

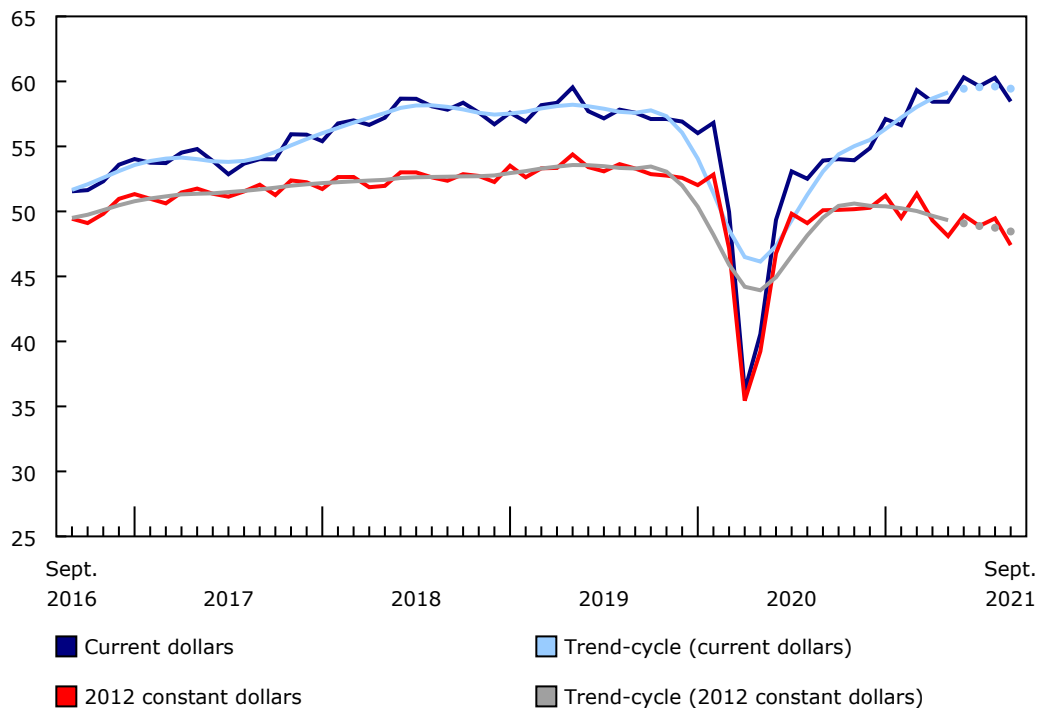
Monthly Survey of Manufacturing, September 2021

Released at 8:30 a.m. Eastern time in *The Daily*, Monday, November 15, 2021

Manufacturing sales declined 3.0% to \$58.5 billion in September, the lowest level since May 2021. Sales decreased in 12 of 21 industries, with most of the decline attributable to lower sales of motor vehicles due to the shortage of semiconductors. The decrease was partially offset by higher sales in the petroleum and coal industry.

Chart 1
Manufacturing sales

billions of dollars



Note(s): Data are seasonally adjusted. The higher variability associated with the trend-cycle estimates is indicated with a dotted line on the chart for the current reference month and the three previous months. For more information, see the Note to readers.

Source(s): Tables [16-10-0047-01](#) and [16-10-0013-01](#).

Sales in constant dollars decreased 4.2% in September, indicating a lower volume of goods sold. Month over month, the [Industrial Product Price Index](#) rose 1.0% in September, while the Raw Materials Price Index increased 2.5% .

Semiconductor chip shortage continues to impact motor vehicle production

The global supply chain disruption continues to slow down recovery in many industries. The lack of computer chips, shortage of shipping containers, port congestion, and environmental disasters presented serious challenges to many manufacturers and distributors of goods, and the supply chain disruption is expected to continue into 2022.



