



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: MAY 2019

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

\$30,285,934,954

RESALE
\$29,968,834,126

386,431 Assets

AUCTION
\$317,100,828

13,769 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 MARKET METRICS		MONTH OVER MONTH MARKET METRICS		PRICE STABILITY INDEX™
	VALUES		VALUES		
CONSTRUCTION \$16,213,460,170 MARKET VALUE 163,288 ASSETS	VALUES	▲ 5.7% FMV ▲ 13.9% FLV	VALUES	▼ 1.0% FMV ▼ 0.9% FLV	95 98.98 105 DEFLATED STABLE INFLATED
	VOLUME	▼ 0.6% RESALE ▲ 14.6% AUCTION	VOLUME	▼ 9.0% RESALE ▲ 123.3% AUCTION	
LIFT/ACCESS \$1,449,089,413 MARKET VALUE 46,178 ASSETS	VALUES	▼ 3.3% FMV ▼ 1.6% FLV	VALUES	▼ 2.2% FMV ▼ 1.4% FLV	95 98.72 105 DEFLATED STABLE INFLATED
	VOLUME	▼ 3.4% RESALE ▲ 19.6% AUCTION	VOLUME	▼ 15.5% RESALE ▲ 49.8% AUCTION	
AGRICULTURE \$8,884,560,928 MARKET VALUE 107,645 ASSETS	VALUES	▲ 2.6% FMV ▲ 20.4% FLV	VALUES	▼ 0.5% FMV ▲ 0.4% FLV	95 99.43 105 DEFLATED STABLE INFLATED
	VOLUME	▼ 22.1% RESALE ▼ 63.8% AUCTION	VOLUME	▲ 8.9% RESALE ▼ 47.7% AUCTION	
COMMERCIAL TRUCK \$3,738,824,443 MARKET VALUE 83,089 ASSETS	VALUES	▼ 13.2% FMV ▲ 4.3% FLV	VALUES	▲ 0.1% FMV ▼ 1.3% FLV	95 100.03 105 DEFLATED STABLE INFLATED
	VOLUME	▼ 45.8% RESALE ▲ 38.2% AUCTION	VOLUME	▼ 6.0% RESALE ▲ 83.7% AUCTION	



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

CONSTRUCTION

OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY

\$16,213,460,170 MARKET VALUE
163,288 ASSETS

YEAR OVER YEAR

MARKET METRICS

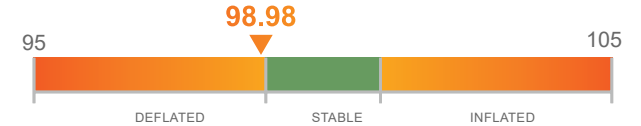
VALUES **▲ 5.7%** FMV **▲ 13.9%** FLV
VOLUME **▼ 0.6%** RESALE **▲ 14.6%** AUCTION

MONTH OVER MONTH

MARKET METRICS

VALUES **▼ 1.0%** FMV **▼ 0.9%** FLV
VOLUME **▼ 9.0%** RESALE **▲ 123.3%** AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

From April to May, both FMV and FLV declined, dropping by 1.0% and 0.9%, respectively. Year-over-year values have increased by 5.7% for resale and 13.9% for auction markets.

