MARKET DATA: JULY 2017

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

$30,404,552,215

RESALE
$30,255,319,772
399,426 Assets

AUCTION
$149,232,443
6,488 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**.

MARKET SUMMARY

For more detailed articles, visit *EquipmentWatch* Intelligence online.

How is the Price Stability INDEX calculated?

MARKET ACTIVITY	YEAR OVER YEAR MARKET METRICS	MONTH OVER MONTH MARKET METRICS	MONTH OVER MONTH PRICE STABILITY INDEX ™
CONSTRUCTION $14,089,342,457 MARKET VALUE; 161,607 ASSETS	VALUES ▼ 6.5% FMV ▼ 8.5% FLV VOLUME ▲ 2.6% RESALE ▼ 3.5% AUCTION	VALUES ▼ 3.6% FMV ▼ 3.8% FLV VOLUME ▼ 14.9% RESALE ▼ 36.4% AUCTION	95.87 (95 – 105) DEFLATED / STABLE / INFLATED
LIFT/ACCESS $1,188,918,587 MARKET VALUE; 40,855 ASSETS	VALUES ▼ 8.7% FMV ▼ 8.5% FLV VOLUME ▲ 2.6% RESALE ▼ 15.7% AUCTION	VALUES ▼ 0.3% FMV ▼ 0.4% FLV VOLUME ▼ 14.9% RESALE ▼ 27.5% AUCTION	99.72 (95 – 105) DEFLATED / STABLE / INFLATED
AGRICULTURE $12,384,312,831 MARKET VALUE; 136,250 ASSETS	VALUES ▼ 4.3% FMV ▼ 4.8% FLV VOLUME ▲ 44.6% RESALE ▼ 10.3% AUCTION	VALUES ▲ 0.8% FMV ▲ 1.0% FLV VOLUME ▲ 44.3% RESALE ▼ 16.9% AUCTION	99.68 (95 – 105) DEFLATED / STABLE / INFLATED
COMMERCIAL TRUCK $2,741,978,340 MARKET VALUE; 67,202 ASSETS	VALUES ▼ 8.3% FMV ▼ 6.4% FLV VOLUME ▲ 42.4% RESALE ▲ 34.5% AUCTION	VALUES ▼ 1.2% FMV ▲ 0.1% FLV VOLUME ▼ 22.0% RESALE ▼ 26.1% AUCTION	98.76 (95 – 105) DEFLATED / STABLE / INFLATED

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You are reading the **free version** of the EquipmentWatch Market Report™

The Premium Market Report is exclusively available to EquipmentWatch customers.

Click here to see a sample of the Premium Market Report

Subtype Trends • Brand Analysis • Regional Price Stability

Want to learn more about EquipmentWatch and our products?

CONTACT OUR SALES TEAM

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CONSTRUCTION

OVERALL | TYPE TRENDS | BRAND TRENDS | REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY

$14,089,342,457
MARKET VALUE

161,607
ASSETS

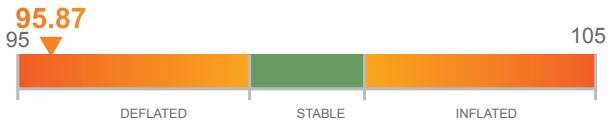
YEAR OVER YEAR MARKET METRICS

VALUES	▼ 6.5% FMV	▼ 8.5% FLV
VOLUME	▲ 2.6% RESALE	▼ 3.5% AUCTION

MONTH OVER MONTH MARKET METRICS

VALUES	▼ 3.6% FMV	▼ 3.8% FLV
VOLUME	▼ 14.9% RESALE	▼ 36.4% AUCTION

MONTH OVER MONTH PRICE STABILITY INDEX ™



MARKET PERFORMANCE

In July 2017 we saw the negative impact of June's high market activity FMVs and FLVs as their trend lines continued to dip to their lowest levels in a 13-month period. The Price Stability Index™ value of 95.87 in July confirms this and points to likely resurgence in months ahead.

