



# Purchases Report

October 2024

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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

In October, the twelve-month rolling total of purchases and production both continued their upward trends. Annual production growth was 3.0% lower than the annual growth of purchases. Analysis of the monthly data showed production and purchases substantially above the seasonal norms.

## Long-Term Trends

Production grew at a 10.4% annual rate.

Purchases expanded at a 13.4% annual rate.

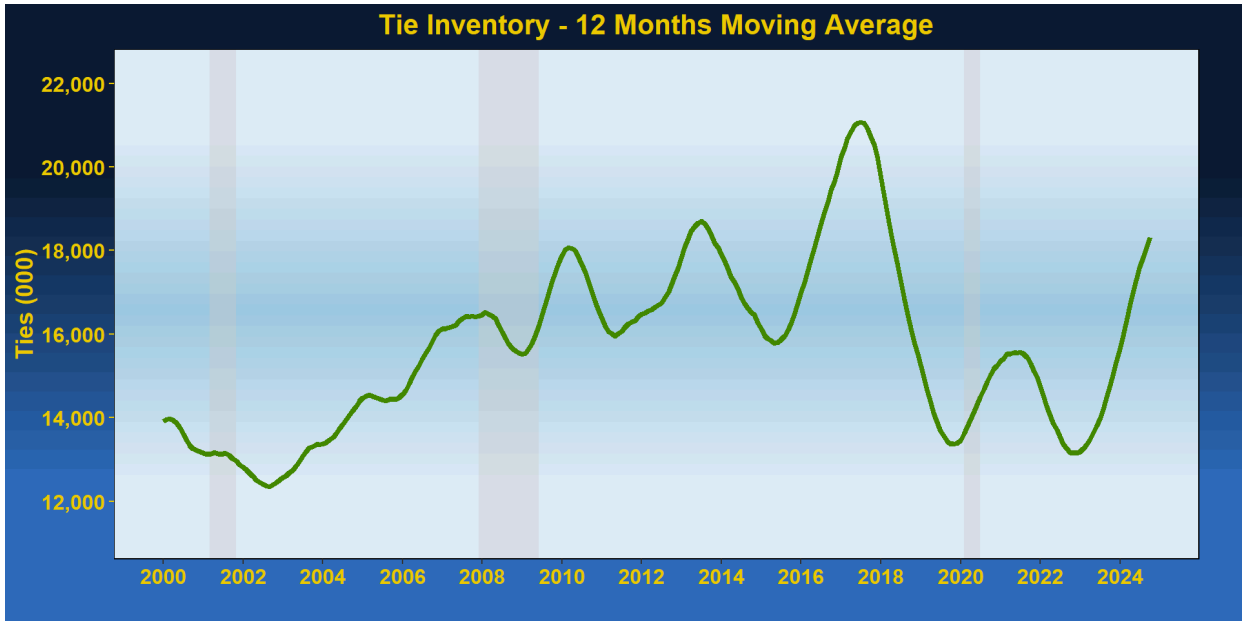
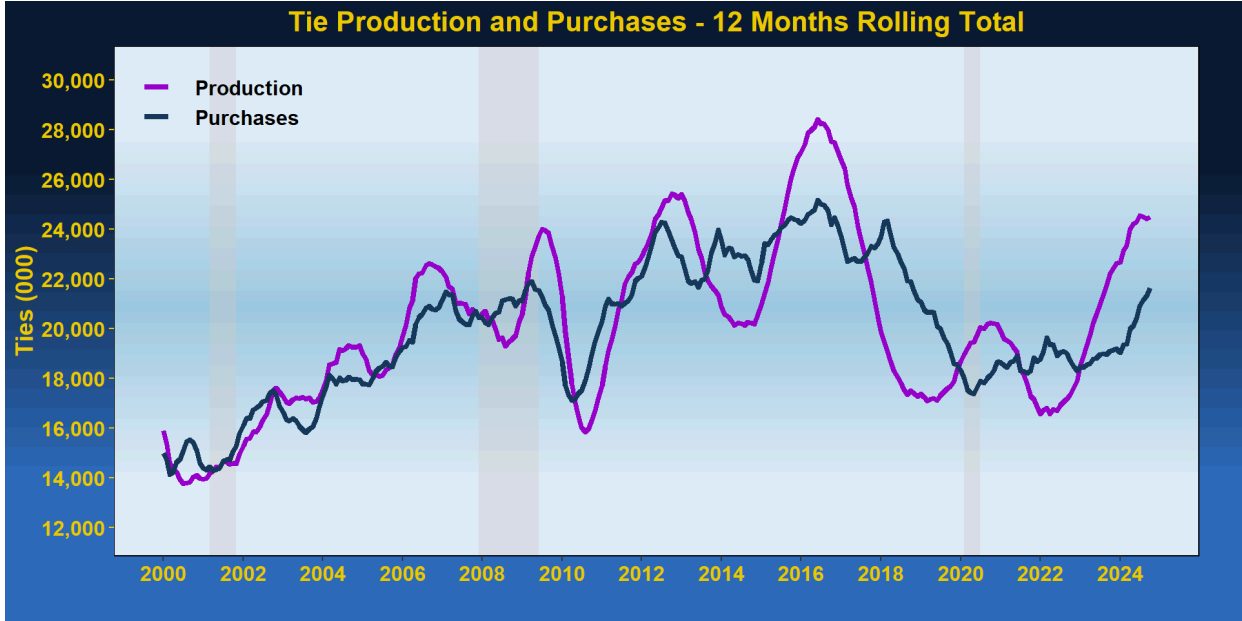
Inventory's 12 month moving average (12MMA) grew by 24% from a year ago levels.