In Canada, the semiconductor chip shortage affected auto manufacturing the most and resulted in a production curtailment in all major auto assembly plants. In September, sales of motor vehicles fell 35.6% to \$1.9 billion, the lowest sales since May 2020. The production capacity rate in the transportation equipment industry fell from 70.6% in August 2021 to 55.3% in September 2021. Sales of motor vehicle parts declined 13.5% to \$1.8 billion accordingly. On a quarterly basis, sales in the motor vehicle industry increased 9.3% in the third quarter, following three consecutive quarterly declines but remained 42.2% down compared with the third quarter of 2020. [Exports of motor vehicles and parts](#) decreased 17.9% in September.

Sales in the primary metal industry posted their first decline since April 2020, falling 6.3% to \$5.2 billion in September. Sales in volume terms decreased 8.7% month over month. A maintenance shutdown at a major non-ferrous metal plant in Quebec was responsible for the decline. Primary metal sales were up 4.6% in the third quarter, the fifth consecutive quarterly gain.

Sales also decreased in the plastic and rubber (-3.6%), chemical (-1.8%), and computer and electronic (-5.4%) product industries in September.

Petroleum products sales rose 3.0% to \$6.7 billion in September, on higher prices. Sales in constant dollars were down 1.6%. [Prices for refined petroleum energy products](#) increased 3.8% in September. In the meantime, sales in the petroleum and coal industry increased 15.1% in the third quarter, the fifth consecutive quarterly gain.

Sales of wood products rose 1.5% to \$3.5 billion in September, mainly on higher volumes sold. [Prices for lumber and other wood products](#) decreased 1.3%, while sales on a constant dollar basis were up 2.4%. Despite the month-over-month increase, sales of wood products were down 29.6% in the third quarter. [The total value of building permits](#) increased 4.3% in September.

Other industries that posted increases in September were the fabricated metal (+0.9%), ship building (+9.7%), and beverage and tobacco (+1.6%) industries.

Computer chip shortage hits sales in Ontario

Manufacturing sales decreased in eight provinces in September, led by Ontario and Quebec. Meanwhile, Newfoundland and Labrador posted the largest increase.

Sales in Ontario decreased 4.1% to \$24.8 billion in September, primarily on lower sales of motor vehicle and motor vehicle parts due to the lack of semiconductor parts. Following a 9.7% decline in August, sales of motor vehicles fell 36.9% to \$1.8 billion in September, bringing sales to their lowest level since May 2020. Sales of motor vehicle parts were also down month over month (-14.1%). Despite the monthly decline, motor vehicle sales rose 10.7% in the third quarter, following three consecutive quarterly declines.

Sales in Quebec decreased 2.2% to \$15.3 billion in September on lower sales in 10 of 21 industries. This decrease was led by the primary metal (-11.5%), plastic and rubber (-8.2%), and aerospace product and parts (-5.0%) industries. Petroleum product sales posted the largest increase, rising 4.0% to \$1.5 billion in September. Despite the decline in September, total sales were 2.2% higher in the third quarter than in the second quarter of 2021.

In Newfoundland and Labrador, sales rose 6.1% to \$303.4 million in September, driven by higher sales in durable goods industries. Sales on quarterly basis were still down 22.9% in the third quarter.

Motor vehicle sales in Toronto stall

Manufacturing sales on a seasonally adjusted basis fell in 7 of the 12 census metropolitan areas covered by the survey in September, led by Toronto, Edmonton, and Montréal. Sales in Regina increased the most.

Following two consecutive increases, sales in Toronto declined 2.7% to \$10.1 billion in September, mostly on lower sales of motor vehicles and motor vehicle parts (-5.9%). Motor vehicle sales fell 12.3%, as auto assembly plants in Toronto lowered production due to the semiconductor shortage.

In Edmonton, sales fell 8.5% to \$2.9 billion, driven by lower sales of petroleum and coal (-16.3%). Nevertheless, total sales in Edmonton were up 31.9% compared with September 2020.

Sales in Montréal decreased 3.4% to \$6.9 billion in September, attributable to lower sales of primary metals (-13.0%) and lower production of aerospace products and parts (-5.0%).

Meanwhile, sales in Regina increased 9.8% to \$807.5 million in September, led by higher sales of chemical and petroleum and coal.

