



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: OCTOBER 2018

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

\$32,073,470,432

RESALE
\$31,951,258,325

401,725 Assets

AUCTION
\$122,212,107

4,930 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 \$18,224,966,700 MARKET VALUE 198,363 ASSETS	VALUES	▲ 2.9% FMV ▲ 9.2% FLV	VALUES	▲ 1.4% FMV ▲ 1.5% FLV	95 ——— 105 101.48 DEFLATED STABLE INFLATED
	VOLUME	▲ 0.04% RESALE ▼ 8.9% AUCTION	VOLUME	▲ 6.1% RESALE ▼ 56.3% AUCTION	
LIFT/ACCESS \$1,282,915,801 MARKET VALUE 43,177 ASSETS	VALUES	▼ 1.4% FMV ▲ 13.0% FLV	VALUES	▲ 0.1% FMV ▲ 0.1% FLV	95 ——— 105 101.91 DEFLATED STABLE INFLATED
	VOLUME	▲ 0.9% RESALE ▼ 16.3% AUCTION	VOLUME	▲ 7.4% RESALE ▼ 71.2% AUCTION	
AGRICULTURE \$10,584,001,085 MARKET VALUE 126,047 ASSETS	VALUES	▲ 2.8% FMV ▲ 9.0% FLV	VALUES	▲ 1.7% FMV ▲ 0.5% FLV	95 ——— 105 101.74 DEFLATED STABLE INFLATED
	VOLUME	▲ 30.3% RESALE ▼ 17.9% AUCTION	VOLUME	▲ 4.6% RESALE ▼ 47.2% AUCTION	
COMMERCIAL TRUCK \$1,981,586,846 MARKET VALUE 39,068 ASSETS	VALUES	▼ 13.6% FMV ▼ 5.4% FLV	VALUES	▼ 1.0% FMV ▲ 0.9% FLV	95 ——— 105 97.85 DEFLATED STABLE INFLATED
	VOLUME	▼ 19.6% RESALE ▲ 48.4% AUCTION	VOLUME	▼ 26.9% RESALE ▼ 68.1% AUCTION	



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CONSTRUCTION

OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY

\$18,224,966,700
MARKET VALUE

198,363
ASSETS

YEAR OVER YEAR

MARKET METRICS

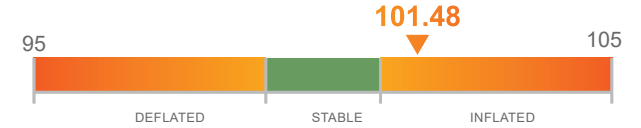
VALUES **▲ 2.9%** FMV **▲ 9.2%** FLV
VOLUME **▲ 0.04%** RESALE **▼ 8.9%** AUCTION

MONTH OVER MONTH

MARKET METRICS

VALUES **▲ 1.4%** FMV **▲ 1.5%** FLV
VOLUME **▲ 6.1%** RESALE **▼ 56.3%** AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

From September to October, FMV and FLV increased by 1.4% and 1.5%, respectively. FMV is almost 3% higher than it was at this point last year and FLV is over 9% higher over the same time period.

