



Purchases Report

August 2024

Table of Contents

Highlights

Long-Term Trends

Analysis of Quarterly Data

Analysis of Monthly Data

Appendix

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.

Copyright: Railway Tie Association, 2024.

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 August, the twelve-month rolling total of purchases and production both continued their upward trend. Annual production growth outpaced purchases by 3.1%. Analysis of the monthly data showed production below third quartile of expected values. Purchases were above the median of expected values.

Long-Term Trends

Production grew at a 14.6% annual rate.

Purchases rose at a 11.5% annual rate.

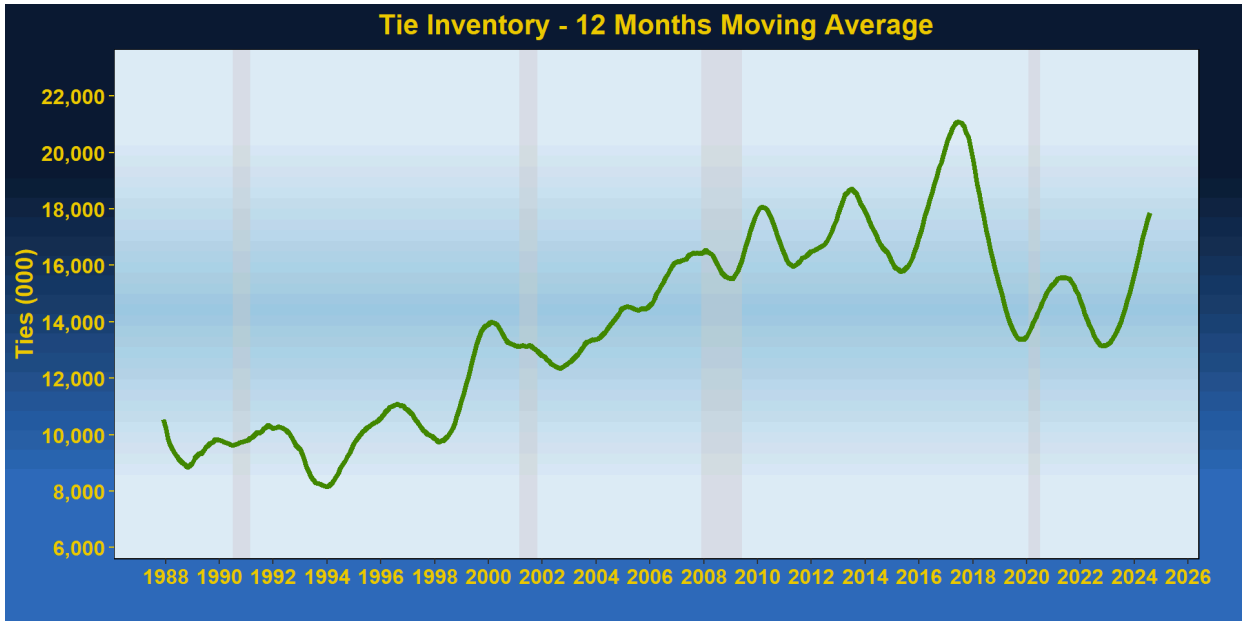
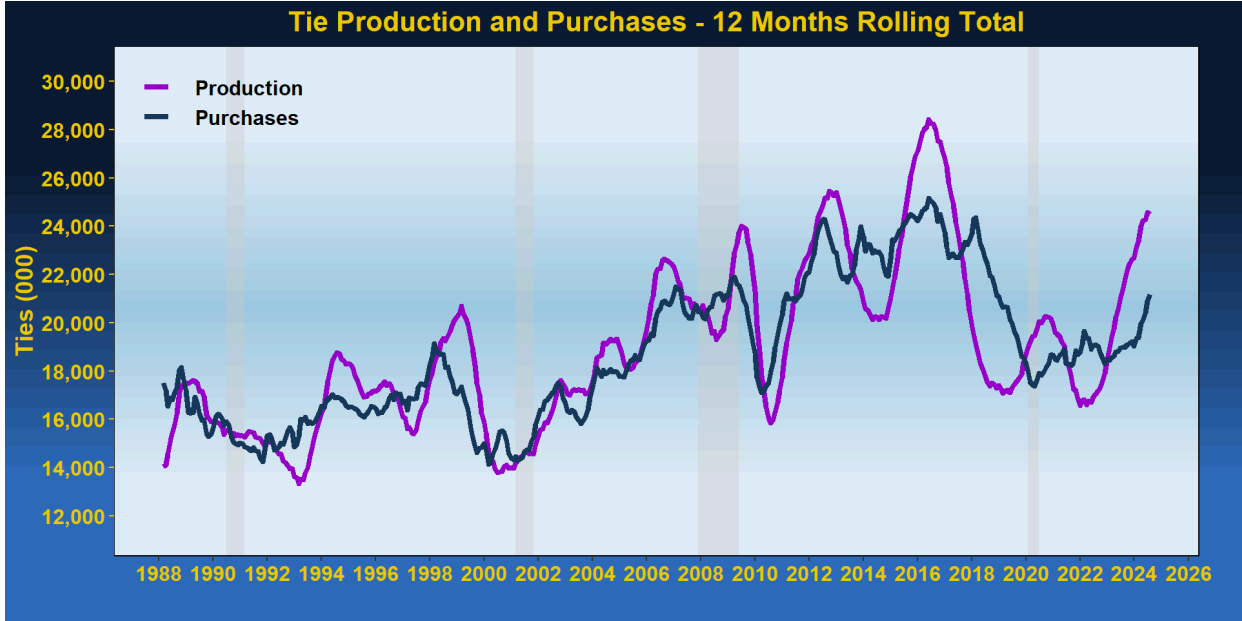
Inventory's 12 month moving average (12MMA) advanced by 25.5% from a year ago levels.

