



Purchases Report

February 2019

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Important notes:

As of November 2016, unless explicitly specified otherwise, RTA uses 3-month moving average for reporting on inventory (including historical data), hence, affecting calculated values of purchases and Inventory-to-Sales Ratio. In this way, any exaggerations that might be manifest in monthly purchases data, due to regular inventory counts by members, are not emphasized.

Highlighted areas in the graphs represent time of recessions.

Explanation about how to read box plots and histograms can be found in the Appendix section.

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Disclaimer: The data and report presented herein are based solely on RTA member monthly reports on production and inventory. Occasionally, members send corrections to previously submitted data. If and when these corrections are received they are incorporated at that time. Users of this report should note while all care is taken to accurately compile the data submitted by member companies, that no warranty is made as to the accuracy of any RTA member reports.

Highlights

February was a weak month for production and above median for purchases. Thus the declining trend in inventory continued. Using the standard 3 month moving average of inventory, the ISR declined marginally. However, using the raw inventory data, the decline in ISR was measurable reaching 0.65.

Long-Term Trends

In February, production came down at a 11.5% annual rate.

Purchases decreased at a 14.4% annual rate.

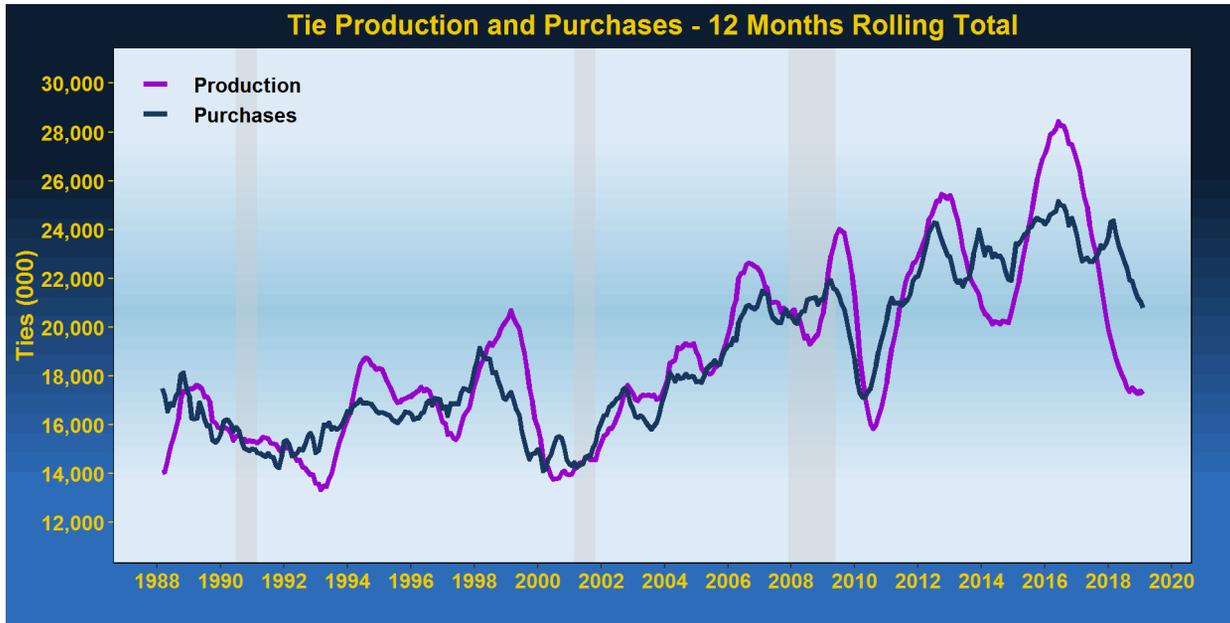
Inventory's 12 month moving average (12MMA) came down by 22.6% from year ago levels.

Inventory-to-Sales Ratio's 12MMA dwindled from 0.86 to 0.68.