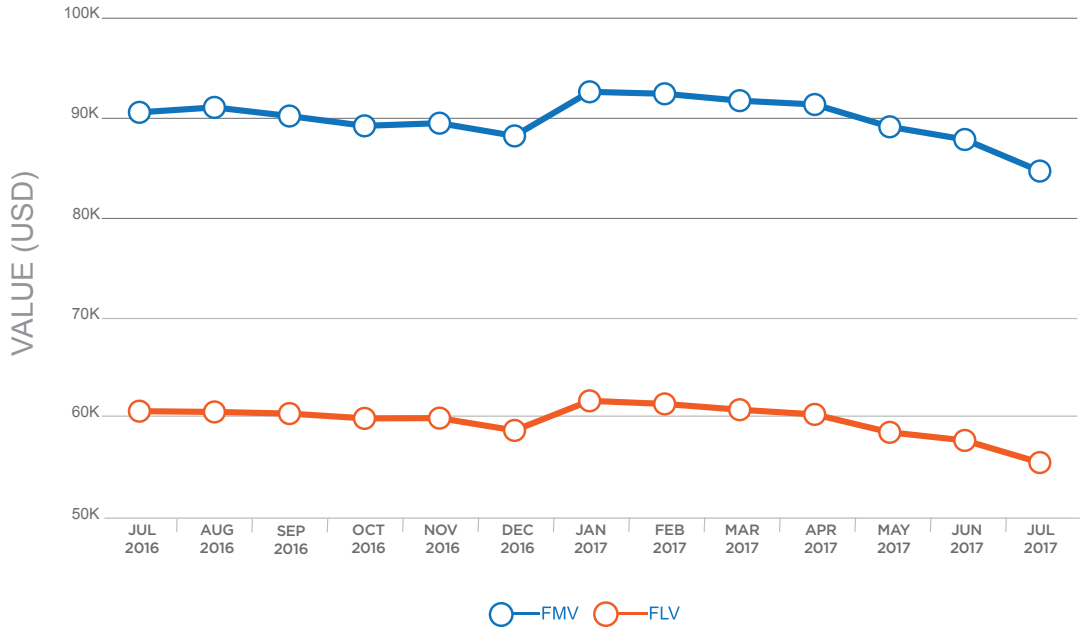
MARKET HIGHLIGHTS

- Overall, age at the resale channel remained relatively constant month over month and increased by almost 1% over last year.
- Average age for equipment sold at auction this month decreased by 2.5% from June this year and 0.3% from last year.
- In contrast to the large increase in month over month in resale activity we listed last month, this month we observed a decrease of 14.9%.

MARKET FORECAST

We expect this trend of decreasing values to within the next few months. We expect values to rebound later in the year when rental houses and equipment managers (among others) seek to replace their heavy equipment with newer machinery.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 14.9% RESALE	▼ 36.4% AUCTION	▼ 0.2% RESALE	▼ 2.5% AUCTION	▲ 0.5% RESALE	▼ 27.5% AUCTION
YEAR OVER YEAR	▲ 2.6% RESALE	▼ 3.5% AUCTION	▲ 0.8% RESALE	▼ 0.3% AUCTION	▲ 3.9% RESALE	▼ 20.4% AUCTION

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LIFT/ACCESS

OVERALL | TYPE TRENDS | BRAND TRENDS | REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY

$1,188,918,587
MARKET VALUE

40,855
ASSETS

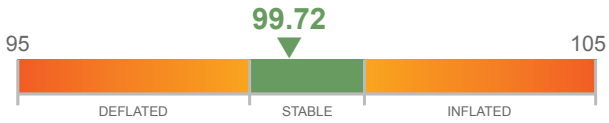
YEAR OVER YEAR MARKET METRICS

VALUES	▼ 8.7% FMV	▼ 8.5% FLV
VOLUME	▲ 2.6% RESALE	▼ 15.7% AUCTION

MONTH OVER MONTH MARKET METRICS

VALUES	▼ 0.3% FMV	▼ 0.4% FLV
VOLUME	▼ 14.9% RESALE	▼ 27.5% AUCTION

MONTH OVER MONTH PRICE STABILITY INDEX ™



MARKET PERFORMANCE

FMV and FLV for lift had slight decreases in July, when compared to June data, decreasing by 0.3% and 0.4%, respectively. Volume decreased in both channels by a decent amount, decreasing by 14.86% in resale markets and 27.46% in auction markets.

