



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: AUGUST 2018

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

\$30,643,996,047

RESALE
\$30,515,655,420

385,727 Assets

AUCTION
\$128,340,627

6,183 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 \$16,758,888,288 182,884 MARKET VALUE ASSETS	VALUES	▼ 3.5% FMV ▲ 0.8% FLV	VALUES	▼ 2.8% FMV ▼ 3.1% FLV	95 ——— 99.13 ——— 105 DEFLATED STABLE INFLATED
	VOLUME	▲ 12.4% RESALE ▼ 5.6% AUCTION	VOLUME	▼ 9.5% RESALE ▼ 4.5% AUCTION	
LIFT/ACCESS \$1,207,689,377 40,869 MARKET VALUE ASSETS	VALUES	▲ 0.4% FMV ▲ 11.3% FLV	VALUES	▲ 1.5% FMV ▲ 1.4% FLV	95 ——— 97.36 ——— 105 DEFLATED STABLE INFLATED
	VOLUME	▲ 7.8% RESALE ▲ 0.6% AUCTION	VOLUME	▲ 0.4% RESALE ▲ 69.2% AUCTION	
AGRICULTURE \$10,640,893,706 122,691 MARKET VALUE ASSETS	VALUES	▲ 0.7% FMV ▲ 3.9% FLV	VALUES	▼ 1.7% FMV ▲ 1.5% FLV	95 ——— 98.94 ——— 105 DEFLATED STABLE INFLATED
	VOLUME	▼ 3.1% RESALE ▼ 34.4% AUCTION	VOLUME	▼ 11.0% RESALE ▼ 26.7% AUCTION	
COMMERCIAL TRUCK \$2,036,524,676 45,466 MARKET VALUE ASSETS	VALUES	▼ 12.5% FMV ▼ 1.5% FLV	VALUES	▲ 0.8% FMV ▼ 0.1% FLV	95 ——— 100.65 ——— 105 DEFLATED STABLE INFLATED
	VOLUME	▲ 30.0% RESALE ▲ 23.5% AUCTION	VOLUME	▲ 19.9% RESALE ▼ 22.2% AUCTION	



SUMMARY

CONSTRUCTION

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COMMERCIAL TRUCK

CONSTRUCTION

OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY

\$16,758,888,288
MARKET VALUE

182,884
ASSETS

YEAR OVER YEAR

MARKET METRICS

VALUES ▼ **3.5%** ▲ **0.8%**
FMV FLV

VOLUME ▲ **12.4%** ▼ **5.6%**
RESALE AUCTION

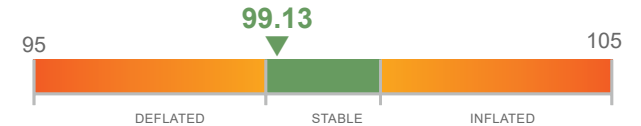
MONTH OVER MONTH

MARKET METRICS

VALUES ▼ **2.8%** ▼ **3.1%**
FMV FLV

VOLUME ▼ **9.5%** ▼ **4.5%**
RESALE AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

August continued the official end of the annual summer slump in values for construction equipment, with average FMV dropping -2.8% and average FLV following with a 3.1% decline. Fittingly, market activity dropped between 5% and 10% in the same period, holding the Price Stability Index relatively stable at 99.13.