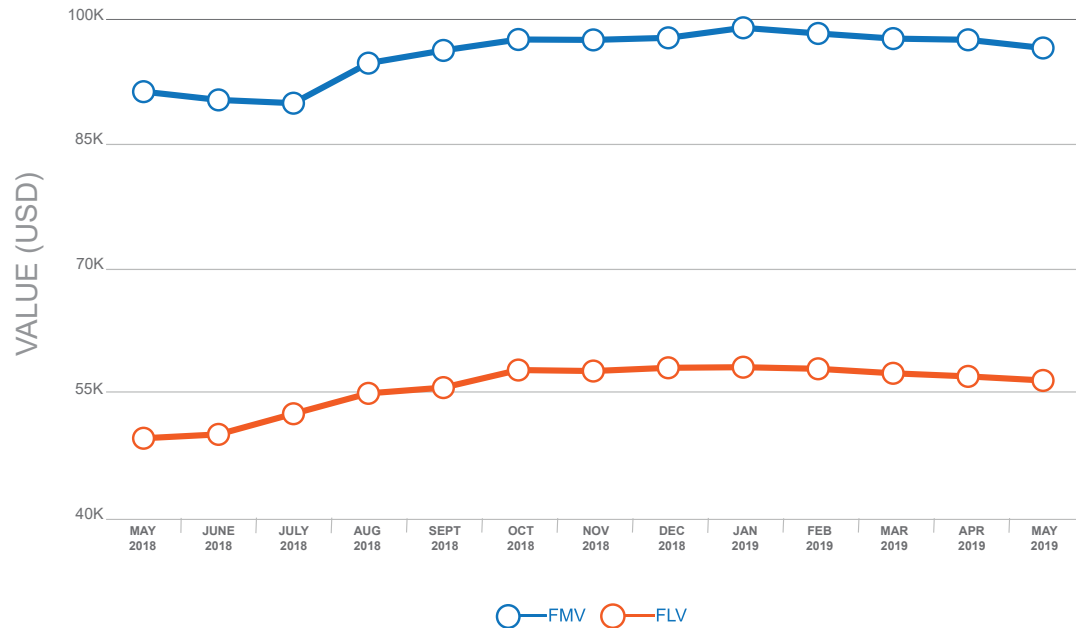
MARKET HIGHLIGHTS

- The overall number of assets decreased by about 5%, while overall market value decreased by only 2.1% month-over-month.
- Average utilization increased by 30% and average age remained basically even in auction markets, while average age and utilization decreased slightly for resale markets.
- Market activity declined on the resale channel, while auction rose by a large amount from April to May. Resale market activity is basically even compared to last May, while auction channel activity is up by almost 15%.

MARKET FORECAST

Average FMV should continue to slightly decrease, while average FLV should increase based on last year's trend. Overall market activity should increase slightly if it follows that same trend as 2018.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 9.0% RESALE	▲ 123.3% AUCTION	▼ 0.5% RESALE	▼ 0.3% AUCTION	▼ 1.6% RESALE	▲ 30.0% AUCTION
YEAR OVER YEAR	▼ 0.6% RESALE	▲ 14.6% AUCTION	▲ 4.7% RESALE	▲ 5.0% AUCTION	▼ 2.6% RESALE	▲ 19.9% AUCTION



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CONSTRUCTION

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COMMERCIAL TRUCK

[How is the Price Stability INDEX calculated?](#)

LIFT/ACCESS

OVERALL TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

MARKET ACTIVITY

\$1,449,089,413 MARKET VALUE
46,178 ASSETS

YEAR OVER YEAR

MARKET METRICS

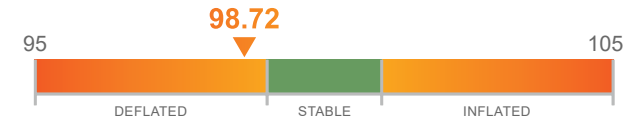
VALUES ▼ **3.2%** FMV ▼ **1.4%** FLV
VOLUME ▼ **3.4%** RESALE ▲ **19.6%** AUCTION

MONTH OVER MONTH

MARKET METRICS

VALUES ▼ **2.0%** FMV ▼ **1.2%** FLV
VOLUME ▼ **15.5%** RESALE ▲ **49.8%** AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

Although both channels decreased in average value compared to April, average FLV declined slower than average FMV. Additionally, the decrease of 2.0% in average FMV coincided with a 15.5% decrease in resale market activity.

