

**Marquette ISM® Report on Manufacturing  
November 2020**

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

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*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 2020	October 2020	September 2020
Seasonally adjusted	61.96	59.42	54.49

(Milwaukee, Wisconsin) – November Index registered at 61.96, an increase from 59.42 in October. November’s index indicates positive territory.

**What respondents are saying in November 2020:**

- Volumes are showing some signs of increasing, particularly in the medical industries. While several other industry segments are down dramatically from the beginning of the year (gaming, fitness, civilian training simulators) they are all showing signs of increasing very slowly from their Q2/Q3 volumes
- Raw materials increases have become consistent in the last 30-60 days along with lead times.
- Labor continues to be one of the largest problems related to timing. Sick days and quarantine times have caused havoc on last minute delays.

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

MANUFACTURING AT A GLANCE: November 2020*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Nov-20	Oct-20		
PMI	61.96	59.42	2.5	growing
New Orders	77.08	59.84	17.2	growing
Production	53.75	57.84	-4.1	growing
Employment	53.26	50.51	2.8	growing
Supplier Deliveries	77.88	78.26	-0.4	declining
Inventories	47.84	50.66	-2.8	declining
Customers' Inventories *	25.00	39.29	-14.3	declining
Prices *	72.22	75.00	-2.8	growing
Backlog of Orders *	69.44	54.17	15.3	growing
Exports *	68.18	37.50	30.7	growing
Imports *	62.50	56.25	6.3	growing

(\* ) 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 2020:

- Significant loss of production due to COVID quarantine and sick days – human capital is a continued issue that is not forecastable
- At times, trying to increase inventories but demand consuming faster than certain areas can replenish

## Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **November 2020, October 2020, and September 2020.**

	Diffusion Index Nov-20	Diffusion Index Oct-20	Diffusion Index Aug-20	Direction	Comments
<b>Blue Collar</b>	56.1	54.1	49.7	growing	-
<b>White Collar</b>	47.7	43.1	45.1	declining	-

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

## What respondents are saying in November 2020:

- Many are retaining all employees even with reduced volume – at one point this will become unsustainable
- Many new staffing challenges in regard to COVID – labor continues to be an issue

## Buying Policy

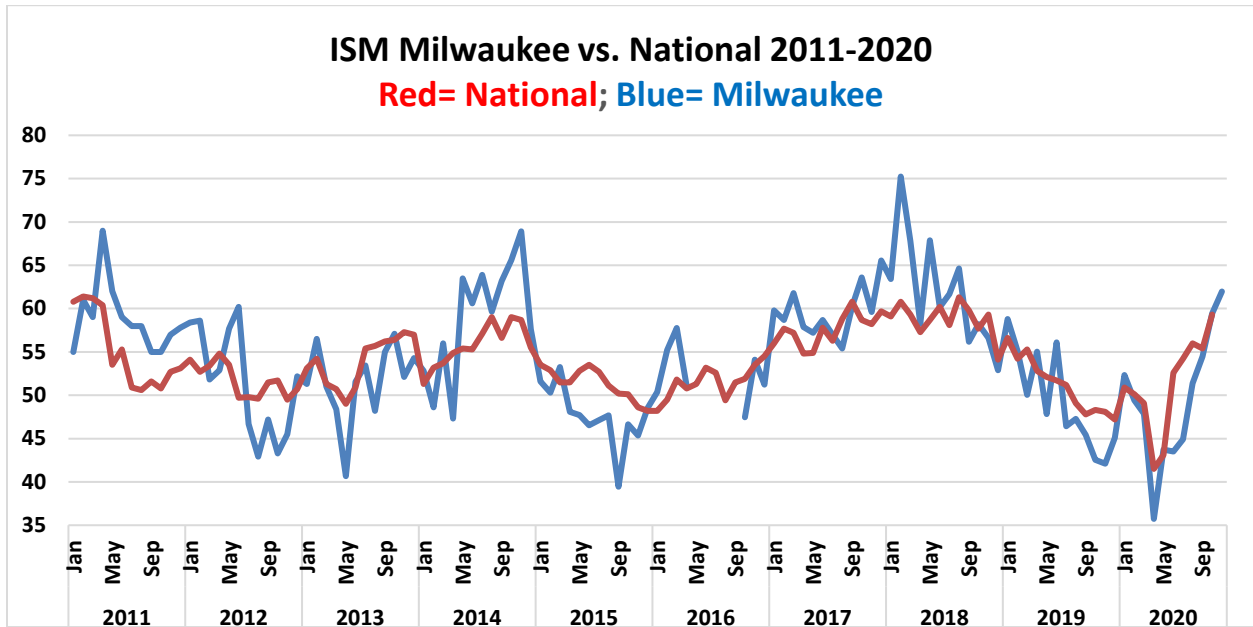
Average commitment lead-time for Capital Expenditures remained the same as 93 days. Average lead-time for Production Materials increased from 50 to 52 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies increased from 17 to 25 days.