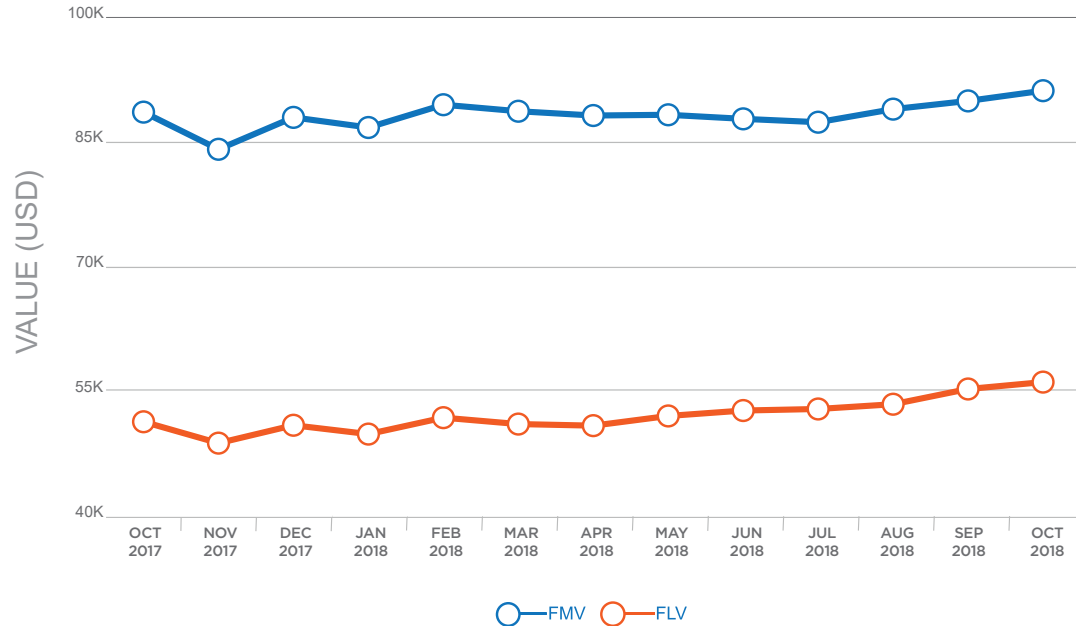
MARKET HIGHLIGHTS

- Overall market value increased by about 4.8% from September to October, while the overall number of assets increased by about 3.7%.
- Month-over-month average age increased across both channels, while average utilization also increased from September to October.
- Resale volume increased again from September to October, while auction volume decreased by over 56% month-over-month. Year-over-year volume remained even for resale and declined by about 9% for auction.

MARKET FORECAST

Overall, construction values should remain relatively even for November across both channels, while market activity should decline slightly.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 6.1% RESALE	▲ 56.3% AUCTION	▲ 1.4% RESALE	▲ 10.3% AUCTION	▲ 1.1% RESALE	▲ 24.1% AUCTION
YEAR OVER YEAR	0.0% RESALE	▼ 8.9% AUCTION	▲ 0.6% RESALE	▲ 10.5% AUCTION	▼ 5.9% RESALE	▲ 15.4% AUCTION



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

LIFT/ACCESS

OVERALL TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

MARKET ACTIVITY

\$1,282,915,801
MARKET VALUE

43,177
ASSETS

YEAR OVER YEAR

MARKET METRICS

VALUES ▼ **1.4%** FMV ▲ **13.0%** FLV

VOLUME ▼ **0.9%** RESALE ▼ **16.3%** AUCTION

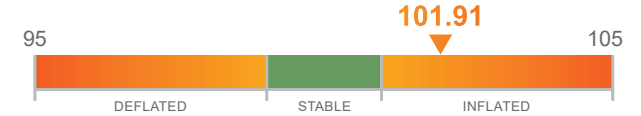
MONTH OVER MONTH

MARKET METRICS

VALUES ▲ **0.1%** FMV ▲ **0.1%** FLV

VOLUME ▲ **7.4%** RESALE ▼ **71.2%** AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

FMV and FLV remained almost unchanged for the second month in a row, while volume trended upward for resale and downward for auction.

