



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: JUNE 2018

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

\$32,838,403,989

RESALE

\$32,575,727,500

436,980 Assets

AUCTION

\$262,676,489

12,022 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 <i>EquipmentW</i> | tch Intelligence online. | | | |
|---|---|---|-------------------------------|--|--|
| MARKET ACTIVITY | YEAR OVER YEAR MONT | | TH OVER MONTH | | |
| | MARKET METRICS | MARKET METRICS | PRICE STABILITY INDEX ™ | | |
| CONSTRUCTION | VALUES ▼ 4.5% ▼ 1.3% FMV FLV | VALUES ▼ 0.5% ▲ 1.2% FLV | 99.66 95 99.66 | | |
| \$17,352,343,841 205,543 MARKET VALUE ASSETS | VOLUME ▲ 28.4% ▲ 23.8% AUCTIO | VOLUME ▲ 7.6% AUCTION | DEFLATED STABLE INFLATED | | |
| LIFT/ACCESS | values ▼ 3.7% ▲ 6.1% FMV FLV | VALUES ▲ 0.7% ▲ 0.4% FLV | 9 9.99 95 99.99 | | |
| \$1,130,850,589 37,574 MARKET VALUE ASSETS | VOLUME ▼ 17.4% ▲ 55.4% AUCTIO | VOLUME ▲ 6.8% AUCTION | DEFLATED STABLE INFLATED | | |
| AGRICULTURE | VALUES ▲ 2.0% ▲ 2.9% FMV FLV | VALUES ▼ 0.4% ▼ 0.4% FLV | 99.56 95 | | |
| \$11,135,126,287 134,680 MARKET VALUE ASSETS | VOLUME ▲ 9.2% ▼ 24.0% AUCTIO | VOLUME ▼ 8.7% ▲ 7.6% AUCTION | DEFLATED STABLE INFLATED | | |
| COMMERCIAL TRUCK | VALUES ▼ 13.4% ▼ 1.5% FMV FLV | VALUES ▼ 1.0% 0.0% FLV | 98.78 95 ▼ 105 | | |
| \$3,220,083,272 71,205 MARKET VALUE ASSETS | VOLUME 17.3% 43.2% RESALE AUCTIO | VOLUME \$\textstyle 10.9\% RESALE AUCTION | DEFLATED STABLE INFLATED | | |



Did you miss a previous Market Report?

Click any of the buttons below to download the report

June 2018

March 2018

May 2018

February 2018

April 2018

January 2018



JULY 26. 2018 VERSION: FREE | UPDATED MONTHLY

SUMMARY

CONSTRUCTION

LIFT/ACCESS

100K

AGRICULTURE

COMMERCIAL TRUCK

CONSTRUCTION

OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?



MARKET PERFORMANCE

Construction resale values decreased by a half percent in June, while resale market activity increased by almost 8% month over month. Auction had a big month, with market activity increasing by over 32% in June.

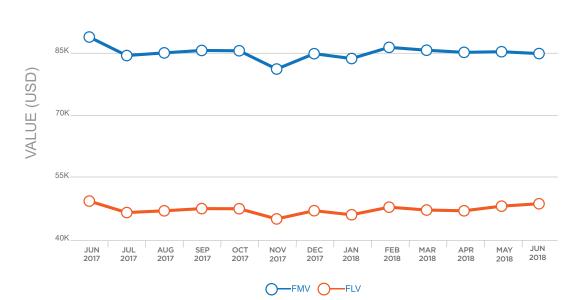
MARKET HIGHLIGHTS

- · The overall number of construction assets increased for the third month in a row, increasing by over 15%. Overall market value also increased in June, rising by over 15% month over month
- Auction values were up 1.2% in June, but that number is somewhat misleading because only two of the twelve equipment types covered in this report increased. They are two of the three largest types, so their large increases caused an overall incease in auction values, when most of the market was down in June.
- Month over month average age and utilization were down slightly in the resale markets, while the opposite was true for auction markets in June.

MARKET FORECAST

Values should remain even or slightly decline in July as the summer production continues to increase. Volume should continue to increase as it did in June.

FMV AND FLV TRENDS



| | VOLUME CHANGE | | AVERAGE AGE | | USAGE | |
|------------------|----------------------|--------------------|------------------|-------------------|------------------|--------------------|
| MONTH OVER MONTH | ▲ 7.6% RESALE | ▲ 32.6% AUCTION | ▼ 0.5% RESALE | ▲ 1.7% AUCTION | ▼ 0.8% RESALE | ▲ 14.5% AUCTION |
| YEAR OVER YEAR | ▲ 28.4% RESALE | ▲ 23.8% AUCTION | ▲ 1.5% RESALE | ▼ 8.3% AUCTION | ▼ 6.6% RESALE | ▼ 3.7% AUCTION |

NEXT

JULY 26, 2018 VERSION: FREE | UPDATED MONTHLY

SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

LIFT/ACCESS

OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?



MARKET PERFORMANCE

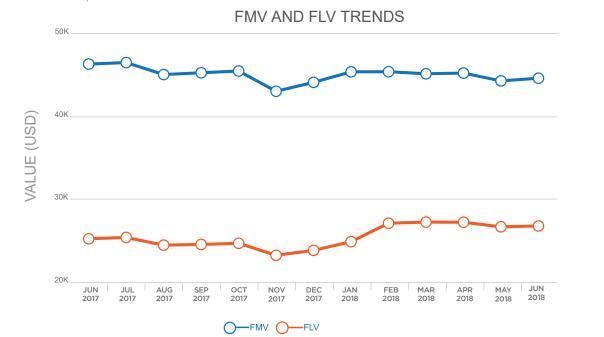
Lift values increased by about 0.5% overall from May to June, while month over month overall market activity increased, with auction going up by more than 50%.