Table of Annual Observations

Production and Purchases are 12 months rolling totals, Inventory and ISR are 12MMA

Date	Production	Purchases	Inventory	ISR
February 2018	19,499	24,306	19,328	0.86
February 2019	17,260	20,796	14,953	0.68





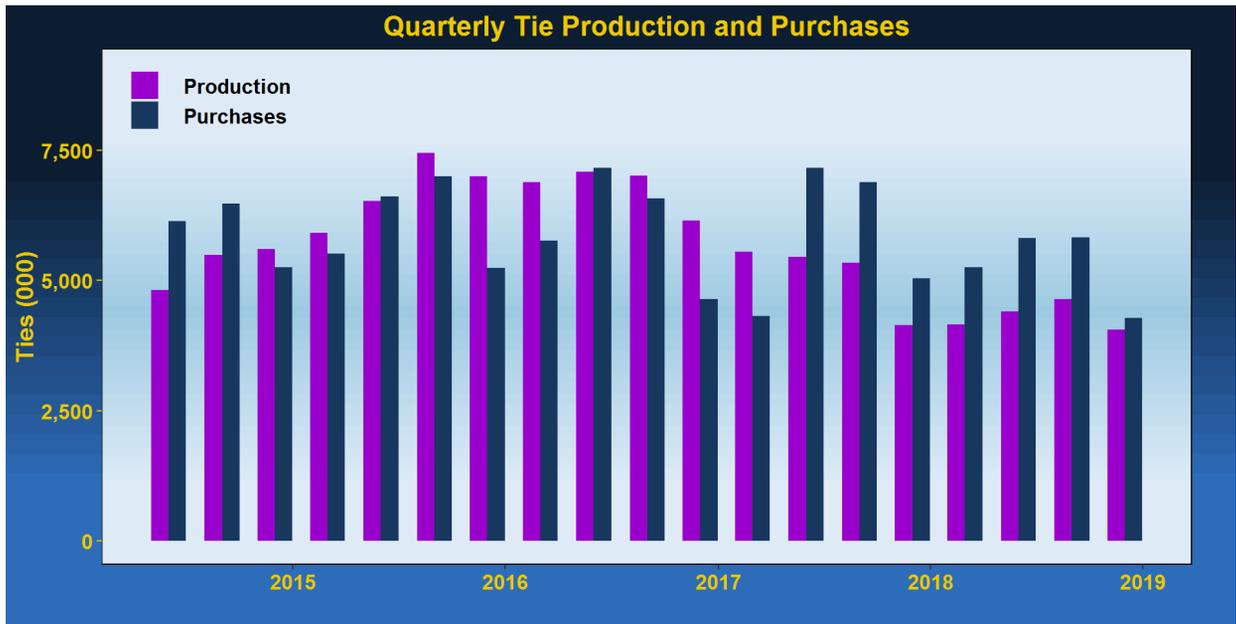
Analysis of Quarterly Data

Production in Q4 dwindled by 12.6% from last quarter and decreased by 2% from year ago. For the same intervals, purchases dwindled by 26.4% and declined by 15% respectively. Inventory's 3MMA fell by 1.5% from last quarter and declined by 21.3% from year ago levels. From Q3 to Q4, the 3MMA of Inventory-to-Sales Ratio remained flat at 0.67. One year ago, the ratio was 0.8.

