

Marquette ISM® Report on Manufacturing  
May 2020- 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	May 2020	April 2020	March 2020
Seasonally adjusted	43.72	35.73	47.86

(Milwaukee, Wisconsin) – May’s Index registered at 43.7, an increase from 35.73 in April. April’s index indicates negative territory.

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

- COVID-19 is continuing to affect supply chain and customer demand
- Beginning to question the short term versus the long term effects of COVID-19 as companies begin to invest heavily in technology to limit future human contact
- The reopening of the state has allowed onsite engineers to better manage projects
- Steel manufacturing is grinding to a halt as ore mines are closed and steel processors are warning that they will be down 50-75% as of July
- Lack of steel manufacturing has led some automotive manufacturers to postpone the release of 2021 car models
- Each day the shutdown continues, the supply chain erodes and the recovery of projects weakens

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

MANUFACTURING AT A GLANCE: May 2020*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	May-20	Apr-20		
PMI	43.72	35.73	8.0	declining
New Orders	29.11	25.88	3.2	declining
Production	30.83	22.84	8.0	declining
Employment	33.93	24.68	9.3	declining
Supplier Deliveries	74.70	71.93	2.8	slower
Inventories	50.00	33.33	16.7	neutral
Customers' Inventories *	34.62	46.43	-11.8	declining
Prices *	53.13	52.78	0.3	growing
Backlog of Orders *	28.57	34.38	-5.8	declining
Exports *	33.33	18.75	14.6	declining
Imports *	38.89	50.00	-11.1	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 May 2020:

- As new orders are pending, manufacturers are using this time for R&D projects
- Began producing inventory stock whereas before COVID-19 production was on a per order basis
- New orders continue to trickle in but there is a slight upward trend
- Suppliers are slow due to staffing issues
- UPS has a 3 to 4 hour variance on their delivery time
- Suppliers are beginning to up production but not quick enough to keep up with the increased demand due to COVID-19
- Fabrication of production materials have 5 to 8 weeks of lead time, which is 2 weeks above the historical average
- R&D projects show promise and there may be a chance to begin recovery

## Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **May 2020, April 2020, and March 2020.**

	Diffusion Index May-20	Diffusion Index Apr-20	Diffusion Index Mar-20	Direction	Comments
<b>Blue Collar</b>	37.0	32.9	41.6	declining	-
<b>White Collar</b>	33.9	30.2	44.2	declining	-

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

## What respondents are saying in May 2020:

- No overtime as new orders are pending
- Continue to work fewer hours than before COVID-19
- Brought back some production workers from furlough
- Steady workload but white collar workers continue to work from home
- Will begin testing new, increased hours in June

## Buying Policy

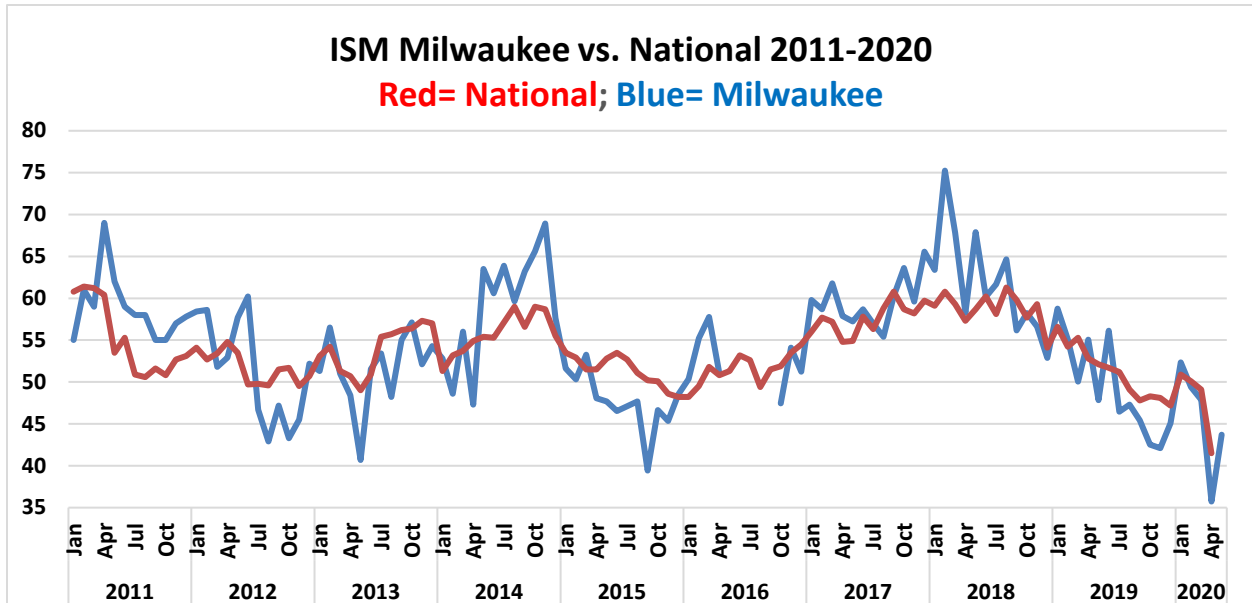
Average commitment lead-time for Capital Expenditures increased from 104 to 109 days. Average lead-time for Production Materials increased from 47 to 50 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies remained the same at 18 days.