Quarterly sales edge up despite decline in the wood industry

Manufacturing sales edged up 0.7% in the third quarter, the fifth consecutive quarterly increase. Higher sales of petroleum and coal (+15.1%), food (+3.2%), and primary metals (+4.6%) were largely offset by a decline in sales of wood (-29.6%). The quarterly decline in wood sales was primarily attributable to the downturn in prices of lumber and other wood products.

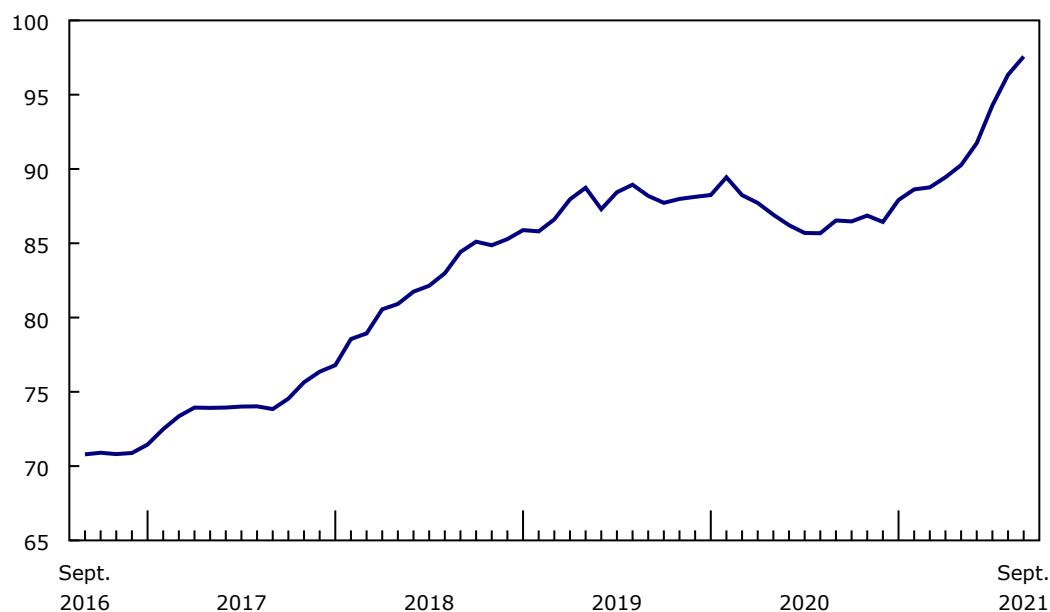
Volume sales declined 0.9% in the third quarter, led by the primary metal (-6.8%) and chemical (-3.5%) industries. The petroleum and coal industry posted the largest increase (+4.5%).

Record-high inventory levels continue

Total inventories increased 1.3% to a record high \$97.6 billion in September, driven by higher inventories of primary metal (+3.6%), fabricated metal (+3.7%) and wood (+3.6%). Up until 2021, higher prices for raw materials contributed to the gains in total inventories. Year over year, total inventories rose 12.7%. Raw materials are the largest component of manufacturing inventories followed by finished products. The share of raw materials in total inventories has been rising since the COVID-19 pandemic, mainly due to higher prices.