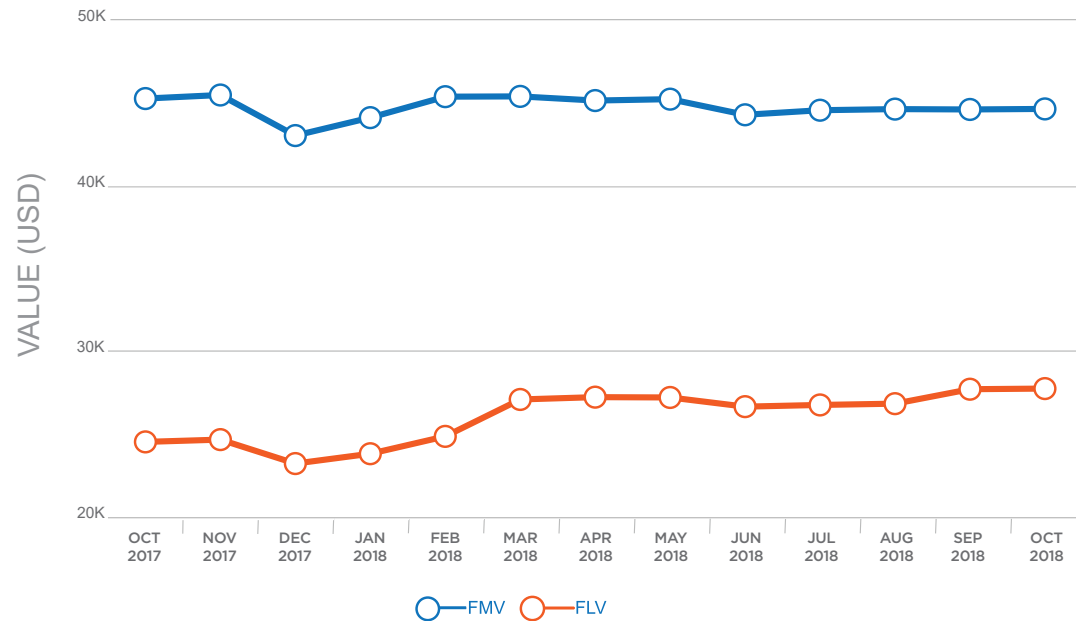
MARKET HIGHLIGHTS

- The Price Stability Index™ showed an inflated score for the first time since January 2017 and was the second highest since the introduction of the Market Report in April 2016.
- Average usage in FLV increased 27.3% from September to October but decreased 22.4% from August to September.
- There was a large drop in auction volume from September to October after seeing large increases the previous two months. Because of this decrease, auction volume is now at around the same number as it was in July.

MARKET FORECAST

In November, we are expecting small FLV and FMV decreases, and increased volume for both channels.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 7.4% RESALE	▼ 71.2% AUCTION	▼ 1.8% RESALE	▼ 2.8% AUCTION	▼ 0.8% RESALE	▲ 27.3% AUCTION
YEAR OVER YEAR	▲ 0.9% RESALE	▼ 16.3% AUCTION	▼ 1.5% RESALE	▼ 0.7% AUCTION	▼ 2.8% RESALE	▼ 5.8% AUCTION



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AGRICULTURE

OVERALL TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

MARKET ACTIVITY

\$10,584,001,085 MARKET VALUE
126,047 ASSETS

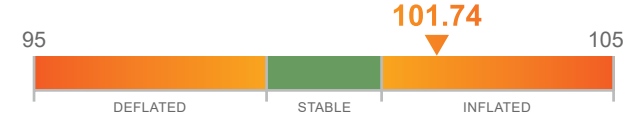
YEAR OVER YEAR MARKET METRICS

VALUES **▲ 2.8%** FMV **▲ 9.0%** FLV
VOLUME **▲ 30.3%** RESALE **▼ 17.9%** AUCTION

MONTH OVER MONTH MARKET METRICS

VALUES **▲ 1.7%** FMV **▲ 0.5%** FLV
VOLUME **▲ 4.6%** RESALE **▼ 47.2%** AUCTION

MONTH OVER MONTH PRICE STABILITY INDEX™



MARKET PERFORMANCE

This month the auction channel has been marked by a substantial decline in market activity on the order of 47.2%. When compared with the same period last year this channel also shows a significant contraction in activity of 17.9%. In contrast, resale market activity has achieved modest growth up 4.6% from the previous month. Meanwhile, values in both channels have maintained a slight upward trajectory which has most likely reached its zenith this month.