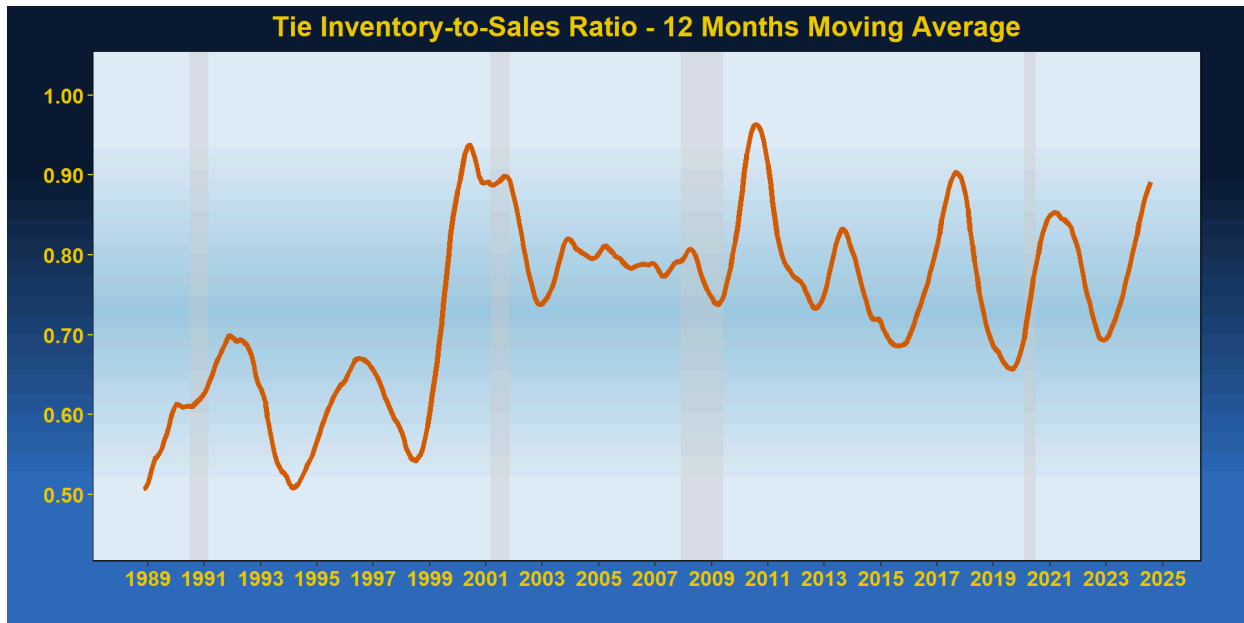
Inventory-to-Sales Ratio's 12MMA expanded from 0.75 to 0.89.

Table of Annual Observations

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

Date	Production	Purchases	Inventory	ISR
August 2023	21,375	18,989	14,226	0.75
August 2024	24,499	21,172	17,850	0.89