Chart 2
Inventory levels rise

billions of dollars

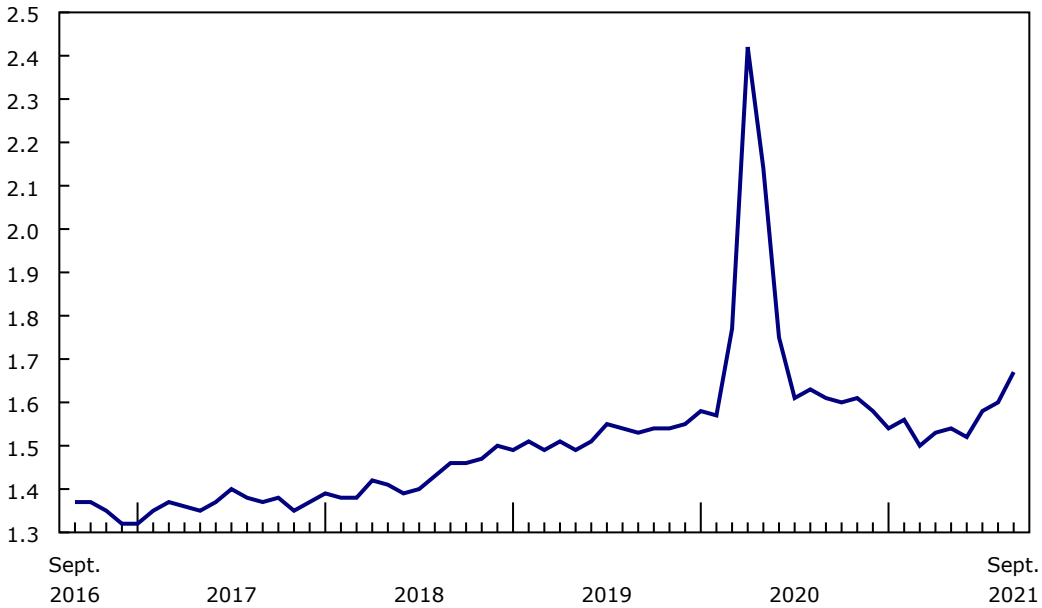


Note(s): Data are seasonally adjusted.
Source(s): Table 16-10-0047-01.

The inventory-to-sales ratio increased from 1.60 in August to 1.67 in September. The ratio measures the time, in months, that would be required to exhaust inventories if sales were to remain at their current level.

Chart 3 The inventory-to-sales ratio increases

ratio



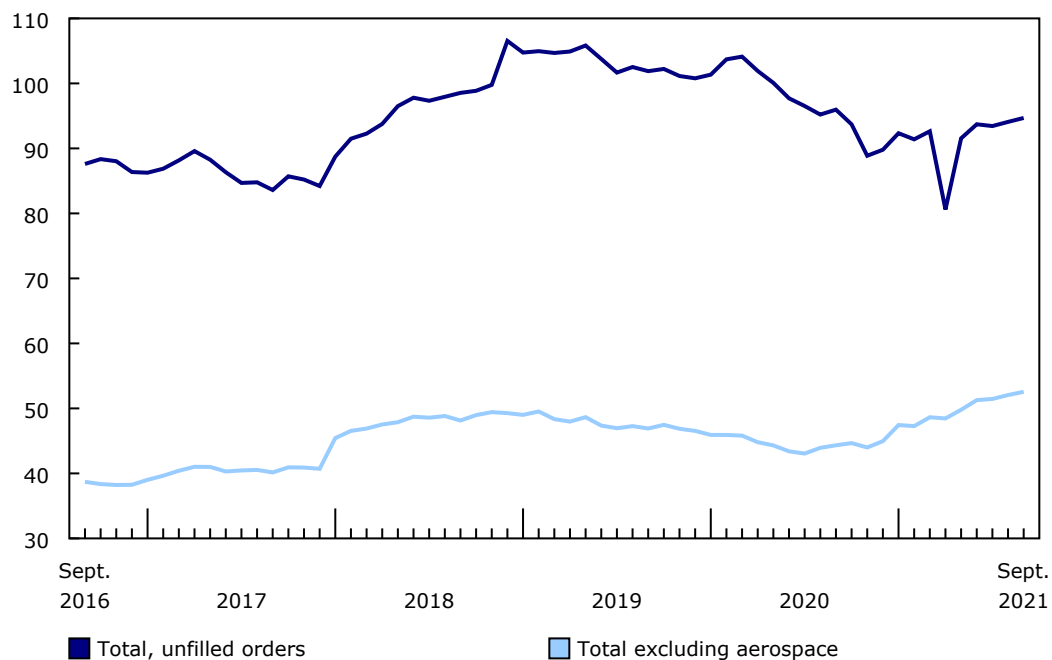
Note(s): Data are seasonally adjusted.
Source(s): Table [16-10-0047-01](#).