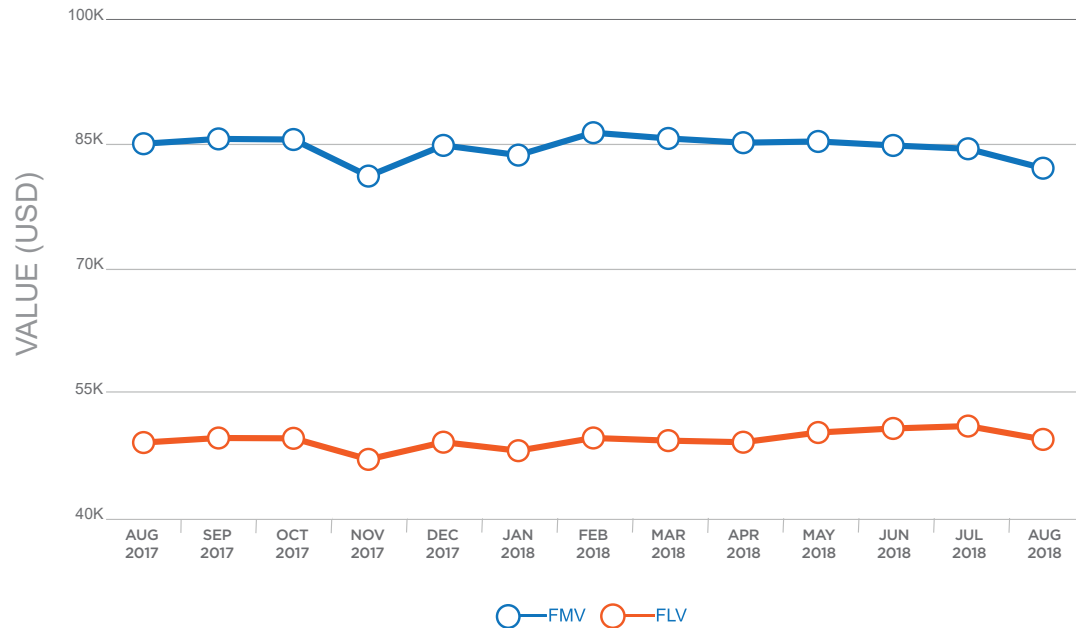
MARKET HIGHLIGHTS

- Declines in average FMV and FLV are expected through August and often into September, usually followed by a sharp jump in values as equipment managers begin disposition activities.
- Overall increases in future average FMV are predicated by declines in average age and usage from July 2018 to August 2018.
- Average FMV not only declined in August 2018, but it was nearly 4% lower than average FMV in the same month a year prior.

MARKET FORECAST

August is likely the last full month of the 2018 calendar year in which average FMV and FLV will decline. We anticipate average usage and age to decline as well as newer machines hit the resale and auction channels.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 9.5% RESALE	▼ 4.5% AUCTION	▼ 1.6% RESALE	▲ 2.5% AUCTION	▼ 1.4% RESALE	▼ 3.2% AUCTION
YEAR OVER YEAR	▲ 12.4% RESALE	▼ 5.6% AUCTION	▼ 0.8% RESALE	▲ 9.4% AUCTION	▼ 5.9% RESALE	▲ 19.3% AUCTION



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LIFT/ACCESS

OVERALL TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY

\$1,207,689,377
MARKET VALUE

40,869
ASSETS

YEAR OVER YEAR

MARKET METRICS

VALUES ▲ **0.4%** FMV ▲ **11.3%** FLV

VOLUME ▲ **4.1%** RESALE ▼ **28.0%** AUCTION

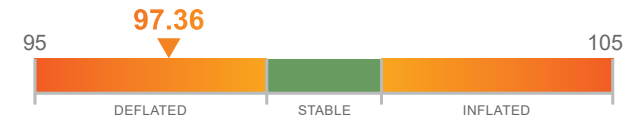
MONTH OVER MONTH

MARKET METRICS

VALUES ▲ **1.5%** FMV ▲ **1.4%** FLV

VOLUME ▲ **0.4%** RESALE ▲ **69.2%** AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

Lift FMVs and FLVs saw increases in August. The overall Price Stability index was 97.36 for August, a decrease from July, and indicating a deflated market.