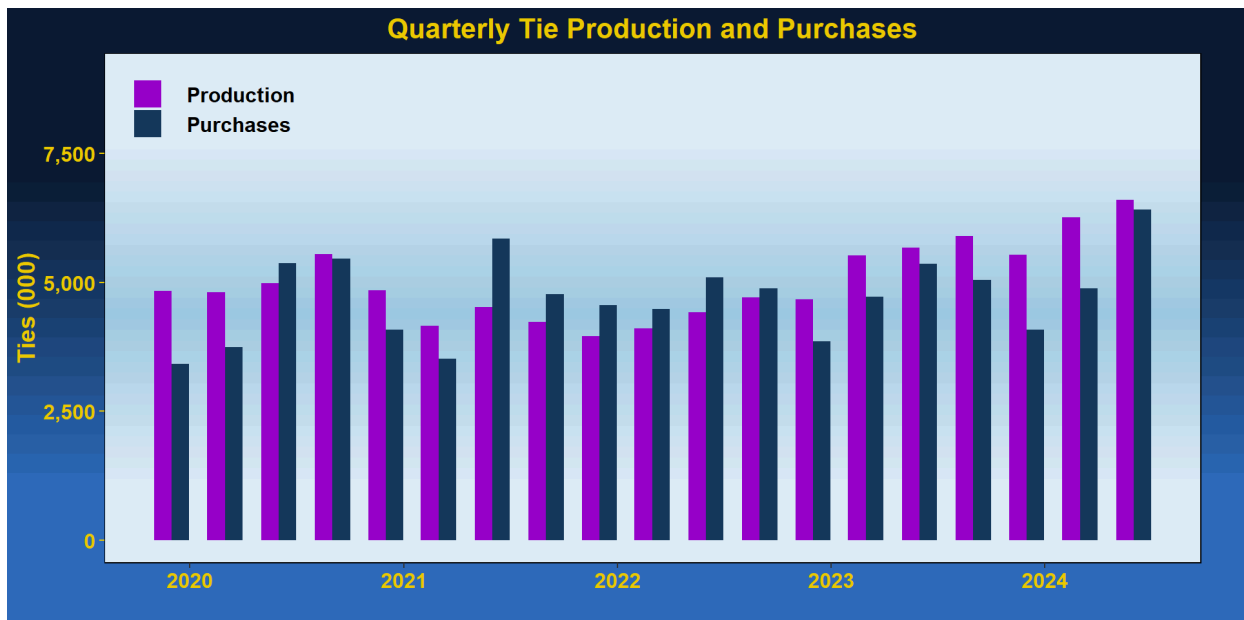
Analysis of Quarterly Data

Production in Q2 advanced by 5.3% from last quarter and advanced by 16.2% from a year ago. For the same intervals, purchases increased by 31.2% and rose by 19.6% respectively. Inventory's 3MMA expanded by 1% from last quarter and advanced by 26.3% from a year ago levels. From Q1 2024 to Q2 2024, the 3MMA of Inventory-to-Sales Ratio fell from 0.93 to 0.92. One year ago, the ratio was 0.78.

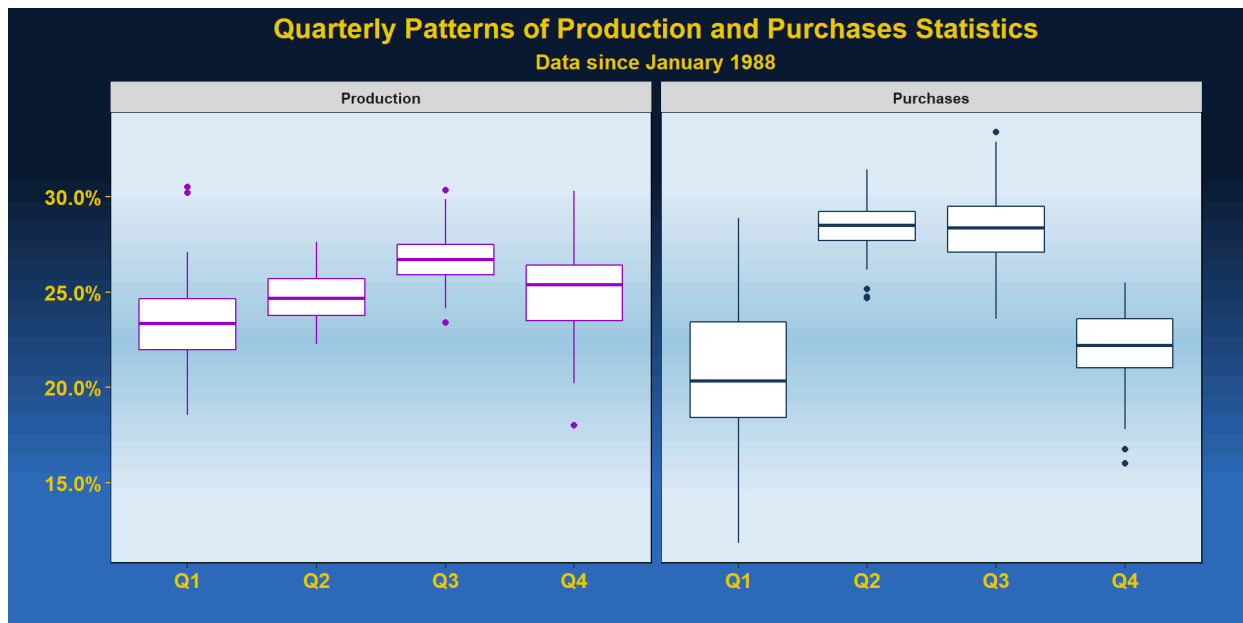
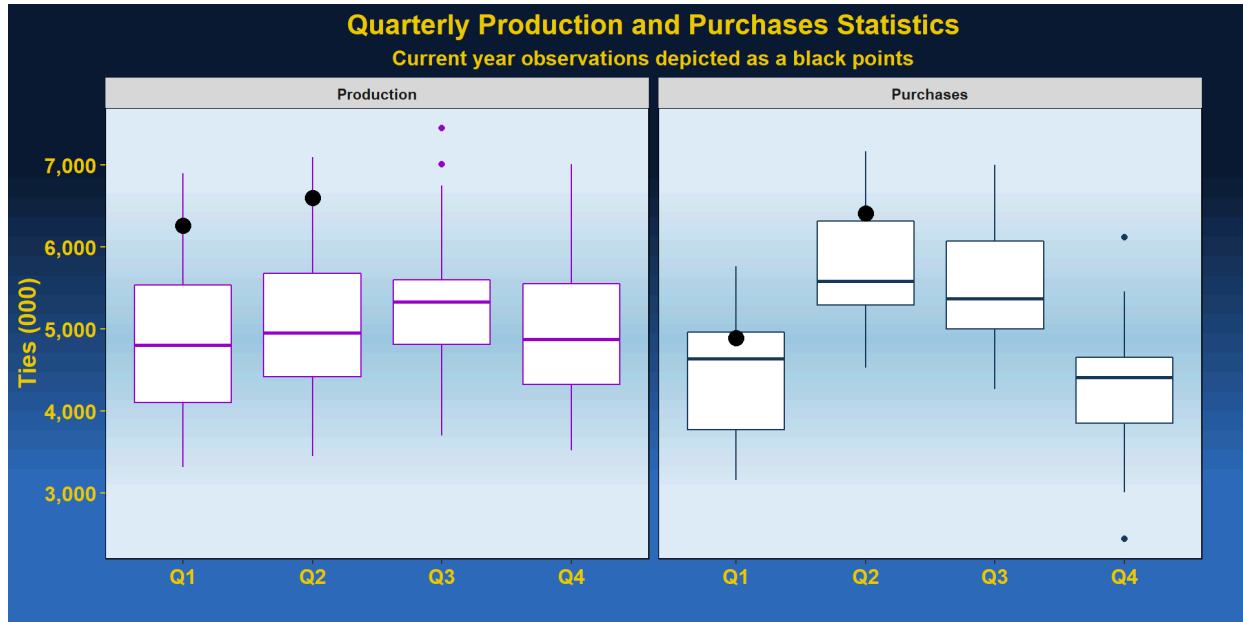
Table of Quarterly Observations