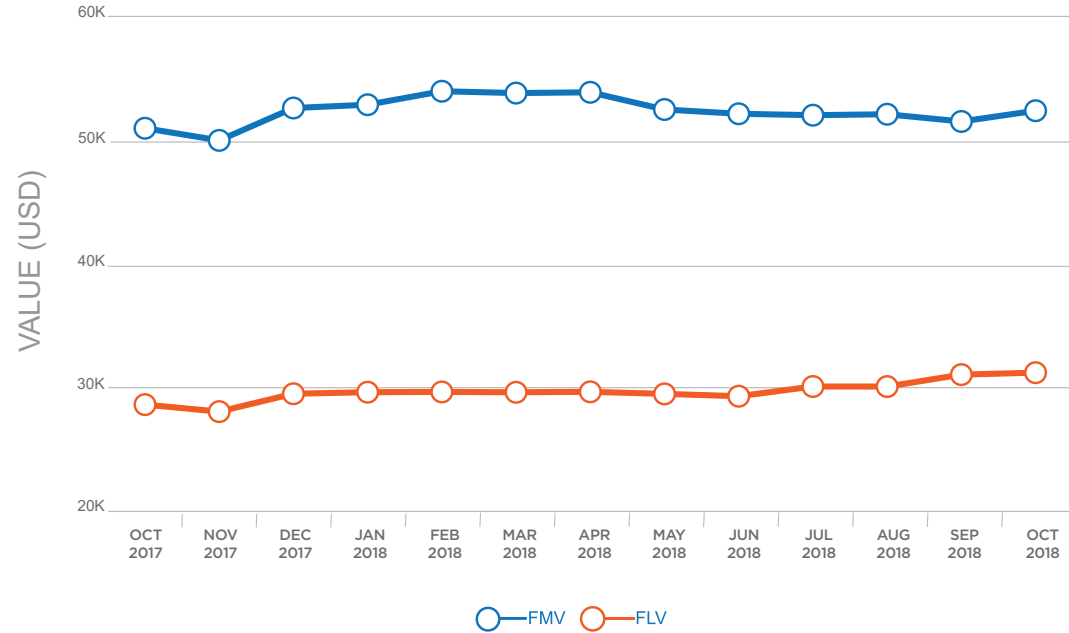
MARKET HIGHLIGHTS

- Despite disparate movement in FMV and FLV market activity, values in both channels have notched up a respective 1.7 and 0.5 percent.
- In the resale market, assets have become younger with relatively lower levels of usage as FMV age has declined 2.2% and usage has fallen by 18.6%.
- As one might expect, at auction assets are relatively older with higher levels of utilization, up from the previous month. Despite this general upturn, increases were of negligible magnitude as average ages only rose a mere 3.9% while usage barely moved the needle with 0.3% growth.

MARKET FORECAST

Asset values at auction and in the resale market have most likely seen their peaks in October. Expect values to bottom out in November and begin to rise yet again in the following months.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 4.6% RESALE	▼ 47.2% AUCTION	▼ 2.2% RESALE	▲ 3.9% AUCTION	▼ 18.6% RESALE	▲ 0.3% AUCTION
YEAR OVER YEAR	▲ 30.3% RESALE	▼ 17.9% AUCTION	▼ 1.6% RESALE	▼ 0.9% AUCTION	▼ 6.4% RESALE	▼ 1.4% AUCTION



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TYPE TRENDS

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How is the Price Stability INDEX calculated?

MARKET ACTIVITY	YEAR OVER YEAR MARKET METRICS		MONTH OVER MONTH MARKET METRICS		PRICE STABILITY INDEX™
	<p>\$1,981,586,846 MARKET VALUE</p> <p>39,068 ASSETS</p>	<p>VALUES ▼ 13.6% FMV</p> <p>VOLUME ▼ 19.6% RESALE</p>	<p>▼ 5.4% FLV</p> <p>▲ 48.4% AUCTION</p>	<p>VALUES ▼ 1.0% FMV</p> <p>VOLUME ▼ 26.9% RESALE</p>	<p>▲ 0.9% FLV</p> <p>▼ 68.1% AUCTION</p>

MARKET PERFORMANCE

Last month indicated a deflated market due to a drop in available trucks for sale in comparison to previous months. FMV overall appeared to drop, but looking at values on a more granular level, there were multiple increases across the market.