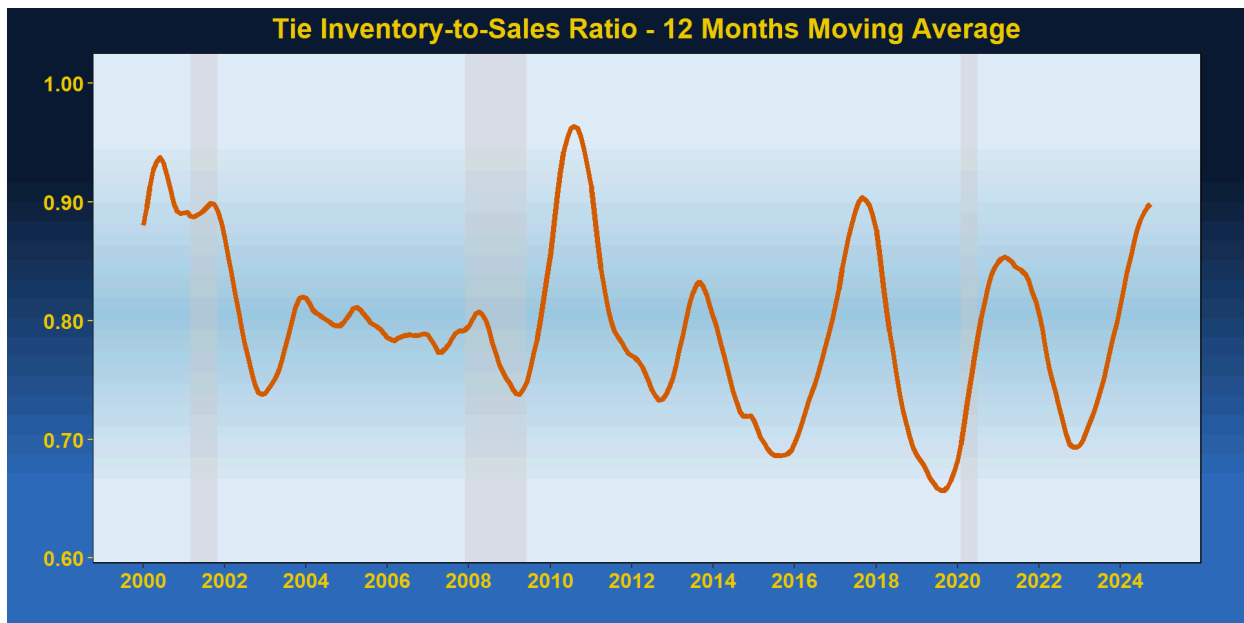
Inventory-to-Sales Ratio's 12MMA advanced from 0.77 to 0.9.

### Table of Annual Observations

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

Date	Production	Purchases	Inventory	ISR
October 2023	22,203	19,089	14,768	0.77
October 2024	24,515	21,641	18,317	0.90





## Analysis of Quarterly Data

Production in Q3 came down by 8.6% from last quarter and grew by 2.2% from a year ago.

For the same intervals, purchases dwindled by 7.2% and advanced by 17.9% respectively.

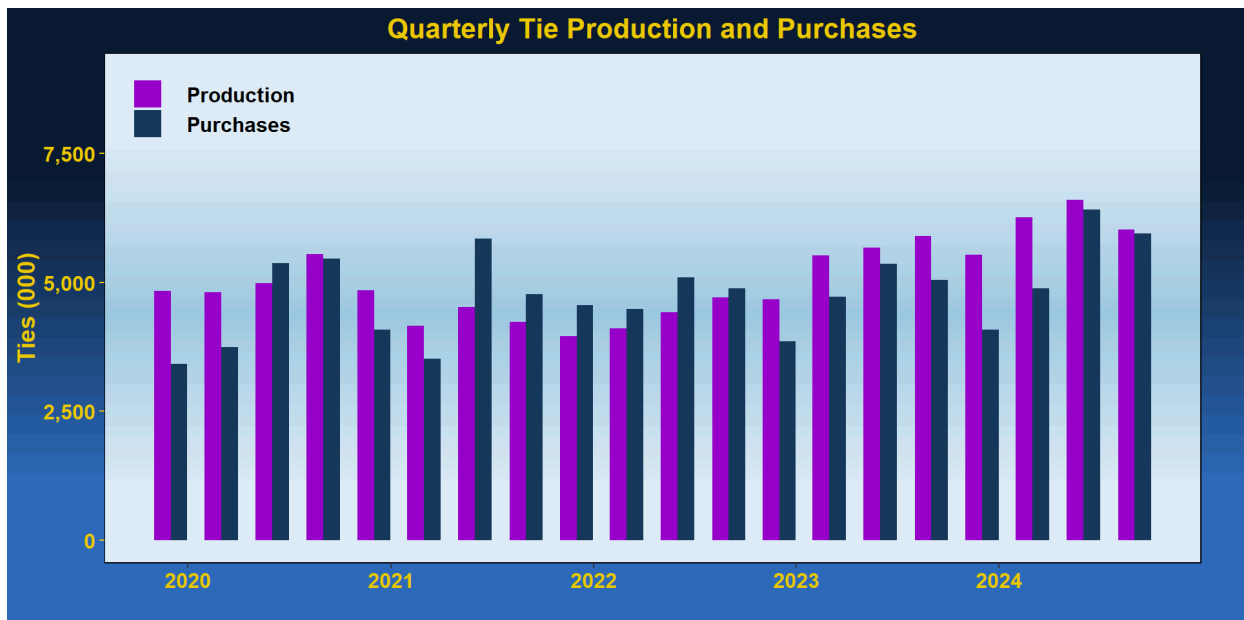
Inventory's 3MMA rose by 0.4% from last quarter and increased by 19.9% from a year ago levels.

