

Detroit Economic Indicators Report

Q4 2022 Release

This project is part of the City of Detroit University Economic Analysis Partnership between the City of Detroit Economics team, Wayne State University, Michigan State University, and the University of Michigan. The goal of this paper is to report the most recent Detroit and Michigan employment statistics as well as current topics surrounding the field of Economics. Each quarter's report includes a new topic of interest at the time (housing, inflation, GDP, etc.). It also lists upcoming data releases that are significant for this report.

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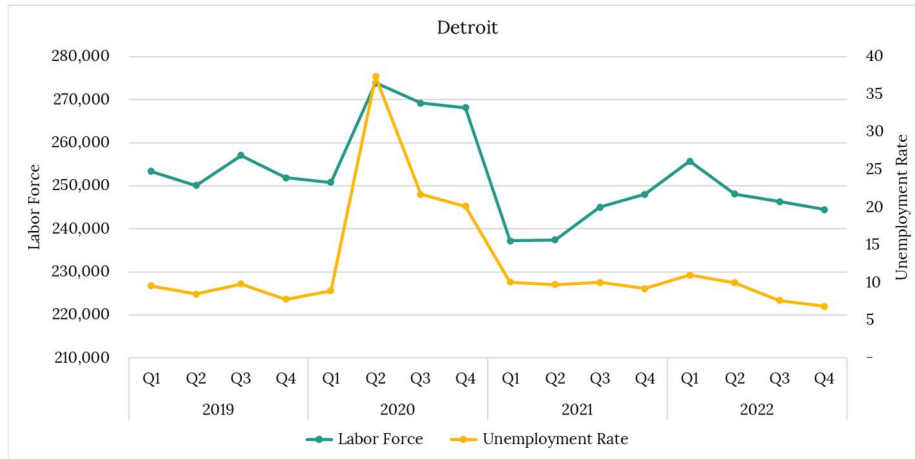


Executive Summary

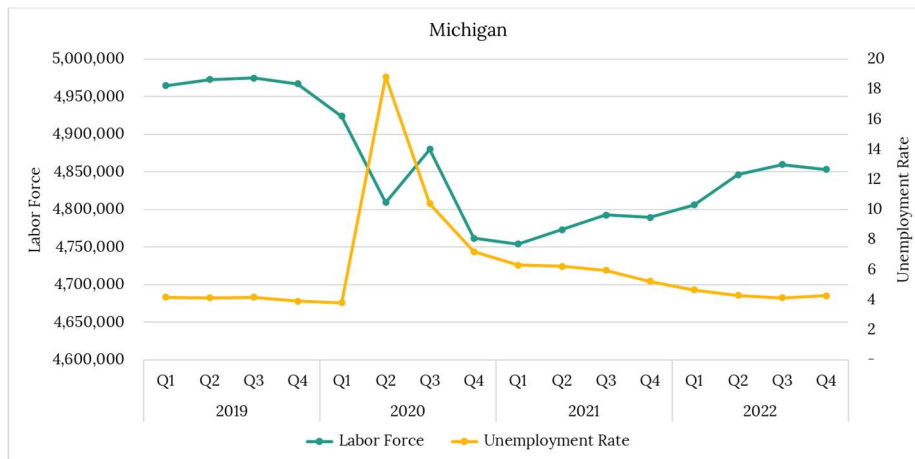
- Detroit's unemployment rate remains lower than previous years, partly due to the decline in labor force. Although Detroit's average quarterly employment is increasing, the labor force has been steadily decreasing over the past year.
- Manufacturing and Finance and Insurance employment has decreased over the quarter and over the past year while employment in other industries like Accommodation and Food Services and Public Administration is recovering from the pandemic.
- Measures from the Institute of Supply Management (ISM) indicate there could be a risk to employment in Detroit's blue-collar industries, however we remain optimistic about the future of Detroit's economy. The expectation is that manufacturing and construction employment will not be diminished by a forecasted upcoming national slowdown.
- Inflation, as measured by the headline consumer price index (CPI), is showing signs of slower growth on the national scale and levelling out on the city level. Real gross domestic product (GDP) has been growing slowly on the national scale since the second quarter of 2022.