Unfilled orders edge upward

Total value of unfilled orders edged up 0.6% to \$94.7 billion in September, mostly due to higher unfilled orders of machinery (+5.8%) and fabricated metal (+2.6%) products. Year over year, unfilled orders were down 1.3%.

Chart 4
Unfilled orders increase

billions of dollars



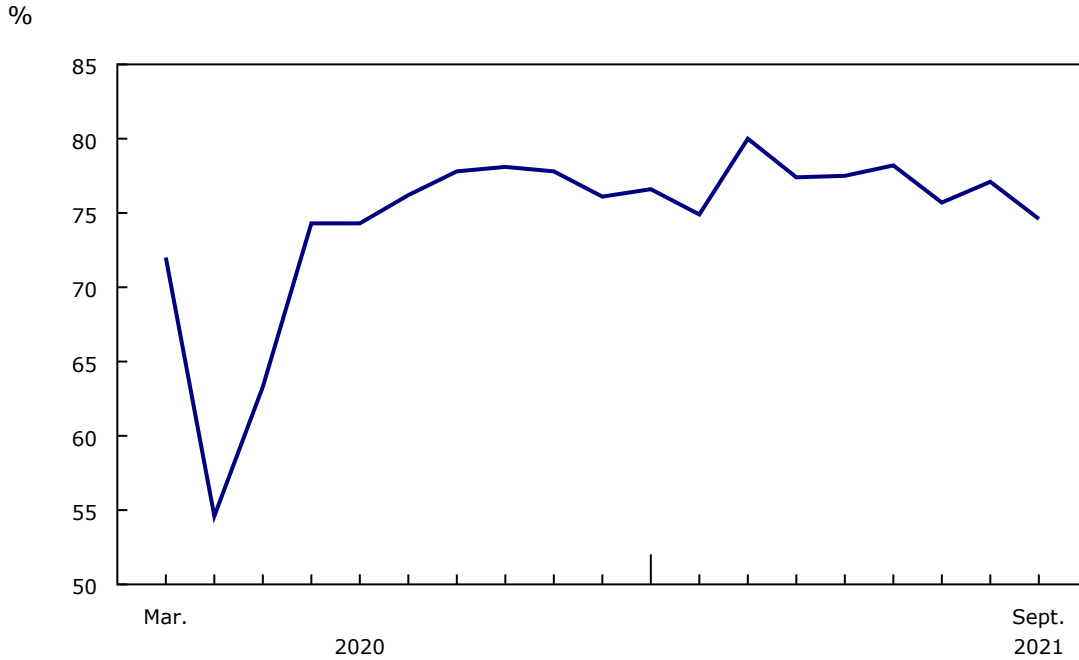
Note(s): Data are seasonally adjusted.
Source(s): Table 16-10-0047-01.

The total value of new orders decreased 3.0% to \$59.1 billion in September, mainly attributable to lower new orders of transportation equipment.

Capacity utilization rate decreases on lower production

The capacity utilization rate (not seasonally adjusted) for the total manufacturing sector decreased from 77.1% in August to 74.6% in September, on lower production.

Chart 5
The capacity utilization rate decreases



Note(s): Data are not seasonally adjusted.
Source(s): Table [16-10-0012-01](#).

The capacity utilization rate fell in 10 of 21 industries September, driven by lower production in the transportation equipment (-15.3 percentage points), petroleum and coal (-3.5 percentage points), primary metal (-2.8 percentage points) and chemical (-4.0 percentage points) industries. The capacity utilization rate in food manufacturing increased 1.5 percentage points.

Table 1
Manufacturing: Principal statistics – Seasonally adjusted

	September 2020	August 2021 ^r	September 2021 ^P	August to September 2021	September 2020 to September 2021
	millions of dollars			% change ¹	
Manufacturing sales (current dollars)	53,912	60,279	58,460	-3.0	8.4
Manufacturing sales (2012 constant dollars)	50,088	49,462	47,407	-4.2	-5.4
Manufacturing sales (current dollars) excluding motor vehicles, parts and accessories	46,745	55,169	54,706	-0.8	17.0
Inventories	86,535	96,341	97,567	1.3	12.7
Unfilled orders	95,959	94,076	94,683	0.6	-1.3
New orders	54,664	60,919 ^E	59,067 ^E	-3.0	8.1
Inventory-to-sales ratio ²	1.61	1.60	1.67

^r revised

^P preliminary

... not applicable

^E use with caution

1. Percent change calculated at thousands of dollars for current dollars and millions of dollars for constant dollars.

2. The inventory-to-sales ratio measures the time in months that it would take to exhaust inventories if sales were to remain at the current rate.