From Q2 2024 to Q3 2024, the 3MMA of Inventory-to-Sales Ratio declined from 0.92 to 0.87. One year ago, the ratio was 0.8.

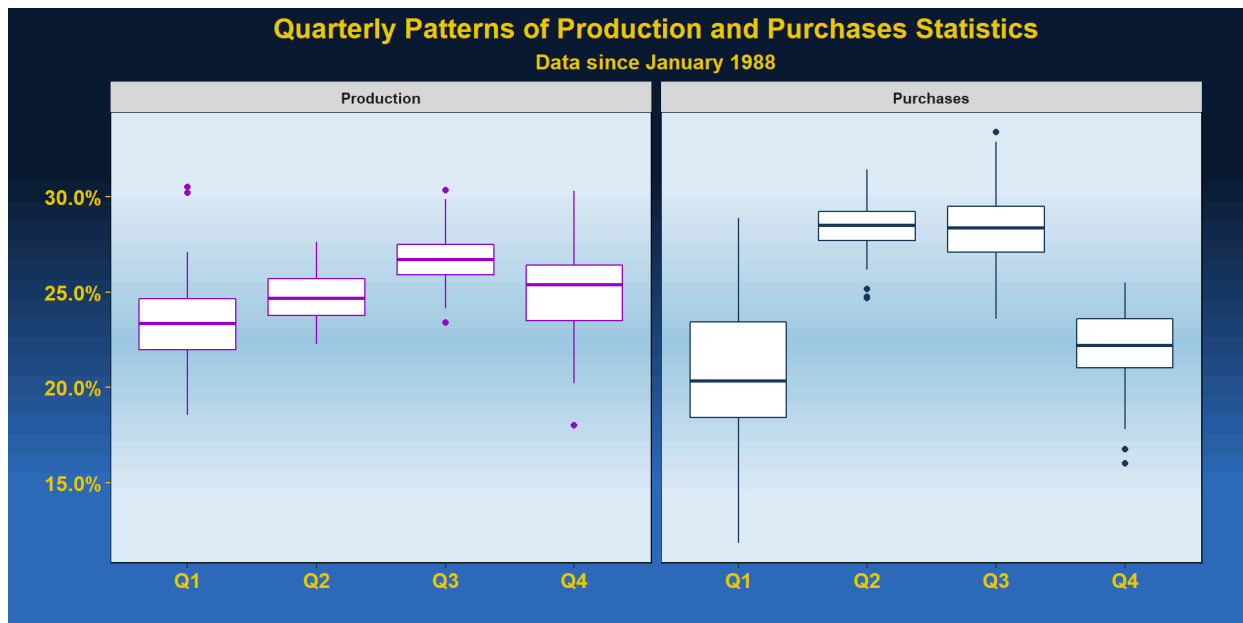
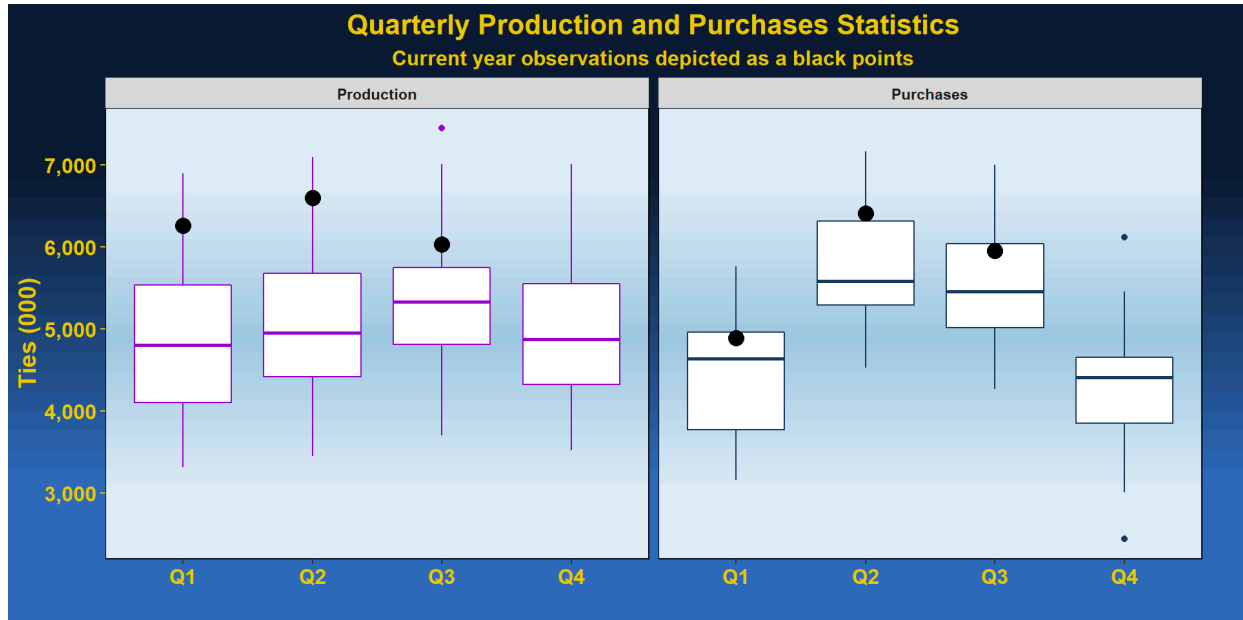
### **Table of Quarterly Observations**

