



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: DECEMBER 2018

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

**\$32,545,405,889**

RESALE  
**\$32,267,919,244**

349,312 Assets

AUCTION  
**\$277,486,645**

10,905 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	
<b>CONSTRUCTION</b> \$16,898,880,529 MARKET VALUE 180,806 ASSETS	▲ 2.4% FMV ▼ 4.5% RESALE	▲ 8.0% FLV ▼ 23.0% AUCTION	▼ 1.1% FMV ▼ 12.7% RESALE	▼ 1.8% FLV ▲ 66.2% AUCTION	98.83 95 ——— 105 DEFLATED STABLE INFLATED
<b>LIFT/ACCESS</b> \$1,255,292,567 MARKET VALUE 43,811 ASSETS	▲ 1.1% FMV ▲ 14.4% RESALE	▲ 17.0% FLV ▲ 71.7% AUCTION	▼ 1.6% FMV ▼ 0.1% RESALE	▼ 1.5% FLV ▲ 116.8% AUCTION	98.52 95 ——— 105 DEFLATED STABLE INFLATED
<b>AGRICULTURE</b> \$10,056,367,572 MARKET VALUE 108,948 ASSETS	▼ 3.1% FMV ▼ 57.3% RESALE	▲ 8.7% FLV ▼ 64.4% AUCTION	▼ 1.9% FMV ▼ 18.5% RESALE	▲ 1.0% FLV ▼ 1.8% AUCTION	97.92 95 ——— 105 DEFLATED STABLE INFLATED
<b>COMMERCIAL TRUCK</b> \$4,334,865,221 MARKET VALUE 26,652 ASSETS	▼ 11.5% FMV ▼ 58.9% RESALE	▼ 4.8% FLV ▼ 59.4% AUCTION	▼ 0.6% FMV ▼ 28.3% RESALE	▼ 0.6% FLV ▼ 46.2% AUCTION	99.62 95 ——— 105 DEFLATED STABLE INFLATED



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

**CONSTRUCTION**

**OVERALL** TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

**MARKET ACTIVITY**

**\$16,898,880,529** **180,806**  
MARKET VALUE ASSETS

**YEAR OVER YEAR**

**MARKET METRICS**

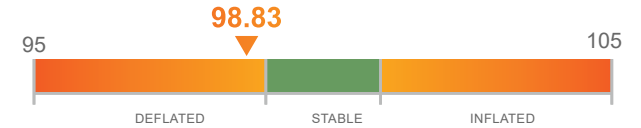
VALUES **▲ 2.4%** **▲ 8.0%**  
FMV FLV  
VOLUME **▼ 4.5%** **▼ 23.0%**  
RESALE AUCTION

**MONTH OVER MONTH**

**MARKET METRICS**

VALUES **▼ 1.1%** **▼ 1.8%**  
FMV FLV  
VOLUME **▼ 12.7%** **▲ 66.2%**  
RESALE AUCTION

**PRICE STABILITY INDEX™**



**MARKET PERFORMANCE**

Both overall FMV and FLV decreased from November to December, dropping by 1.1% and 1.8%, respectively. Both metrics were still up from December, 2017, though.

