

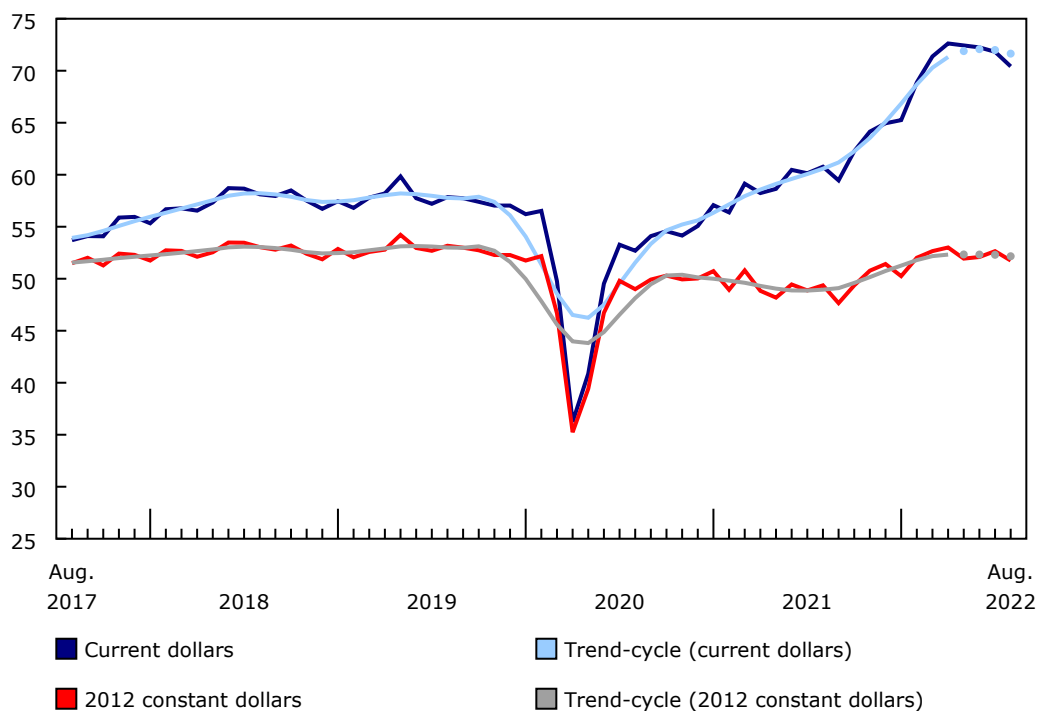
Monthly Survey of Manufacturing, August 2022

Released at 8:30 a.m. Eastern time in *The Daily*, Friday, October 14, 2022

Manufacturing sales fell 2.0% to \$70.4 billion in August, the fourth consecutive monthly decline. There were lower sales in 17 of 21 industries, led by the petroleum and coal product (-3.9%), chemical (-4.5%), primary metal (-3.2%), paper (-5.7%) and wood product (-4.3%) industries. Meanwhile, sales of beverage and tobacco products (+5.5%) and food (+0.6%) increased the most.

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 1.7% in August, indicating lower volume of goods sold. Month over month, the [Industrial Product Price Index](#) declined 1.2% in August.

Sales of petroleum and coal product industry declined the most

Petroleum and coal sales decreased 3.9% to \$9.9 billion in August, the third consecutive monthly decline, on lower prices and volumes as sales in constant dollars were down 1.9%. Prices for refined petroleum energy products decreased 7.0%, while [exports of refined petroleum energy products](#) were down 10.3%. The declines were associated with a lower demand for energy products due to the ongoing macroeconomic concerns, as well as a

higher supply of crude oil as the United States has been releasing barrels of oil from its Strategic Petroleum Reserve. Despite the monthly decrease, sales in petroleum and coal products were 51.2% higher compared with August 2021.