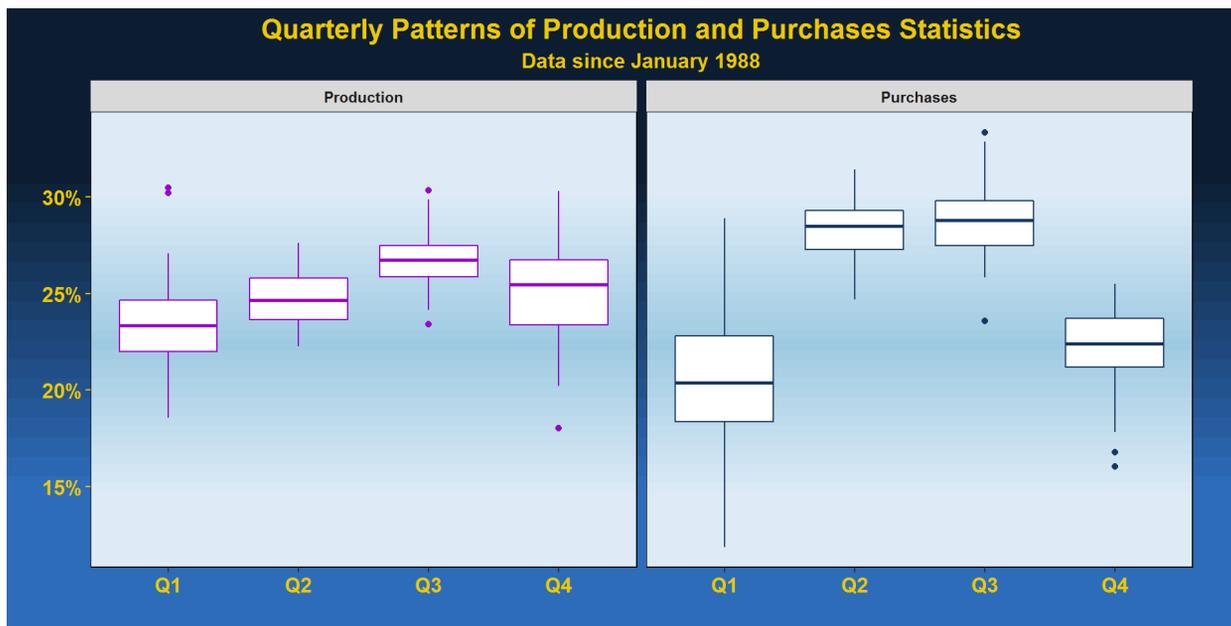
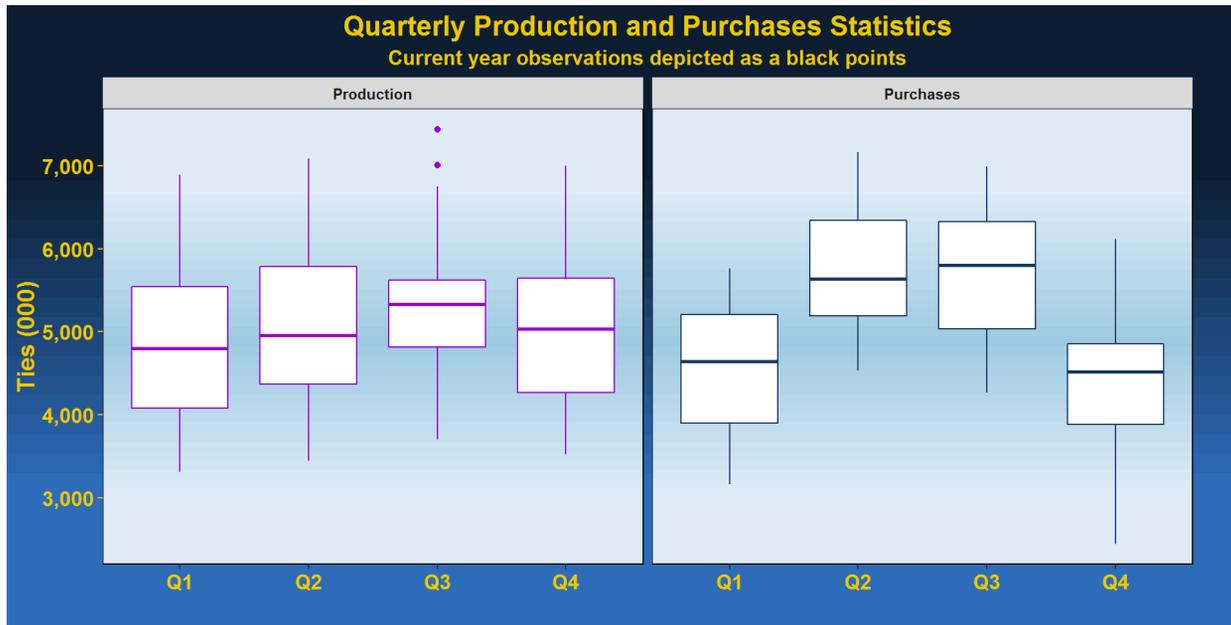
Table of Quarterly Observations

Production and Purchases Quarterly Sum, Inventory and ISR - 3MMA

Date	Production	Purchases	Inventory	ISR
December 2017	4,145	5,043	18,328	0.80
September 2018	4,649	5,824	14,651	0.67
December 2018	4,063	4,285	14,429	0.67



Quarterly pattern of production and purchases uses data from January 2000. The top graph shows data analysis within each quarter. It shows the median, upper quartile and lower quartile boundary (a more detailed explanation is available in the Appendix section). It also displays what the production and purchases were in each quarter of reporting year represented by black points in relation to quarterly statistical values. The second graph shows the contribution of each quarter to the total annual production and purchases.



Analysis of Monthly Data

Production fell by 8.7% from last month and decreased by 9.5% from year ago.

