

**Marquette-ISM Report on Manufacturing  
July 2019- Early Release**

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*The Marquette-ISM Report on Manufacturing was prepared by **Katie Ozanich**, a graduate student in Applied Economics at Marquette University, and distributed by **Kelly Wesolowski**, Associate Director of the Center for Supply Chain Management.*

*Please direct data questions and requests for media commentary to Bill Lee.*

*This report should not be confused with the ISM National Report published by the Institute of Supply Management. While a reasonable attempt has been made to remain consistent with the national report, the contents of this report reflect only information pertinent to the southeast Wisconsin and northern Illinois region. This report is not used in the calculation of the national report.*

**Summary**

Milwaukee-area PMI	July 2019	June 2019	May 2019
Seasonally adjusted	46.44	56.11	47.83

(Milwaukee, Wisconsin) – July’s Index registered at 46.44, a decrease from 56.11 in June. July’s index indicates negative territory.

**What respondents are saying in July 2019:**

- Manufacturing support services such as painting, anodizing, and plating are constrained which has caused manufactured lead times for parts to increase.
- A continued shortage of qualified labor for suppliers has led to significant supply chain issues.

*Important: See explanatory notes on the survey and diffusion index at the end of this report.*

MANUFACTURING AT A GLANCE: July 2019*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Jul-19	Jun-19		
PMI	46.44	56.11	-9.7	declining
New Orders	35.83	51.23	-15.4	declining
Production	43.48	48.26	-4.8	declining
Employment	56.95	66.38	-9.4	growing
Supplier Deliveries	53.63	68.55	-14.9	slower
Inventories	42.31	46.15	-3.8	declining
Customers' Inventories *	40.91	40.91	0.0	declining
Prices *	46.15	69.23	-23.1	declining
Backlog of Orders *	41.67	45.45	-3.8	declining
Exports *	50.00	56.25	-6.3	growing
Imports *	56.25	42.86	13.4	growing

(\* ) The indices are seasonally adjusted *except for* the Customers' Inventories, Prices, Backlog of Orders, Exports, and Imports Indexes, which do not meet accepted criteria for seasonal adjustments.

**What respondents are saying in July 2019:**

- Price increases are occurring in commodity items, fasteners, and other stocked items at distributors.
- Slowdowns in Chinese and European markets are impacting production in the United States.
- Customer behaviors are not providing a clear direction on market demand, creating a degree of uncertainty.
- Agricultural markets continue to slow.

## Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **July 2019, June 2019, and May 2019.**

	Diffusion Index Jul-19	Diffusion Index Jun-19	Diffusion Index May-19	Direction	Comments
Blue Collar	60.7	62.3	52.9	growing	-
White Collar	49.4	51.6	57.0	declining	-

**Note:** These have been calculated based on the seasonally adjusted (SA) Blue and White Collar indices.

## What respondents are saying in July 2019:

- The shortage of qualified labor continues, leading to high employee turnover as talent seeks better available opportunities.

## Buying Policy

Average commitment lead-time for Capital Expenditures increased from 108 days to 130 days. Average lead-time for Production Materials increased from 53 days to 59 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies decreased from 24 days to 15 days.

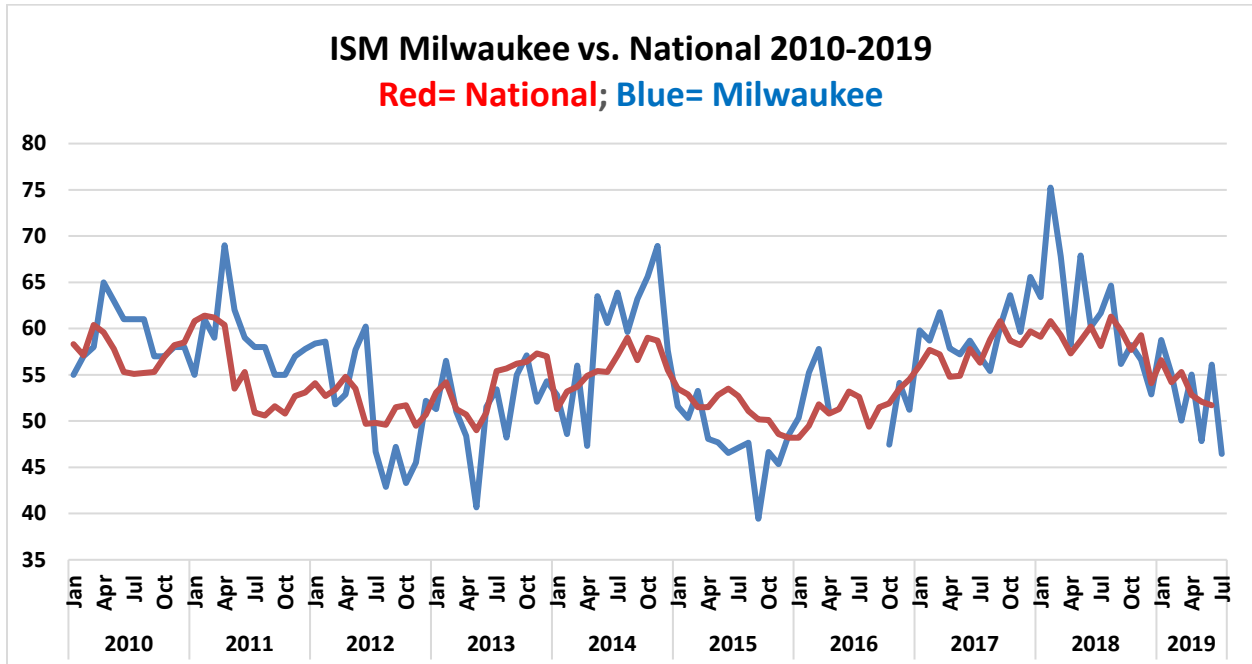
## Six- Month Outlook on Business Conditions

In this outlook, there is a continued downward shift in positive expectations compared with May and June in terms of market conditions. Approximately 21% of respondents expect positive conditions, 57% expect conditions to remain the same and 21% of the respondents expect conditions to worsen within the next six months.

