



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: JUNE 2019

EquipmentWatch remains the largest sales database on the planet with 20x the sales data of any other source.

\$30,026,962,997

RESALE

\$29,683,431,318

386,325 Assets

AUCTION

\$343,531,679

16,550 Assets

The *EquipmentWatch* **Market Report**[™] is a monthly resource for the construction, lift/access, agriculture and commercial truck industries to make better-informed decisions by leveraging key **equipment values, market activity, age and usage metrics**.

How is the Price Stability INDEX calculated?

MARKET SUMMARY	For more detailed articles, visit <i>EquipmentWat</i>	ch Intelligence online.	
MARKET ACTIVITY	YEAR OVER YEAR	l ————————————————————————————————————	NTH OVER MONTH
	MARKET METRICS	MARKET METRICS	PRICE STABILITY INDEX ™
CONSTRUCTION	VALUES A 5.6% A 8.6% FLV	VALUES ▼ 0.8% ▼ 3.4% FMV FLV	99.22 95 ▼ 105
\$16,909,775,238 MARKET VALUE ASSETS	VOLUME ▲ 12.0% ▼ 0.9% AUCTION	VOLUME ▲ 21.2% ▼ 8.2% RESALE AUCTION	DEFLATED STABLE INFLATED
LIFT/ACCESS	VALUES ▼ 3.0% ▼ 2.0% FLV	VALUES ▼ 1.7% ▼ 2.4% FMV FLV	99.27 95 ▼ 105
\$1,395,041,564 MARKET VALUE ASSETS	VOLUME ▼ 6.1% ▲ 21.2% AUCTION	VOLUME ▲ 3.9% ▲ 22.6% AUCTION	DEFLATED STABLE INFLATED
AGRICULTURE	VALUES ▲ 3.0% ▲ 16.3% FLV	VALUES ▼ 0.3% ▼ 4.0% FMV FLV	99.69 95 9 105
\$6,578,209,718 MARKET VALUE ASSETS	VOLUME ▼ 9.6% ▼ 42.4% AUCTION	VOLUME ▲ 5.9% ▲ 37.2% RESALE AUCTION	DEFLATED STABLE INFLATED
COMMERCIAL TRUCK	VALUES ▼ 11.8% ▲ 3.1% FMV FLV	VALUES ▲ 0.8% ▼ 1.2% FMV FLV	95 101.37
\$5,143,936,477 113,326 MARKET VALUE ASSETS	VOLUME ▼ 40.5% ▲ 41.0% RESALE AUCTION	VOLUME \$\textstyle 21.8\% RESALE AUCTION AUCTION	DEFLATED STABLE INFLATED

JULY 25, 2019 VERSION: FREE | UPDATED MONTHLY



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TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MONTH OVER MONTH YEAR OVER YEAR **MARKET ACTIVITY** PRICE STABILITY INDEX T **MARKET METRICS MARKET METRICS** 99.22 **5.6% 8.6% V** 0.8% **7** 3.4% **VALUES VALUES** 105 95 FMV FLV 173.325 FMV FLV \$16.909.775.238 MARKET VALUE **ASSETS** VOLUME **12.0% V** 0.9% VOLUME **1.2%** ▼ 8.2% DEFLATED STABLE INFLATED RESALE **AUCTION** RESALE **AUCTION**

MARKET PERFORMANCE

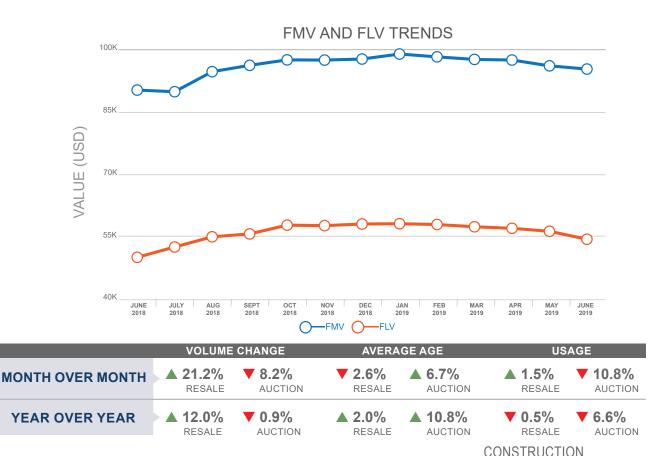
Both FMV and FLV declined again in June, decreasing by 0.8% and 3.4%, respectively. Year-over-year values have increased by 5.6% for resale and 8.6% for auction markets..

