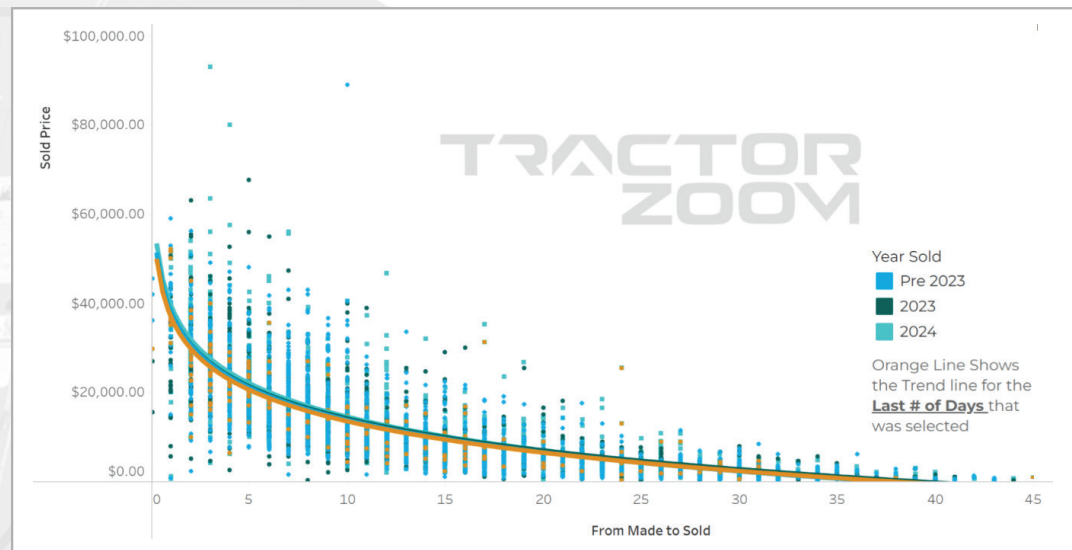
Balers

Balers tend not to be too volatile and this year is not an exception. A steady supply in the market, plus a strong dairy and cattle market, are holding the turns at relatively stable rates.

Steady.



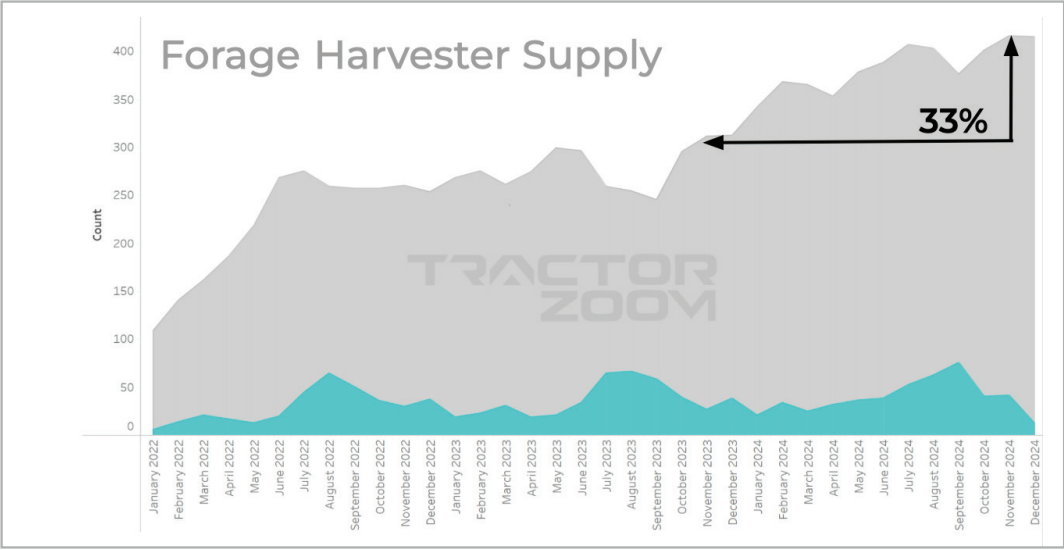
This, in turn, keeps the large round baler average auction price in line with previous years.



Forage harvesters

Similarly to large round balers, the forage harvester market appears to be supported somewhat by the stronger cattle and dairy industries. Supply is up by about 33% year over year and auction prices have remained stable over the past year.

Bovine buoyancy.



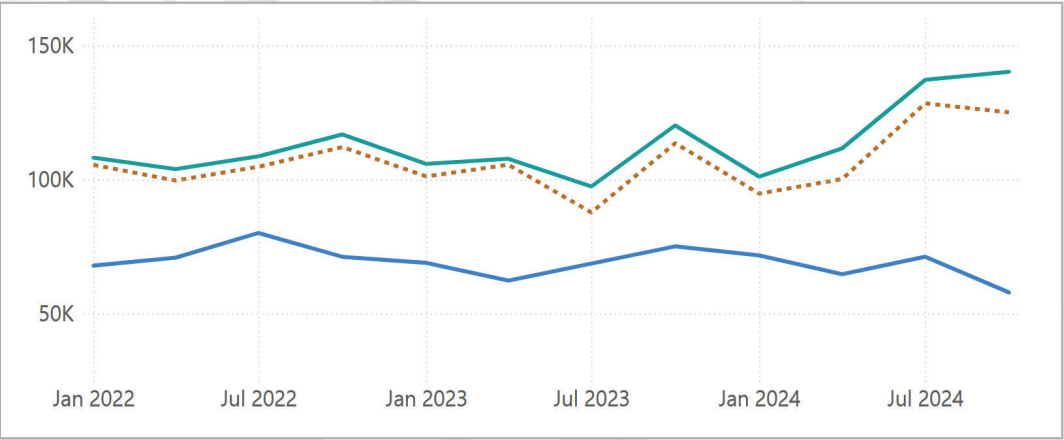
One area of concern with forage harvesters is the growing separation between retail and auction values. We saw those two data points continue their divergence this year, potentially exacerbating the already challenging resale market.

