



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: FEBRUARY 2019

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

\$33,664,882,621

RESALE
\$33,324,274,747

437,754 Assets

AUCTION
\$340,607,874

10,490 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	FLV	VALUES	FLV	
CONSTRUCTION \$18,094,461,491 MARKET VALUE 190,563 ASSETS	▲ 6.8% FMV ▲ 31.2% RESALE	▲ 18.1% FLV ▼ 4.2% AUCTION	▼ 0.9% FMV ▲ 30.4% RESALE	▼ 0.4% FLV ▲ 361.9% AUCTION	99.12 95 ——— 105 DEFLATED — STABLE — INFLATED
LIFT/ACCESS \$1,435,666,853 MARKET VALUE 47,770 ASSETS	▲ 0.9% FMV ▲ 11.6% RESALE	▼ 0.5% FLV ▲ 27.0% AUCTION	▼ 0.9% FMV ▲ 48.2% RESALE	▼ 0.9% FLV ▲ 225.0% AUCTION	98.82 95 ——— 105 DEFLATED — STABLE — INFLATED
AGRICULTURE \$10,127,630,527 MARKET VALUE 120,498 ASSETS	▲ 1.9% FMV ▼ 15.3% RESALE	▲ 19.5% FLV ▼ 60.6% AUCTION	▼ 0.4% FMV ▲ 94.8% RESALE	▲ 1.4% FLV ▲ 158.3% AUCTION	99.38 95 ——— 105 DEFLATED — STABLE — INFLATED
COMMERCIAL TRUCK \$4,007,123,750 MARKET VALUE 89,413 ASSETS	▼ 15.0% FMV ▼ 29.5% RESALE	▲ 1.4% FLV ▼ 44.9% AUCTION	▼ 1.6% FMV ▲ 100.6% RESALE	▲ 0.6% FLV ▲ 35.6% AUCTION	98.68 95 ——— 105 DEFLATED — STABLE — INFLATED



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

CONSTRUCTION

OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

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

MARKET ACTIVITY

\$18,094,461,491 MARKET VALUE
190,563 ASSETS

YEAR OVER YEAR

MARKET METRICS

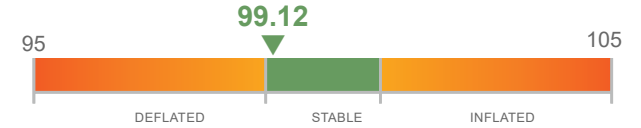
VALUES **▲ 6.8%** FMV **▲ 18.1%** FLV
VOLUME **▲ 31.2%** RESALE **▼ 4.2%** AUCTION

MONTH OVER MONTH

MARKET METRICS

VALUES **▼ 0.9%** FMV **▼ 0.4%** FLV
VOLUME **▲ 30.4%** RESALE **▲ 361.9%** AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

Both FMV and FLV decreased month-over-month, declining by 0.9% and 0.4%, respectively. Year-over-year FMV has increased almost 7% from February of 2018, while FLV has gone up by over 18% over the same time period.