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

Date	Production	Purchases	Inventory	ISR
September 2023	5,896	5,047	15,492	0.80
June 2024	6,597	6,412	18,497	0.92
September 2024	6,028	5,951	18,574	0.87



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 expanded by 11.6% from last month and advanced by 4.9% from a year ago.

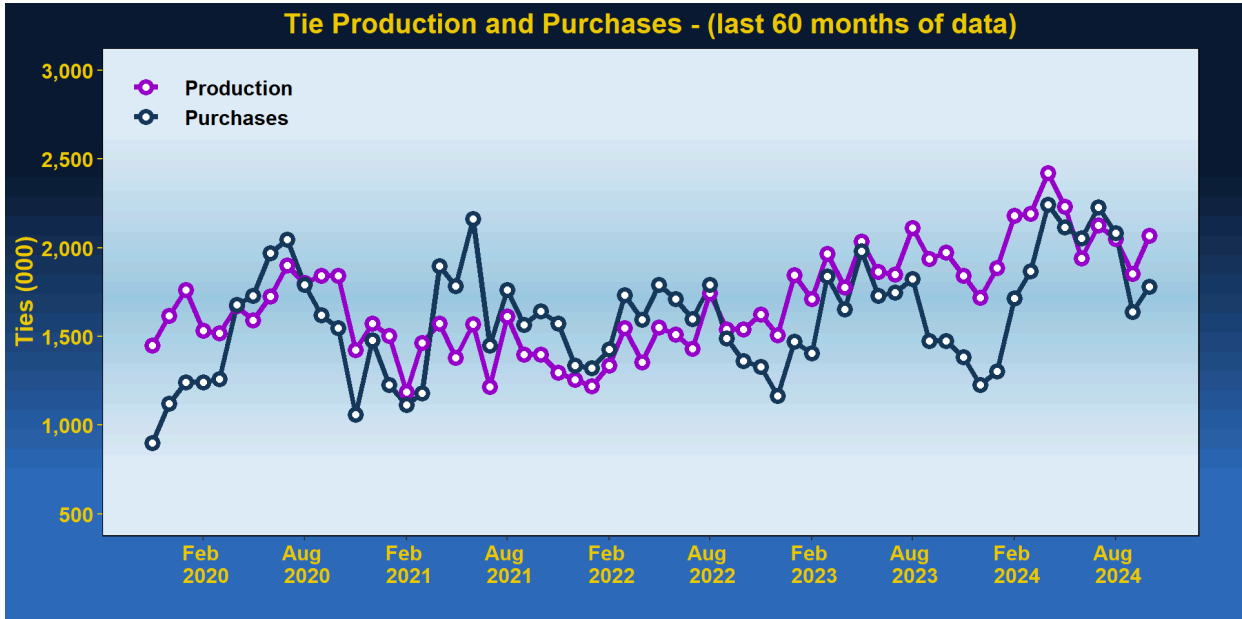
For the same time intervals, purchases rose by 8.6% and increased by 20.7% respectively.

Inventory levels expanded by 1.6% from last month and grew by 18% from a year ago levels.