Tractors

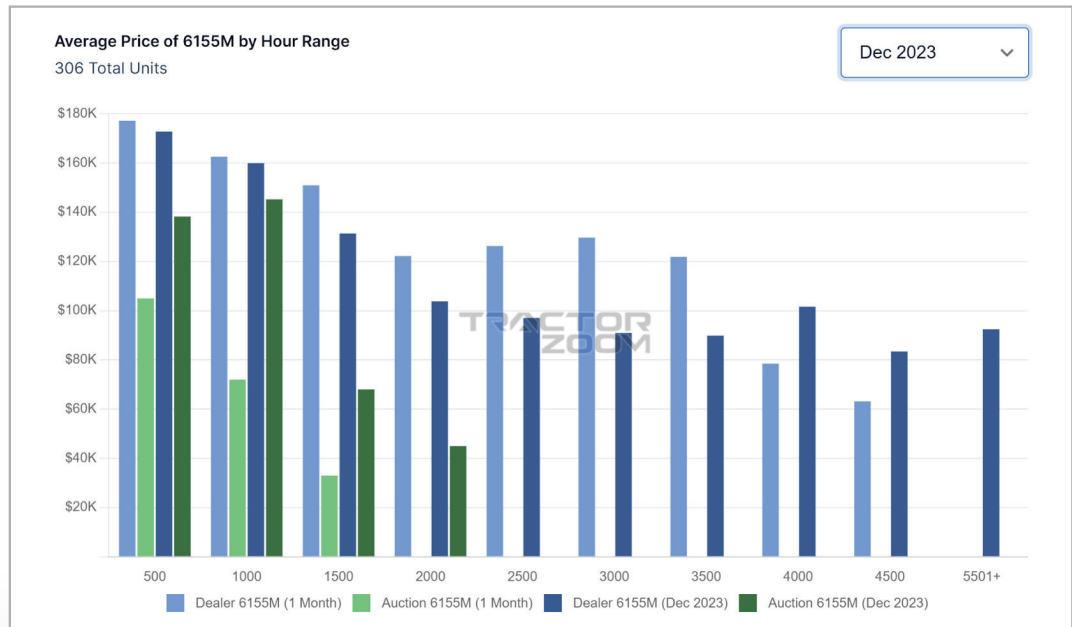
Utility tractors

Turn rate on utility tractors is dropping steadily as the average retail list price continues to climb.

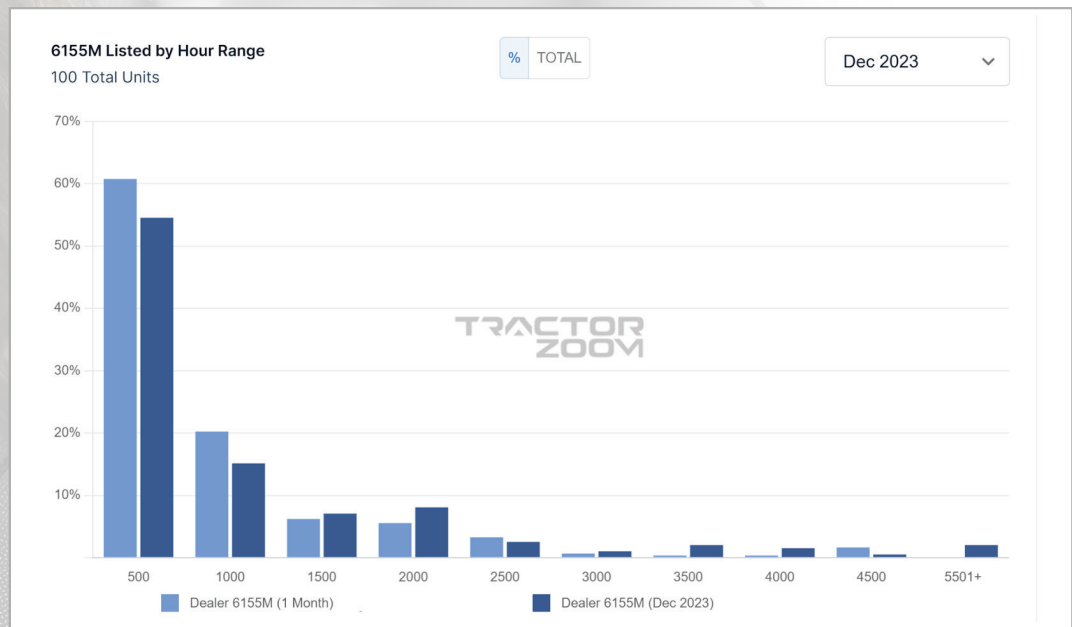
Rising retail values.



To better illustrate the issue here, we highlight a screenshot below from Tractor Zoom Pro's Market Trends solution isolating John Deere's 6155M utility tractor. If you are not familiar with the layout of Market Trends, the light blue represents the current average dealer retail listing price at the hour range. The next light green bar is the average auction price for that hour category (0-500, 501-1000...) The dark blue and green represent those respective values from December of last year.