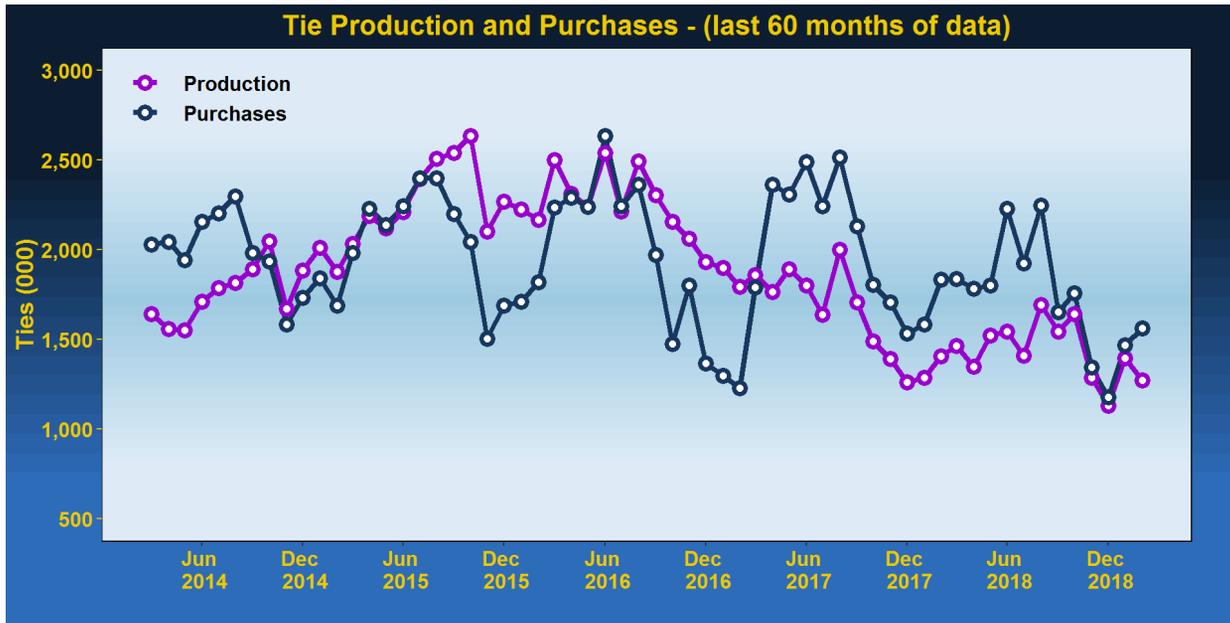
For the same time intervals, purchases increased by 6.5% and came down by 14.8% respectively.

Inventory dropped by 2% from last month and dwindled by 20.1% from year ago levels.

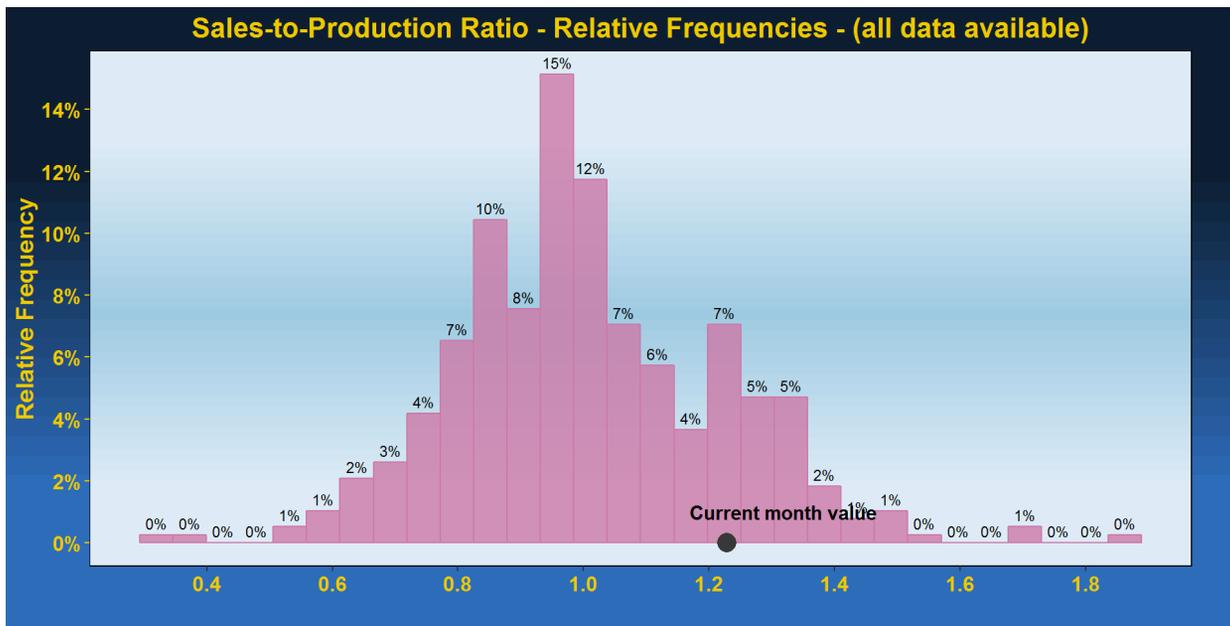
The Inventory-to-Sales Ratio remained flat at 0.68 from month ago, and from a year ago, the ratio dwindled from 0.72.