Following a 2.5% decrease in July 2022, sales in the chemical manufacturing industry decreased by 4.5% to \$5.6 billion in August, on lower sales in the basic chemical (-5.3%) and pharmaceutical and medicine manufacturing (-5.5%) industries. Prices of chemicals and chemical products fell 3.7% in August. Exports of basic chemicals and chemical products decreased 2.5%. Shutdowns and turnarounds at some major manufacturers in petroleum chemicals also contributed to lower sales in August. Chemical product sales in constant dollars were down 3.5%. Despite the month-over-month decline, sales in the chemical product industry increased 5.7% year over year.

Sales in the primary metal industry declined 3.2% to \$5.4 billion in August, the fourth consecutive monthly decline and the lowest level since September 2021. The decline was mainly attributable to declines in the non-ferrous metal (except aluminum) production and processing industry (-2.8%), despite this industry experiencing higher prices (+1.6%) in August. Some major primary metal manufacturers were still recovering from unplanned interruptions that occurred in July. The easing of restrictions in China and increased domestic output have contributed to the lower prices of primary ferrous metal products in August. Sales in constant dollars were down 2.6%.

Sales also decreased in the paper (-5.7%) and wood product (-4.3%) industries in August.

Sales of beverages and tobacco increased 5.5% to \$1.5 billion in August, the highest on record, on higher prices and volumes, as sales in real terms were up 2.2% in August.

Following a 3.5% increase in July, sales of food rose a further 0.6% to a record high \$12.0 billion in August, on higher prices as sales in constant dollars edged down (-0.2%).

Quebec posts the largest decline

Manufacturing sales declined in seven provinces in August, led by Quebec and followed by Alberta and New Brunswick. Meanwhile, sales in Manitoba increased the most.

In Quebec, manufacturing sales were down 5.5% to \$16.7 billion in August, the second consecutive monthly decrease. Lower sales of primary metals (-7.8%), fabricated metal products (-12.1%) and wood products (-10.1%) were the main contributors to the decline. On a year-over-year basis, total sales were up 6.7% in August.

In Alberta, sales declined 3.1% to \$8.8 billion in August, mainly on lower sales of the petroleum and coal products (-6.5%) and chemical (-5.9%) industries. The decrease was partly offset by higher sales in the food industry (+5.7%). Despite the decline, total sales were up 23.3% in August compared with the same month a year earlier.

Sales in New Brunswick decreased 5.7% to \$2.3 billion in August, mainly on lower sales of non-durable goods (-5.9%). On a year-over-year basis, total sales in New Brunswick rose 33.3% in August.

Following a 6.2% decline in July, sales in Manitoba increased 1.8% to \$2.1 billion in August, mostly attributable to higher sales in the chemical (+14.5%) and machinery (+5.2%) industries.

Sales in Windsor decrease the most

Manufacturing sales fell in 7 of 15 selected census metropolitan areas in August, led by Windsor and Edmonton, while sales in Toronto increased the most.

After a 36.6% increase in July, sales in Windsor fell 19.2% to \$1.3 billion in August. The decline was mainly attributable to lower sales of motor vehicle and motor vehicle parts industries as the ongoing shortage of microchips continued to impact auto makers.

Sales in Edmonton decreased 4.2% to \$4.6 billion in August, almost entirely on lower sales of petroleum and coal products (-6.9%). Year over year, sales in Edmonton increased 46.2%.