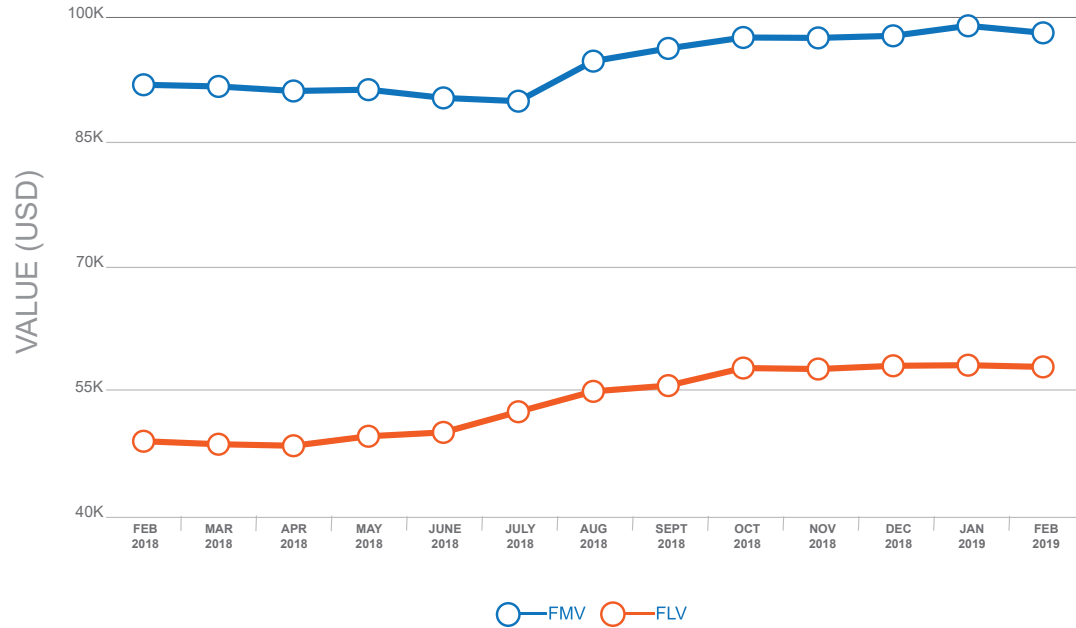
MARKET HIGHLIGHTS

- The overall number of assets decreased by about 8% from January to February, while overall market value decreased by over 11% month-over-month.
- Average age in auctions markets dropped by about 20% month-over-month, while average usage remained even in both channels.
- Auction market activity had large increases, rising by over 360% from January to February, while resale market activity also increased, but only by about 30%.

MARKET FORECAST

FMVs in the construction channel should continue to decrease slightly in March, while FLVs should also continue to decrease. Auction market activity should stay high with the busy March auctions.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 30.4% RESALE	▲ 361.9% AUCTION	▼ 2.8% RESALE	▼ 19.8% AUCTION	▲ 0.8% RESALE	▼ 2.7% AUCTION
YEAR OVER YEAR	▲ 31.2% RESALE	▼ 4.2% AUCTION	▲ 0.6% RESALE	▲ 3.8% AUCTION	▼ 5.1% RESALE	▼ 10.4% AUCTION



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

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

LIFT/ACCESS

OVERALL TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

MARKET ACTIVITY

\$1,435,666,853
MARKET VALUE

47,770
ASSETS

YEAR OVER YEAR

MARKET METRICS

VALUES **▲ 0.9%** FMV **▼ 0.5%** FLV

VOLUME **▲ 11.6%** RESALE **▲ 27.0%** AUCTION

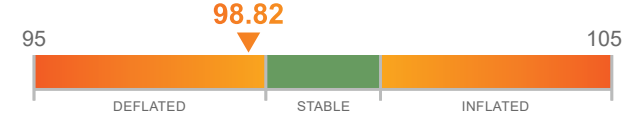
MONTH OVER MONTH

MARKET METRICS

VALUES **▼ 0.9%** FMV **▼ 0.9%** FLV

VOLUME **▲ 48.2%** RESALE **▲ 225.0%** AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

Both channels showed similar behavior in February, as FMV and FLV decreased 0.9%, and volume in both resale and auction greatly increased compared to January.