Table of Monthly Observations

Date	Production	Purchases	Inventory	ISR
February 2018	1,407	1,835	17,601	0.72
January 2019	1,395	1,468	14,356	0.68
February 2019	1,273	1,563	14,065	0.68

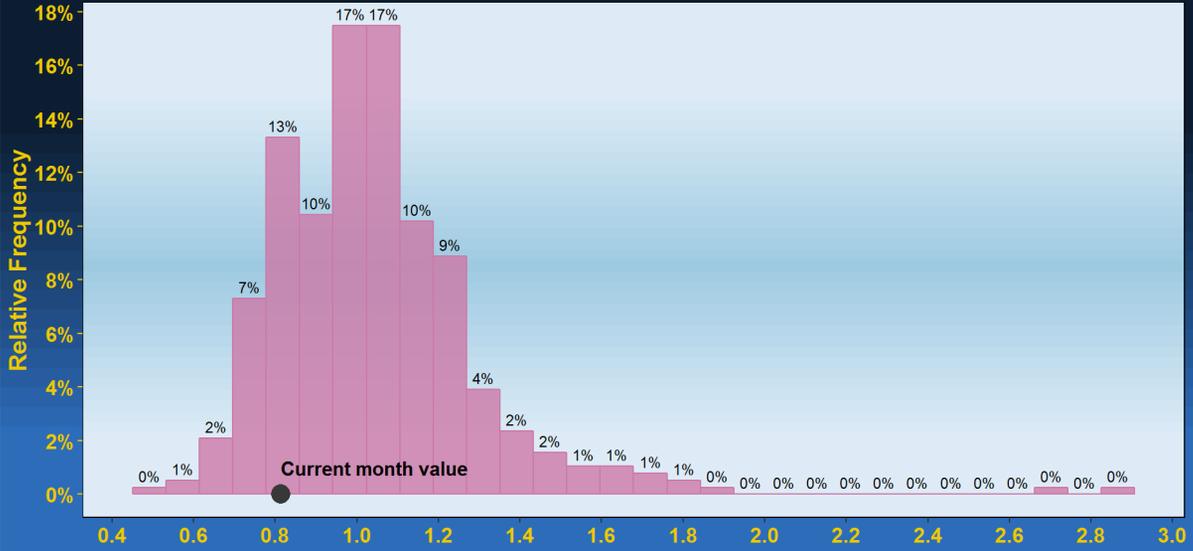


Sales-to-Production Ratio shows the replenishment/diminishment of inventory. Ratio above one signals diminishment and ratio below one replenishment of inventory stock.



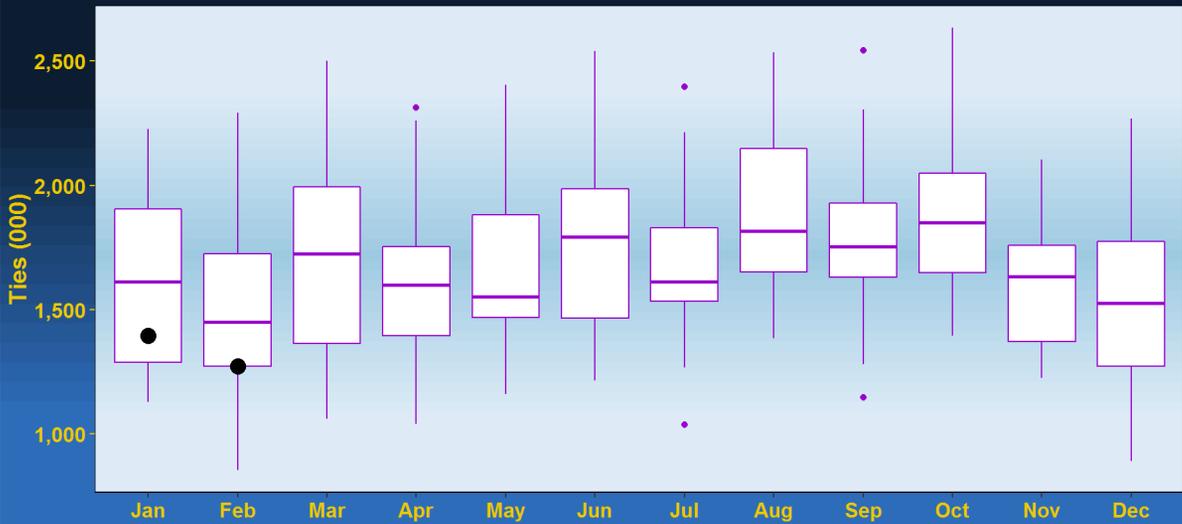
The following graph tells the same story as the graph above, just the ratio is reversed - Production-to-Sales Ratio.