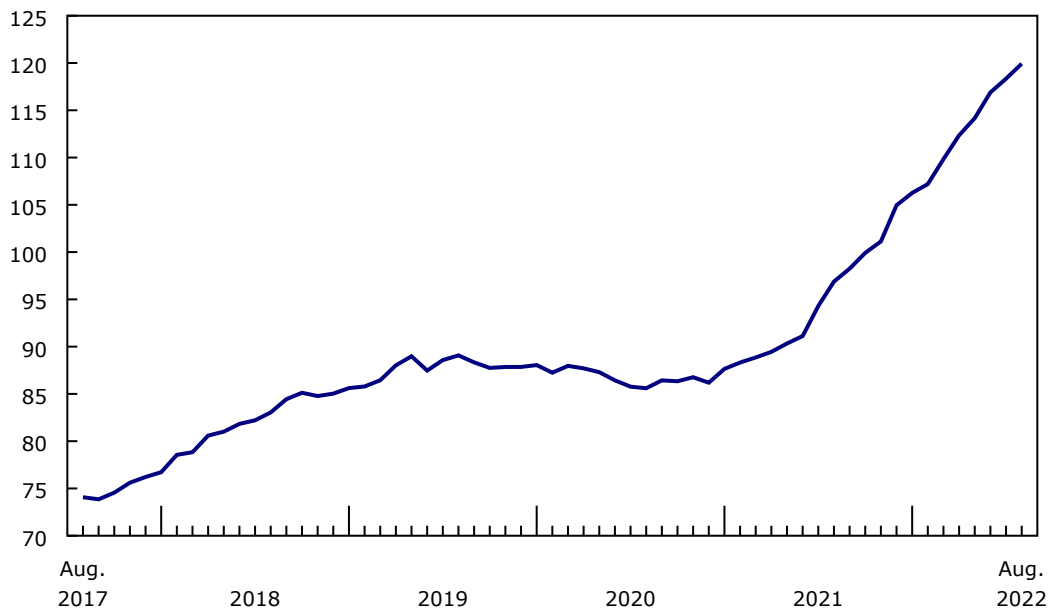
Following a 1.2% decline in July, sales in Toronto increased 1.6% to \$12.0 billion in August, mainly on higher sales of motor vehicles (+7.4%) and beverage and tobacco (+36.9%) industries. On a year-over-year basis, sales in Toronto increased 14.1%.

Record-high inventory levels continue

Total inventory levels increased 1.3% to \$119.9 billion in August, on higher inventories in 16 of 21 industries, led by the aerospace product and parts (+5.0%), computer and electronic product (+7.0%) and beverage and tobacco (+6.8%) industries. The gains were partly offset by a 2.5% decline in inventories of petroleum and coal and a 3.5% decrease in paper products. Total inventories (+37.5%) and raw materials (+51.5%) rose compared with the level in February 2020, prior to the COVID-19 pandemic—mainly on higher prices of materials as the increases were 9.6% for total inventories and 13.7% for raw materials in real terms during the same period.