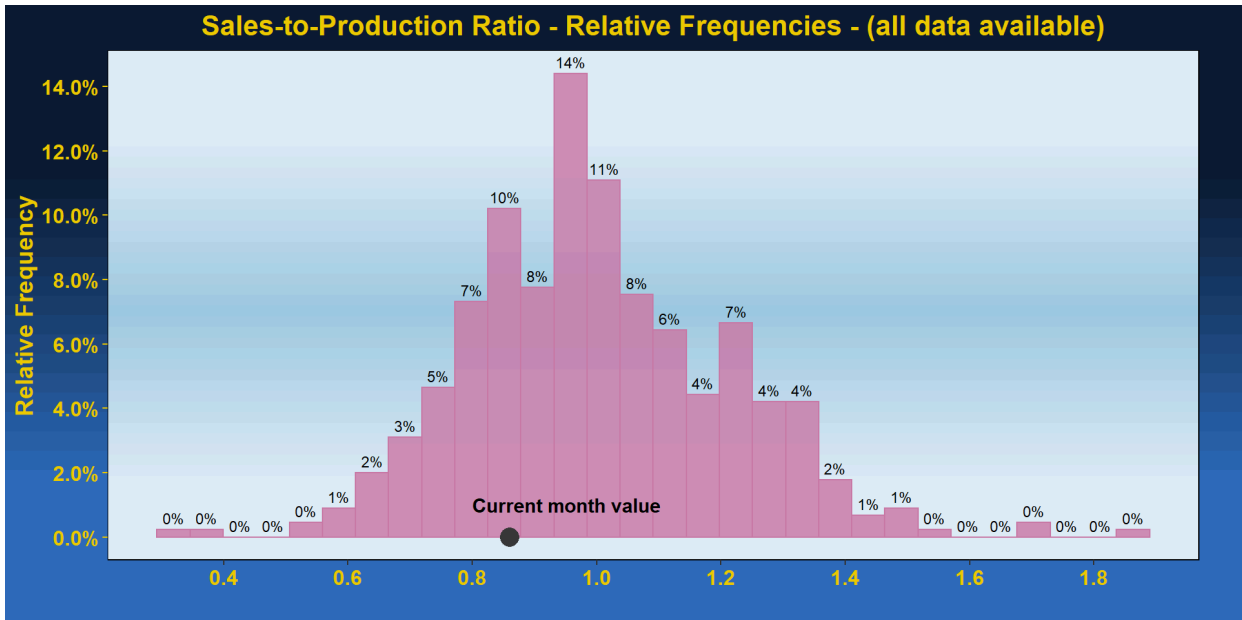
The Inventory-to-Sales Ratio remained flat at 0.87 compared to month ago, and from a year ago, the ratio increased from 0.84.

**Table of Monthly Observations**

Date	Production	Purchases	Inventory	ISR
October 2023	1,971	1,475	15,988	0.84
September 2024	1,854	1,639	18,574	0.87
October 2024	2,068	1,780	18,862	0.87

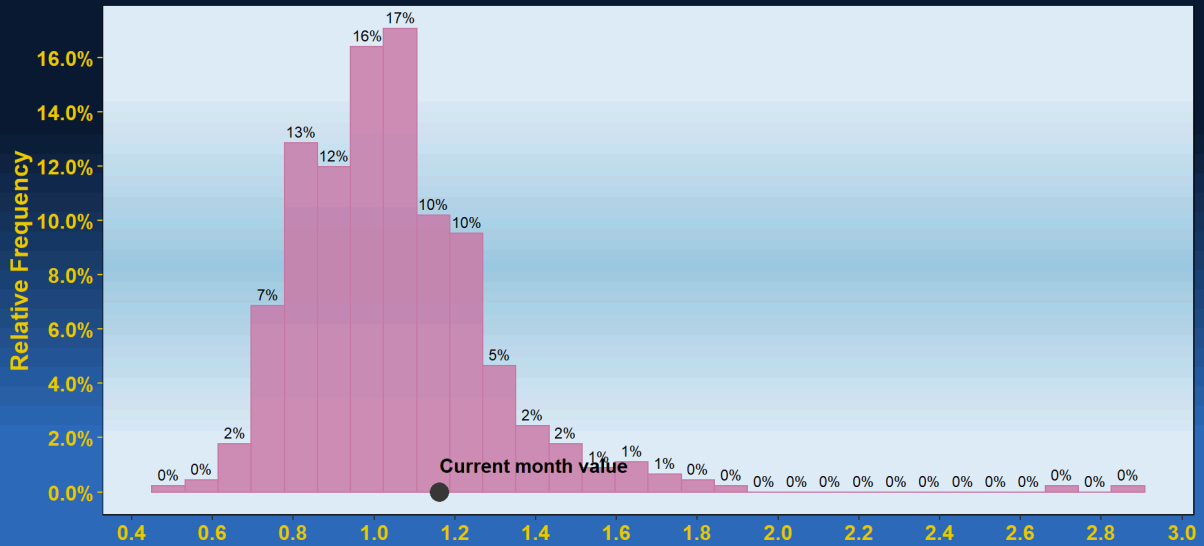


Sales-to-Production Ratio shows the replenishment/diminishment of inventory. Ratio above one signals diminishment and ratio below one replenishment of inventory stock.