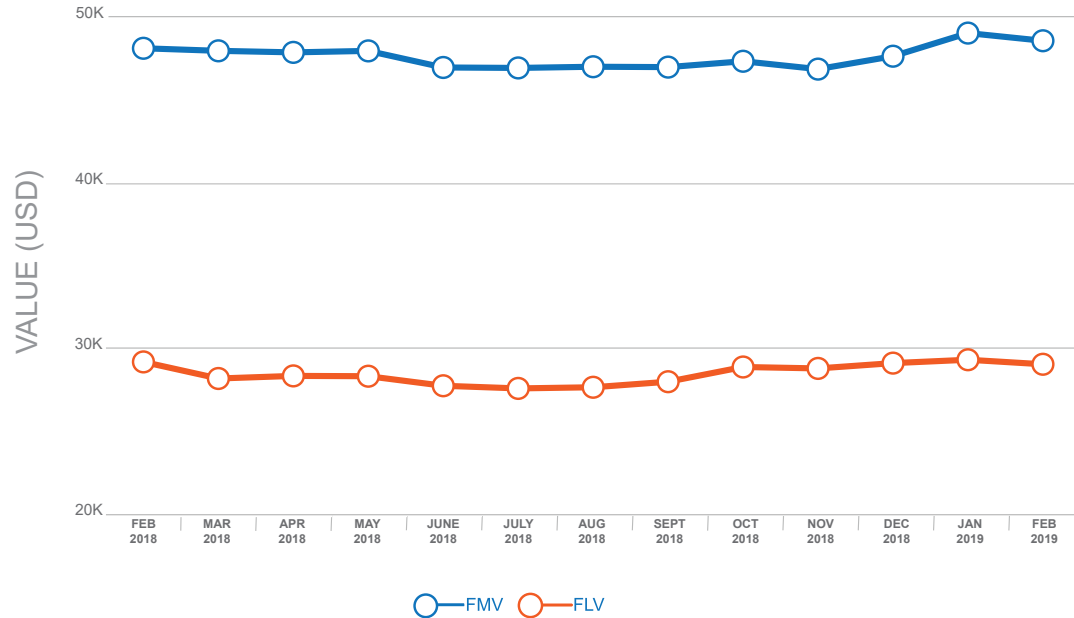
MARKET HIGHLIGHTS

- In addition to the month-over-month increase in volume, volume compared to February 2018 has increased 11.6% in resale and 27% in auction.
- Average asset usage in resale increased this month, but decreased in auction. In auction, however, this wasn't seen consistently between subtypes.
- Lift's February overall market value of \$1,435,666,853 is at its highest since last June.

MARKET FORECAST

Expect resale and auction activity to remain about the same in March, and for values in both channels to decrease as well.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 48.2% RESALE	▲ 225.0% AUCTION	▼ 2.4% RESALE	▼ 1.2% AUCTION	▲ 5.9% RESALE	▼ 15.7% AUCTION
YEAR OVER YEAR	▲ 11.6% RESALE	▲ 27.0% AUCTION	▲ 0.5% RESALE	▲ 8.3% AUCTION	▼ 5.6% RESALE	▼ 17.7% AUCTION



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

How is the Price Stability INDEX calculated?

AGRICULTURE

OVERALL TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

MARKET ACTIVITY

YEAR OVER YEAR

MARKET METRICS

\$10,127,630,527 MARKET VALUE
120,498 ASSETS

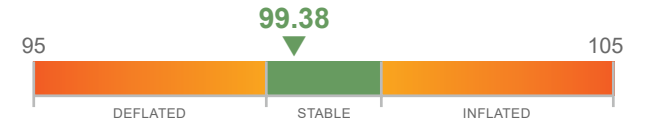
VALUES **▲ 1.9%** FMV **▲ 19.5%** FLV
VOLUME **▼ 15.3%** RESALE **▼ 60.6%** AUCTION

MONTH OVER MONTH

MARKET METRICS

PRICE STABILITY INDEX™

VALUES **▼ 0.4%** FMV **▲ 1.4%** FLV
VOLUME **▲ 94.8%** RESALE **▲ 158.3%** AUCTION



MARKET PERFORMANCE

As the final months of the winter season pass, overall FMV declined slightly from January 2019 to February 2019. Powered by a strong auction season in February, average FLV increased for agricultural equipment just under 1.5%. Markets for agricultural equipment continued the 2018 trend towards normal volume and pricing behavior.