Chart 2 Inventory levels rise

billions of dollars

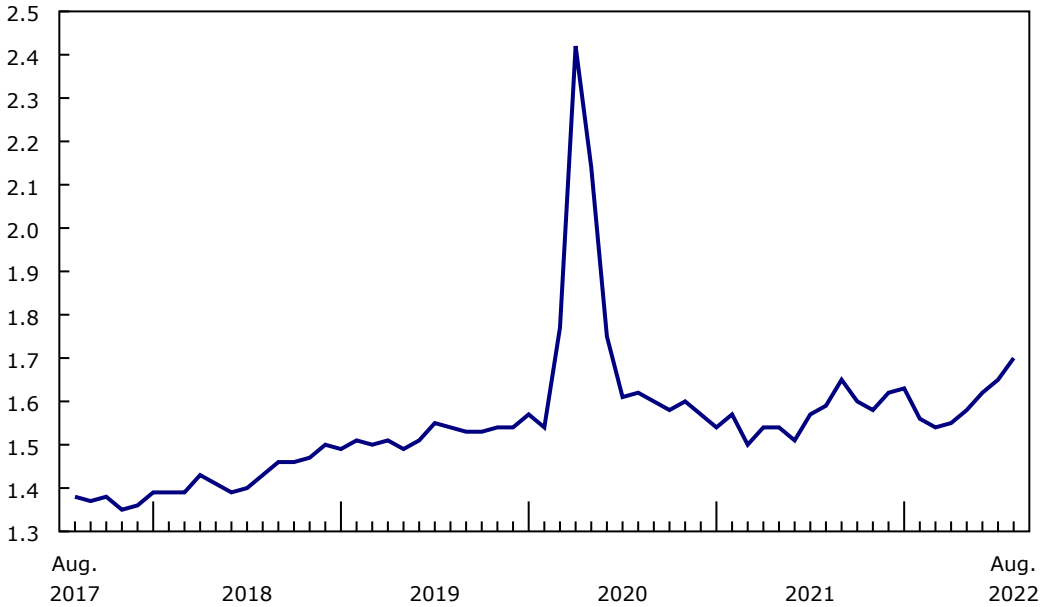


Note(s): Data are seasonally adjusted.
Source(s): Table 16-10-0047-01.

The inventory-to-sales ratio increased from 1.65 in July to 1.70 in August. This 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



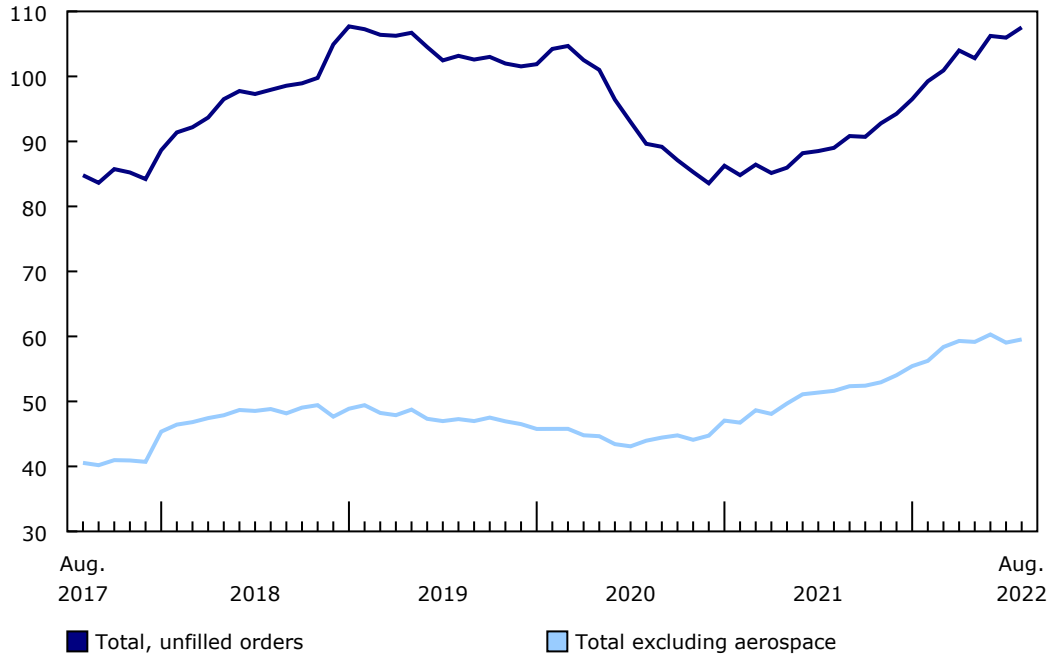
Note(s): Data are seasonally adjusted.
Source(s): Table [16-10-0047-01](#).

Unfilled orders rise

After a 0.2% decline in July, the total value of unfilled orders rose 1.5% to \$107.5 billion in August on higher unfilled orders in the transportation equipment industry (+2.8%). The increase was partially offset by declines of unfilled orders in the fabricated metal industry (-3.7%). Total unfilled orders were up 20.8% on a year-over-year basis in August.