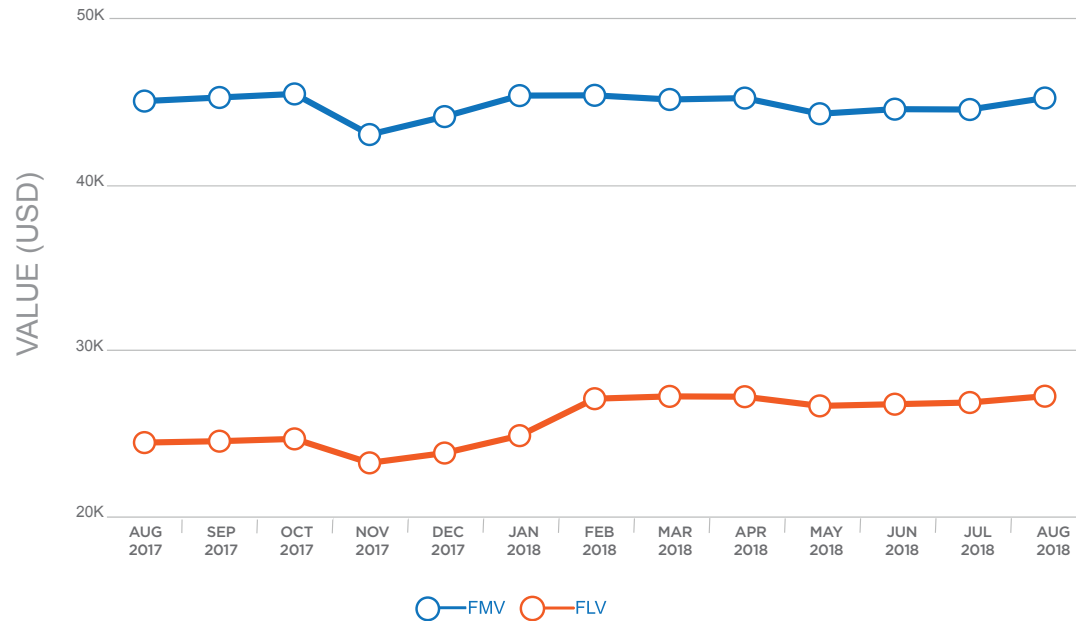
MARKET HIGHLIGHTS

- After a modest increase, resale values are at the highest they have been in six months. Auction values are the highest they have been in over a year.
- Auction volume increased significantly in August, when compared to July, and remained stable when compared to this last August. Although auction volume increased 69.2% this month, August's auction market activity was still lower than what was seen in June.
- With a score of 97.36, the Lift Price Stability Index is deflated for the first time since January. All but one region had a deflated score.

MARKET FORECAST

Looking forward to September, we should see a slight increase in volume from both resale and auction, and values should remain around the same. Also, the Price Stability Index should go back to indicating a stable market.

FMV AND FLV TRENDS



VOLUME CHANGE

AVERAGE AGE

USAGE

MONTH OVER MONTH

▲ **0.4%** RESALE ▲ **69.2%** AUCTION ▼ **0.9%** RESALE ▲ **1.1%** AUCTION ▼ **0.4%** RESALE **0.0%** AUCTION

YEAR OVER YEAR

▲ **7.8%** RESALE ▲ **0.6%** AUCTION ▲ **0.2%** RESALE ▼ **4.1%** AUCTION ▲ **3.2%** RESALE ▲ **10.6%** AUCTION



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How is the Price Stability INDEX calculated?

AGRICULTURE

OVERALL TYPE TRENDS BRAND TRENDS REGIONAL TRENDS

MARKET ACTIVITY

YEAR OVER YEAR

MARKET METRICS

\$10,640.893,706 MARKET VALUE
122,691 ASSETS

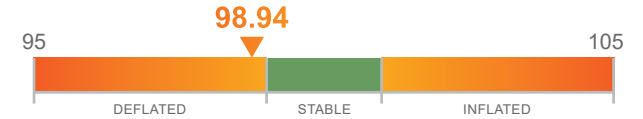
VALUES **▲ 0.7%** FMV **▲ 3.9%** FLV
VOLUME **▼ 3.1%** RESALE **▼ 34.4%** AUCTION

MONTH OVER MONTH

MARKET METRICS

VALUES **▼ 1.7%** FMV **▲ 1.5%** FLV
VOLUME **▼ 11.0%** RESALE **▼ 26.7%** AUCTION

PRICE STABILITY INDEX™



MARKET PERFORMANCE

Values remained stable as usual this month, with a marginal decrease in FMV by 1.7%, and a marginal increase in FLV by 1.5%. Agricultural market in August was slightly deflated with The Price Stability Index™ being 98.94%. Though FMV's have slightly decreased expect for them to not have much variance in the upcoming months.