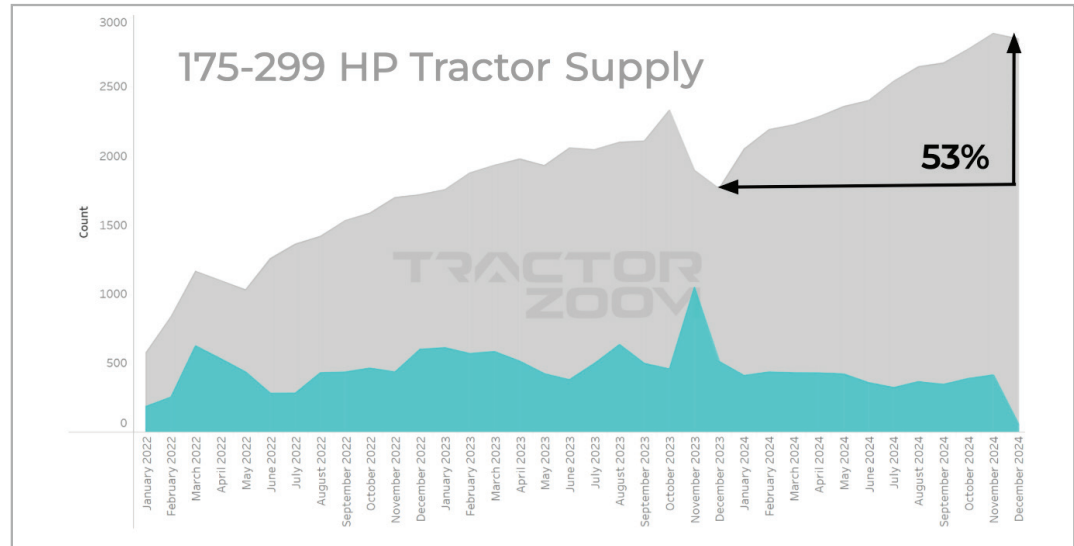
At a quick glance you can see the growing spread between auction and retail prices. This price disparity makes the sale of low-hour equipment challenging enough. Include competition from low-interest financing on new units from the manufacturer, and it becomes apparent why these units are piling up. The bar graph below shows the growing proportion of those low hour tractors with less than 1,000 hours on dealer lots from a collective 70% this time last year to over 80% this year.



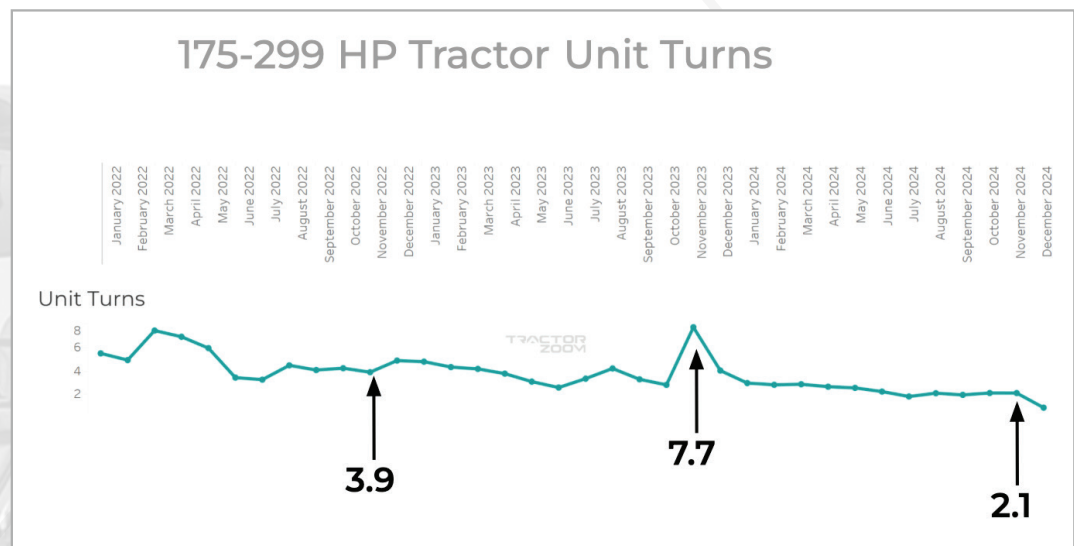
Row Crop Tractors

175-299HP tractors

Growing concern.

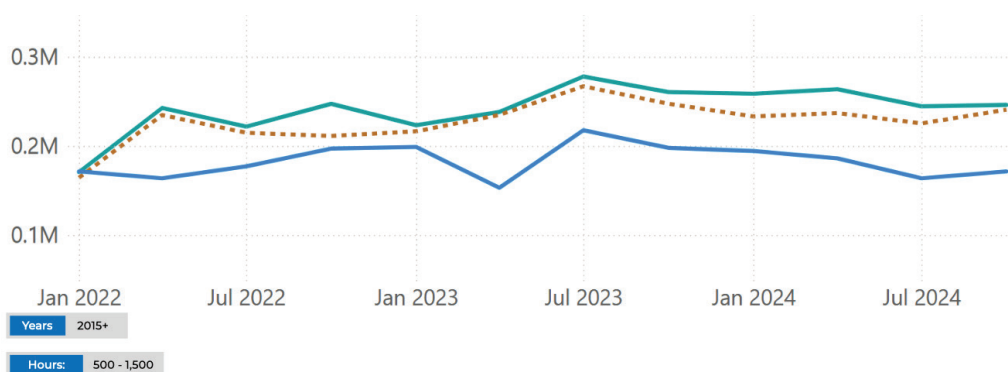


This category of row crop tractors has had a 53% increase in overall supply year over year after a big sell-off last fall. Sales have been steady to softer, resulting in a slow, but steady decline in turn rates.



