

**Marquette ISM[®] Report on Manufacturing
November 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 Report On Business[®], PMI[®], NMI[®], published by the Institute of Supply Management[®] (ISM[®]). 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	November 2019	October 2019	September 2019
Seasonally adjusted	42.12	42.54	45.41

(Milwaukee, Wisconsin) – November's Index registered at 42.12, a decrease from 42.54 in October. November's index indicates negative territory.

What respondents are saying in November 2019:

- Continued customer order reductions in Q4 and through 2020
- Slowing production levels in some sectors
- Business seems to have stabilized and is now picking up a bit

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

MANUFACTURING AT A GLANCE: November 2019*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Nov-19	Oct-19		
PMI	42.12	42.54	-0.4	declining
New Orders	36.54	40.26	-3.7	declining
Production	42.32	39.97	2.4	declining
Employment	31.94	38.39	-6.5	declining
Supplier Deliveries	49.80	47.03	2.8	faster
Inventories	50.00	47.06	2.9	neutral
Customers' Inventories *	33.33	30.00	3.3	declining
Prices *	50.00	50.00	0.0	neutral
Backlog of Orders *	19.23	40.63	-21.4	declining
Exports *	40.91	37.50	3.4	declining
Imports *	31.25	33.33	-2.1	declining

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

What respondents are saying in November 2019:

- Production levels are the lowest of the year
- Steel pricing is favorable for early 2020
- Slightly concerned about deliveries from Chinese suppliers with the New Year approaching
- Forecasts for 2020 customer inventories are slightly lower than 2019

Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **November 2019, October 2019, and September 2019.**

	Diffusion Index Nov-19	Diffusion Index Oct-19	Diffusion Index Sep-19	Direction	Comments
Blue Collar	29.0	38.4	45.2	declining	-
White Collar	37.7	35.6	41.1	declining	-

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

What respondents are saying in November 2019:

- The labor pool is diminishing
- Difficult to find qualified Blue Collar employees
- The outlook is slow but not stagnating

Buying Policy

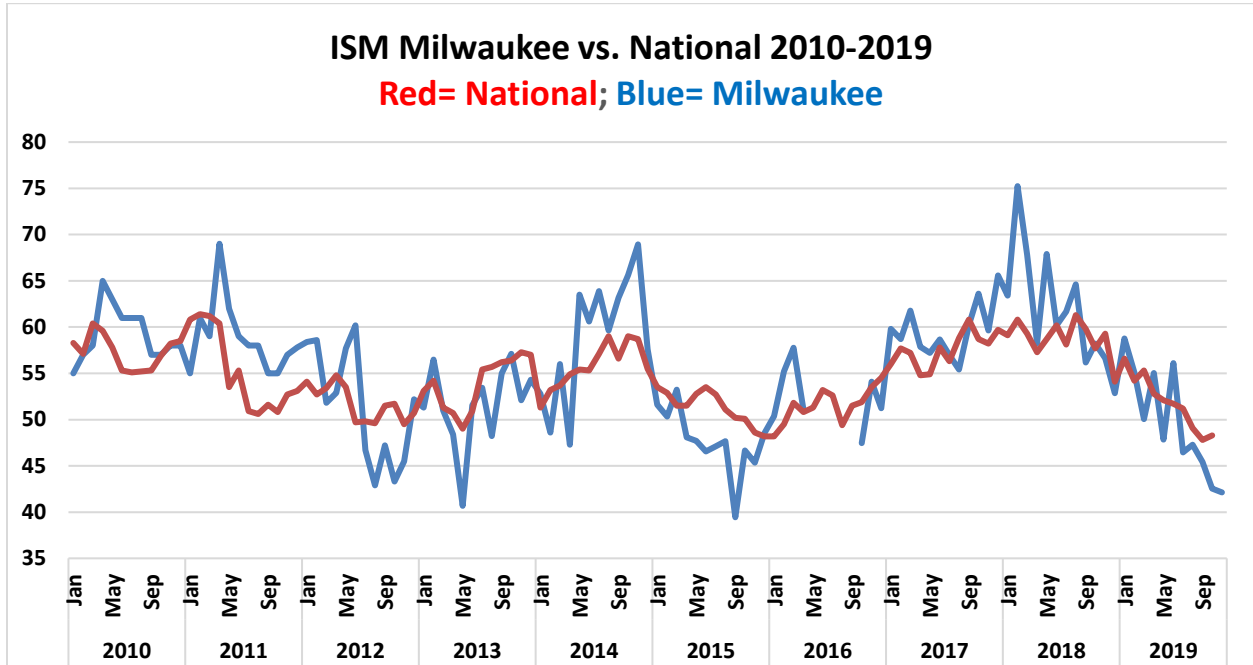
Average commitment lead-time for Capital Expenditures decreased from 124 days to 109 days. Average lead-time for Production Materials increased from 44 to 51 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies increased from 14 to 18 days.