Production-to-Sales Ratio - Relative Frequencies - (all data available)



Monthly Production Statistics - (data since 2000)

Current year observations depicted as a black points



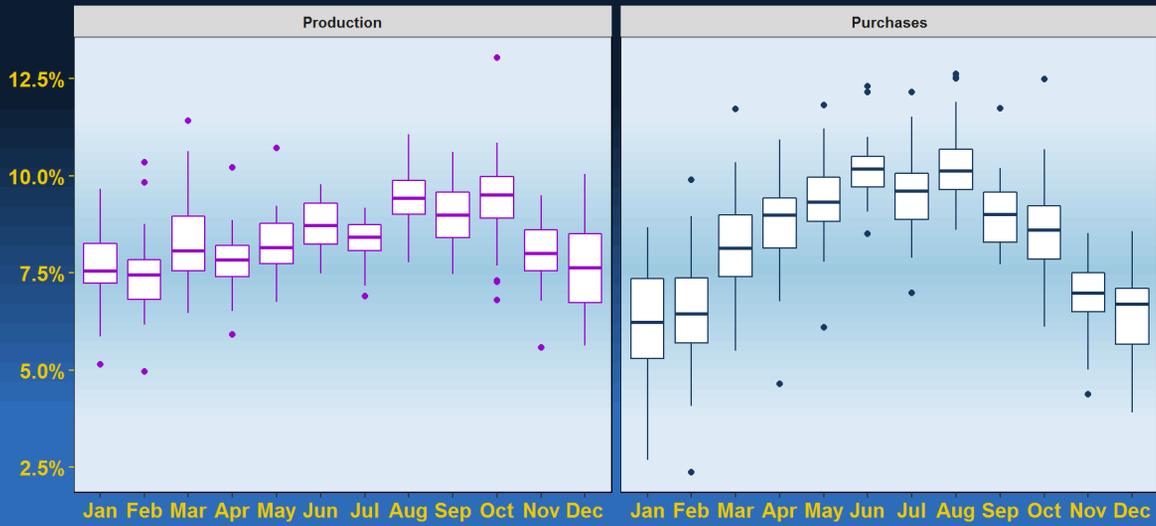
Monthly Purchases Statistics - (data since 2000)