MARKET HIGHLIGHTS

- Year over year and month over month auction market activity have both increased by over 50%, which shows strong evidence that people have been dumping their old pieces of equipment.
- From May to June, the overall market value for lift increased slightly (1.03%), while the overall number of assets also increased (4.18%).
- Month over month average age decreased across both channels, with auction average ages having the larger decrease at almost 10%. Average utilization had very little movement from May to June.

MARKET FORECAST

As we look ahead to July, we should see values remain relatively even or slightly decrease while market activity should decline slightly after seeing large increases in June.





LIFT/ACCESS

JULY 26, 2018 VERSION: FREE | UPDATED MONTHLY



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK



MARKET PERFORMANCE

Market values have depreciated slightly with respect to those of last month, however year over year values hold strong showing gradual gains of 2 and 2.9% for FMV and FLV respectively. Resale volumes have declined for the month but are still up for the year by 9.2% when compared to the same period last year. The inverse of this relationship is true in the auction channel where, most notably, year over year volumes have declined 24%

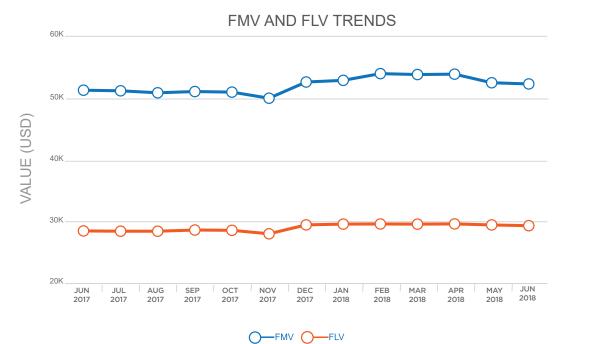
MARKET HIGHLIGHTS

- Utilization in the resale channel has had a significant increase of 27.2% as listings of assets with higher meter reads have emerged.
- The data suggest younger assets with lower usage have been turning up at auction relative to last month.
 In contrast, year over year figures indicate the opposite is occurring.
- The average age for assets in the resale market show no significant change this month relative to last.

MARKET FORECAST

Expect FMV and FLV values to continue their gradual descent until mid Q3 where the drop should reach bottom before positive value gains become apparent.

13







JULY 26, 2018 VERSION: FREE | UPDATED MONTHLY



SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

COMMERCIAL TRUCK

OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?



MARKET PERFORMANCE

FMV was down 1% which is to be expected with an increase in activity and minimal changes to the average or usage. FLV held steady for the month due to seasonality of the auction channel. There were a few larger drops in value on the medium duty trucks, but the heavy duty trucks hold most of the market activity.

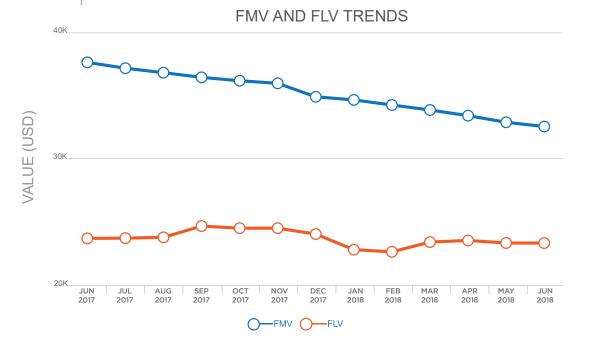
MARKET HIGHLIGHTS

- As anticipated, the activity on both the resale and auction channels increased month over month, but also year over year indicating a healthy season for the market.
- Average age on the resale channel is between 6 and 7 years, which is where the FMV has increased thus bringing the overall channel up from the drops in other model years due to the amount of market share on these trucks..
- The average age on the auction channel dropped at a higher rate than the average usage suggesting the increase in activity brought newer model year trucks to the market with only slightly lower mileage thus allowing FLV to drop for certain model year trucks.

MARKET FORECAST

Expect FMV and FLV to continue holding with increases on the auction channel especially in the coming months.

18



| | VOLUME CHANGE | | AVERAGE AGE | | USAGE | |
|------------------|----------------|-----------------|---------------|---------------|---------------|---------------|
| MONTH OVER MONTH | ▲ 10.9% | ▲ 33.7% | V 0.5% | ▼ 6.7% | ▲ 0.1% | 2.9% |
| | RESALE | AUCTION | RESALE | AUCTION | RESALE | AUCTION |
| YEAR OVER YEAR | ▲ 17.3% | ▲ 43.2 % | ▼ 5.5% | ▼ 5.4% | ▼ 3.1% | ▼ 2.1% |
| | RESALE | AUCTION | RESALE | AUCTION | RESALE | AUCTION |

COMMERCIAL TRUCK





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 | | | |



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:

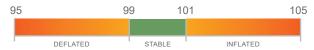
$$P_{L} = \frac{\sum (p_{c,t_{n}}) * (q_{c,t_{0}})}{\sum (p_{c,t_{0}}) * (q_{c,t_{0}})}$$

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.



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.

25

| Country | Region | State/Province |
|---------|--------|------------------------------------|
| USA | А | CT, DE, MA, ME, NH, NJ, MY, RI, VT |
| USA | В | MD, P, VA, WV |
| USA | С | AL, FL, GA, KY, MS, NC, SC, TN |
| USA | D | IL, IN, MI, OH, WI |
| USA | Е | IA, KS, MO, NE |
| USA | F | AR, LA, OK, TX |
| USA | G | AZ, CO, NM, UT |
| USA | Н | 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.



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.

26

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://www.3.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.