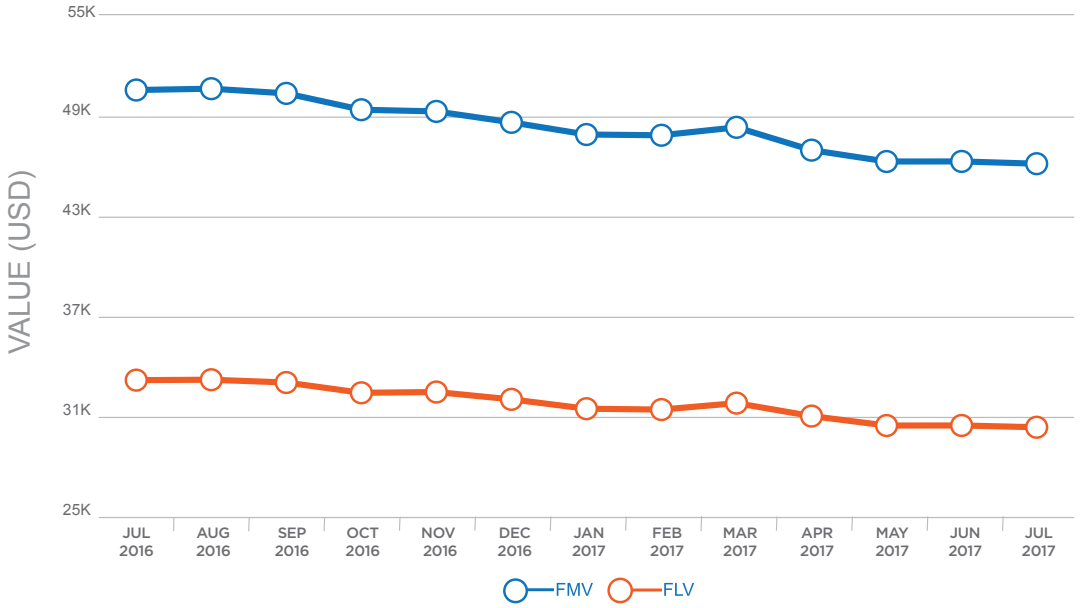
MARKET HIGHLIGHTS

- The Price Stability Index™ was stable for July, with a score of 99.72. This is the second straight month that the lift market has been stable.
- The overall Market Value and number of assets decreased by about 7.3% and 5.6%, respectively, when compared to June.
- Average age decreased in resale channels, but increased in auction channels. Both channels saw increases in average utilization in July, as compared to June.

MARKET FORECAST

Looking forward to August, we should expect to see values remain basically even once again. Volume should continue to decrease slightly, following the same trend as this month.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 14.9% RESALE	▼ 27.5% AUCTION	▼ 1.4% RESALE	▲ 10.6% AUCTION	▲ 2.4% RESALE	▲ 9.3% AUCTION
YEAR OVER YEAR	▲ 2.6% RESALE	▼ 15.8% AUCTION	▲ 1.0% RESALE	▼ 3.0% AUCTION	▲ 1.6% RESALE	▲ 22.1% AUCTION

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AGRICULTURE

OVERALL | TYPE TRENDS | BRAND TRENDS | REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY

$12,384,312,831
MARKET VALUE

136,250
ASSETS

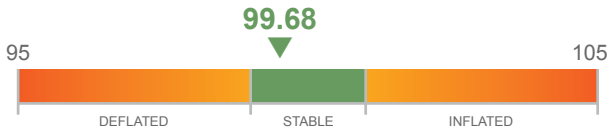
YEAR OVER YEAR MARKET METRICS

VALUES	▼ 4.3% FMV	▼ 4.8% FLV
VOLUME	▲ 44.6% RESALE	▼ 10.3% AUCTION

MONTH OVER MONTH MARKET METRICS

VALUES	▲ 0.8% FMV	▲ 1.0% FLV
VOLUME	▲ 44.3% RESALE	▼ 16.9% AUCTION

MONTH OVER MONTH PRICE STABILITY INDEX ™



MARKET PERFORMANCE

Average prices for the resale channel have remained stable year over year and month over month. The Price Stability Index™ mirrors this information with an index value of 99.68.