Source(s): Tables [16-10-0047-01](#) and [16-10-0013-01](#).

Table 2
Manufacturing sales by industry – Seasonally adjusted

	September 2020	August 2021 ^r	September 2021 ^P	August to September 2021	September 2020 to September 2021
	millions of dollars			% change ¹	
Food manufacturing	9,283	10,666	10,674	0.1	15.0
Beverage and tobacco product	1,357	1,432	1,454	1.6	7.1
Textile mills	141	141	137	-3.0	-3.3
Textile product mills	133	135	130	-4.0	-2.6
Clothing manufacturing	221	222	225	1.6	1.8
Leather and allied product	21	24	28	15.0	29.1
Wood product	3,446	3,447	3,497	1.5	1.5
Paper manufacturing	2,244	2,465	2,442	-0.9	8.8
Printing and related support activities	673	679	684	0.8	1.7
Petroleum and coal product	3,722	6,511	6,703	3.0	80.1
Chemical	4,401	5,288	5,193	-1.8	18.0
Plastics and rubber products	2,738	3,017	2,908	-3.6	6.2
Non-metallic mineral product	1,273	1,325	1,315	-0.8	3.3
Primary metal	3,796	5,586	5,233	-6.3	37.9
Fabricated metal product	3,252	3,618	3,650	0.9	12.2
Machinery	3,032	3,490	3,499	0.3	15.4
Computer and electronic product	1,183	1,257	1,189	-5.4	0.5
Electrical equipment, appliance and component	881	946	930	-1.7	5.5
Transportation equipment	9,897	7,574	6,162	-18.6	-37.7
Motor vehicle	4,417	3,010	1,937	-35.6	-56.1
Motor vehicle body and trailer	302	316	333	5.6	10.3
Motor vehicle parts	2,750	2,100	1,817	-13.5	-33.9
Aerospace product and parts	1,758	1,500	1,450	-3.3	-17.5
Railroad rolling stock	191	239	194	-18.9	1.7
Ship and boat building	237	240	263	9.7	11.2
Furniture and related product	1,021	1,170	1,138	-2.8	11.5
Miscellaneous manufacturing	1,198	1,288	1,270	-1.4	6.1
Non-durable goods industries	24,933	30,578	30,576	-0.0	22.6
Durable goods industries	28,979	29,702	27,884	-6.1	-3.8

^r revised

^P preliminary

1. Percent change calculated at thousands of dollars.

Source(s): Table [16-10-0047-01](#).

Table 3
Manufacturing sales: Provinces and territories – Seasonally adjusted

	September 2020	August 2021 ^r	September 2021 ^p	August to September 2021	September 2020 to September 2021
	millions of dollars			% change ¹	
Canada	53,912	60,279	58,460	-3.0	8.4
Newfoundland and Labrador	317	286	303	6.1	-4.2
Prince Edward Island	184	215	202	-6.0	10.2
Nova Scotia	821	832	820	-1.4	-0.0
New Brunswick	1,322	1,747	1,618	-7.4	22.4
Quebec	13,426	15,692	15,340	-2.2	14.3
Ontario	25,144	25,858	24,804	-4.1	-1.4
Manitoba	1,614	1,813	1,742	-4.0	7.9
Saskatchewan	1,126	1,733	1,725	-0.4	53.2
Alberta	5,344	7,118	6,913	-2.9	29.3
British Columbia	4,611	4,977	4,986	0.2	8.1
Yukon	3	2	2	3.0	-29.7
Northwest Territories and Nunavut	1	5	4	-18.6	178.3

^r revised

^p preliminary

1. Percentage change calculated at thousands of dollars.

Source(s): Tables [16-10-0047-01](#) and [16-10-0048-01](#).