Chart 4
Unfilled orders increase

billions of dollars



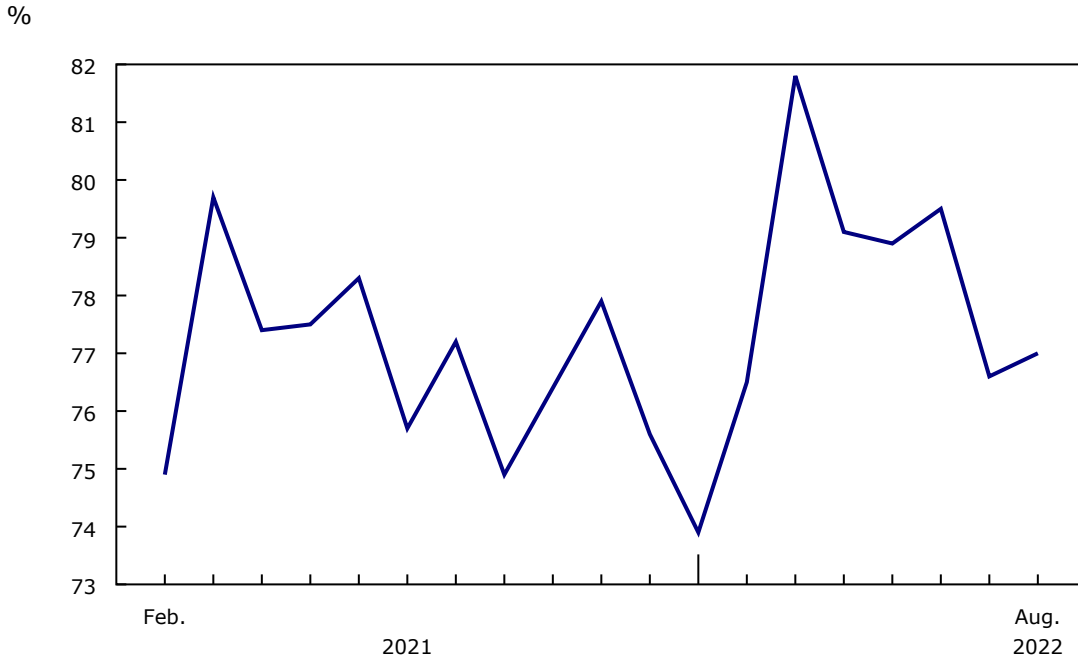
Note(s): Data are seasonally adjusted.
Source(s): Table 16-10-0047-01.

The total value of new orders increased 0.6% to \$72.0 billion in August, largely on higher new orders in the transportation equipment industry (+9.8%). The gain was partially offset by lower new orders in the petroleum and coal industry (-3.9%).

Capacity utilization rate edges up

The capacity utilization rate (not seasonally adjusted) for the manufacturing sector edged up (+0.4 percentage points), from 76.6% in July to 77.0% in August.

Chart 5
The capacity utilization rate edges up



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

The capacity utilization rate for the plastic and rubber industry rose 6.3 percentage points to 72.4% in August, mostly attributable to higher production of plastic products.

The capacity utilization rate for the transportation equipment industry rose 1.5 percentage points to 72.2% in August. A gradual rise of production at some motor vehicle and motor vehicle parts plants after some shutdowns was mostly responsible for the increase.

The increases were partially offset by a lower capacity utilization rate in the petroleum and coal product (-2.4 percentage points) and primary metal (-2.4 percentage points) industries.

Annual Survey of Manufacturing advance estimate for 2021

Some 2021 advanced estimates from the Annual Survey of Manufacturing Industries are now available and indicate that manufacturing activity increased 15.9% from 2020. Total revenue is estimated at \$785.2 billion, revenue from goods manufactured is estimated at \$734.3 billion and total expenses are estimated at \$697.5 billion.

Note that these advance preliminary estimates will be revised with the upcoming official release of the Annual Survey of Manufacturing Industries. For information on why the Annual Survey of Manufacturing Industries estimates may differ from the Monthly Survey of Manufacturing, please consult the webpage [Differences between the Annual Survey of Manufacturing Industries and the Monthly Survey of Manufacturing](#).