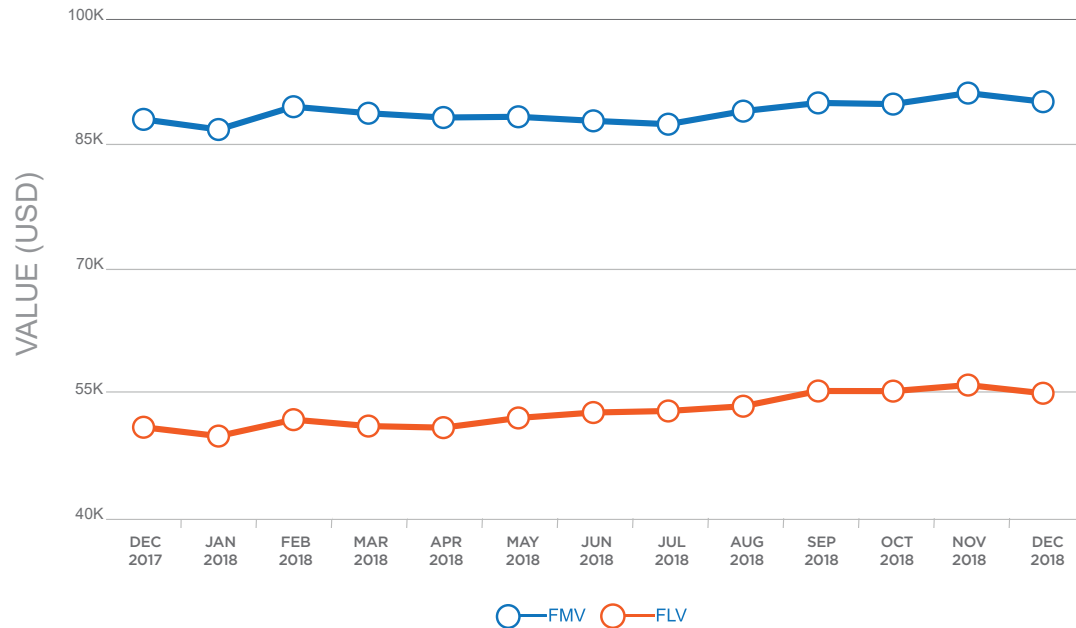
**MARKET HIGHLIGHTS**

- Auction market activity increased by over 66% from November to December, while resale market activity decreased by almost 13%. Year-over-year market activity was down across both channels.
- The overall number of assets decreased by almost 10% month-over-month, while overall market value decreased by 3.8% during the same time period.
- Average utilization in the auction channel had a decrease of over 41% from November to December, while seeing a small increase in average age. The resale channel saw small month-over-month increases in both metrics.

**MARKET FORECAST**

FMVs and FLVs in the construction channel should increase in January, while overall market activity should remain relatively even.

**FMV AND FLV TRENDS**



	VOLUME CHANGE		AVERAGE AGE		USAGE	
<b>MONTH OVER MONTH</b>	<b>▼ 12.7%</b> RESALE	<b>▲ 66.2%</b> AUCTION	<b>▲ 0.3%</b> RESALE	<b>▲ 0.6%</b> AUCTION	<b>▲ 0.2%</b> RESALE	<b>▼ 41.4%</b> AUCTION
<b>YEAR OVER YEAR</b>	<b>▼ 4.5%</b> RESALE	<b>▼ 23.0%</b> AUCTION	<b>▼ 0.1%</b> RESALE	<b>▼ 1.3%</b> AUCTION	<b>▼ 2.2%</b> RESALE	<b>▼ 24.0%</b> AUCTION



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**LIFT/ACCESS**

**OVERALL** TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

**MARKET ACTIVITY**

**\$1,255,292,567**  
MARKET VALUE

**43,811**  
ASSETS

**YEAR OVER YEAR**

**MARKET METRICS**

VALUES **▲ 1.1%** FMV **▲ 17.0%** FLV

VOLUME **▲ 14.4%** RESALE **▲ 71.7%** AUCTION

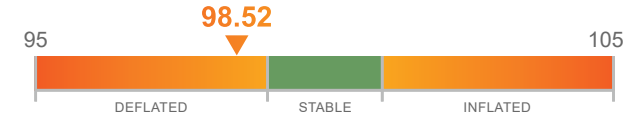
**MONTH OVER MONTH**

**MARKET METRICS**

VALUES **▼ 1.6%** FMV **▼ 1.5%** FLV

VOLUME **▼ 0.1%** RESALE **▲ 116.8%** AUCTION

**PRICE STABILITY INDEX™**



**MARKET PERFORMANCE**

In December, both FMV and FLV saw decreases for the second month in a row, volume remained close to the same for resale, and increased greatly for auction.

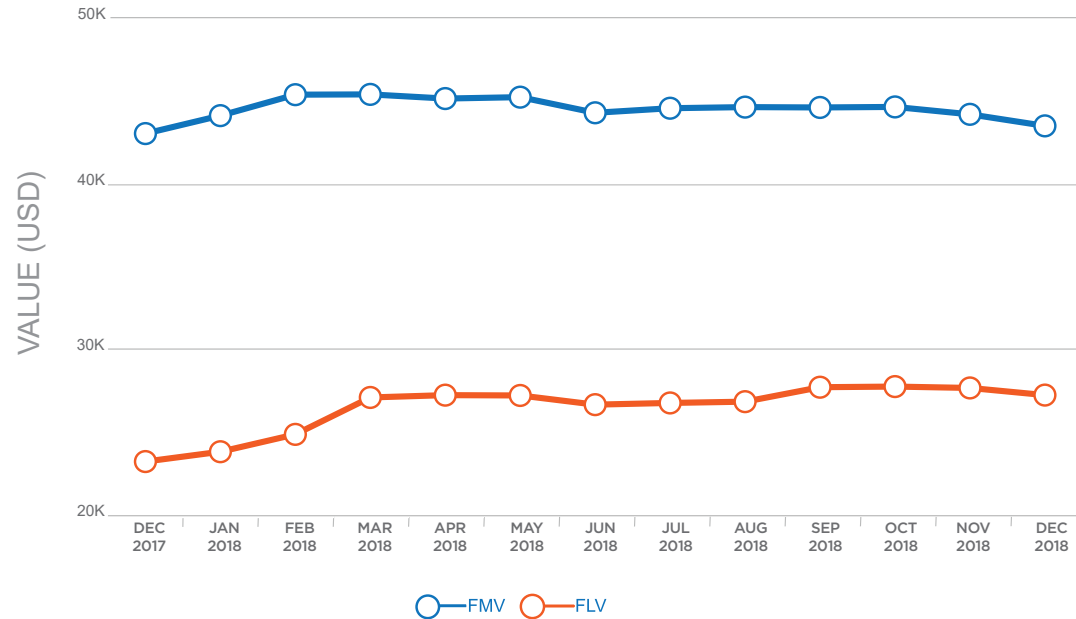
**MARKET HIGHLIGHTS**

- Although average FMV and FLV decreased in the past month, values are higher now than they were last December.
- Average usage of assets in both channels decreased this month, and average usage has seen a notable decrease compared to this time last year.
- The large change in volume for auction is becoming a regular occurrence, as auction volume has seen a month over month change of over 50% in every month since May 2018.

**MARKET FORECAST**

Going into January, FMV and FLV will both increase, volume in resale will increase, and volume in auction should decrease in anticipation of large auction events in the later months.

**FMV AND FLV TRENDS**



	VOLUME CHANGE		AVERAGE AGE		USAGE	
<b>MONTH OVER MONTH</b>	<b>▼ 0.1%</b> RESALE	<b>▲ 116.8%</b> AUCTION	<b>▼ 0.7%</b> RESALE	<b>▲ 5.9%</b> AUCTION	<b>▼ 6.9%</b> RESALE	<b>▼ 18.5%</b> AUCTION
<b>YEAR OVER YEAR</b>	<b>▲ 14.4%</b> RESALE	<b>▲ 71.7%</b> AUCTION	<b>▼ 1.3%</b> RESALE	<b>▼ 5.8%</b> AUCTION	<b>▼ 8.5%</b> RESALE	<b>▼ 7.0%</b> AUCTION



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**OVERALL** TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

**MARKET ACTIVITY**

**YEAR OVER YEAR**

**MARKET METRICS**

**\$10,056,367,572** **108,948**  
MARKET VALUE ASSETS

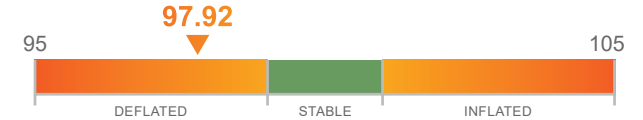
VALUES ▼ **3.1%** ▲ **8.7%**  
FMV FLV  
VOLUME ▲ **57.3%** ▼ **64.4%**  
RESALE AUCTION

**MONTH OVER MONTH**

**MARKET METRICS**

VALUES ▼ **1.9%** ▲ **1.0%**  
FMV FLV  
VOLUME ▼ **18.5%** ▼ **1.8%**  
RESALE AUCTION

**PRICE STABILITY INDEX™**



**MARKET PERFORMANCE**

Both resale and auction channels have experienced contractions in market activity from the previous month as FMV volumes fell by 18.5% while FLV activity shrunk by a modest 1.8%. Despite the change in volume in both channels, a divergence in values took place between the two where average resale values dropped right under 2% and auction values rose slightly by 1%. Resale values have failed to recover despite bullish expectations.