Table 4
Manufacturing sales by selected census metropolitan area – Seasonally adjusted

	September 2020	August 2021 ^r	September 2021 ^p	August to September 2021	September 2020 to September 2021
	millions of dollars			% change ¹	
Halifax	262	214	257	20.4	-1.9
Québec	1,210	1,613	1,677	4.0	38.7
Montréal	6,231	7,171	6,929	-3.4	11.2
Ottawa–Gatineau, Ontario and Quebec	664	725	739	2.0	11.4
Toronto	10,469	10,329	10,050	-2.7	-4.0
Hamilton	1,503	1,788	1,845	3.2	22.8
Winnipeg	898	978	918	-6.1	2.2
Regina	391	735	807	9.8	106.7
Saskatoon	346	425	385	-9.2	11.5
Calgary	848	959	945	-1.4	11.4
Edmonton	2,166	3,121	2,857	-8.5	31.9
Vancouver	2,394	2,619	2,611	-0.3	9.1

^r revised

^p preliminary

1. Percentage change calculated at thousands of dollars.

Note(s): Data in this table are seasonally adjusted.

Source(s): Table [16-10-0011-01](#).

Table 5
Manufacturing capacity utilization rates by industry – Unadjusted

	September 2020	August 2021 ^r	September 2021 ^p	August to September 2021	September 2020 to September 2021
	%			percentage point change	
Manufacturing	77.8	77.1	74.6 ^E	-2.5	-3.2
Non-durable goods industries	77.4	78.8 ^E	78.0 ^E	-0.8	0.6
Food manufacturing	78.7	77.1 ^E	78.6 ^E	1.5	-0.1
Beverage and tobacco product manufacturing	74.6	75.9	71.6	-4.3	-3.0
Beverage manufacturing	75.2	75.9	71.0	-4.9	-4.2
Tobacco manufacturing	72.0	75.3	75.7	0.4	3.7
Textile mills	75.5	76.1	75.4 ^E	-0.7	-0.1
Textile product mills	73.8	75.9	75.2 ^E	-0.7	1.4
Clothing manufacturing	81.1	75.7	77.3	1.6	-3.8
Leather and allied product manufacturing	84.7	83.9	86.3	2.4	1.6
Paper manufacturing	82.0	86.2	81.3	-4.9	-0.7
Printing and related support activities	72.3	69.6 ^E	72.4 ^E	2.8	0.1
Petroleum and coal products manufacturing	77.2	86.4	82.9	-3.5	5.7
Chemical manufacturing	73.4	76.9	72.9 ^E	-4.0	-0.5
Plastics and rubber products manufacturing	79.1	73.1	77.3 ^E	4.2	-1.8
Plastic product manufacturing	79.4	73.4	78.0 ^E	4.6	-1.4
Rubber product manufacturing	77.4	71.5	73.0	1.5	-4.4
Durable goods industries	78.1	75.4	71.3	-4.1	-6.8
Wood product manufacturing	85.7	79.8	82.4	2.6	-3.3
Non-metallic mineral product manufacturing	80.7	78.2 ^E	80.4 ^E	2.2	-0.3
Primary metal manufacturing	73.9	78.3	75.5	-2.8	1.6
Fabricated metal product manufacturing	66.8	70.7 ^E	73.7 ^E	3.0	6.9
Machinery manufacturing	73.4	78.3 ^E	78.0 ^E	-0.3	4.6
Computer and electronic product manufacturing	81.4	74.7	76.7 ^E	2.0	-4.7
Electrical equipment, appliance and component manufacturing	74.8	79.2	81.3	2.1	6.5
Transportation equipment manufacturing	83.0	70.6	55.3	-15.3	-27.7
Furniture and related product manufacturing	78.1	82.8 ^E	82.2 ^E	-0.6	4.1
Miscellaneous manufacturing	78.8	78.9 ^E	80.2 ^E	1.3	1.4

^r revised

^p preliminary

^E use with caution

Note(s): Data in this table are not seasonally adjusted.