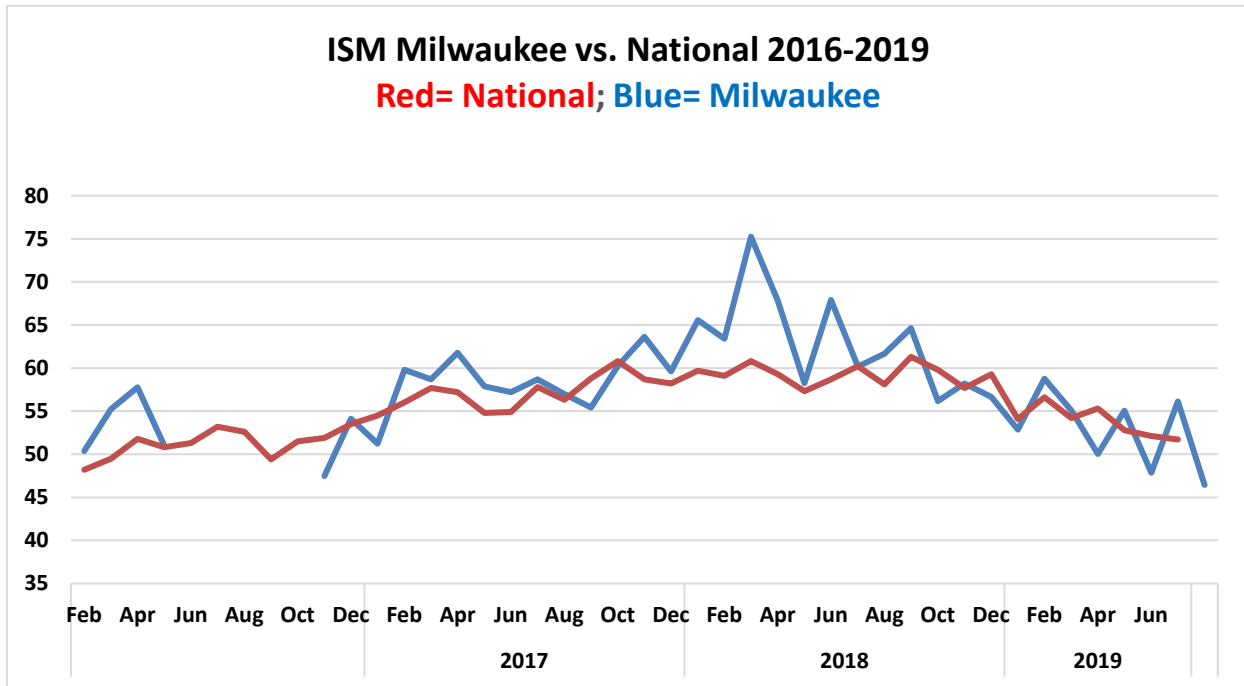
	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Jul-19	21.43%	57.14%	21.43%	50.00%
Jun-19	38.46%	46.15%	15.38%	61.54%
May-19	46.15%	38.46%	15.38%	65.38%

**Milwaukee versus the Nation –**

*January 2010 – July 2019 Graph*



*January 2016- July 2019 Graph*



## Insights on the ISM PMI from the National Organization:

### ISM *Manufacturing Report On Business*<sup>®</sup> Background

In February 1982, the PMI was developed by the U.S. Department of Commerce (DOC) and ISM. The index, based on analytical work by the DOC, adjusts five components of the Institute's monthly survey — new orders, production, employment, supplier deliveries and inventories — for normal seasonal variations, applies equal weights to each and then calculates them into a single monthly index number.

An update of research originally done by Theodore S. Torda, the late economist for the DOC, shows a close parallel between growth in real Gross Domestic Product (GDP) and the PMI. The index can explain about 60 percent of the annual variation in GDP, with a margin of error that averaged  $\pm .48$  percent during the last ten years. George McKittrick, an economist at the DOC, said "Not only does the PMI track well with the overall economy, but the indication provided by ISM data about how widespread changes are, complements analogous government series that show size and direction of change."

In January 1989, the Supplier Deliveries Index from the *Report* became a standard element of the DOC's Bureau of Economic Analysis Index of Leading Economic Indicators. The data was incorporated into the index from June 1976 forward. In January 1996, The Conference Board began compiling this index.

### What Is a Diffusion Index?

Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change. The percent response to the "Better," "Same" or "Worse" question is difficult to compare to prior periods. Therefore, the percentages are "diffused" for this purpose. A diffusion index takes those indicating "Better" and half of those indicating "Same" and adds the percentages. This effectively measures the bias toward a positive (above 50 percent) or negative index (below 50 percent). For example, if the response is 20 percent "Better," 70 percent "Same," and 10 percent "Worse," then the diffusion index would be 55 percent ( $20\% + [0.50 \times 70\%]$ ). The data for each question is converted to a diffusion index and then seasonally adjusted.

**For each index, a reading above 50 percent indicates expansion of an index, while a reading below 50 percent indicates it is generally declining. And a reading of 50 percent indicates "no change" from the previous month. Supplier Deliveries is an exception. A Supplier Deliveries Index above 50 percent indicates slower deliveries, and below 50 percent indicates faster deliveries.**

(<https://www.instituteforsupplymanagement.org/files/ISMREPORT/ROBBroch08.pdf>)