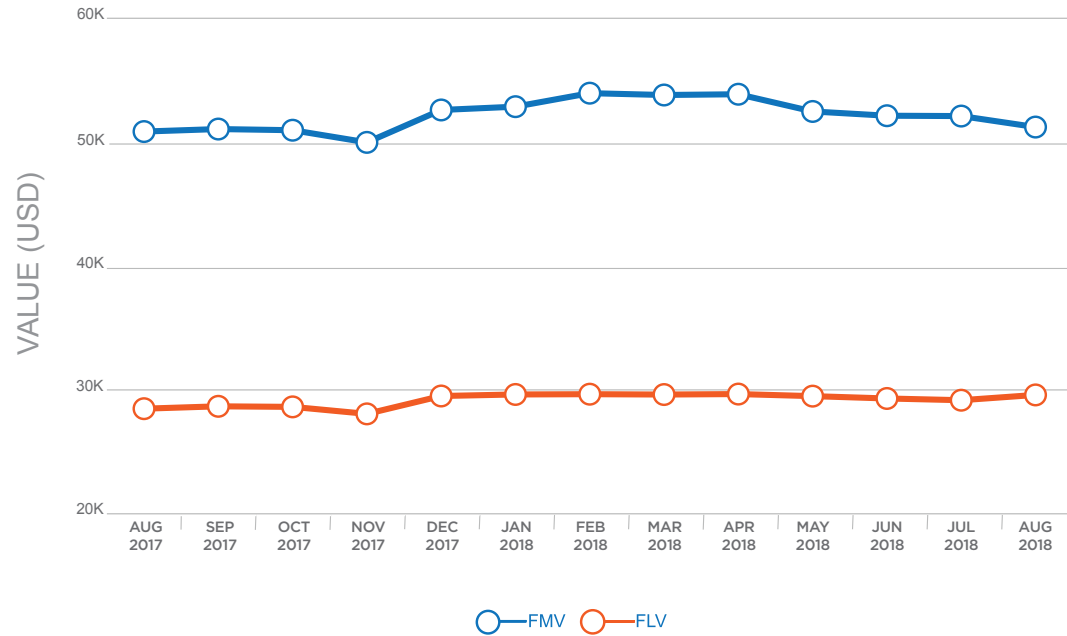
MARKET HIGHLIGHTS

- Relative to last year FLV has increased. This increase in values can be explained by the decrease of equipment utilization.
- The resale channel is experiencing an increase in age, with a decrease in asset utilization.
- The change in volume for resale and auction markets is critical this month. These changes are indicative of seasonality, as harvest season is starting for most fall crops.

MARKET FORECAST

Going into the 4th quarter expect values to remain stable and utilization to marginally increase due to harvesting season.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 11.0% RESALE	▼ 26.7% AUCTION	▲ 2.7% RESALE	▼ 4.4% AUCTION	▼ 11.6% RESALE	▼ 18.2% AUCTION
YEAR OVER YEAR	▼ 3.1% RESALE	▼ 34.4% AUCTION	▲ 0.9% RESALE	▲ 24.6% AUCTION	0.0% RESALE	▼ 25.8% AUCTION



SUMMARY

CONSTRUCTION

LIFT/ACCESS

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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 MARKET METRICS		MONTH OVER MONTH MARKET METRICS		PRICE STABILITY INDEX™
	VALUES	FLV	VALUES	FLV	
\$2,036,524,676 MARKET VALUE	▼ 12.5% FMV	▼ 1.5% FLV	▲ 0.8% FMV	▼ 0.1% FLV	95 100.65 105 DEFLATED STABLE INFLATED
45,466 ASSETS	▲ 30.0% RESALE	▲ 23.5% AUCTION	▲ 19.9% RESALE	▼ 22.2% AUCTION	

MARKET PERFORMANCE

As is expected this time of year, volume was up on the used truck market which has been continuing to grow year over year. The resale channel year over year activity increase in August of 2017 was 10.2% and August of 2018 was up another 30.0%. The auction channel had similar results as last year with a 22.2% drop month over month, but 23.5% increase year over year while August of 2017's year over year increase was 50.9%.