Source(s): Table 16-10-0012-01.

Sustainable development goals

On January 1, 2016, the world officially began implementing the [2030 Agenda for Sustainable Development](#)—the United Nations' transformative plan of action that addresses urgent global challenges over the following 15 years. The plan is based on 17 specific sustainable development goals.

The Monthly Survey of Manufacturing is an example of how Statistics Canada supports the reporting on the global sustainable development goals. This release will be used to help measure the following goal:



Note to readers

Monthly data in this release are seasonally adjusted and are expressed in current dollars, unless otherwise specified.

Seasonally adjusted data are data that have been modified to eliminate the effect of seasonal and calendar influences to allow for more meaningful comparisons of economic conditions from period to period. For more information on seasonal adjustment, see [Seasonally adjusted data – Frequently asked questions](#).

Trend-cycle estimates are included in selected charts as a complement to the seasonally adjusted series. These data represent a smoothed version of the seasonally adjusted time series and provide information on longer-term movements, including changes in direction underlying the series. For information on trend-cycle data, see [Trend-cycle estimates – Frequently asked questions](#).

Both seasonally adjusted data and trend-cycle estimates are subject to revision as additional observations become available. These revisions could be large and could even lead to a reversal of movement, especially for reference months near the end of the series or during periods of economic disruption.

Non-durable goods industries include food; beverage and tobacco products; textile mills; textile product mills; clothing; leather and allied products; paper; printing and related support activities; petroleum and coal products; chemicals; and plastics and rubber products.

Durable goods industries include wood products; non-metallic mineral products; primary metals; fabricated metal products; machinery, computer and electronic products; electrical equipment; appliances and components; transportation equipment; furniture and related products; and miscellaneous manufacturing.

Production-based industries

For the aerospace and shipbuilding industries, the value of production is used instead of the value of sales of goods manufactured. The value of production is calculated by adjusting monthly sales of goods manufactured by the monthly change in inventories of goods in process and finished products manufactured. The value of production is used because of the extended period of time that it normally takes to manufacture products in these industries.

Unfilled orders are a stock of orders that will contribute to future sales, assuming that the orders are not cancelled.

New orders are those received, whether sold in the current month or not. New orders are measured as the sum of sales for the current month plus the change in unfilled orders from the previous month to the current month.

Manufacturers reporting sales, inventories and unfilled orders in US dollars

Some Canadian manufacturers report sales, inventories and unfilled orders in US dollars. These data are then converted to Canadian dollars as part of the data production cycle.

For sales, based on the assumption that they occur throughout the month, the average monthly exchange rate for the reference month established by the Bank of Canada is used for the conversion. The monthly average exchange rate is available in table 33-10-0163-01. Inventories and unfilled orders are reported at the end of the reference period. For most respondents, the daily average exchange rate on the last working day of the month is used for the conversion of these variables.

However, some manufacturers choose to report their data as of a day other than the last working day of the month. In these instances, the daily average exchange rate on the day selected by the respondent is used. Note that because of exchange rate fluctuations, the daily average exchange rate on the day selected by the respondent can differ from both the exchange rate on the last working day of the month and the monthly average exchange rate. Daily average exchange rate data are available in table 33-10-0036-01.

Revision policy

Each month, the Monthly Survey of Manufacturing releases preliminary data for the reference month and revised data for the previous three months. Revisions are made to reflect new information provided by respondents and updates to administrative data.

Once a year, a revision project is undertaken to revise multiple years of data.

Real-time data tables

Real-time data tables 16-10-0118-01, 16-10-0119-01, 16-10-0014-01 and 16-10-0015-01 will be updated on November 22, 2021.

Next release

Data from the Monthly Survey of Manufacturing for October will be released on December 15, 2021.

Available tables: [16-10-0011-01](#) to [16-10-0013-01](#) , [16-10-0047-01](#) and [16-10-0048-01](#).

Definitions, data sources and methods: survey number [2101](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; STATCAN.infostats-infostats.STATCAN@canada.ca) or Media Relations (613-951-4636; STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca).