

SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: JULY 2019

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

\$30,000,783,903

RESALE

\$29,870,060,522

395,768 Assets

AUCTION

\$130,723,381

7,084 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 EquipmentWatch Intelligence online.						
MARKET ACTIVITY	YEAR OVER YEAR	MONTH OVER MONTH					
	MARKET METRICS	MARKET METRICS	PRICE STABILITY INDEX ™				
CONSTRUCTION \$17,185,313,565 172,819	VALUES ▲ 3.6% ▼ 3.3% FMV FLV	VALUES ▼ 0.4% ▼ 2.0% FMV FLV 9	97.61				
MARKET VALUE ASSETS	VOLUME ▲ 8.3% ▼ 9.3% AUCTION	VOLUME ▼ 1.9% ▼ 55.9% AUCTION	DEFLATED STABLE INFLATED				
LIFT/ACCESS	VALUES ▼ 6.1% ▼ 1.3% FMV FLV	VALUES ▼ 0.7 % ▼ 0.8 % FMV FLV 9	97.52 ▼ 105				
\$997,934,557 MARKET VALUE ASSETS	VOLUME ▼ 17.5% ▲ 57.1% AUCTION	VOLUME ▼ 5.8% ▼ 56.4% AUCTION	DEFLATED STABLE INFLATED				
AGRICULTURE	VALUES ▲ 0.9% ▲ 8.4% FMV FLV	VALUES ▼ 0.2% ▼ 1.5% FMV FLV 9	97.81				
\$6,673,697,584 79,065 MARKET VALUE ASSETS	VOLUME ▼ 16.9% ▼ 64.7% AUCTION	VOLUME ▲ 0.5% ▼ 19.5% RESALE AUCTION	DEFLATED STABLE INFLATED				
COMMERCIAL TRUCK	VALUES ▼ 12.7% ▲ 1.7% FMV FLV	VALUES ▼ 1.1% ▼ 1.0% FLV 9	99.28				
\$5,143,838,197 MARKET VALUE ASSETS	VOLUME ▼ 22.1% ▲ 11.6% AUCTION	VOLUME ▲ 2.9% ▼ 57.3% AUCTION	DEFLATED STABLE INFLATED				



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CONSTRUCTION

OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY		YEAR OVER YEAR			MONTH OVER MONTH							
		MARKET METRICS		MARKET METRICS		PRICE ST	PRICE STABILITY INDEX ™					
\$17,185,313,565	172,819	VALUES	▲ 3.6% FMV	▼ 3.3% FLV	VALUES	▼ 0.4% FMV	▼ 2.0% FLV	95	97.61 ▼			105
MARKET VALUE	ALUE ASSETS	VOLUME	▲ 8.3% RESALE	▼ 9.3% AUCTION	VOLUME	▼ 1.9% RESALE	▼ 55.9% AUCTION		DEFLATED	STABLE	INFLATED	

MARKET PERFORMANCE

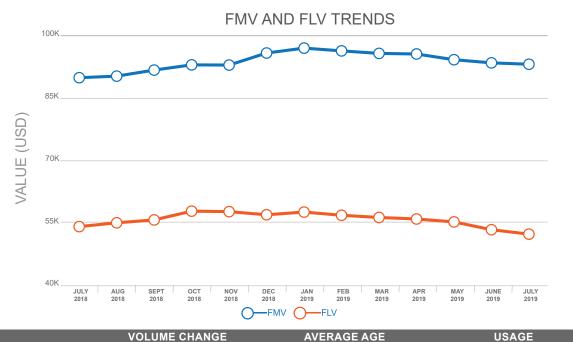
Average FMV and FLV declined by 0.4% and 2.0% respectively in July 2019, marking the 8th consecutive month of sliding values on both channels. Average FMV continued to be higher Year-over-Year with a 3.6% increase, while average FLV has declined 3.3%.

MARKET HIGHLIGHTS

- Overall market activity decreased slightly by 0.3%, while total market value managed to outshine June 2019 by 1.6%, mostly led by the 3.6% increase in resale activity.
- There was a sharp 55.9% decrease in auction activity month-over-month and -9.3% decrease Year-over-Year.
- The average age of equipment on the auction channel has increased by 7.6% Year-over-Year, while average usage decreased 8.3%.

MARKET FORECAST

Expect to see declines in average age and usage as we draw close to the end of 2019 and newer machines begin to hit the resale and auction channels. With that, we anticipate slight increases to average FMVs and FLVs





NEXT

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DEFLATED

INFLATED

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MARKET ACTIVITY

\$997,934,557

MARKET VALUE

OVERALL

VALUES.

VOLUME

TYPE TRENDS

T 1.3%

FIV

▲ 57.1%

AUCTION

YEAR OVER YEAR

MARKET METRICS

▼ 6.1%

FMV

T 17.5%

RESALE

BRAND TRENDS

VALUES

VOLUME

REGIONAL TRENDS

V 0.8%

FLV

▼ 56.4%

AUCTION

MARKET METRICS

V 0.7%

▼ 5.8%

RESALE

FMV



STABLE

How is the Price Stability INDEX calculated?

MARKET PERFORMANCE

In July 2019, average values decreased once again, with FMV and FLV both decreasing by around the same percentage. Market volume in both channels also saw decreases compared to June.