## Six- Month Outlook on Business Conditions

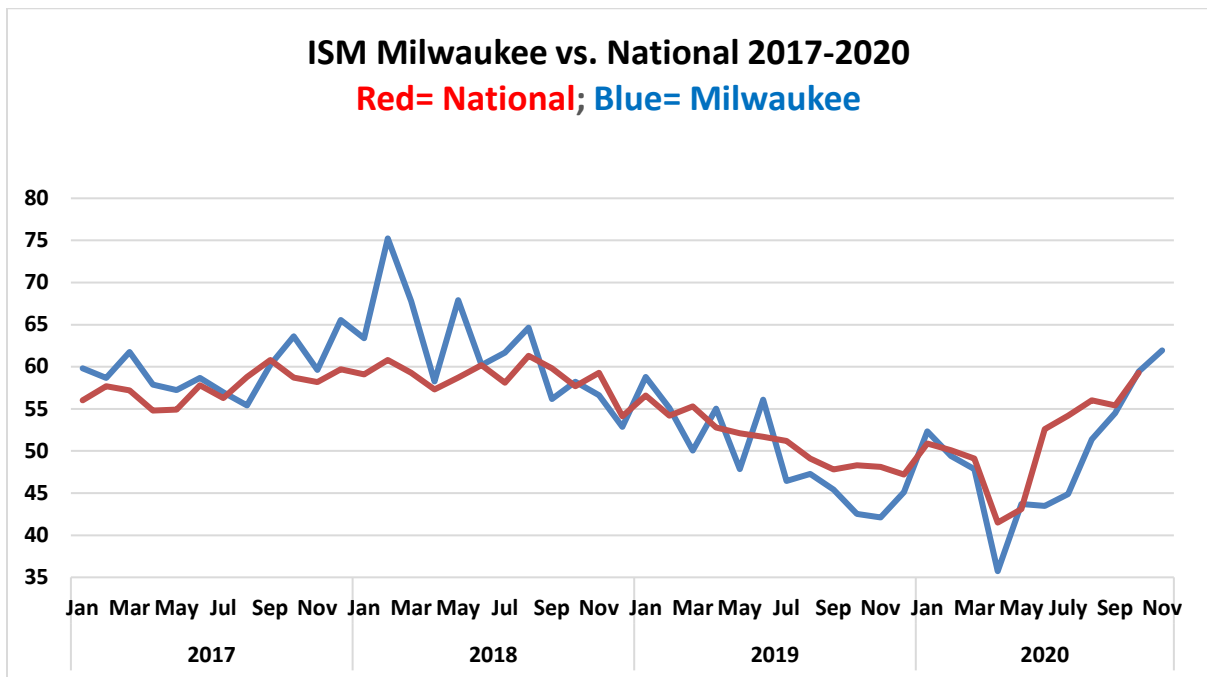
In this outlook, there is a downward shift in positive expectations compared with October and September in terms of market conditions. Approximately 39% of respondents expect positive conditions, 44% expect conditions to remain the same and 17% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
<b>Nov-20</b>	38.89%	44.44%	16.67%	61.11%
<b>Oct-20</b>	50.00%	35.71%	14.29%	67.86%
<b>Sept-20</b>	47.06%	35.29%	17.65%	64.71%

**Milwaukee versus the Nation –  
January 2011 – November 2020 Graph**



**January 2017 – November 2020 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>)