Current year observations depicted as a black points

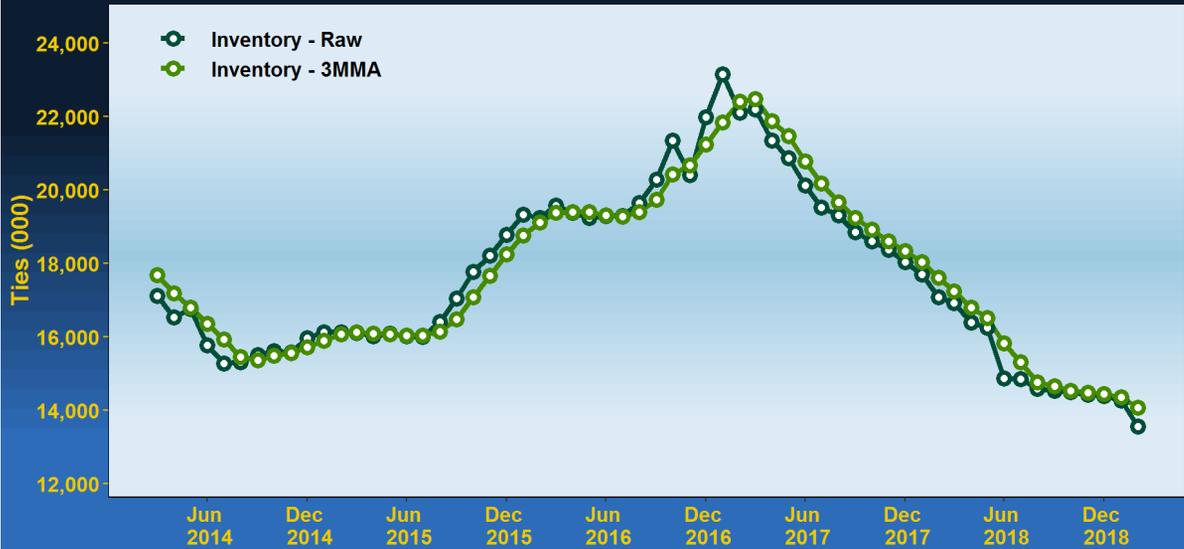


Monthly Pattern of Production and Purchases Statistics - Percent of Annual Total

Data since January 1988



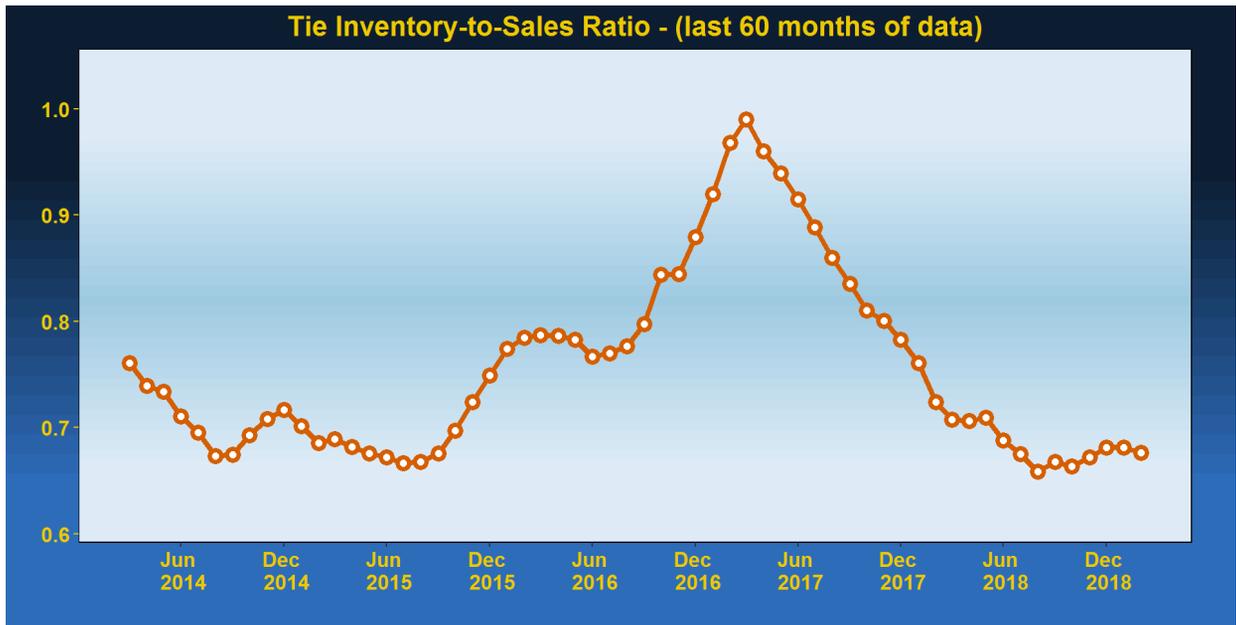
Tie Inventory - Raw Monthly and 3MMA Data - (last 60 months of data)