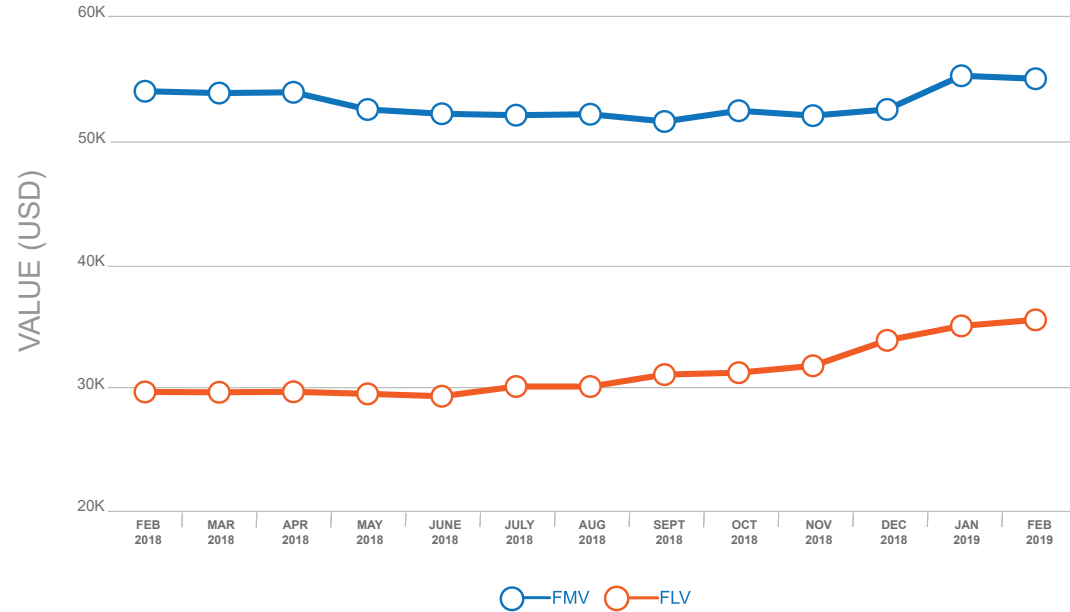
MARKET HIGHLIGHTS

- Auction market activity rose significantly from January to February 2019, a seasonally-expected hike that will likely drop in the next month.
- Even with the significant month-over-month climb in auction market activity, February 2019 recorded much lower volume at auction for agricultural equipment than in 2018.
- Average age on the resale channel dropped 3.9% against a 22.8% decline in average recorded meter reads, indicating a higher proportion of better condition assets reaching the market.

MARKET FORECAST

All indicators point to a stable, growth-driven March and April for agricultural equipment. Auction market activity is expected to fall dramatically to normal levels, while values and volume on the resale channel will likely show nominal increases.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 94.8% RESALE	▲ 158.3% AUCTION	▼ 3.9% RESALE	▼ 34.5% AUCTION	▼ 22.8% RESALE	▼ 13.3% AUCTION
YEAR OVER YEAR	▼ 15.3% RESALE	▼ 60.6% AUCTION	▲ 2.3% RESALE	▼ 3.5% AUCTION	▼ 34.6% RESALE	▲ 20.1% AUCTION



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

COMMERCIAL TRUCK

OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY

\$4,007,123,750
MARKET VALUE

89,413
ASSETS

YEAR OVER YEAR

MARKET METRICS

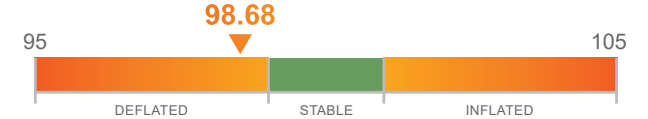
VALUES ▼ **15.0%** FMV ▲ **1.4%** FLV
VOLUME ▼ **29.5%** RESALE ▼ **44.9%** AUCTION

MONTH OVER MONTH

MARKET METRICS

VALUES ▼ **1.6%** FMV ▲ **0.6%** FLV
VOLUME ▲ **100.6%** RESALE ▲ **35.6%** AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

As expected, the FLV went up 0.6% last month with a 1.4% increase year over year. With the increase in FLV, there was also an increase in average usage as the age dropped indicating the newer trucks have higher mileage but are also dominating the channel with a 35.6% increase in activity.