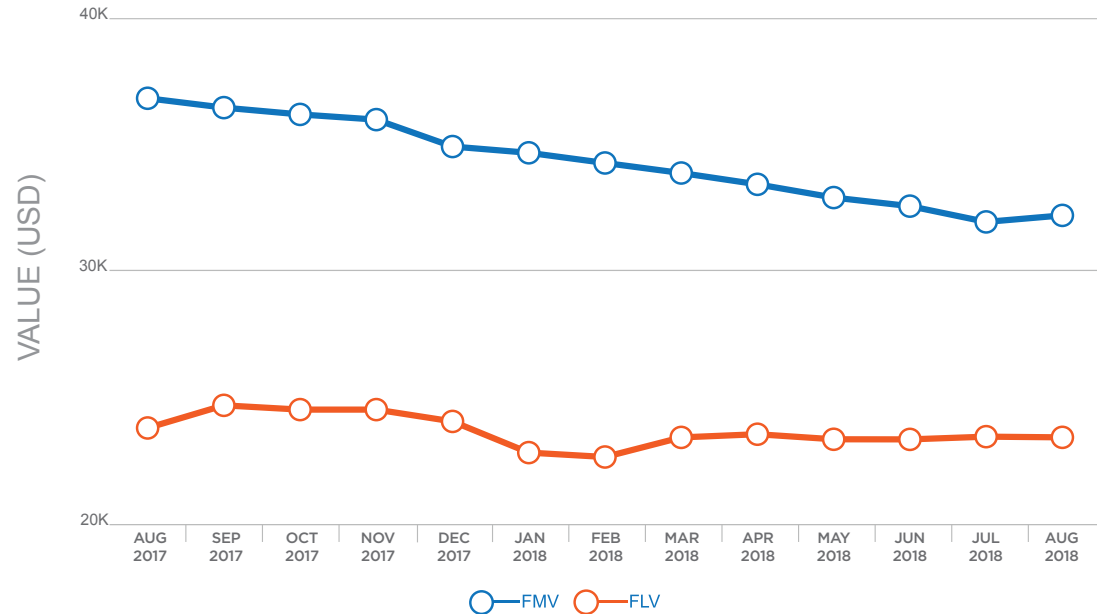
MARKET HIGHLIGHTS

- These increases in volume did not have a negative impact on FMV and FLV as the FMV was up 0.8% month over month and FLV only dropped by 0.1% which is typical given the decreases in both that are expected over the next few months.
- With more trucks entering the used market, the average age on the resale channel increased 3.0% with average usage down 19.7%; while the average age may be increasing, the condition and low usage were allowing FMV to remain steady.
- The auction channel had different results last month as the average age increases month over month and year over year with average usage up as well thus causing the small dip in FLV.

MARKET FORECAST

Expect the volume to continue increasing on both the resale and auction channels with an increase in FLV as sellers unable to sell at resale shift towards auction due to the number of trucks available on the resale channel this time of year.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 19.9% RESALE	▼ 22.2% AUCTION	▲ 3.0% RESALE	▲ 4.1% AUCTION	▼ 19.7% RESALE	▲ 2.6% AUCTION
YEAR OVER YEAR	▲ 30.0% RESALE	▲ 23.5% AUCTION	▲ 5.1% RESALE	▲ 12.8% AUCTION	▼ 21.6% RESALE	▲ 12.3% 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:

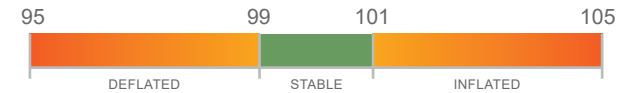
$$P_L = \frac{\sum(p_{c,t_n}) * (q_{c,t_0})}{\sum(p_{c,t_0}) * (q_{c,t_0})}$$

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.

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