Six- Month Outlook on Business Conditions

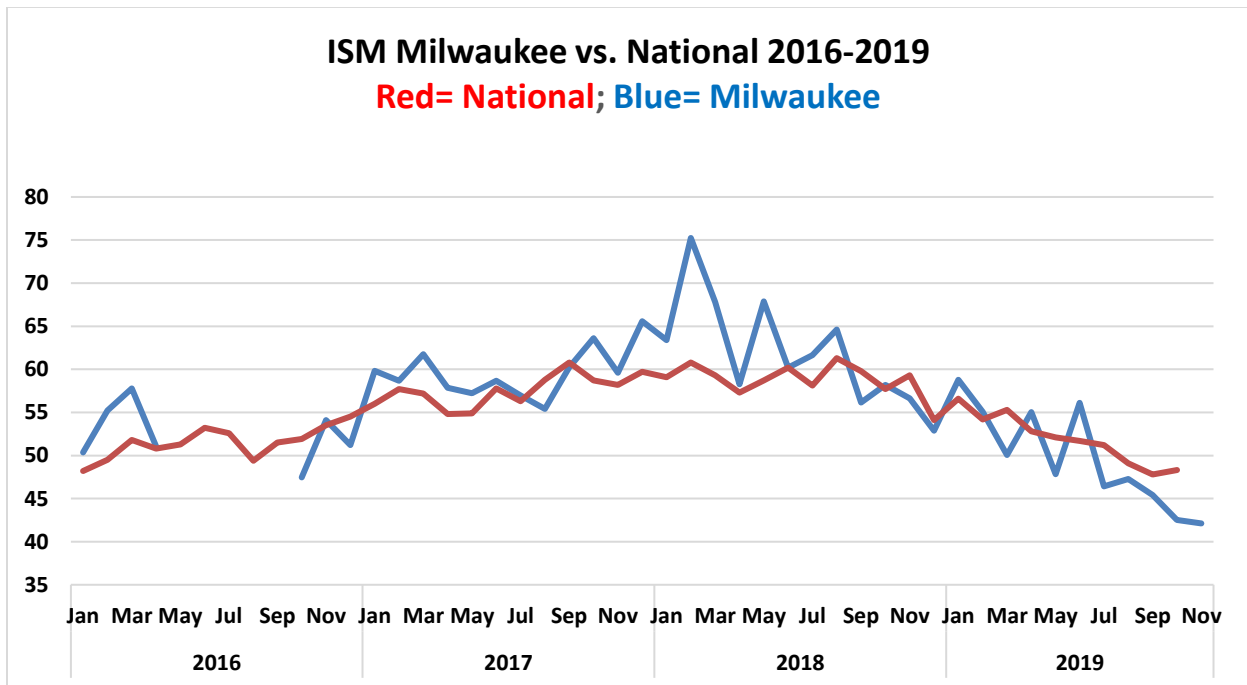
In this outlook, there is a downward shift in positive expectations compared with September in terms of market conditions. Approximately 31% of respondents expect positive conditions, 38% expect conditions to remain the same and 31% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Nov-19	31.25%	37.50%	31.25%	50.00%
Oct-19	16.67%	55.56%	27.78%	44.44%
Sep-19	33.33%	41.67%	25.00%	54.17%

**Milwaukee versus the Nation –
January 2010 – November 2019 Graph**



January 2016- November 2019 Graph



Insights on the ISM® PMI® from Institute for Supply Management®:

ISM® Manufacturing Report On Business® 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>)