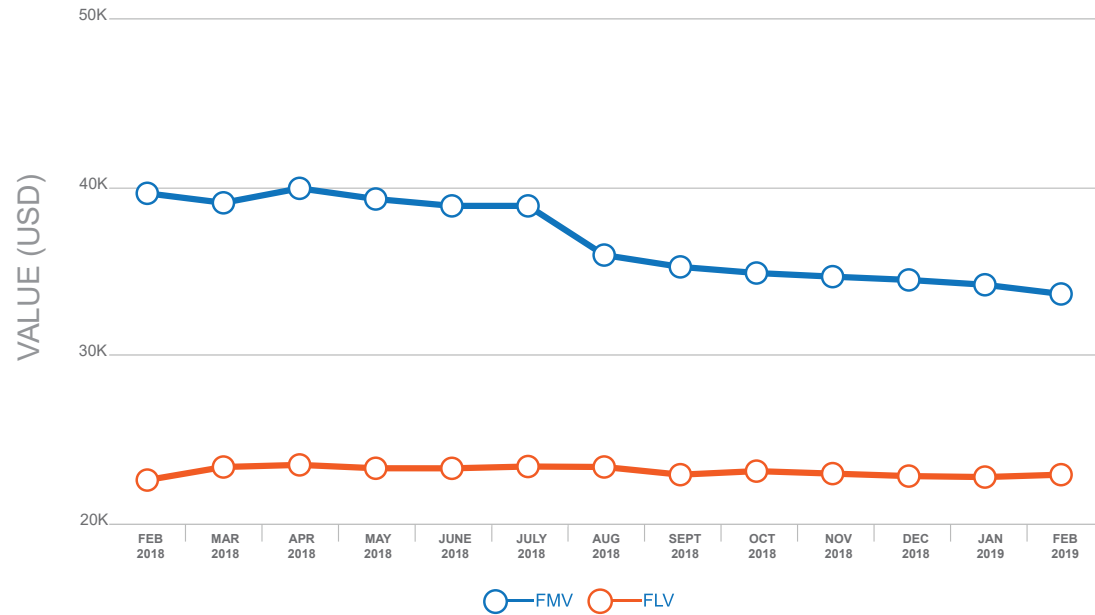
MARKET HIGHLIGHTS

- The resale channel activity was up 100.6% last month, but still 29.5% below last year.
- Average usage increase both month over month and year over year on both the auction and resale channels, so even though age dropped in a few cases, the trucks are accumulating more miles on average.
- FMV was down for the month, primarily due to the 2017 and 2018 model year trucks in their first two years of depreciation.

MARKET FORECAST

Expect the auction channel to slow down with the hopes that activity on the resale channel will pick up.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 100.6% RESALE	▲ 35.6% AUCTION	▲ 12.0% RESALE	▼ 15.5% AUCTION	▲ 1.9% RESALE	▲ 37.5% AUCTION
YEAR OVER YEAR	▼ 29.5% RESALE	▼ 44.9% AUCTION	▼ 22.9% RESALE	▲ 8.2% AUCTION	▲ 19.9% RESALE	▲ 25.3% 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:

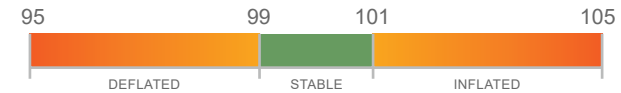
$$P_L = \frac{\sum(p_{c,t_n}) * (q_{c,t_0})}{\sum(p_{c,t_0}) * (q_{c,t_0})}$$

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.

Terms and Conditions

This document is made available as part of your EquipmentWatch subscription and is subject to the EquipmentWatch Terms of Service (<http://www3.equipmentwatch.com/marketing/info/355/terms-of-service>) (the "TOS"). This document will be deemed a "One-Time Report" for purposes of the TOS. Without limiting the generality of the foregoing, you may make a de minimis number of copies of this document for your organization's internal business purposes, but you may not redistribute the document, in whole or in part, outside your organization except under the limited circumstances permitted by the TOS.