Table 1
Manufacturing: Principal statistics – Seasonally adjusted

	August 2021	July 2022 ^r	August 2022 ^p	July to August 2022	August 2021 to August 2022
	millions of dollars			% change ¹	
Manufacturing sales (current dollars)	60,770	71,824	70,416	-2.0	15.9
Manufacturing sales (2012 constant dollars)	49,365	52,651	51,750	-1.7	4.8
Manufacturing sales (current dollars) excluding motor vehicles, parts and accessories	55,567	65,092	63,792	-2.0	14.8
Inventories	96,879	118,339	119,926	1.3	23.8
Unfilled orders	89,009	105,961	107,538	1.5	20.8
New orders	61,265 ^E	71,561 ^E	71,993 ^E	0.6	17.5
Inventory-to-sales ratio ²	1.59	1.65	1.70

^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

	August 2021	July 2022 ^r	August 2022 ^p	July to August 2022	August 2021 to August 2022
	millions of dollars			% change ¹	
Food manufacturing	10,883	11,931	12,006	0.6	10.3
Beverage and tobacco product	1,430	1,450	1,529	5.5	6.9
Textile mills	139	158	157	-0.8	12.9
Textile product mills	131	143	141	-2.0	7.2
Clothing manufacturing	232	188	187	-0.4	-19.5
Leather and allied product	26	27	27	0.2	5.6
Wood product	3,546	3,897	3,732	-4.3	5.2
Paper manufacturing	2,487	2,984	2,814	-5.7	13.2
Printing and related support activities	674	772	763	-1.2	13.1
Petroleum and coal product	6,531	10,271	9,875	-3.9	51.2
Chemical	5,316	5,887	5,620	-4.5	5.7
Plastics and rubber products	3,056	3,609	3,557	-1.4	16.4
Non-metallic mineral product	1,353	1,607	1,529	-4.9	13.1
Primary metal	5,503	5,618	5,440	-3.2	-1.1
Fabricated metal product	3,630	4,368	4,293	-1.7	18.3
Machinery	3,489	4,192	4,176	-0.4	19.7
Computer and electronic product	1,275	1,612	1,588	-1.5	24.5
Electrical equipment, appliance and component	929	1,130	1,155	2.2	24.3
Transportation equipment	7,701	9,264	9,220	-0.5	19.7
Motor vehicle	3,069	3,866	3,835	-0.8	24.9
Motor vehicle body and trailer	326	405	419	3.5	28.6
Motor vehicle parts	2,134	2,865	2,789	-2.7	30.7
Aerospace product and parts	1,540	1,503	1,484	-1.2	-3.7
Railroad rolling stock	207	159	167	4.9	-19.3
Ship and boat building	249	248	267	7.6	7.0
Furniture and related product	1,150	1,303	1,288	-1.2	12.0
Miscellaneous manufacturing	1,289	1,413	1,320	-6.6	2.4
Non-durable goods industries	30,906	37,420	36,676	-2.0	18.7
Durable goods industries	29,864	34,404	33,740	-1.9	13.0

^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

	August 2021	July 2022 ^r	August 2022 ^p	July to August 2022	August 2021 to August 2022
	millions of dollars			% change ¹	
Canada	60,770	71,824	70,416	-2.0	15.9
Newfoundland and Labrador	258	229	250	8.9	-3.1
Prince Edward Island	221	255	252	-1.1	14.2
Nova Scotia	832	933	925	-0.9	11.2
New Brunswick	1,743	2,465	2,324	-5.7	33.3
Quebec	15,643	17,663	16,695	-5.5	6.7
Ontario	26,319	31,041	30,950	-0.3	17.6
Manitoba	1,800	2,083	2,120	1.8	17.8
Saskatchewan	1,767	2,283	2,278	-0.2	28.9
Alberta	7,171	9,125	8,843	-3.1	23.3
British Columbia	5,012	5,741	5,774	0.6	15.2
Yukon	2	3	3	8.4	53.1
Northwest Territories and Nunavut	5	3	2	-10.4	-52.1