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

Date	Production	Purchases	Inventory	ISR
June 2023	5,678	5,360	14,643	0.78
March 2024	6,263	4,886	18,313	0.93
June 2024	6,597	6,412	18,497	0.92



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 came down by 3.7% from last month and came down by 3% from a year ago.

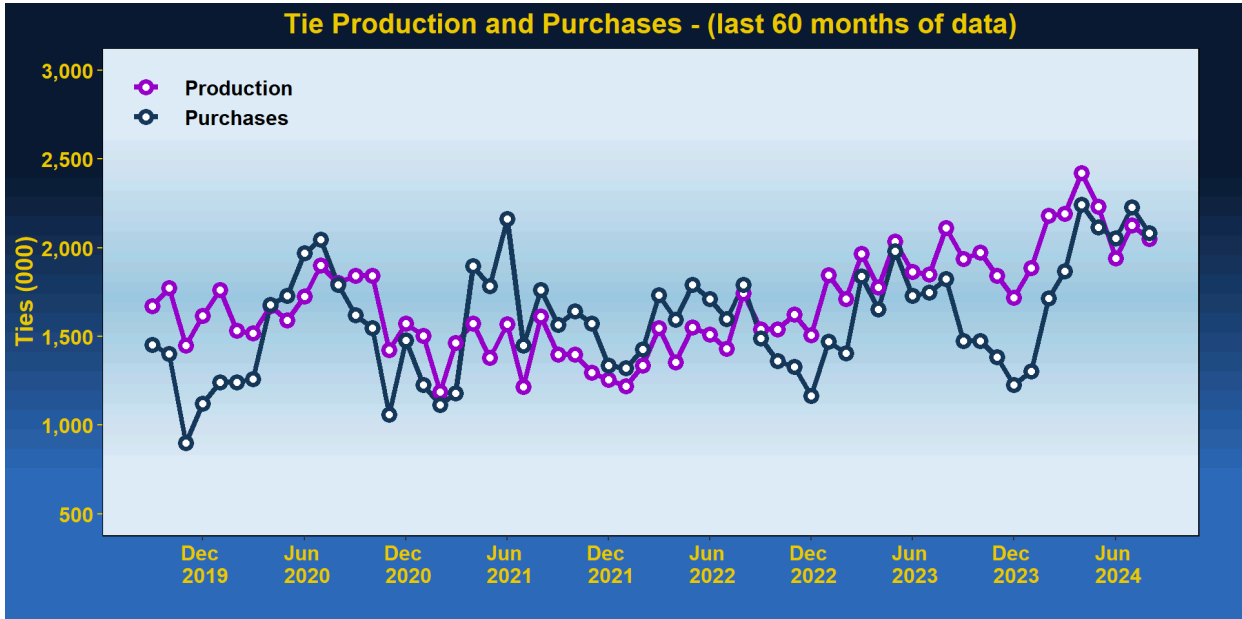
For the same time intervals, purchases dwindled by 6.5% and expanded by 14.3% respectively.

Inventory levels decreased by 0.2% from last month and increased by 22.1% from a year ago levels.

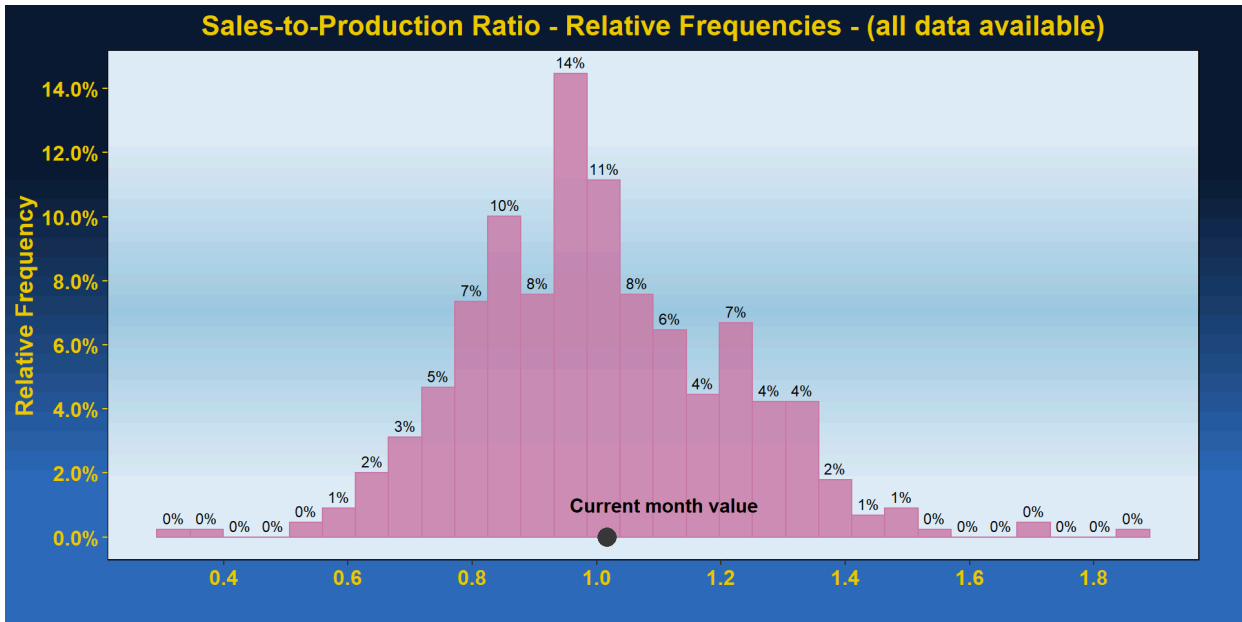
The Inventory-to-Sales Ratio decreased from 0.88 to 0.87 compared to month ago, and from a year ago, the ratio rose from 0.79.

Table of Monthly Observations

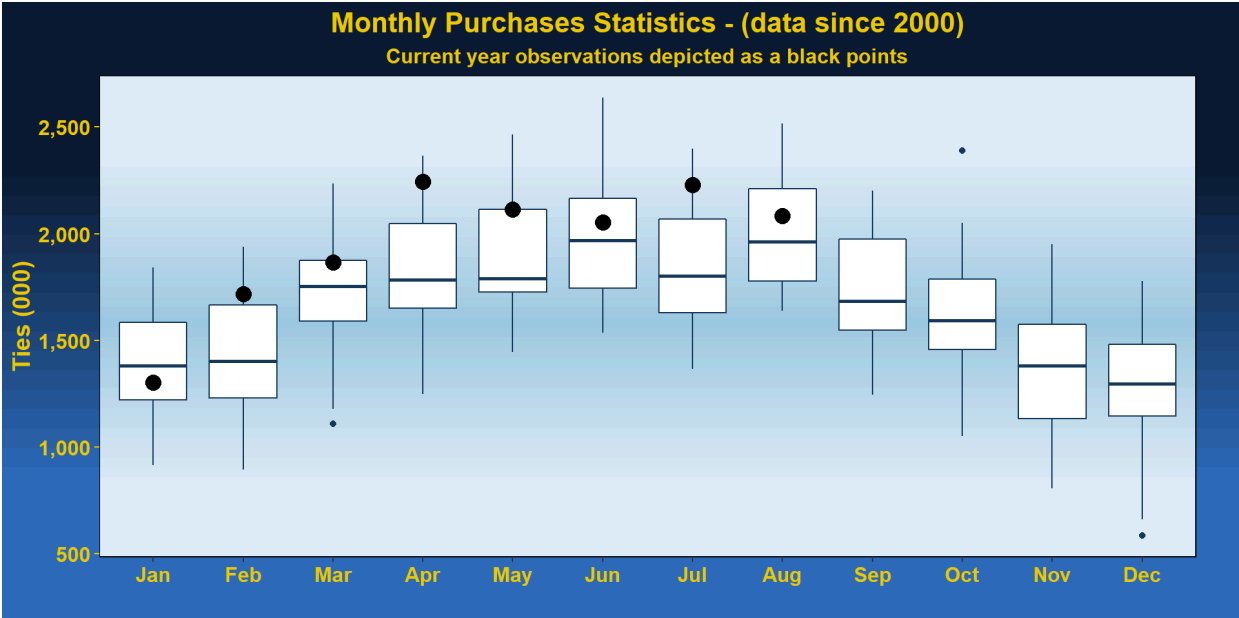
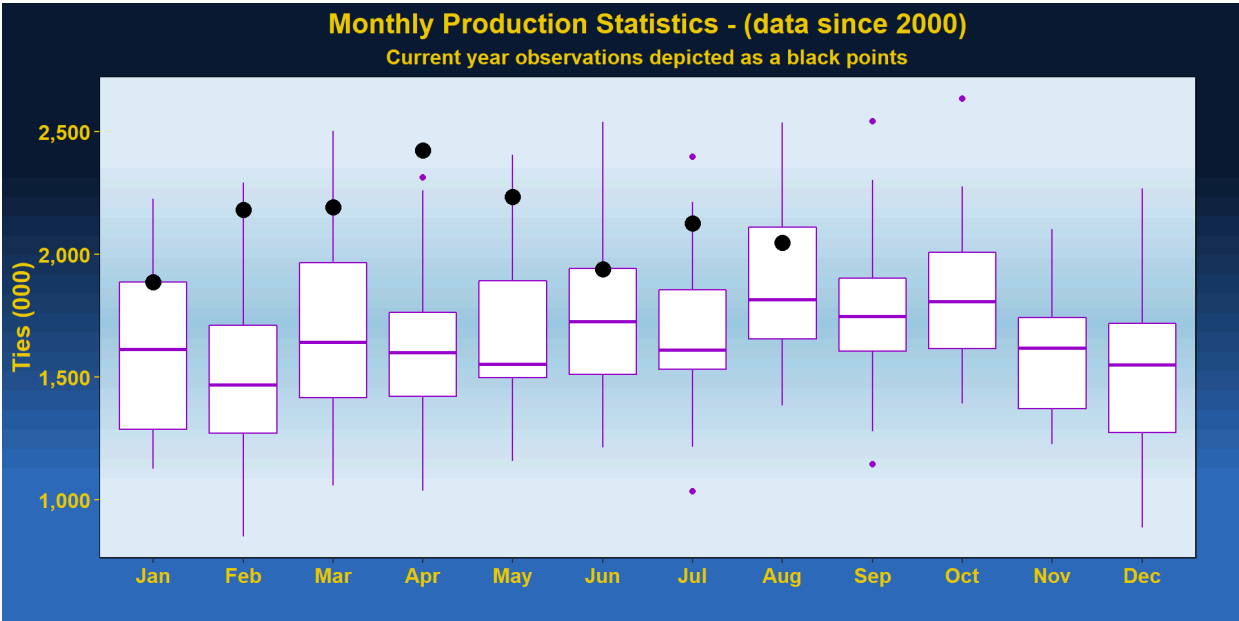
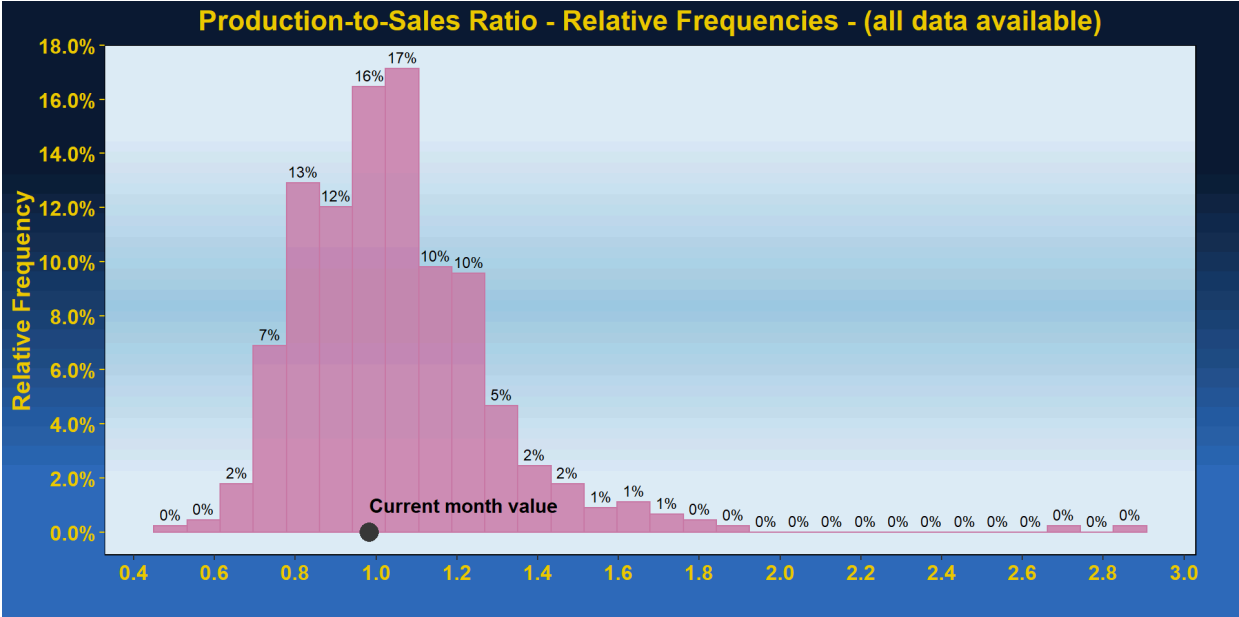
Date	Production	Purchases	Inventory	ISR
August 2023	2,111	1,823	15,032	0.79
July 2024	2,126	2,229	18,395	0.88
August 2024	2,048	2,083	18,359	0.87



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

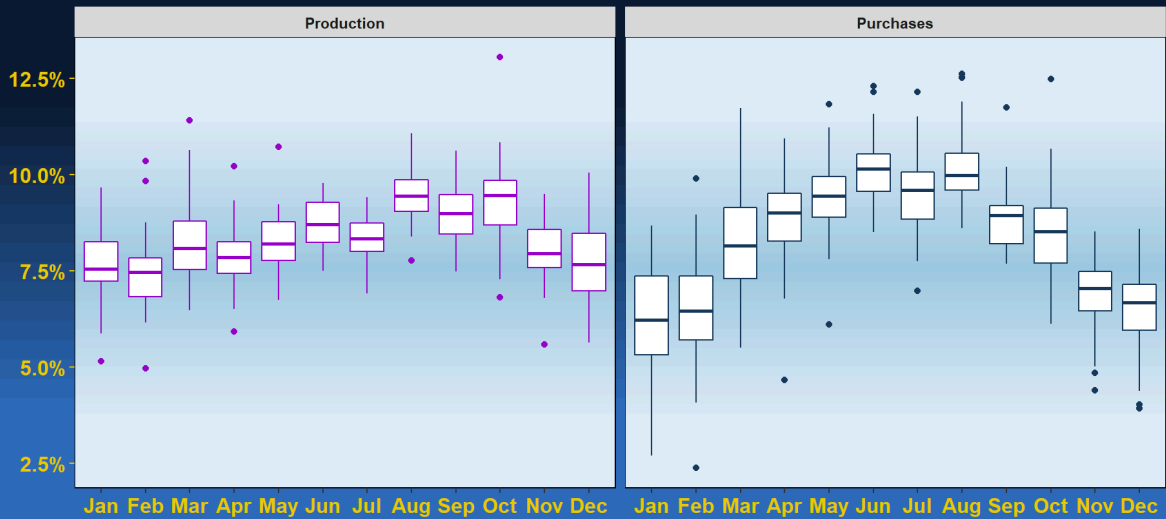


The following graph tells the same story as the graph above, just the ratio is reversed - Production-to-Sales Ratio.

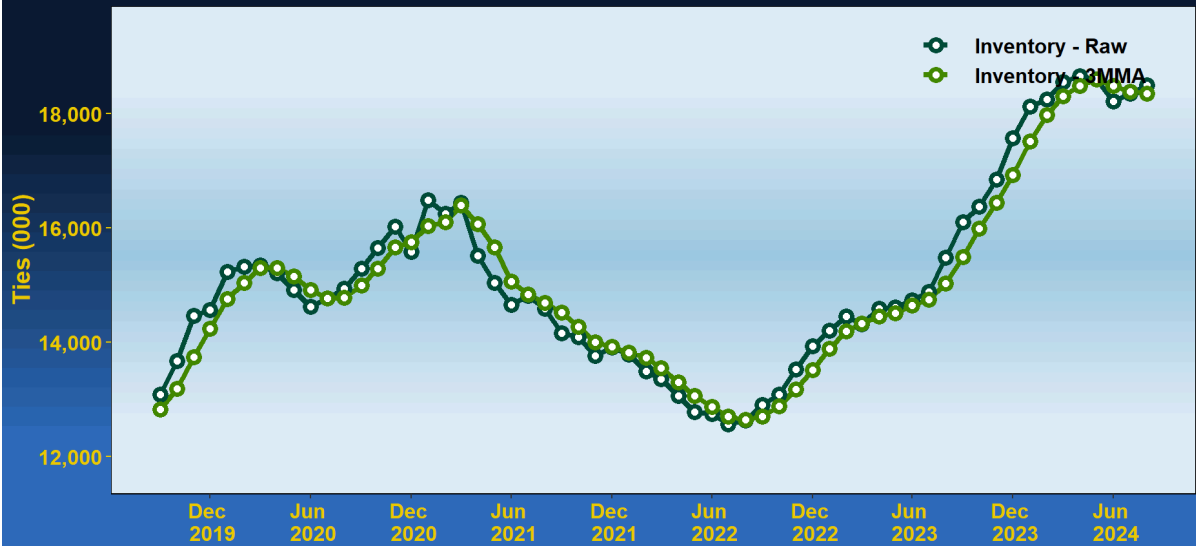


Monthly Pattern of Production and Purchases Statistics - Percent of Annual Total

Data since January 1988



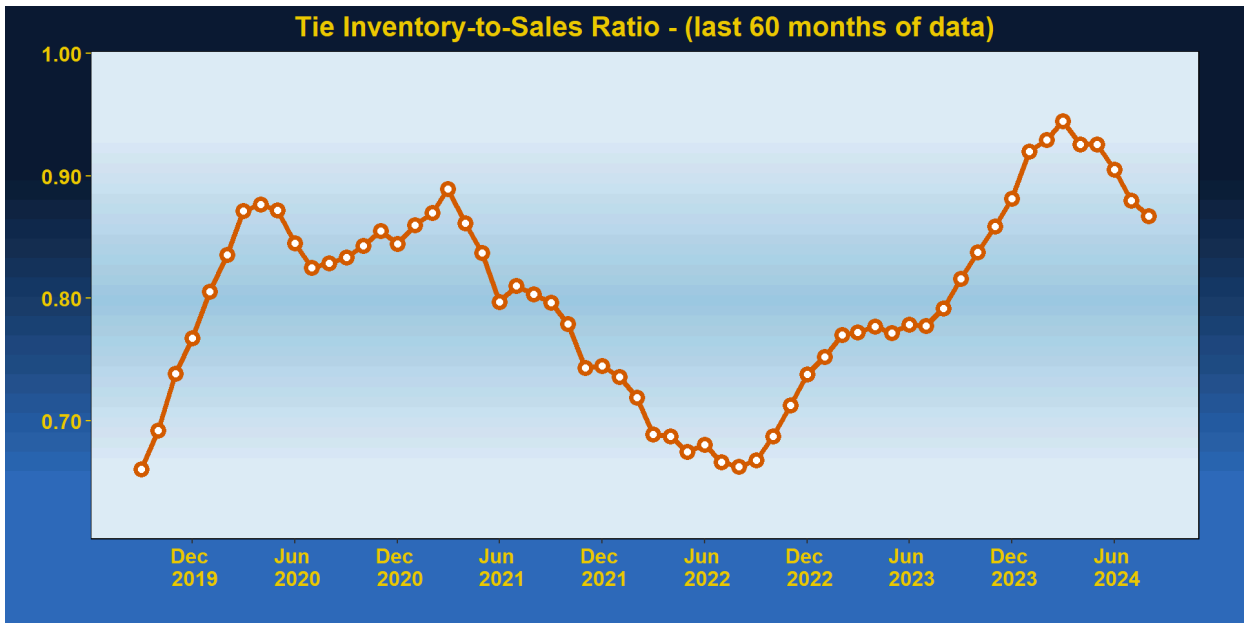
Tie Inventory - Raw Monthly and 3MMA Data - (last 60 months of data)