While it is no surprise across the industry that values have declined as a result this past year, a bright spot appeared in Q4 for auction and actual sold values. Demand picked up for low-hour, late model tractors, reversing a half-year downward trend.

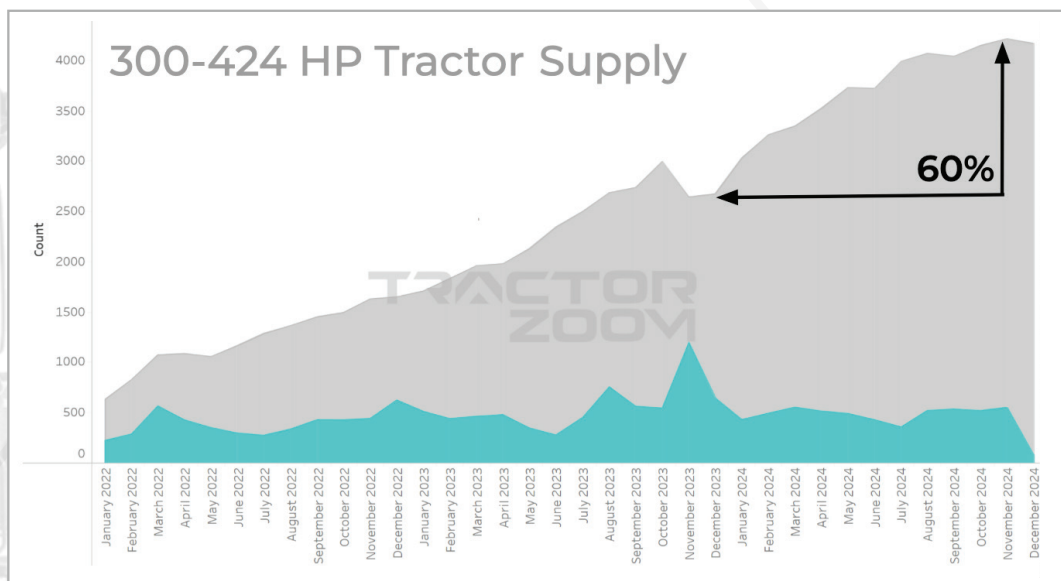
175 - 299 HP Tractor List, Sold, Auction Averages



It is important to note that this valuation reversal is not universally equal for all row crop tractor hour categories. This recent upward trend is more pronounced in low hour tractors, but not so for those over 5,000 hours.

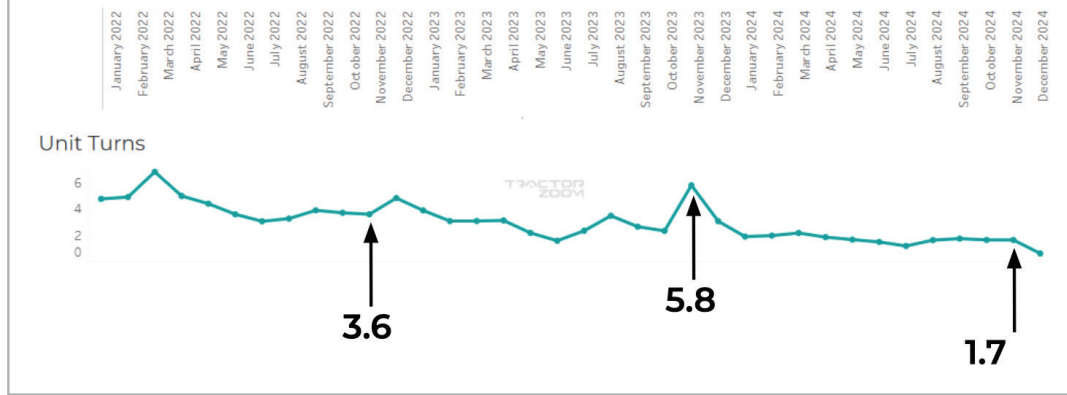
300-424HP tractors

Tractor Zoom has recorded a 60% increase in supply in the past year of large row crop tractors. This market is obviously tracking the smaller row crop tractor market closely, just with a slightly larger growth in supply and faster drop in turns.



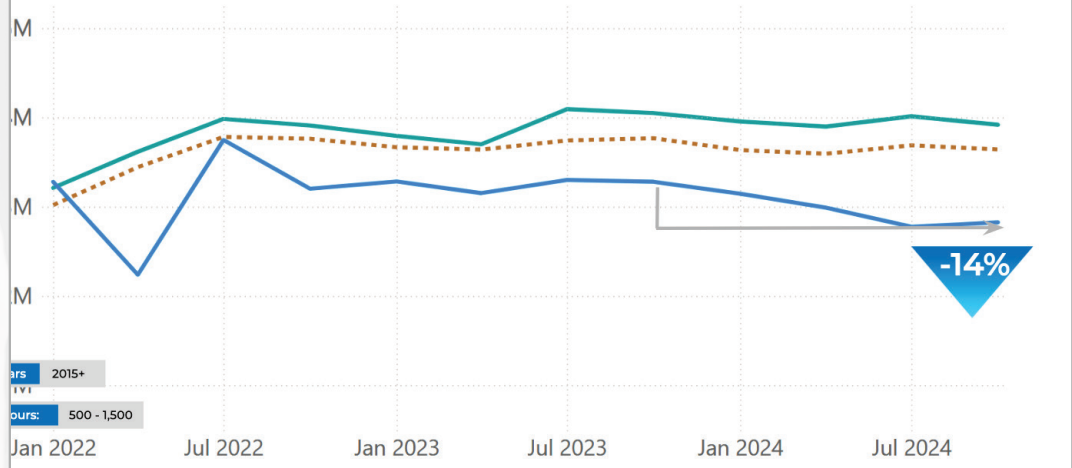
We are recording about half the turn rate we saw from dealerships in December 2022.