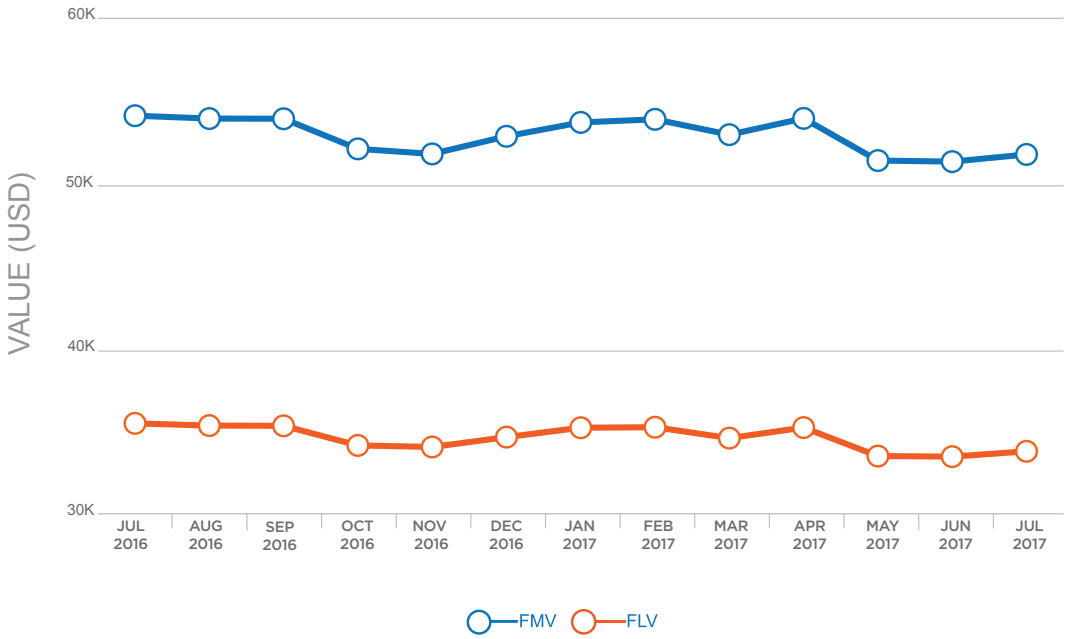
MARKET HIGHLIGHTS

- Resale market activity increased 44.3% from last month and 44.6% from the previous year.
- Average age of equipment decreased for the resale channel month over month and increased a small amount year over year.
- Utilization in the resale channel increased 11.18% from last month and decreased 4.58% over the previous year.

MARKET FORECAST

FMVs and FLVs are at lower levels than last year. However, this summer values have remained stable as was the case last year. Therefore, we expect August values to remain stable.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 44.3% RESALE	▼ 16.9% AUCTION	▼ 3.8% RESALE	▼ 0.4% AUCTION	▲ 11.2% RESALE	▼ 31.7% AUCTION
YEAR OVER YEAR	▲ 44.6% RESALE	▼ 10.4% AUCTION	▲ 0.2% RESALE	▲ 3.0% AUCTION	▼ 4.6% RESALE	▼ 6.7% AUCTION

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COMMERCIAL TRUCK

OVERALL | TYPE TRENDS | BRAND TRENDS | REGIONAL TRENDS

How is the Price Stability INDEX calculated?

MARKET ACTIVITY

$27,419,783,40
MARKET VALUE

67,202
ASSETS

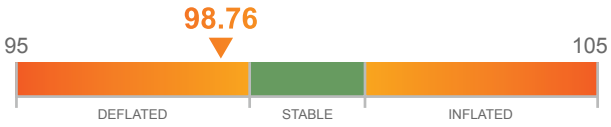
YEAR OVER YEAR MARKET METRICS

VALUES	▼ 8.3% FMV	▼ 6.4% FLV
VOLUME	▲ 42.3% RESALE	▲ 34.5% AUCTION

MONTH OVER MONTH MARKET METRICS

VALUES	▼ 1.2% FMV	▲ 0.1% FLV
VOLUME	▼ 22.0% RESALE	▼ 26.1% AUCTION

MONTH OVER MONTH PRICE STABILITY INDEX ™



MARKET PERFORMANCE

There was a notable drop in both auction and resale channel volume during July, which was expected as the Commercial Truck retail channel showed drops over 20% in volume for the past three consecutive years. The auction channel has consistently dropped in volume between June and July for the past four years all due to the increases that occur during June.