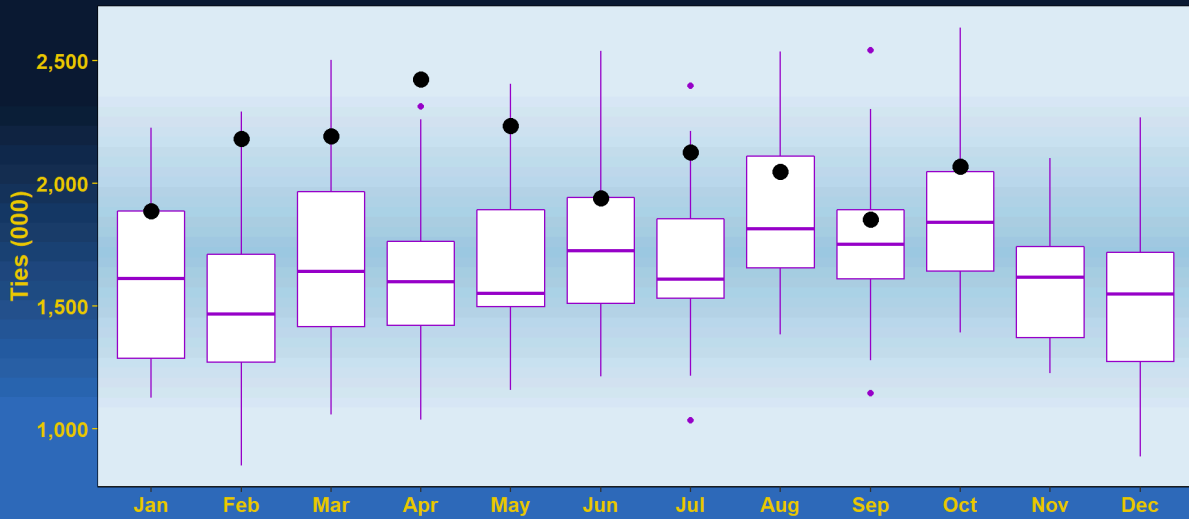
The following graph tells the same story as the graph above, just the ratio is reversed - Production-to-Sales Ratio.

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



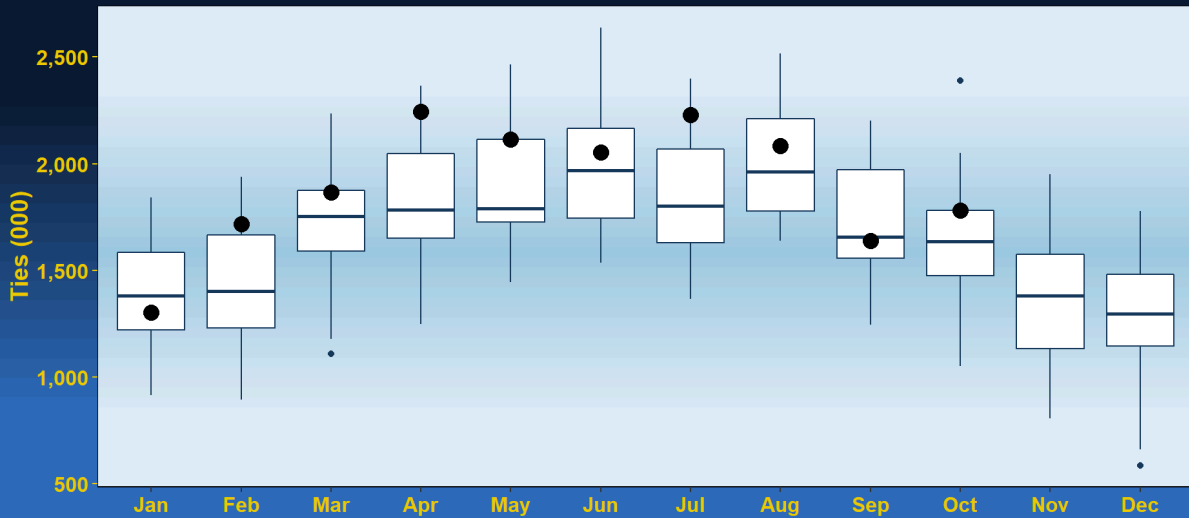
### Monthly Production Statistics - (data since 2000)

Current year observations depicted as a black points



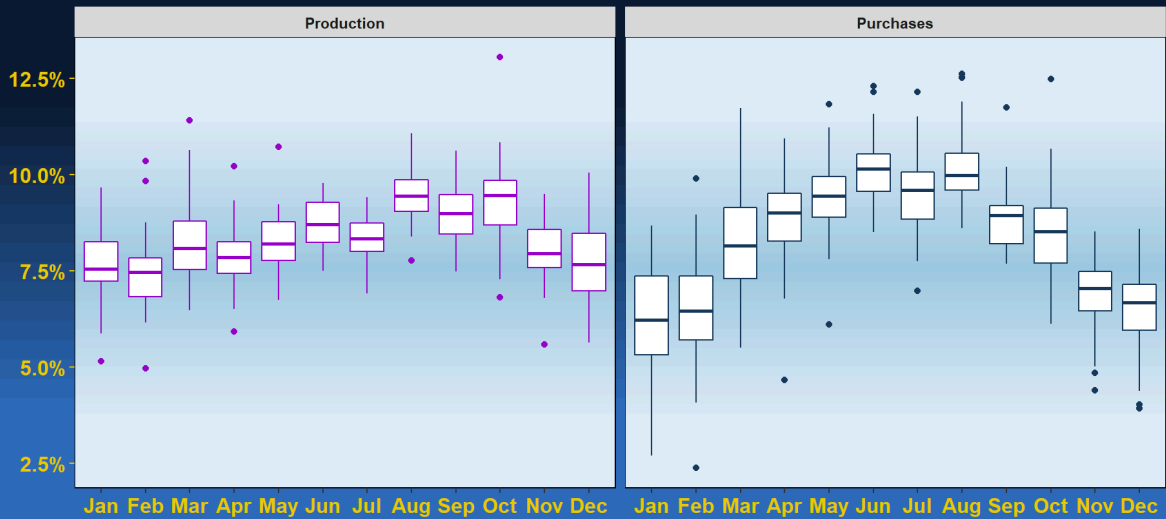
### Monthly Purchases Statistics - (data since 2000)