300-424 HP Tractor Unit Turns



Tracking the quarter average values reveals a 14% drop in auction values since this time last year. A similar, but more muted 4th quarter bump has hit these auction values like they did for smaller row crop tractors. One important difference between the two size categories of these tractors is the growing difference between retail and auction values for the higher horsepower group, where the smaller row crop differential has been fairly consistent for this low hour segment of data.

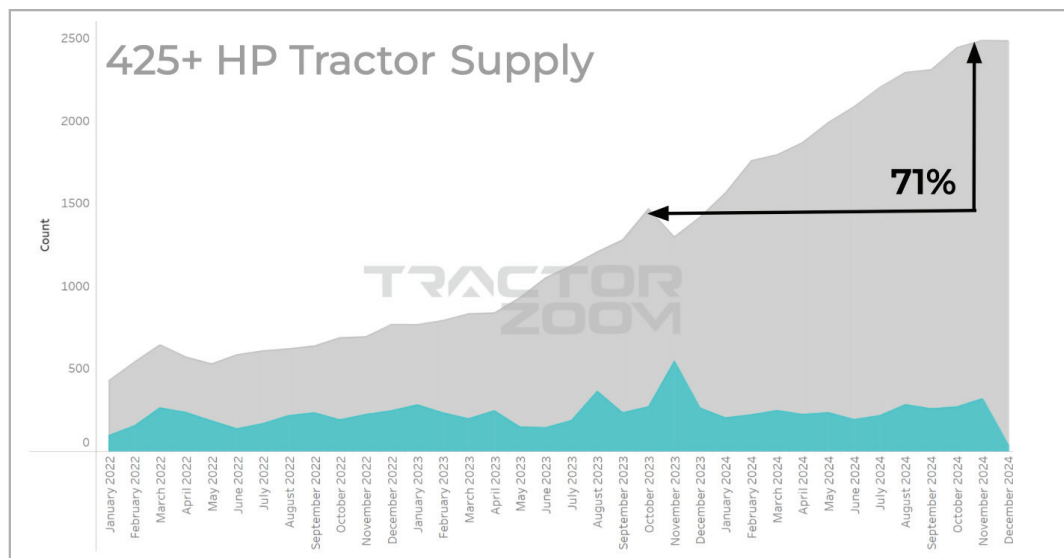
300 - 424 HP Tractor List, Sold, Auction Averages



Since the second half of 2023, margins have been continually squeezed from the top down by an average lowering of actual sold values.

4WD and high horsepower tractors

The most striking and concerning trend in the 425+ horsepower category is the 70% increase in supply. Along with this sharp increase in supply, we've seen the average auction value decrease by 15% over the last year.



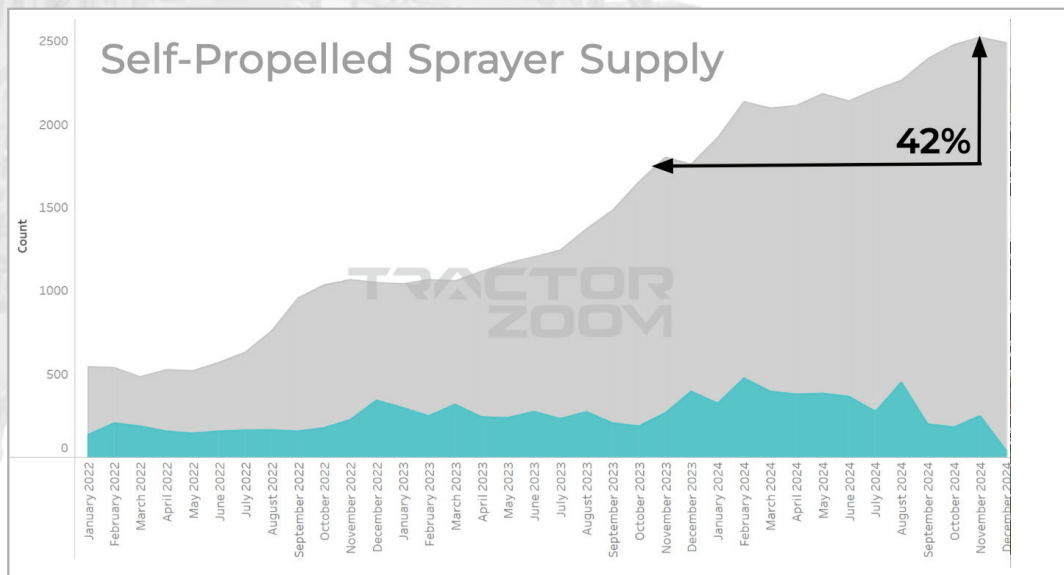
Sales rates have not kept pace with the burgeoning supply. This has kept unit turns off dealer lots down since the spring of 2024. The positive side of this is that they have not appeared to fall significantly since then. This may be one of the reasons that 4WD tractors were not one of the top four concerning categories when surveying our used equipment manager audience during our recent Tractor Zoom Analysis Briefing.

Note that by breaking down the category to the model level, we can see individualized trends within the Tractor Zoom data. Because not all models are equal, and many buyers have particular preferences and needs, a specific model may behave slightly differently than the parent category. For instance if a model doesn't have oversupply, the prices tend to be more stable.