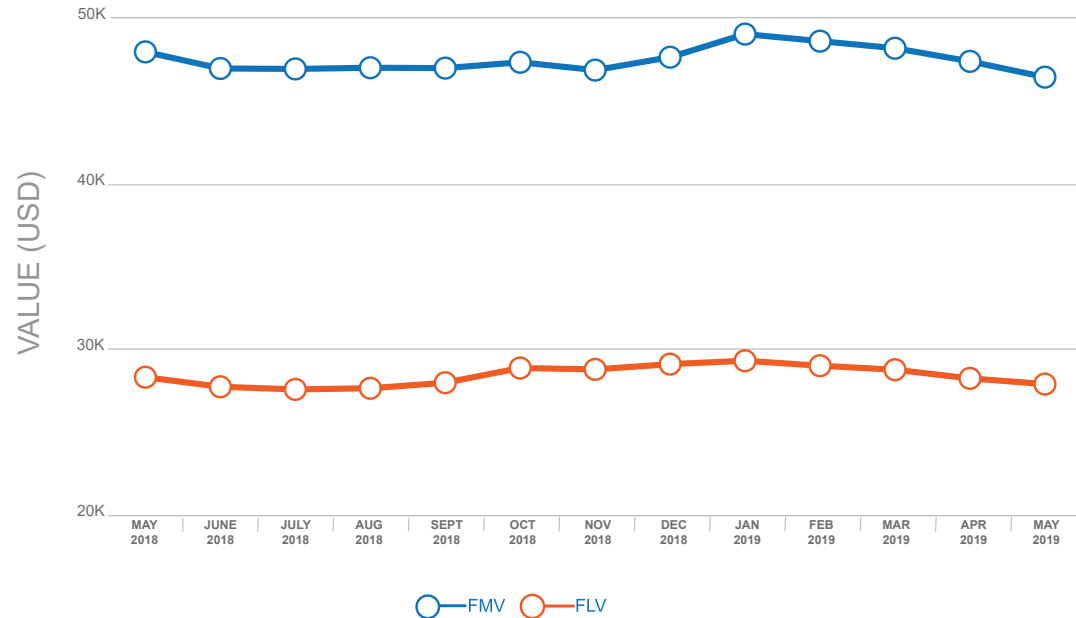
MARKET HIGHLIGHTS

- In general, market activity increased on both channels in May 2019. Total market value increased by 24.6% and assets increased by 16.8% compared to the month prior.
- Auction market activity increased greatly compared to May 2019 and June 2018, by 49.8% and 19.6%, respectively.
- Average age on market continued last month's decline in both channels, although in May 2019 average usage reversed trend and declined as well.

MARKET FORECAST

In June, we should see average FMV and FLV remain even or slightly increase. Resale market activity will likely continue to decline, but at a slower rate; auction market activity will likely show marginal changes.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 15.5% RESALE	▲ 49.8% AUCTION	▼ 3.1% RESALE	▲ 23.0% AUCTION	▼ 1.2% RESALE	▲ 19.2% AUCTION
YEAR OVER YEAR	▼ 3.4% RESALE	▲ 19.6% AUCTION	▼ 2.7% RESALE	▼ 1.6% AUCTION	▼ 3.7% RESALE	▲ 26.7% AUCTION



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How is the Price Stability INDEX calculated?

AGRICULTURE

OVERALL

TYPE TRENDS

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REGIONAL TRENDS

MARKET ACTIVITY

YEAR OVER YEAR

MARKET METRICS

\$8,884,560,928
MARKET VALUE

107,645
ASSETS

VALUES

▲ **2.6%**
FMV

▲ **20.4%**
FLV

VOLUME

▼ **22.1%**
RESALE

▼ **63.8%**
AUCTION

VALUES

▼ **0.5%**
FMV

▲ **0.4%**
FLV

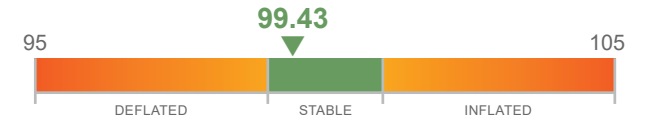
VOLUME

▲ **8.9%**
RESALE

▼ **47.7%**
AUCTION

MONTH OVER MONTH

PRICE STABILITY INDEX™



MARKET PERFORMANCE

While average FLV increased slightly from April to May 2019, average FMV decreased in the same period. Surprisingly, average FLV was over 20% higher than in the same month last year.