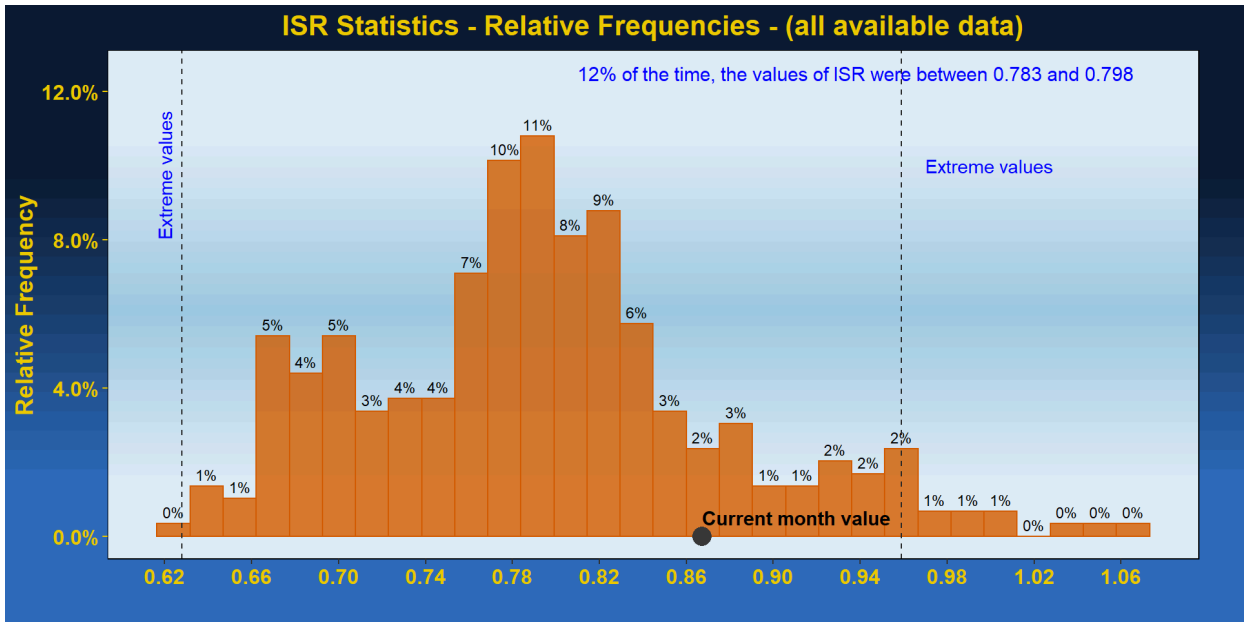
Monthly Patterns of Inventory - (data since 2000)

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





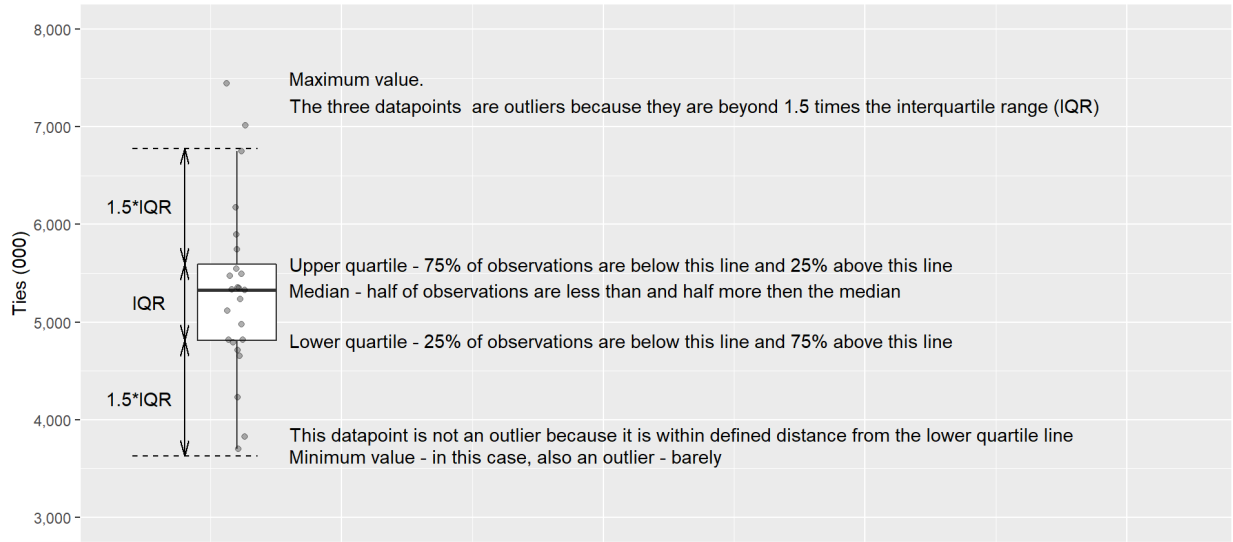
Inventory-to-Sales Ratio (ISR) histogram of relative frequencies shows the monthly ISR data distribution and the black point represents the value for the current reporting month.



Appendix

Box Plot Explained

Underlying data displayed as 'jittered' points



Histogram of Relative Frequencies Explained