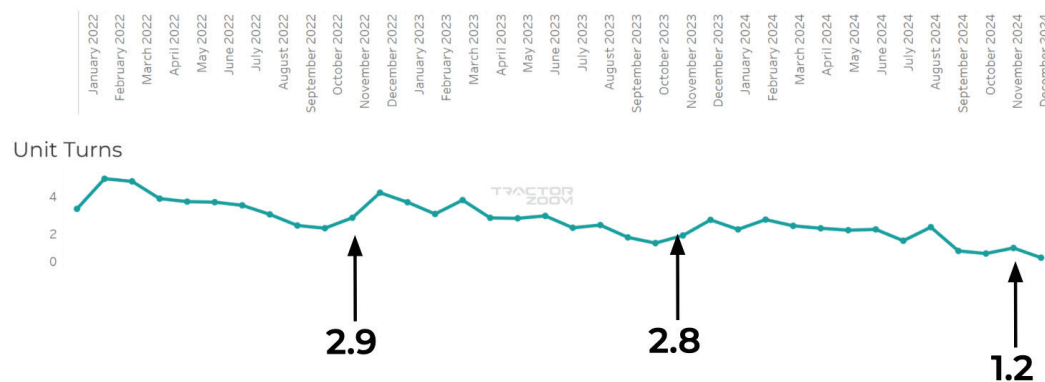
Self-propelled sprayers

There are a number of red flags in the self-propelled sprayer market worth watching. A 42% year-over-year supply increase may not be as significant as the tractor market, but sprayers don't have the elastic demand that tractors do either.

This is a heartburn-inducing category.

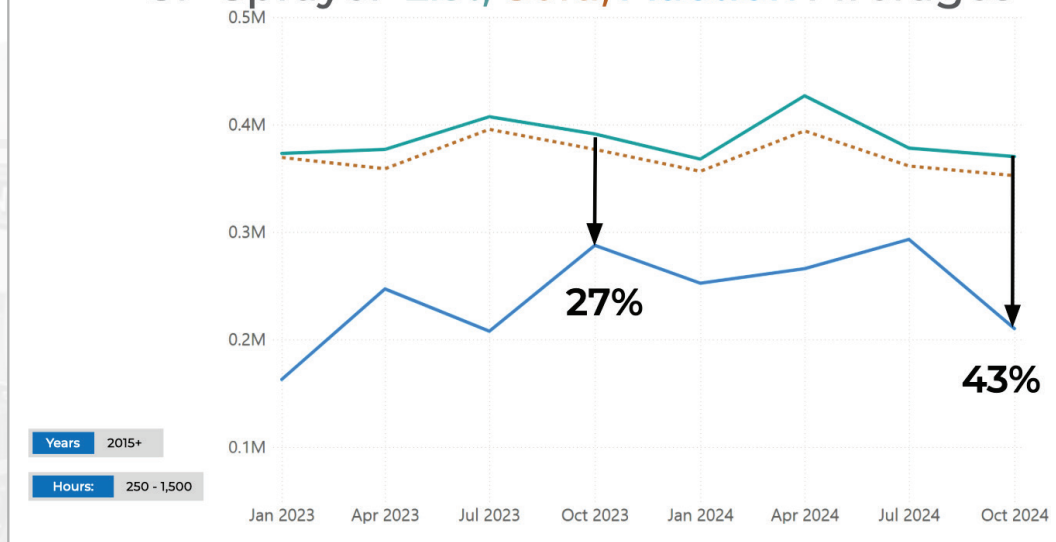


Self-Propelled Sprayer Unit Turns



The next flag is a notable one. The change in the auction value over the past year has dropped 22%. This is a further separation of the distance between list and current auction prices, a 43% difference in the most recent quarter.

SP Sprayer List, Sold, Auction Averages

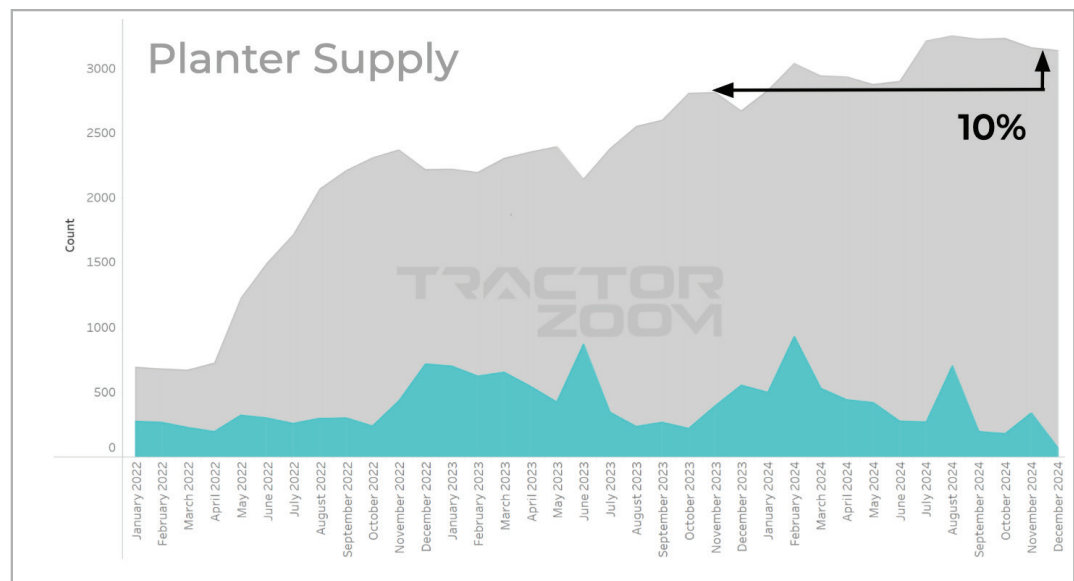


When we look most recently in the last 60 days, the actual sold averages are down 10% from the earlier 2024 baseline. Individual analysis of popular models, like Case IH's Patriot 4440, confirm this movement with similar drops in auction value.