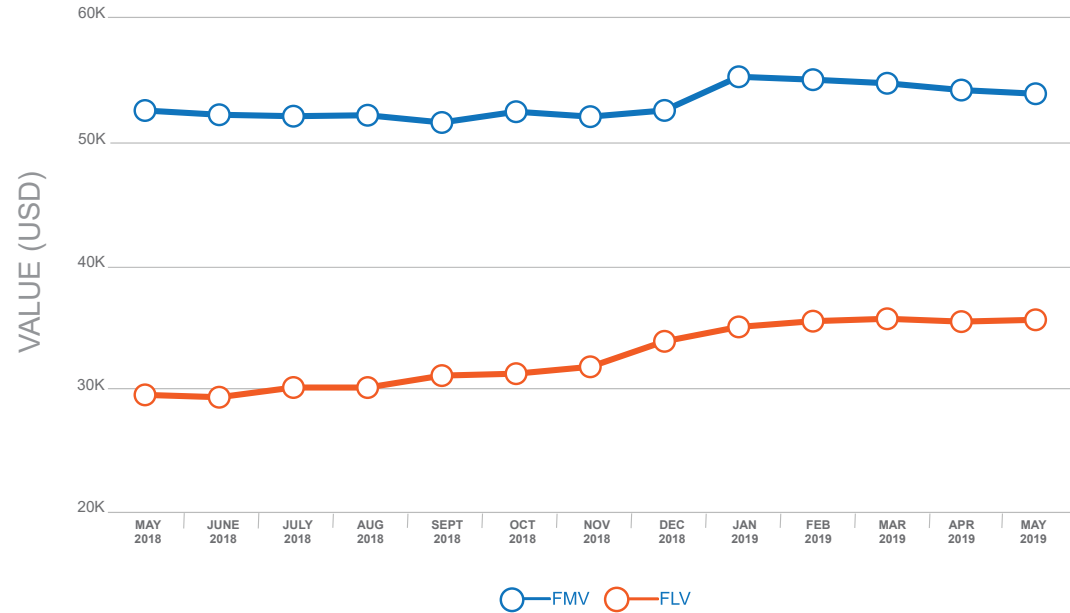
MARKET HIGHLIGHTS

- Surprisingly, resale market activity levels were higher by 8.9% in May 2019 than in April, but still remained 22.1% lower than in May 2018.
- From April to May 2019, average age on the resale and auction channel increased by 1.8% and 11.3%, respectively, attaining strong growth relative to the year prior.
- From April to May 2019, average usage on the resale channel decreased by 8.7% against an increase of 17.8% on the auction channel.

MARKET FORECAST

Looking ahead, we anticipate increased resale activity as many parts of the country enter harvest season. We also expect average FMV and FLV to continue recent growth trends.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 8.9% RESALE	▼ 47.7% AUCTION	▲ 1.8% RESALE	▲ 11.3% AUCTION	▼ 8.7% RESALE	▲ 17.8% AUCTION
YEAR OVER YEAR	▼ 22.1% RESALE	▼ 63.8% AUCTION	▲ 1.2% RESALE	▲ 9.1% AUCTION	▲ 5.7% RESALE	▲ 30.6% AUCTION



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COMMERCIAL TRUCK

OVERALL

TYPE TRENDS

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How is the Price Stability INDEX calculated?

MARKET ACTIVITY

\$3,738,824,443
MARKET VALUE

83,089
ASSETS

YEAR OVER YEAR

MARKET METRICS

VALUES ▼ **13.2%** ▲ **4.3%**
FMV FLV

VOLUME ▼ **45.8%** ▲ **38.2%**
RESALE AUCTION

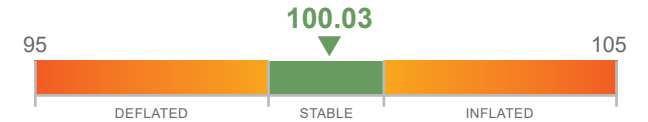
MONTH OVER MONTH

MARKET METRICS

VALUES ▲ **0.1%** ▼ **1.3%**
FMV FLV

VOLUME ▼ **6.0%** ▲ **83.7%**
RESALE AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

FMV increased 0.1% month over month due to minimal pricing changes on the resale channel for heavy duty trucks. Most FMV drops were focused on the 2013, 2014, and 2015 model years for both heavy and medium duty.