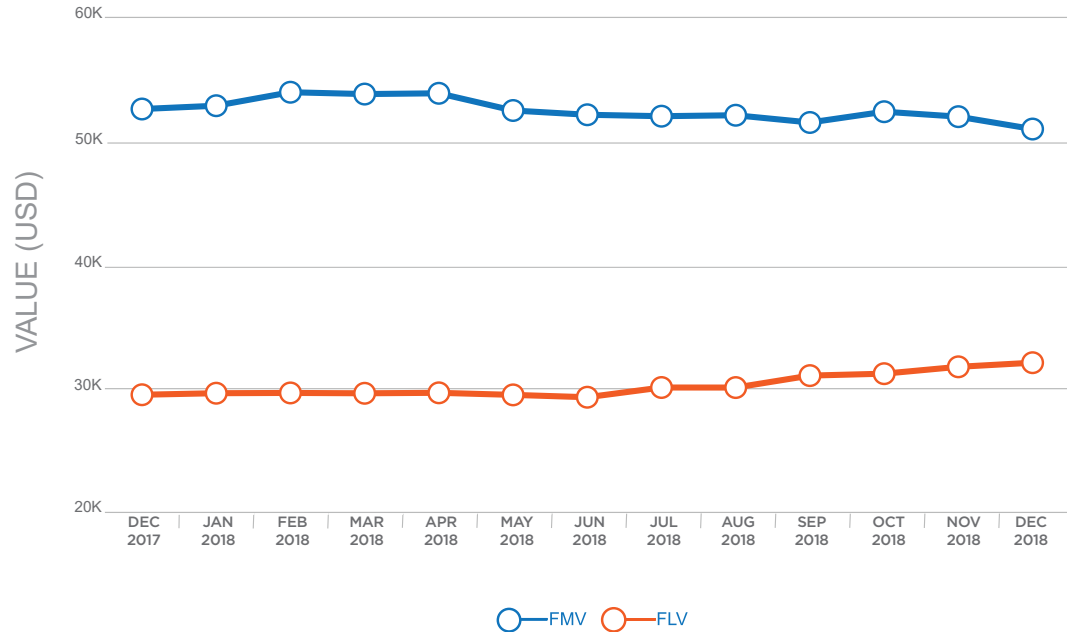
**MARKET HIGHLIGHTS**

- Utilization averages in both the resale and auctions channel suggest an entrance of machines with relatively higher meter reads than the previous month as both FMV and FLV usage figures rose.
- With the entrance of additional asset channels in the market place, average ages have remained nearly stagnant barely moving the needle in any one direction.
- Activity across market places is significantly quieter when compared to the same period last year as the resale channel displayed 57.3% less volume and auction 64.4% less.

**MARKET FORECAST**

While auction values have behaved as expected as they continue to rise going into January, resale values have yet to increase. Expect FMV trends to change direction and gain positive traction in January and auction values to continue their steady ascent into February.

**FMV AND FLV TRENDS**



	VOLUME CHANGE		AVERAGE AGE		USAGE	
<b>MONTH OVER MONTH</b>	▼ 18.5% RESALE	▼ 1.8% AUCTION	▲ 0.4% RESALE	▼ 0.7% AUCTION	▲ 22.2% RESALE	▲ 16.5% AUCTION
<b>YEAR OVER YEAR</b>	▼ 57.3% RESALE	▼ 64.4% AUCTION	▲ 2.2% RESALE	▲ 2.2% AUCTION	▼ 23.3% RESALE	▲ 0.1% AUCTION



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**COMMERCIAL TRUCK**

**COMMERCIAL TRUCK**

**OVERALL**

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY	YEAR OVER YEAR		MONTH OVER MONTH	
	MARKET METRICS		PRICE STABILITY INDEX™	

**\$4,334,865,221**  
MARKET VALUE

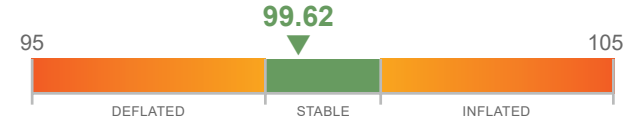
**26.652**  
ASSETS

VALUES ▼ **11.5%** FMV ▼ **4.8%** FLV

VOLUME ▼ **58.9%** RESALE ▼ **59.4%** AUCTION

VALUES ▼ **0.6%** FMV ▼ **0.6%** FLV

VOLUME ▼ **28.3%** RESALE ▼ **46.2%** AUCTION



**MARKET PERFORMANCE**

FMV and FLV was down, but only slightly with the end of the year as volume dropped for both channels. The drop in activity for the resale channel was due to less trucks available for sale by dealer or individual reseller.