MARKET HIGHLIGHTS

- Market activity increased by over 21% in the resale channel and decreased by 8.2% in the auction channel from May to June.
- The overall market value increased by 4.3% month-overmonth, while the number of assets increased by 6.1%.
- Average age decreased by 2.6% and average utilization increased by 1.5% in the resale channel, while average age and utilization had the opposite trend in the auction channel.

MARKET FORECAST

After seeing large decreases in FLVs in June, we should expect to see them rise slightly in July as auction market activity should decline. FMVs should remain relatively even.



JULY 25, 2019 VERSION: FREE | UPDATED MONTHLY

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JUNE

2018

MARKET PERFORMANCE

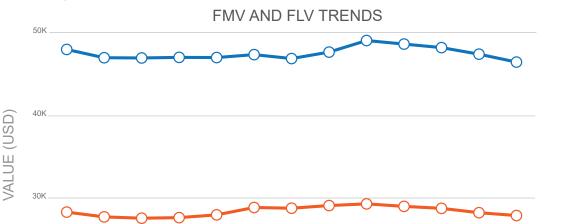
The month of June showed continued decrease in average values, following the same trend as May. Average FLV declined faster than FMV, with a 2.4% decrease as compared to only 1.7% decrease for FMV.

MARKET HIGHLIGHTS

- Resale channel showed a 6.1% decrease in volume in June 2019 compared to June 2018, but was 3.9% higher than in May 2019.
- Auction market activity continued increase this month, 22.6% higher than in May 2019.
- Both channels showed slight decreases in both month-over-month and year-over-year variances, but overall market performance is stable.

MARKET FORECAST

Activity observed over the past 5 months, since February 2019, suggests that we will see slight declines in market activity and average values in July 2019.





	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 3.9% RESALE	▲ 22.6% AUCTION	▲ 0.3% RESALE	▲ 4.1% AUCTION	▲ 2.8% RESALE	▼ 18.9% AUCTION
YEAR OVER YEAR	▼ 6.1% RESALE	▲ 21.2% AUCTION	▼ 1.9% RESALE	▲ 8.8% AUCTION	▼ 0.3% RESALE	▲ 1.0% AUCTION

LIFT/ACCESS

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MARKET PERFORMANCE

While the average FMV has stayed relatively the same from May to June 2019 and the average FLV has decreased slightly by 4% over the same time period, there is still a reason to be optimistic about the market as a whole. Average FMV has increased over the past calendar year by 3%, and FLV has grown by 16.3% on average from June 2018 to June 2019.

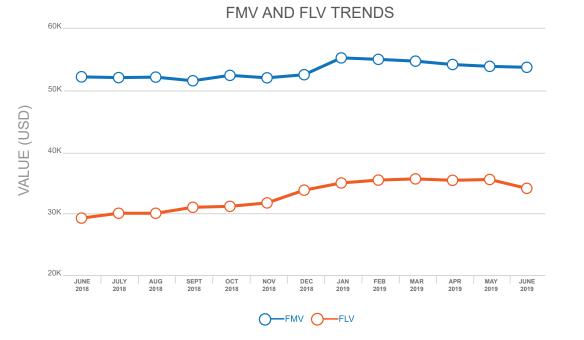
MARKET HIGHLIGHTS

- Even though average resale market activity channel was down 9.6% and 42.4% for auction channel from June 2018 to June 2019, from May to June 2019 the resale channel saw a 5.9% increase and the auction channel witnessed a 37.2% uplift.
- · Average age has not changed much from May to June 2019 for the resale, while the average age at auction has decreased 18.2%, indicating that there are much newer assets being put in the auction channel.
- · Average usage of agriculture assets on the resale channel droppedof agriculture assets in the FMV channel have dropped 15.1% from May to June 2019, and the usage has dropped in the auction channel 14.2%.