38,788

ASSETS

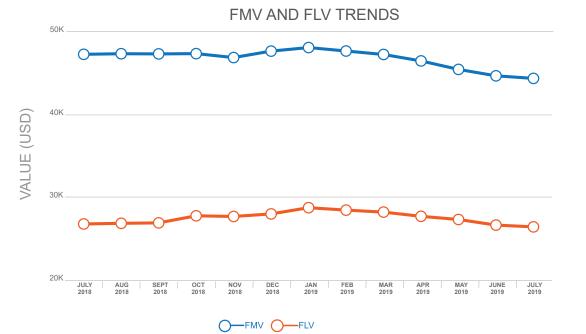
MARKET HIGHLIGHTS

- July saw a continued downward trend in both FMV and FLV. Both have decreased every month since January 2019.
- · From June to July, average asset age in auction has increased over 5%, and average usage has increased by almost 13%.
- · Resale market activity saw a notable decrease. Compared to June, volume is down 5.8%, and volume is down 17.5% compared to July 2018.

MARKET FORECAST

EquipmentWatch.

In August, expect to see average FMV increase to correct for the deflated values observed in July.







LIFT/ACCESS



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MARKET PERFORMANCE

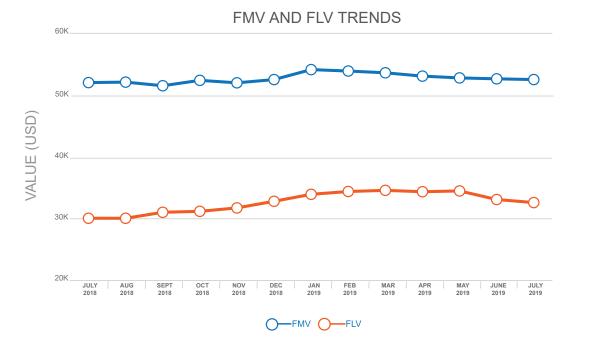
The values in the Resale and Auction channels did not change much from June to July 2019, decreasing by less than 2%. However, the Auction channel increased by 8.4% from July 2018 to July 2019, a strong uptick in prices across the board.

MARKET HIGHLIGHTS

- As expected, usage has increased in both resale and auction channels with harvesting season coming closer and closer. Usage increased by 28.8% and 16.1% for resale and auction channels, respectively, from June 2019 to July 2019.
- From July 2018 to July 2019, there was a significant drop in volume in both resale and auction channels, 16.9% and 64.7% respectively.
- The usage of agriculture assets in the FMV channel have dropped 15.1% from May to June 2019, and the usage has dropped in the FLV channel 14.2%.

MARKET FORECAST

Looking ahead, it is important to keep an eye on the decrease in volume of 19.5% from June 2019 to July 2019 to make sure that the same trend does not carry over to the resale channel as well.





Interested in connecting? Visit us at equipmentwatch.com/contact-us

AGRICULTURE

NEXT TYPE TRENDS

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How is the Price Stability INDEX calculated?



MARKET PERFORMANCE

FMV began to drop back to where it was prior to the May and June increases. The same drop occurred for FLV after higher values were seen since April. FLV is still sitting 1.7% higher than it was one year ago in July of 2018.

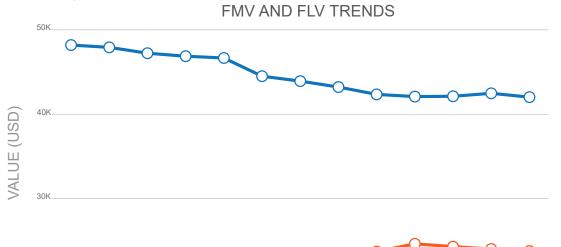
MARKET HIGHLIGHTS

- Average age increased on the resale channel by 5.2% as the volume increased 2.9% bringing older trucks to the channel
- Despite the 10.1% drop in average age between June 2019 and July 2019 on the auction channel, the average usage increased 4.9%.
- The auction channel drop in volume from June 2019 to July 2019 of 57.3% was not unheard of as July 2019 volume was still 11.6% higher than it was in July 2018.

MARKET FORECAST

Expect the FMV to continue a slow decline into the end of the year and the fourth quarter while FLV should pick up again before the year closes.

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	VOLUME CHANGE		AVERA	GE AGE	USAGE		
MONTH OVER MONTH	▲ 2.9% RESALE	▼ 57.3% AUCTION	▲ 5.2% RESALE	▼ 10.1% AUCTION	▲ 0.4% RESALE	▲ 4.9% AUCTION	
YEAR OVER YEAR	▼ 22.1% RESALE	▲ 11.6% AUCTION	▼ 12.8% RESALE	▲ 3.1% AUCTION	▲ 0.5% RESALE	▼ 7.4% AUCTION	

COMMERCIAL TRUCK

NEXT TYPE TRENDS



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:

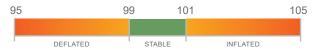
$$P_{L} = \frac{\sum (p_{c,t_{n}}) * (q_{c,t_{0}})}{\sum (p_{c,t_{0}}) * (q_{c,t_{0}})}$$

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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