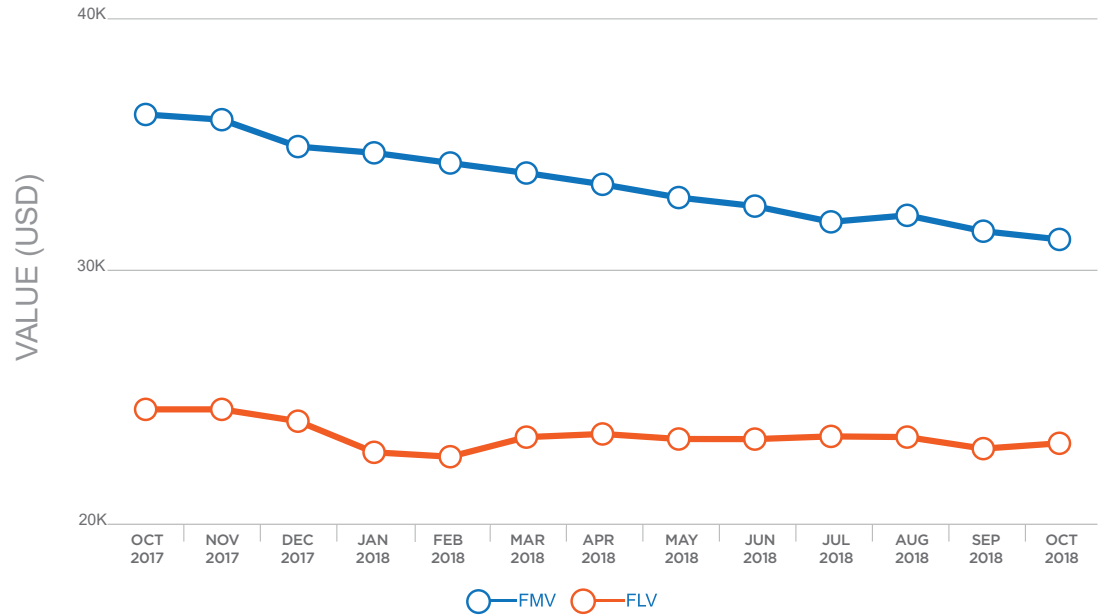
MARKET HIGHLIGHTS

- Average age on the resale channel was down 7.5% since the previous month with an average usage drop of 4.6%.
- The auction channel had minimal changes month over month, but compared to last year, the average usage was up 32.9% with a volume increase of 48.4%.
- FLV was up 0.9% from the previous month due to the class 7 and 8 truck increases, but was still 5.4% below last year.

MARKET FORECAST

Going into the end of the year, expect FMV and FLV to remain stable as the number of trucks waiting to be sold decreases.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 26.9% RESALE	▼ 68.1% AUCTION	▼ 7.5% RESALE	▲ 0.9% AUCTION	▼ 4.6% RESALE	▼ 2.1% AUCTION
YEAR OVER YEAR	▼ 19.6% RESALE	▲ 48.4% AUCTION	▲ 3.6% RESALE	▼ 0.1% AUCTION	▲ 3.7% RESALE	▲ 32.9% 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:

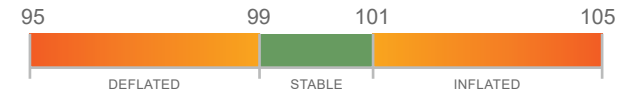
$$P_L = \frac{\sum(p_{c,t_n}) * (q_{c,t_0})}{\sum(p_{c,t_0}) * (q_{c,t_0})}$$

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, NY, RI, VT
USA	B	MD, PA, 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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