## Six- Month Outlook on Business Conditions

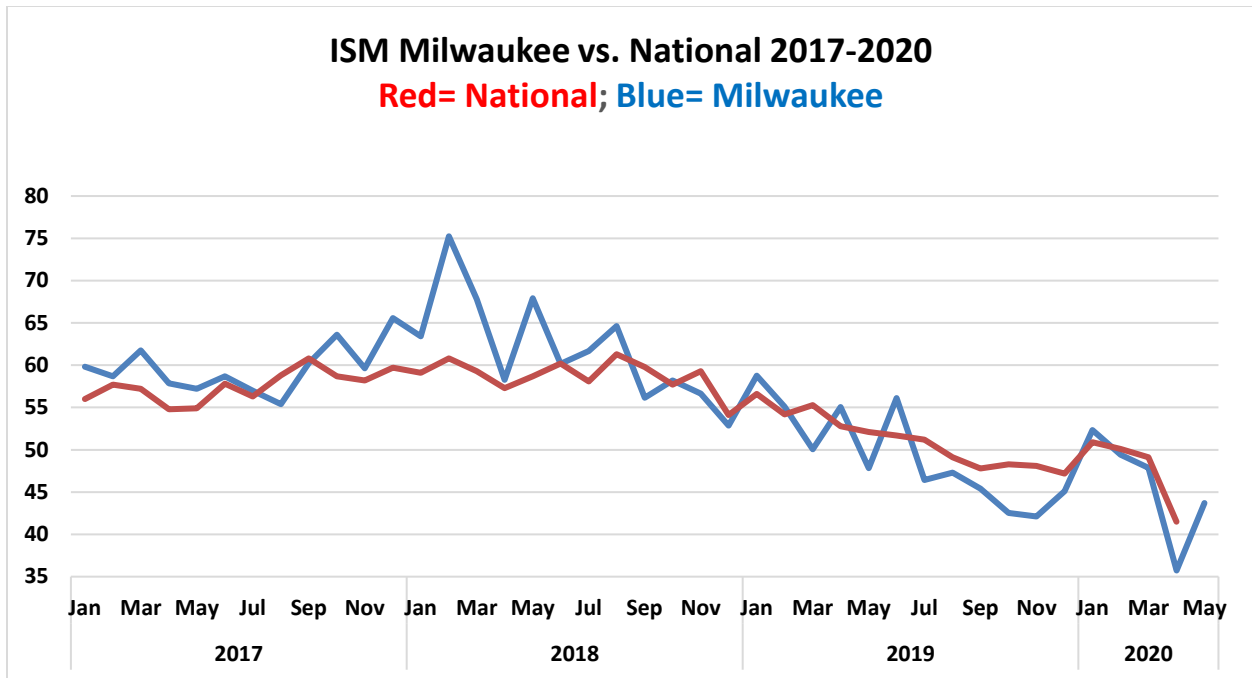
In this outlook, there is an upward shift in positive expectations compared with April in terms of market conditions. Approximately 36% of respondents expect positive conditions, 43% expect conditions to remain the same and 21% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
<b>May-20</b>	35.71%	42.86%	21.43%	57.14%
<b>Apr-20</b>	23.53%	29.41%	47.06%	38.24%
<b>Mar-20</b>	22.22%	44.44%	33.33%	44.44%

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



**January 2017 – May 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>)