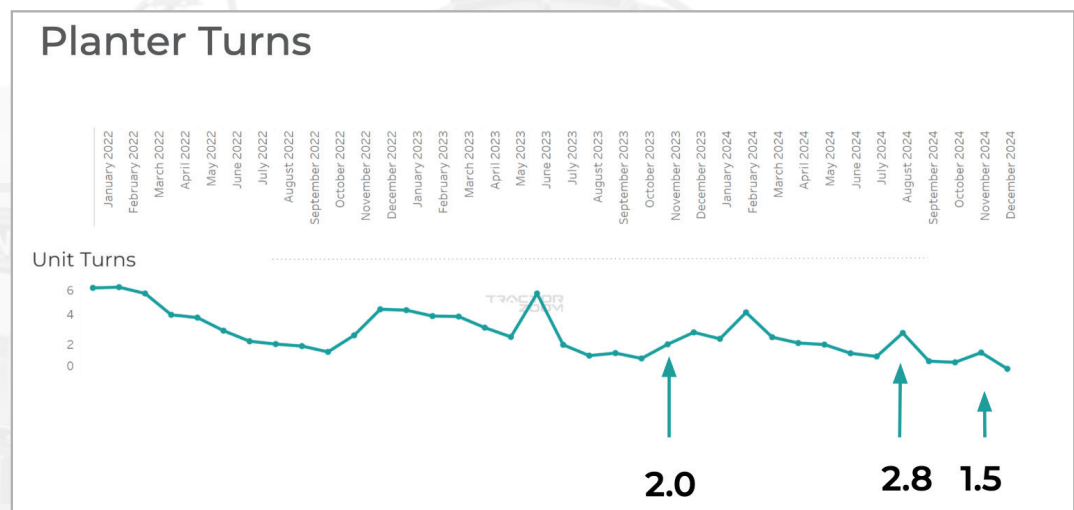
Planters

Aggregate planter supply is stabilizing on dealer lots with only a 10% increase in inventory over last year.

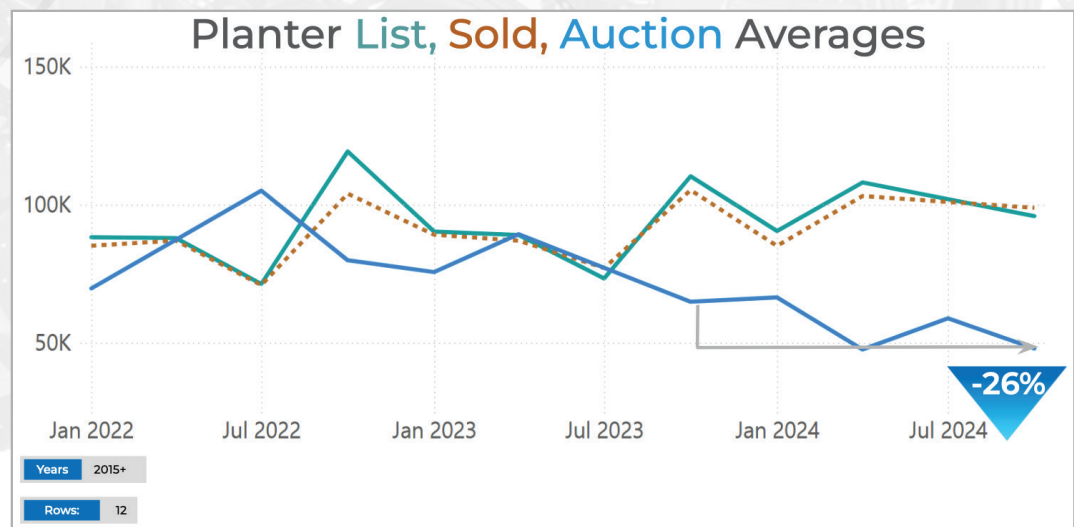
Auction values falling, but less risk resides on dealer lots.



It is beneficial that supply is in check because sales rates are considerably lower than the last couple of years, contributing to a falling unit turn rate.



According to Tractor Zoom data, the average list values are flat year over year, with actual sold values closely following the top line price. Average auction values are dropping about 26% year over year for 12-row planters.





2025 Equipment Outlook & Action

The 2025 equipment market faces notable challenges. The issues that have plagued the industry in 2023 and 2024 will remain, just with varying degrees of influence. Some of the most notable issues are laid out below.

3. Inventory supply

Supply dynamics remain mixed, with planters and combines largely in balance, while high horsepower tractors and sprayers remain in oversupply. Yet many major machines are made-to-order, and those orders have been down substantially. So the high inventory issue should begin to correct itself, but it will take time.

4. Export markets

The current high supply of late-model equipment may be alleviated faster if the demand for exported large ag equipment increases. Ukraine could be an area for high amounts of exports if we see an end to the conflict in 2025.