^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

	August 2021	July 2022 ^r	August 2022 ^p	July to August 2022	August 2021 to August 2022
	millions of dollars			% change ¹	
Halifax	256	268	255	-4.5	-0.3
Québec	1,618	2,243	2,154	-4.0	33.1
Sherbrooke	207	245	237	-3.2	14.7
Montréal	7,076	7,782	7,726	-0.7	9.2
Ottawa–Gatineau, Ontario and Quebec	726	819	812	-0.8	11.9
Toronto	10,540	11,836	12,025	1.6	14.1
Hamilton	1,780	1,912	1,965	2.8	10.4
Kitchener–Cambridge–Waterloo	1,872	2,132	2,232	4.7	19.2
Windsor	1,259	1,561	1,260	-19.2	0.1
Winnipeg	986	1,026	1,040	1.4	5.5
Regina	706	845	906	7.2	28.3
Saskatoon	420	522	554	6.0	31.9
Calgary	983	1,217	1,232	1.2	25.4
Edmonton	3,148	4,803	4,603	-4.2	46.2
Vancouver	2,605	2,919	2,996	2.6	15.0

^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

	August 2021	July 2022 ^r	August 2022 ^p	July to August 2022	August 2021 to August 2022
	%			percentage point change	
Manufacturing	77.2	76.6	77.0	0.4	-0.2
Non-durable goods industries	79.0	79.3	79.7	0.4	0.7
Food manufacturing	77.5 ^E	79.4 ^E	79.6 ^E	0.2	2.1
Beverage and tobacco product manufacturing	75.9	73.7	75.1	1.4	-0.8
Beverage manufacturing	76.0	75.5	77.0	1.5	1.0
Tobacco manufacturing	75.2	64.4	64.4	0.0	-10.8
Textile mills	76.2	77.5	75.3	-2.2	-0.9
Textile product mills	73.4	73.3 ^E	71.5 ^E	-1.8	-1.9
Clothing manufacturing	74.4	82.9 ^E	80.0 ^E	-2.9	5.6
Leather and allied product manufacturing	82.5	82.0	85.9 ^E	3.9	3.4
Paper manufacturing	85.4	85.4	86.2	0.8	0.8
Printing and related support activities	69.5 ^E	74.2 ^E	76.0 ^E	1.8	6.5
Petroleum and coal products manufacturing	88.0	89.9	87.5	-2.4	-0.5
Chemical manufacturing	76.7	70.8	72.3 ^E	1.5	-4.4
Plastics and rubber products manufacturing	72.1	66.1 ^E	72.4 ^E	6.3	0.3
Plastic product manufacturing	72.2	65.4 ^E	71.9 ^E	6.5	-0.3
Rubber product manufacturing	71.9	70.9	75.3	4.4	3.4
Durable goods industries	75.3	73.5	74.2 ^E	0.7	-1.1
Wood product manufacturing	80.0	76.1	79.9	3.8	-0.1
Non-metallic mineral product manufacturing	78.0 ^E	76.6 ^E	78.1 ^E	1.5	0.1
Primary metal manufacturing	77.9	69.2	66.8	-2.4	-11.1
Fabricated metal product manufacturing	69.5 ^E	74.2 ^E	74.7 ^E	0.5	5.2
Machinery manufacturing	78.1 ^E	75.0 ^E	78.9 ^E	3.9	0.8
Computer and electronic product manufacturing	77.2	75.0	77.6	2.6	0.4
Electrical equipment, appliance and component manufacturing	81.0	87.6 ^E	83.7 ^E	-3.9	2.7
Transportation equipment manufacturing	70.6	70.7	72.2	1.5	1.6
Furniture and related product manufacturing	83.8 ^E	78.1 ^E	78.7 ^E	0.6	-5.1
Miscellaneous manufacturing	78.8	76.2	68.8 ^E	-7.4	-10.0

^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 October 21, 2022.

Next release

Data from the Monthly Survey of Manufacturing for September will be released on November 16, 2022.

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; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).