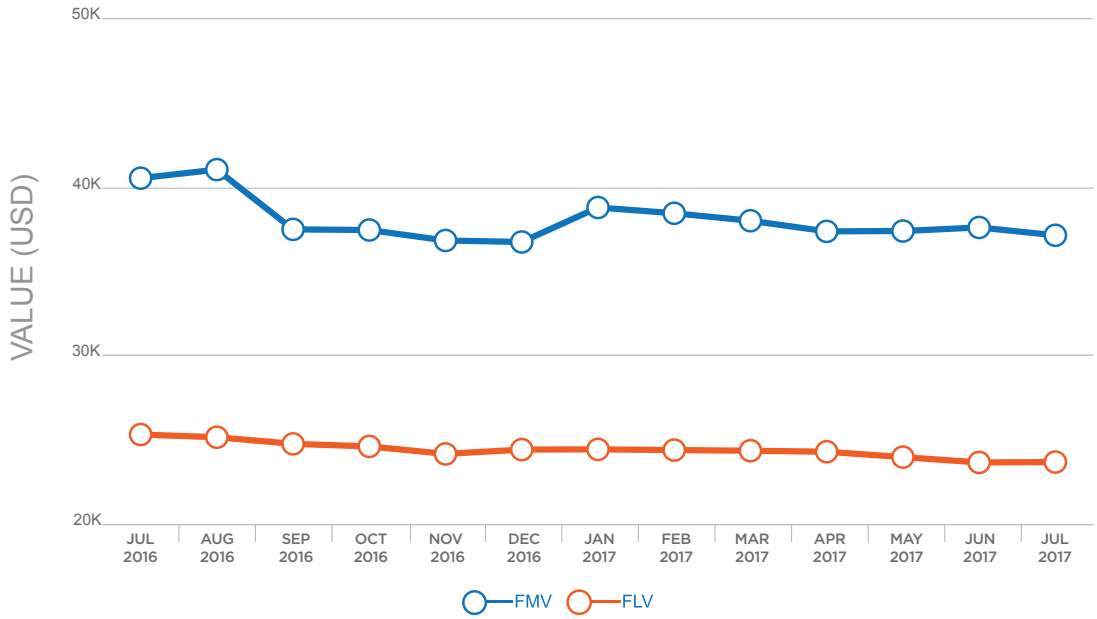
MARKET HIGHLIGHTS

- FMV tends to drop during July after increases in June, so the 1.2% decrease is not alarming and the 8.3% drop year over year is compensating for the 42.3% increase in volume.
- Despite the month over month drop in average age on the auction channel, there was a drop in average usage as well while the year over year average age was up 30.6% with a 26.4% increase in average usage.
- Even though the retail channel volume drops every July, both 2016 and 2017 have shown year over year increases indicating that July is not as slow of a month as it once was.

MARKET FORECAST

Volume typically picks up in August causing FMV and FLV to drop.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 22.0% RESALE	▼ 26.1% AUCTION	▼ 7.1% RESALE	▼ 5.1% AUCTION	▲ 3.1% RESALE	▼ 15.4% AUCTION
YEAR OVER YEAR	▲ 42.3% RESALE	▲ 34.5% AUCTION	▼ 23.9% RESALE	▲ 30.6% AUCTION	▲ 5.36% RESALE	▲ 26.4% AUCTION

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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			

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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:

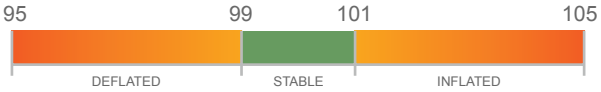
$$P_L = \frac{\sum(p_{c,t_n}) * (q_{c,t_0})}{\sum(p_{c,t_0}) * (q_{c,t_0})}$$

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.

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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.

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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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