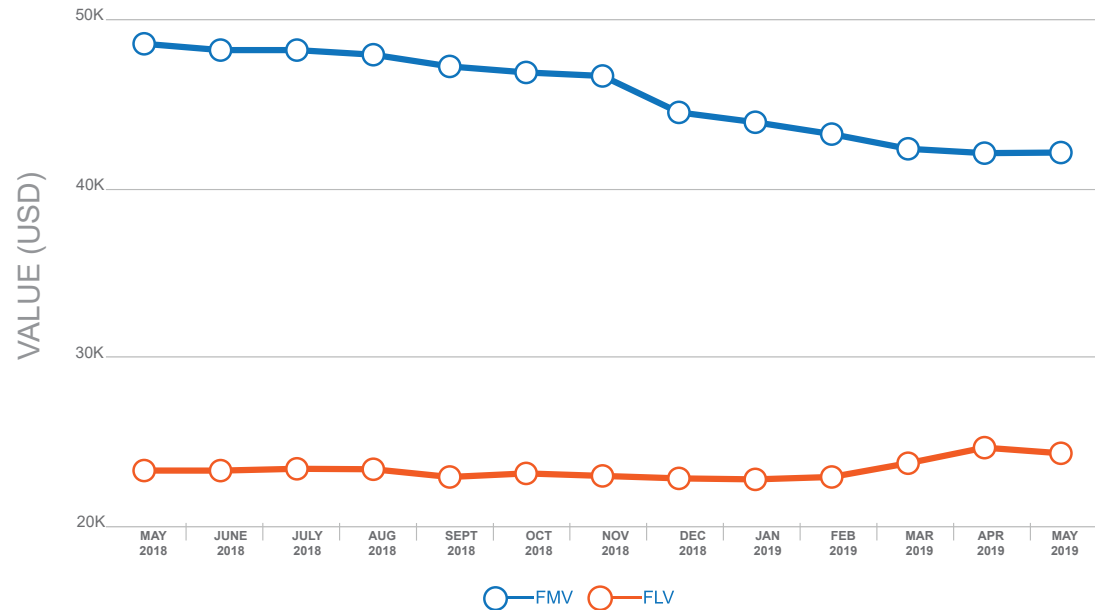
MARKET HIGHLIGHTS

- FLV dropped 1.3% month over month resulting in 4.3% higher FLV than last year as volume increased on the auction channel.
- Average age and usage decreased along with the volume on the resale channel both month over month and year over year as significantly younger, yet only 0.6% less mileage, trucks available.
- The auction channel increase in volume was more impactful on the month over month change than the year over year, up 83.7% from the previous month resulting in the decrease of FLV which was much higher than the 0.8% drop between April and May of 2018.

MARKET FORECAST

Expect FMV to continue with minimal month over month changes and FLV to increase, all before drops on both channels begin at the end of summer into fall.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 6.0% RESALE	▲ 83.7% AUCTION	▼ 1.7% RESALE	▼ 2.6% AUCTION	▼ 3.2% RESALE	▼ 21.4% AUCTION
YEAR OVER YEAR	▼ 45.8% RESALE	▲ 38.2% AUCTION	▼ 18.2% RESALE	▲ 8.1% AUCTION	▼ 0.6% RESALE	▼ 5.8% AUCTION



APPENDIX

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			



APPENDIX

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:

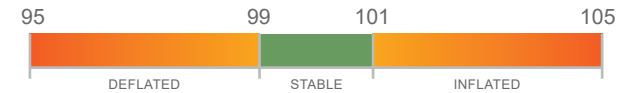
$$P_L = \frac{\sum(p_{c,t_n}) * (q_{c,t_0})}{\sum(p_{c,t_0}) * (q_{c,t_0})}$$

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.



APPENDIX

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	A	CT, DE, MA, ME, NH, NJ, MY, RI, VT
USA	B	MD, P, VA, WV
USA	C	AL, FL, GA, KY, MS, NC, SC, TN
USA	D	IL, IN, MI, OH, WI
USA	E	IA, KS, MO, NE
USA	F	AR, LA, OK, TX
USA	G	AZ, CO, NM, UT
USA	H	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.



APPENDIX

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.

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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