MARKET FORECAST

Looking ahead, usage is expected to increase as the harvesting season is rapidly approaching around Mid-August. Considering more assets will be in use, we expect market activity to move away from recent sharp spikes and begin to decline, as most growers will be focused on their owned equipment for the upcoming season.

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	VOLUME CHANGE	AVERAGE AGE	USAGE
MONTH OVER MONTH	▲ 5.9% ▲ 37.2% AUCTION		▼ 15.1% ▼ 14.2% RESALE AUCTION
YEAR OVER YEAR	▼ 9.6% ▼ 42.4%		▼ 28.2% ▲ 6.0% RESALE AUCTION
			AGRICULTURE

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How is the Price Stability INDEX calculated?



MARKET PERFORMANCE

As the number of new truck orders is down year-over-year and picked up during June 2019 compared to May 2019, the used truck market has shown the same trending with a month-over-month increase in activity of 21.8% and 40.5% drop year-over-year on the resale channel. The auction channel had increases of 9.2% from May 2019 and 41.0% from June 2018 with a monthly decrease in FLV of 1.2%.

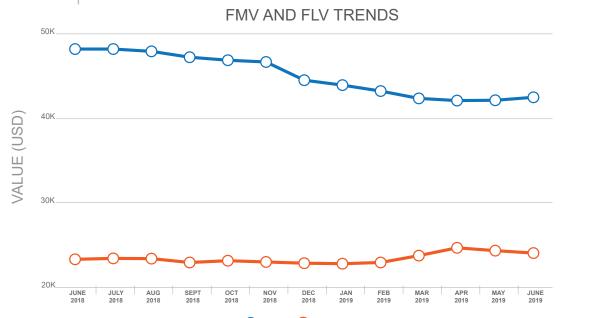
MARKET HIGHLIGHTS

- Average age for the resale channel did not see much change in June, but auction average age increased 3.4% since May.
- · The average usage on the auction channel dropped both month-over-month and year-over-year, down 8.3% and 11.5% respectively as age increased.
- · After a few months of trending towards convergence, FLV and FMV are heading in different directions as FMV increased 0.8% in June 2019 and FLV decreased 1.2%

MARKET FORECAST

Expect FMV and FLV to level out in the next month before it begins to decline at the end of summer moving into September and August.

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	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 21.8%	▲ 9.2%	▲ 0.1%	▲ 3.4%	▲ 2.1%	▼ 8.3%
MONTH OVER MONTH	RESALE	AUCTION	RESALE	AUCTION	RESALE	AUCTION
YEAR OVER YEAR	▼ 40.5%	▲ 41.0%	▼ 18.1%	▲ 18.5%	▲ 1.3%	▼ 11.5%
	RESALE	AUCTION	RESALE	AUCTION	RESALE	AUCTION

COMMERCIAL TRUCK



INTRODUCTION

The EquipmentWatch Market Report is a compilation of a wide array of EquipmentWatch's data, designed to bring you an in-depth look at used equipment markets over the last month.

This Appendix is designed to answer your questions regarding this report. Here we define and illustrate how we think about values, market activity, age, Usage, and regional influence for the most common types of equipment seen on used markets across North America.

OUR DATA

Selection Criteria for OEMs and Subtypes

EquipmentWatch tracks Resale and Auction prices and activity for over 15,000 models across 389 manufacturers throughout North America. With over \$800 billion in collected equipment transactions, EquipmentWatch is your primary source for intelligence regarding used equipment markets.

The data in this report is divided into four distinct equipment markets: Construction, Lift/Access, Agriculture, and Commercial Trucks. For each market, we selected the top equipment types based on their market share from January 2015 to December 2015. They're listed in the table to the right.

Construction	Lift/Access	Agriculture	Commercial Trucks
4-Wd Articulated Wheel Loaders Electric Self Propelled Scissor Lifts		Track Tractors	Heavy Duty: Conventional - Sleeper (Heavy Tractor)
Articulated Frame Graders	I.C. Pneumatic Tire Lift Trucks	Balers	Heavy Duty: Conventional - Day Cab (Heavy Tractor)
Articulated Rear Dumps	I.C. Self Propelled Telescopic Boom Aerial Lifts	Combines	Heavy Duty: Conventional - Day Cab (Heavy Cab Chassis)
Compact Track Loaders	I.C. Self-Propelled Articulating Boom Aerial Lifts	Corn Headers	Medium Duty: Conventional - Day Cab (Cab Chassis)
Crawler Mounted Compact Excavators	Telescoping Boom Rough Terrain Lift Trucks	Wheel Tractors	Medium Duty: Cabover - Day Cab (Cab Chassis)
Crawler Mounted Hydraulic Excavators	I.C. Cushion Tire Lift Trucks	Planters	Medium Duty: Crew (Cab Chassis)
Large Generator Sets			
Single Drum Vibratory Compactors			
Skid Steer Loaders			
Standard Crawler Dozers			
Tandem Vibratory Compactors			
Tractor-Loader- Backhoes			



We have also limited the scope of the EquipmentWatch Market Report to the following brands in each market:

Construction	Lift/Access	Agriculture	Commercial Truck
Bobcat	Caterpillar	Deere	International
Case	Genie	Case IH	Freightliner
Caterpillar	JLG	New Holland	Volvo
Deere	Sky Trak	Massey Ferguson	Kenworth
Komatsu	Skyjack	Challenger	Peterbilt
Volvo	Hyster	Kubota	Hino

THE EQUIPMENTWATCH PRICE STABILITY INDEX™

Academic justification

The EquipmentWatch Price Stability Index™ is a new metric for understanding used equipment markets for used heavy equipment. It measures resale price capacity based on the movement of market prices and market activity among the equipment types and manufacturers presented above.

Methodology and Calculation

The EquipmentWatch Price Stability Index[™] is based on the Laspeyres Index, one of the many economic indices used to monitor changes in prices over time. To calculate it, we use the framework provided by the Laspeyres Index:

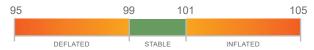
$$P_{L} = \frac{\sum (p_{c,t_{n}}) * (q_{c,t_{0}})}{\sum (p_{c,t_{0}}) * (q_{c,t_{0}})}$$

This equation sums the product of prices in the current month and quantity of the previous month and divides that by the product of prices in the previous month and quantity in the previous month.

We have modified this method to track the change in prices for each equipment type from month-to-month against the change in market activity for each equipment type month to month.

Interpretation

The EquipmentWatch Price Stability Index[™] can be thought of as an index of price capacity. In more formal terms, it measures how efficiently used markets adjust to equilibrium given previous adjustments in prices and market activity. There are three primary ranges in the EquipmentWatch Price Stability Index[™], as noted below:



When the EquipmentWatch Price Stability Index[™] is higher than 101, that indicates that equipment is valued at a higher level than expected, given last month's prices and amount of market activity. We categorize this range as "Inflated".

When the EquipmentWatch Price Stability Index[™] is lower than 99, it indicates that equipment is valued at a lower level than expected, given last month's prices and market activity. We categorize this range as "Deflated".

When the EquipmentWatch Price Stability Index™ is between 99 and 101, it is typically demonstrating that equipment prices and market activity are moving appropriately towards market equilibrium. We categorize this range as "Stable".

It is important to note that a higher rating on EquipmentWatch Price Stability Index™ does not necessarily imply that used markets are better than a lower rating. For some, price inflation is desirable; for others, it is undesirable. However, all parties involved in buying or selling equipment on used markets can use the EquipmentWatch Price Stability Index™ to easily understand how prices in a particular region or equipment channel are moving relative to the previous month.



SECTION GUIDES

The Introduction

In the top left, we exhibit a tally of the estimated market value of market activity last month in the Resale channel and Auction channel.

In the main table, we display market activity and assets for each market, along with month over month and year over year changes in Fair Market Value and Forced Liquidation Value.

Overall Trends

This page is an overview of each channel. The graph highlights an overall FMV and FLV trend line for all of the equipment types and manufacturers in the report for the last 13 months. It also displays very general month over month and year over year trends across the entire channel.

Type Trends

This page subsets the analysis of the previous page across each of the key equipment types in this report.

Brand Trends

This page shows some of the key month over month trends for the manufacturers represented in this report, including equipment values, Usage, market activity, and age trends.

Regional Trends

This page shows the EquipmentWatch Price Stability Index[™] for each of the 14 regions, using the same calculation method as the EquipmentWatch Price Stability Index[™] shown on the first page of the report. The states and provinces which make up each region are listed in the table to the right.

Note that due to regional disparity in market activity, some regions with very little or no market activity in the last month are excluded from the analysis. These are marked with "NA" on the map.

Country	Region	State/Province
USA	А	CT, DE, MA, ME, NH, NJ, MY, RI, VT
USA	В	MD, P, VA, WV
USA	С	AL, FL, GA, KY, MS, NC, SC, TN
USA	D	IL, IN, MI, OH, WI
USA	Е	IA, KS, MO, NE
USA	F	AR, LA, OK, TX
USA	G	AZ, CO, NM, UT
USA	Н	ID, MN, MT, ND, SD, WY
USA	I	CA, NV, OR, WA
USA	J	HI
USA	K	AK
CAN	L	NT, NU, YT
CAN	M	AB, BC, MB, SK
CAN	N	NB, NL, NS, ON, PE, QC

FAQS

Why did you limit the equipment types in this report?

EquipmentWatch tracks market activity for over a hundred unique equipment types each month. For each channel, we selected the most popular equipment types, based on the frequency of appearance on the resale and auction channels.

Why are there only 24 manufacturers in this report?

EquipmentWatch tracks market activity for almost 400 unique manufacturers each month. For each market, we selected the top 6 manufacturers. As the markets shift and prominence on used markets changes, we will adjust our selections accordingly.



Why don't you use OLV?

Orderly Liquidation Value, or OLV, is a third major category of values. These are the values of an asset given a single seller and multiple potential buyers given a long or indefinite timeframe in which to dispose. Given the lack of clarity around the time dimension, we have chosen not to make assumptions about the orderly liquidation process. However, OLV is typically between FLV and FMV in gross value.

IMPORTANT DEFINITIONS

Fair Market Value (FMV): the value of an asset sold to a single buyer under no compulsion.

Forced Liquidation Value (FLV): the value of an asset sold at a properly advertised and conducted auction in which the seller is under compulsion to sell on an as-is, where-is basis as of a specific date.

Market Activity: A measure of the total number of observations collected by EquipmentWatch, including publicly-available dealer listings, auction results, and final sales data.

Meter Reads: A measure of Usage that varies by equipment market. For most equipment types, this represents engine hours at the time of observation.

Age: the age of an asset, based on model year and the year of observation.

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ABOUT EQUIPMENTWATCH

EquipmentWatch is the trusted source for heavy equipment data and intelligence. EquipmentWatch produces the leading database information products for the construction equipment industry and is the world leader in heavy construction research and serves more than 15,000 professional, high-volume users of construction and lift-truck data. Our online and print products are valuable tools in decisions surrounding the purchase, valuation, operation, and disposal of equipment.

For nearly 50 years, EquipmentWatch has served contractors, equipment manufacturers, dealers, rental companies, lenders and insurers, and government agencies involved in heavy civil construction.

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