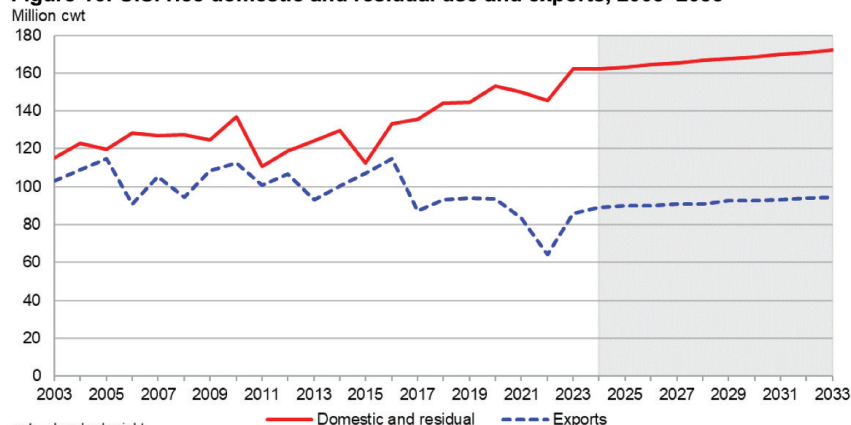
5. Current demand

Machinery demand is driven largely by net farm income. Using 2019 as a baseline for comparison, we will continue to face headwinds. Currently there is strong competition from global markets, namely South America and Russia, improved genetics that increase yield potential, a reduction in global demand from China, all of which result in high global stocks-to-use ratios of the major commodities. These higher ratios will pressure the market downward, potentially reducing net farm income.

6. USDA projected farm income

According to the USDA's Mid-Range Outlook published on December 13, 2024, the corn market is bullish, which could provide a short-term boost for the equipment market in the new year. However, the USDA also projects a decline in the net cash farm income through 2033, driven by anticipated acres in production and yield growth, so the long-term outlook remains bleak.

Figure 16: U.S. rice domestic and residual use and exports, 2003–2033





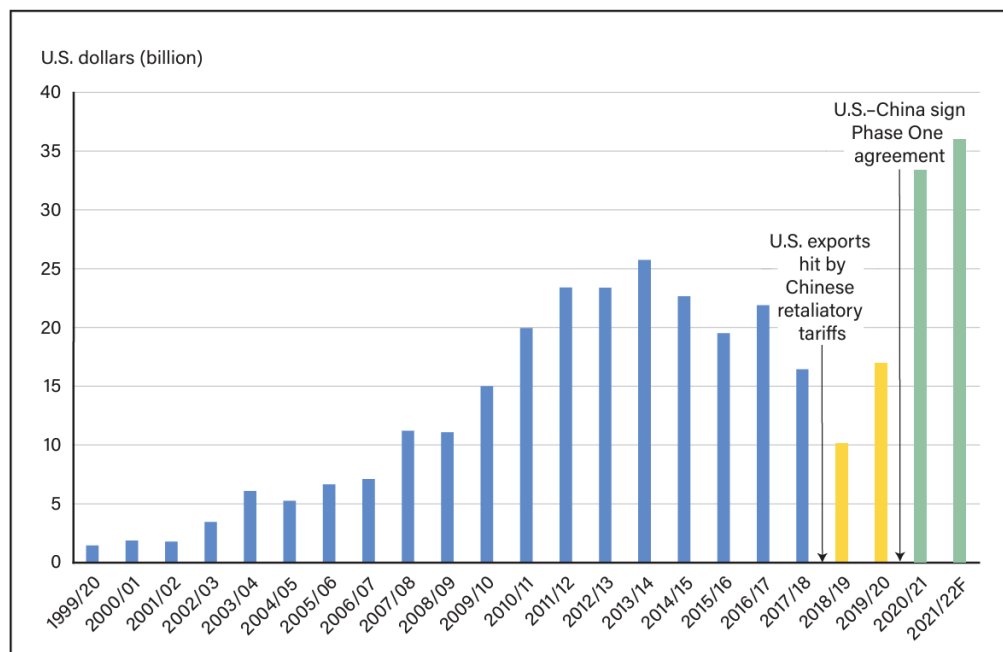
7. Tariffs

Of particular focus at the end of 2024 is the new administration's potential use of tariffs. While it's undetermined (as of December 2024) what tariffs may be put into place, we can anticipate some of the effect on agriculture and then downstream on equipment values based on the last round of tariffs implemented in the previous administration.

For example, if tariffs on Canada (a large ethanol export market) and Mexico (the US's top corn export market) are implemented, the corn market would be negatively affected. A tariff against China would affect many commodities, with soybeans likely taking the most significant hit.

As we know, equipment demand and values tend to follow farm profitability. Farmers' experiences adapting to crop demand will influence their buying decisions and therefore, equipment values.

Figure 1
U.S. agricultural exports to China, by fiscal year, 1999–22 (year ending September 30)



Notes: F=forecast. Columns in yellow indicate the period covered by this analysis when most of China's retaliatory tariffs were in place. The green columns represent the period covering the U.S.-China Phase One agreement is in effect. In March 2021, the USDA adopted the World Trade Organization definition that adds ethanol, distilled spirits, and manufactured tobacco product categories to the definition of agricultural products (USDA, Foreign Agricultural Service, 2021). FY 2021/22 forecast from USDA, Economic Research Service, Trade Outlook Report, November 2021.

Source: USDA, Economic Research Service (ERS) using data from ERS's Trade Outlook Report, August 2021, and U.S. Department of Commerce, Bureau of the Census.



TRACTOR ZOOM

Power your 2025 strategy with Tractor Zoom

With the right solutions, your dealership can be better equipped to make informed pricing, sales, marketing, and inventory management decisions as the ag industry continues in a new challenging direction. If you would like to learn more about how Tractor Zoom helps our partners sell more equipment efficiently with their repricing, sales, and inventory decisions, [request a personal demo](#) today.