Current year observations depicted as a black points

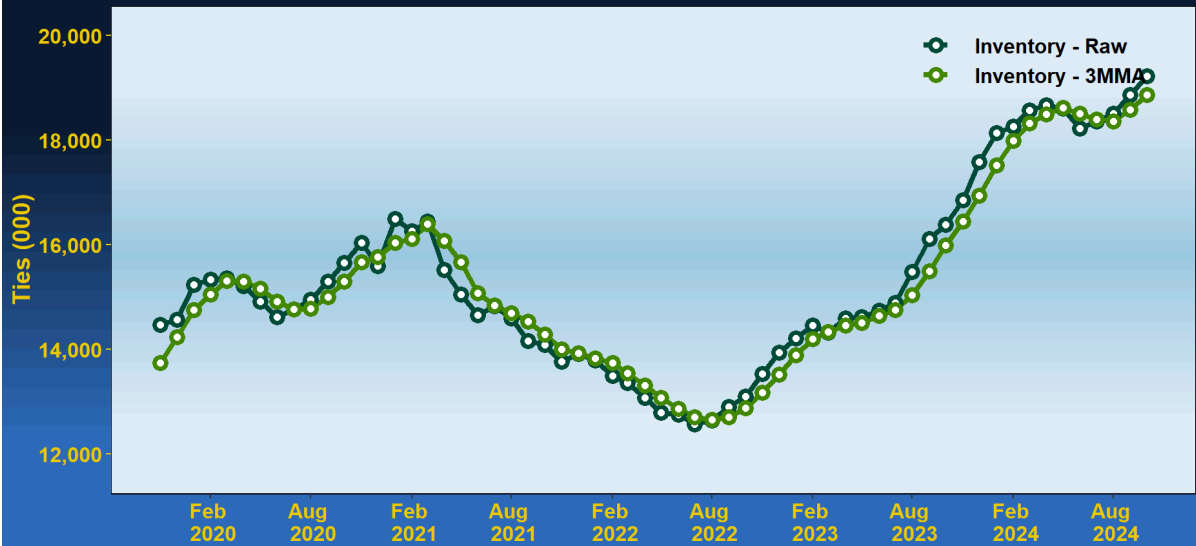


### Monthly Pattern of Production and Purchases Statistics - Percent of Annual Total

Data since January 1988



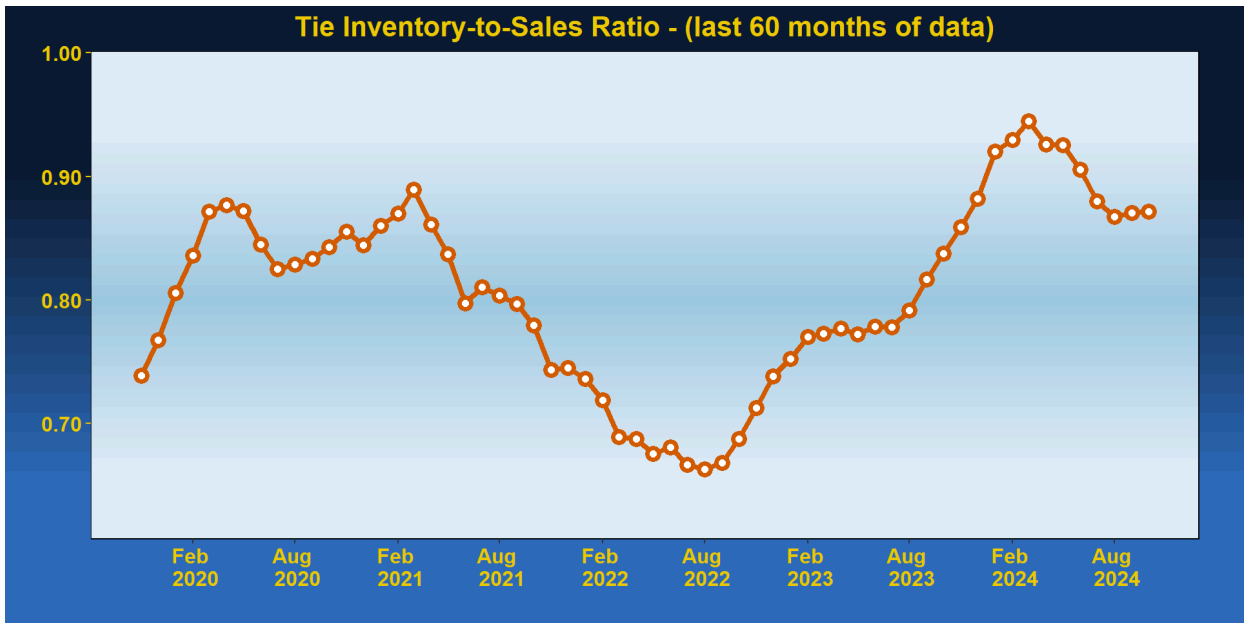
### Tie Inventory - Raw Monthly and 3MMA Data - (last 60 months of data)