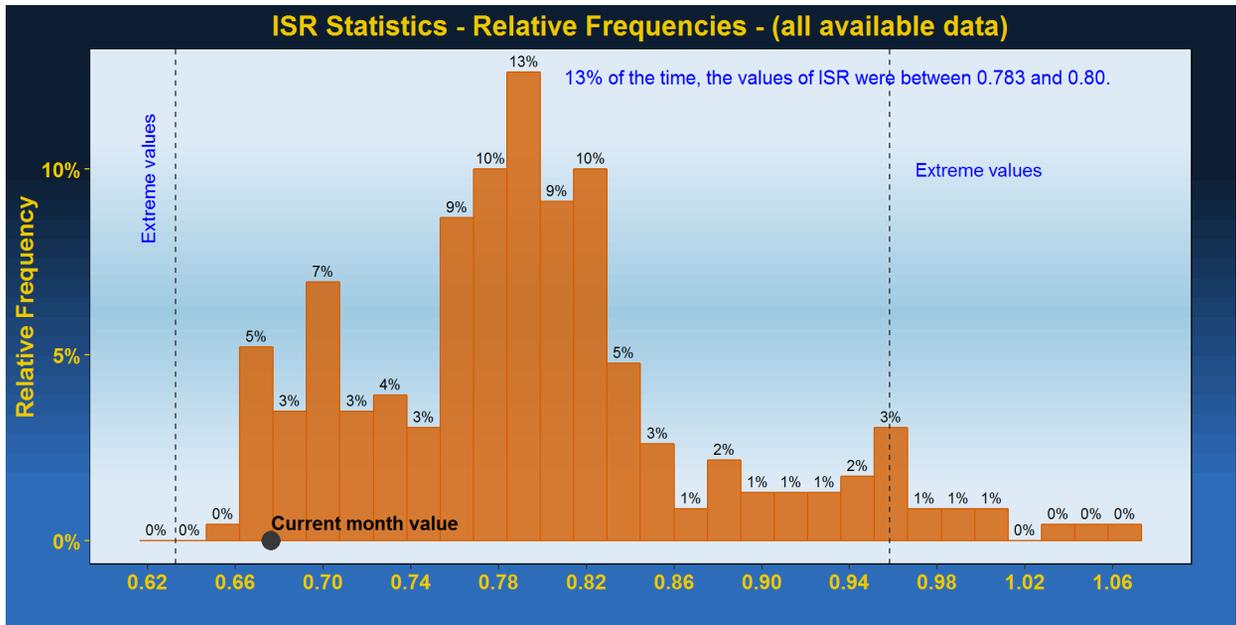
Monthly Patterns of Inventory - (data since 2000)

Monthly average depicted with solid green line, current year observations depicted as a black points



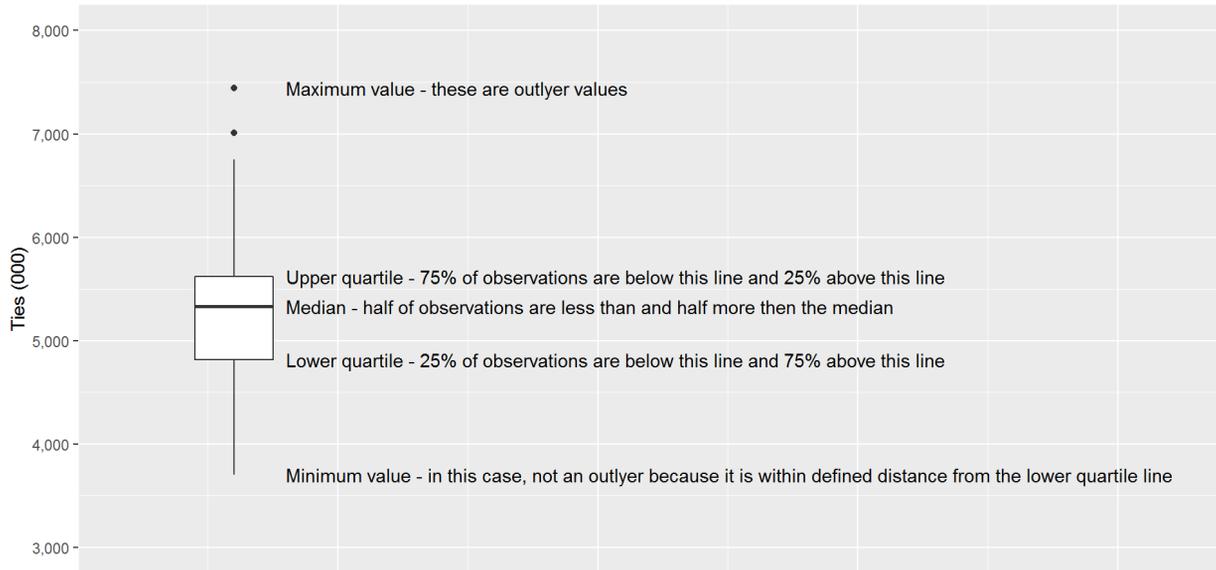


Inventory-to-Sales Ratio (ISR) histogram of relative frequencies shows the monthly ISR data distribution and the black point represents the value for current reporting month.



Appendix

Box Plot Explained



Histogram of Relative Frequencies Explained