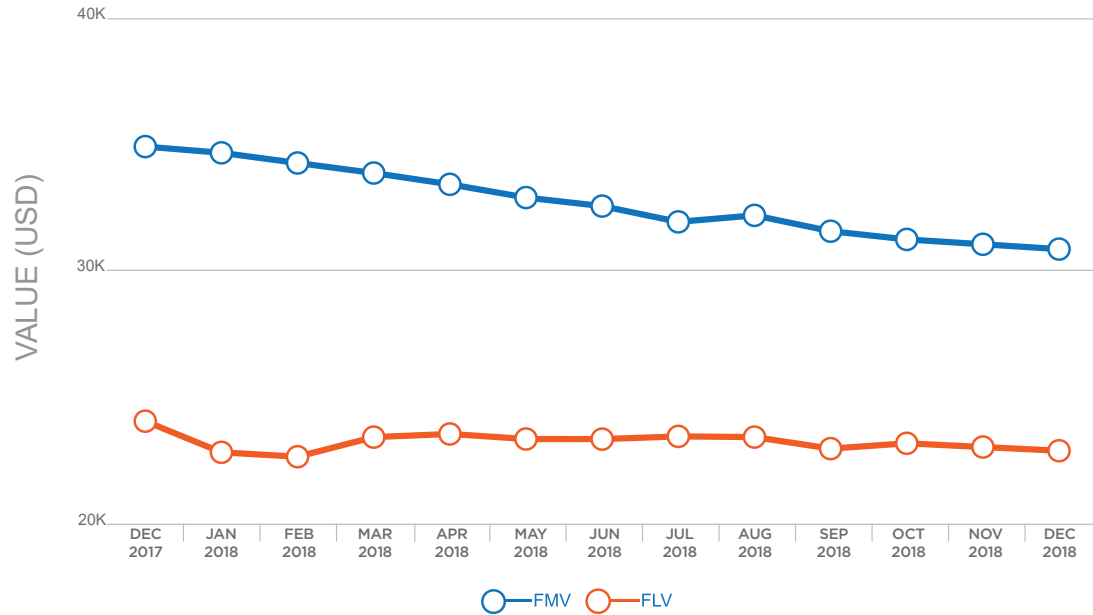
**MARKET HIGHLIGHTS**

- With the drop in activity, the average usage increased meaning the trucks waiting to be sold on resale or the lower volume sold at auction were the lower aged, higher mileage trucks.
- Average age was down across the board with a 35.4% drop month over month on resale and 11.3% on the auction channel.
- Auction channel usage was only up 2.7% compared to the resale channel increase of 10%, but both channels were up 20% year over year.

**MARKET FORECAST**

Expect the activity to increase, especially on the auction channel with the start of the new year.

**FMV AND FLV TRENDS**



	VOLUME CHANGE		AVERAGE AGE		USAGE	
<b>MONTH OVER MONTH</b>	▼ <b>28.3%</b> RESALE	▼ <b>46.2%</b> AUCTION	▼ <b>35.4%</b> RESALE	▼ <b>11.3%</b> AUCTION	▲ <b>10.0%</b> RESALE	▲ <b>2.7%</b> AUCTION
<b>YEAR OVER YEAR</b>	▼ <b>58.9%</b> RESALE	▼ <b>59.4%</b> AUCTION	▼ <b>26.1%</b> RESALE	▲ <b>0.7%</b> AUCTION	▲ <b>20.3%</b> RESALE	▲ <b>20.9%</b> 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:

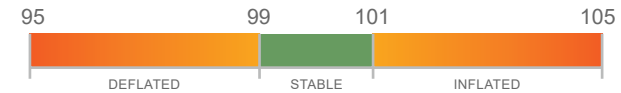
$$P_L = \frac{\sum(p_{c,t_n}) * (q_{c,t_0})}{\sum(p_{c,t_0}) * (q_{c,t_0})}$$

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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