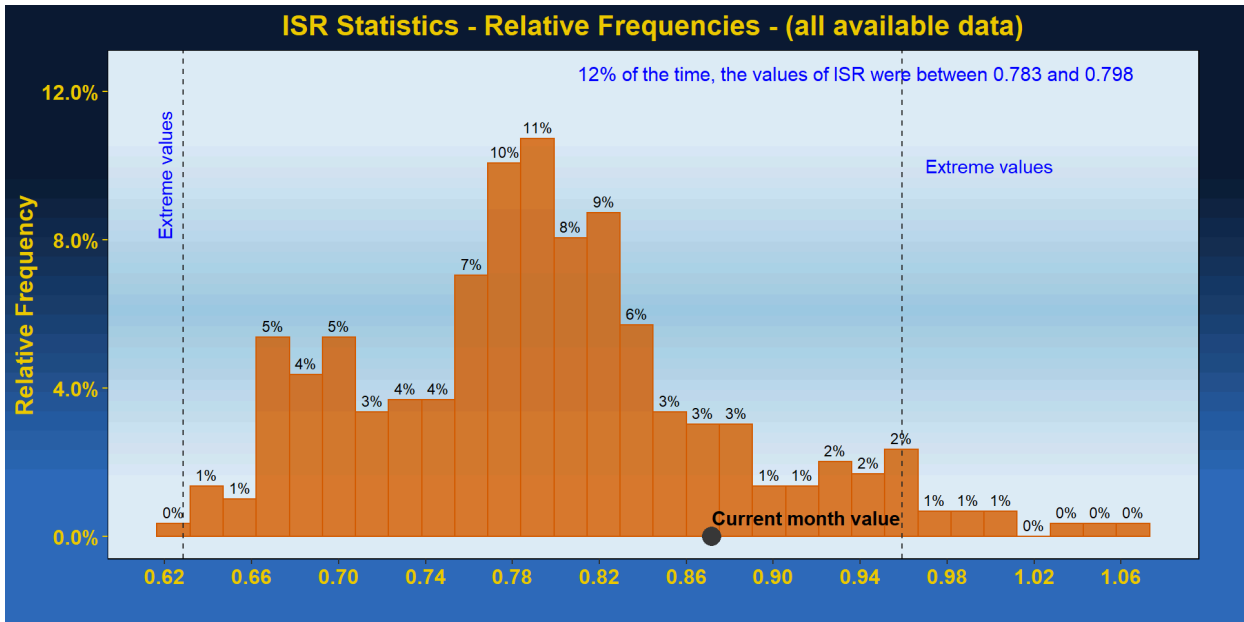
### Monthly Patterns of Inventory - (data since 2000)

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 the current reporting month.

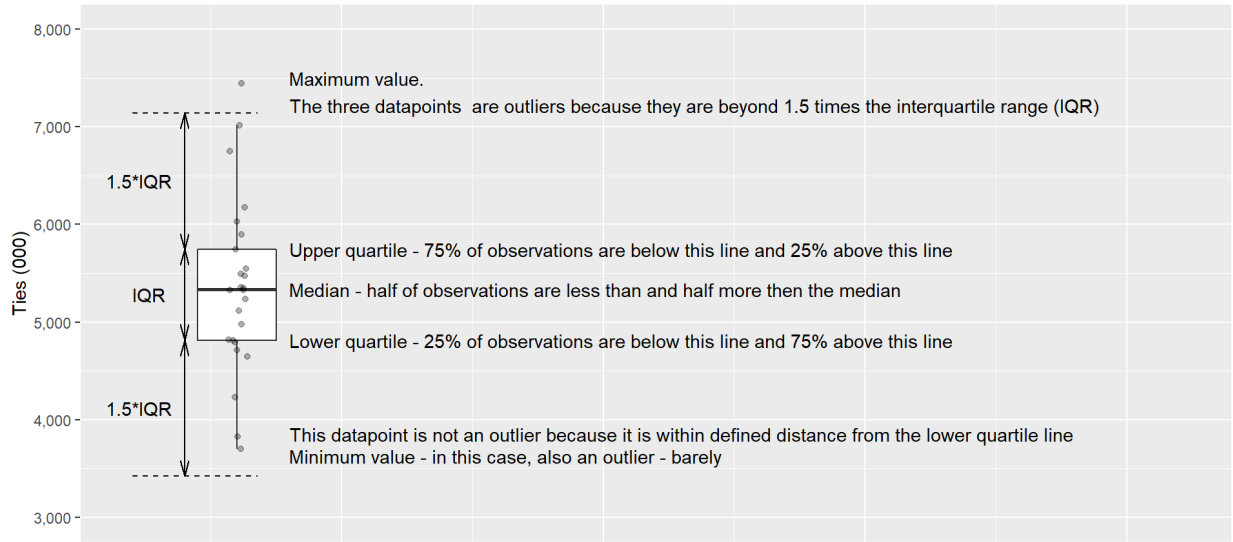




# Appendix

## Box Plot Explained

Underlying data displayed as 'jittered' points



## Histogram of Relative Frequencies Explained