Employment – Detroit and Michigan

Detroit's average employment increased by roughly 250 individuals in the 4th quarter of 2022 from the previous quarter (up by about 2,500 individuals over the year) and the unemployment rate fell to 6.9 percent (down from the previous quarter's 7.7 percent). One area of concern for the city is the declining labor force because the declining unemployment rate has come primarily from residents leaving the labor force rather than finding work. From the 4th quarter of 2019 to the 4th quarter of 2022, Detroit's labor force decreased by 3 percent (around 7,388 individuals). Unemployment decreased by 15 percent (around 2,872 individuals) in the same 3-year time frame. Michigan's labor force growth pattern is shown below for reference; the state's labor force has been growing steadily since the 1st quarter of 2021 except for two dips at the end of 2021 and 2022. Neither Detroit's nor Michigan's labor force reached pre-pandemic levels in the 4th quarter of 2022. The LAUS data shown below was pulled prior to the annual benchmark revision that came out on March 13, 2023.



Source: Michigan Bureau of Labor Market Information and Strategic Initiatives, Local Area Unemployment Statistics, not seasonally adjusted



Source: Michigan Bureau of Labor Market Information and Strategic Initiatives, Local Area Unemployment Statistics, seasonally adjusted

Payroll Employment Data (Q2 2022)

Accommodation and Food Services employment has seen significant growth as the industry continues to recover from the large losses related to the pandemic. Employment in the Finance and Insurance industry has declined recently due to rising interest rates and a decrease in mortgage demand. Employment in the Administrative and Support and Waste Management and Remediation Services industry increased by 18 percent over the year. Manufacturing employment decreased by 6 percent between the 1st and 2nd quarters of 2022.

Most of the weakness in the Detroit labor market has been in industries that are sensitive to interest rate changes, primarily the finance and insurance sector.

We believe Detroit's labor market has remained resilient in light of softening external environment. We attribute this strength to the backlog of automotive demand due to the semiconductor chip shortage from 2021 and 2022. Absolute changes in employment that are less than or greater than 1,000 are highlighted in the table below.

	Q1 2022 AVG	Q2 2022 AVG	Change over the:	
	Employment	Employment	Quarter	Year
11 Agriculture, Forestry, Fishing and Hunting	190	210	+ 20 (11%)	+ 65 (45%)
21 Mining, Quarrying, and Oil and Gas Extraction	428	493	+ 65 (15%)	+ 0 (0%)
22 Utilities	3,666	3,682	+ 15 (0%)	- 8 (0%)
23 Construction	6,753	7,538	+ 786 (12%)	+ 1,152 (18%)
31-33 Manufacturing	24,507	23,076	- 1,431 (-6%)	- 399 (-2%)
42 Wholesale Trade	5,213	5,139	- 74 (-1%)	+ 117 (2%)
44-45 Retail Trade	12,964	13,000	+ 36 (0%)	+ 302 (2%)
48-49 Transportation and Warehousing	8,189	8,075	- 115 (-1%)	+ 609 (8%)
51 Information	2,314	2,380	+ 66 (3%)	+ 139 (6%)
52 Finance and Insurance	16,327	15,289	- 1,038 (-6%)	- 2,641 (-15%)
53 Real Estate and Rental and Leasing	2,013	2,017	+ 4 (0%)	+ 177 (10%)
54 Professional, Scientific, and Technical Services	13,477	13,699	+ 222 (2%)	+ 644 (5%)
55 Management of Companies and Enterprises	9,626	9,571	- 55 (-1%)	+ 2,210 (30%)
56 Administrative and Support and Waste Management and Remediation Services	11,208	11,872	+ 664 (6%)	+ 1,837 (18%)
61 Educational Services	19,686	20,261	+ 575 (3%)	+ 324 (2%)
62 Health Care and Social Assistance	45,284	45,598	+ 314 (1%)	- 628 (-1%)
71 Arts, Entertainment, and Recreation	4,149	4,867	+ 719 (17%)	+ 1,393 (40%)
72 Accommodation and Food Services	16,049	17,631	+ 1,582 (10%)	+ 4,133 (31%)
81 Other Services (except Public Administration)	6,461	6,661	+ 200 (3%)	+ 581 (10%)
92 Public Administration	18,712	18,825	+ 113 (1%)	+ 2,308 (14%)
99 Nonclassifiable Establishments	507	478	- 29 (-6%)	+ 155 (48%)

Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics

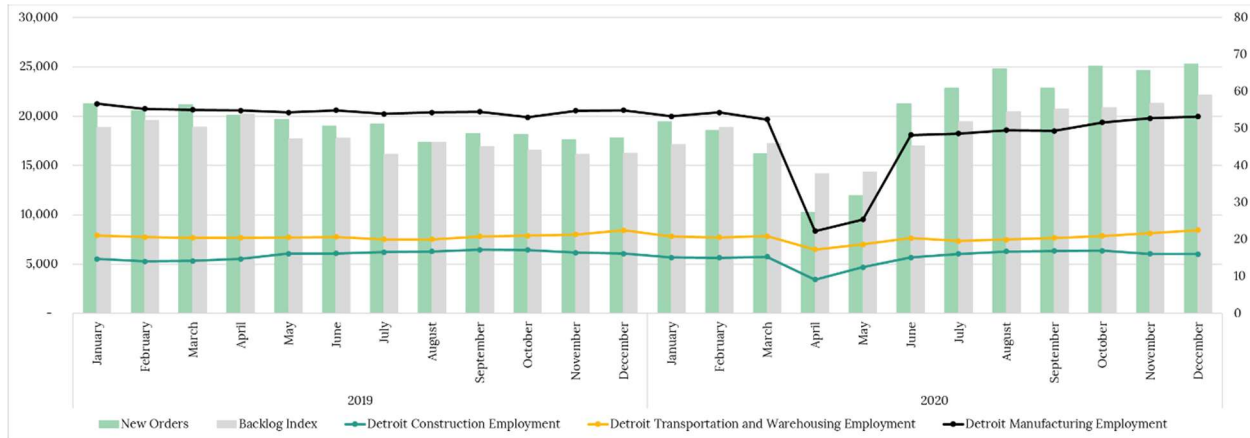
Detroit's Recessionary Expectations – Blue Collar Industries

The winter update to the Detroit Economic Forecast prepared through the University Economic Partnership predicated on a mild national recession in late 2023 or early 2024. The most recent City of Detroit Revenue Estimating Conference Report also comments that “for all the worry of recession chances, labor market data has not reflected any recession-like conditions. National unemployment

continues to stay near historic lows and employment levels continue to increase. Labor force participation remains a challenge and labor demand has begun to slow with federal funds rate increases but overall labor conditions still appear strong.”¹

Typically, recessions triggered by monetary tightening in order to control inflation have hit first in Detroit’s finance, manufacturing, and construction industries. Focusing on blue-collar industries, the graphs below look at employment levels for the three main industries that make up the bulk of blue-collar jobs in Detroit: Manufacturing, Construction, and Transportation and Warehousing. Also shown are the new manufacturing orders and the backlog index from the Institute for Supply Management (ISM). The ISM backlog index and new manufacturing orders measurement have historically tracked closely to Detroit’s manufacturing employment. The number of new manufacturing orders has been higher than the backlog index for the last three months of 2022, which will help maintain demand for labor in the blue-collar industries. In the following graphs, employment is charted on the left axis and the new manufacturing orders and backlog index are measured on the right axis.

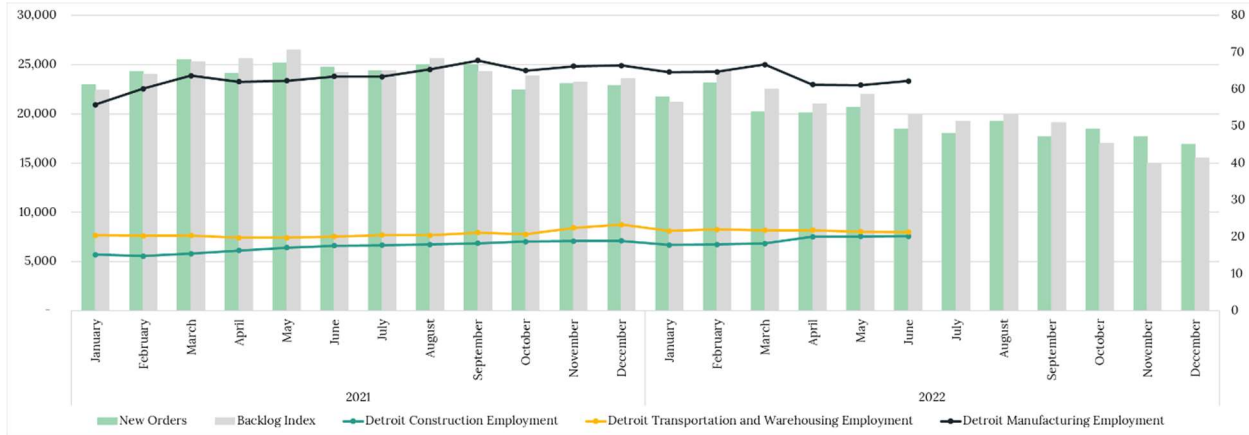
Manufacturing Indices and Employment Levels, 2019-2020



Sources: Institute for Supply Management and QCEW

¹ February 2023 Revenue Estimating Conference Report, City of Detroit

Manufacturing Indices and Employment Levels, 2021-2022



Sources: Institute for Supply Management and QCEW

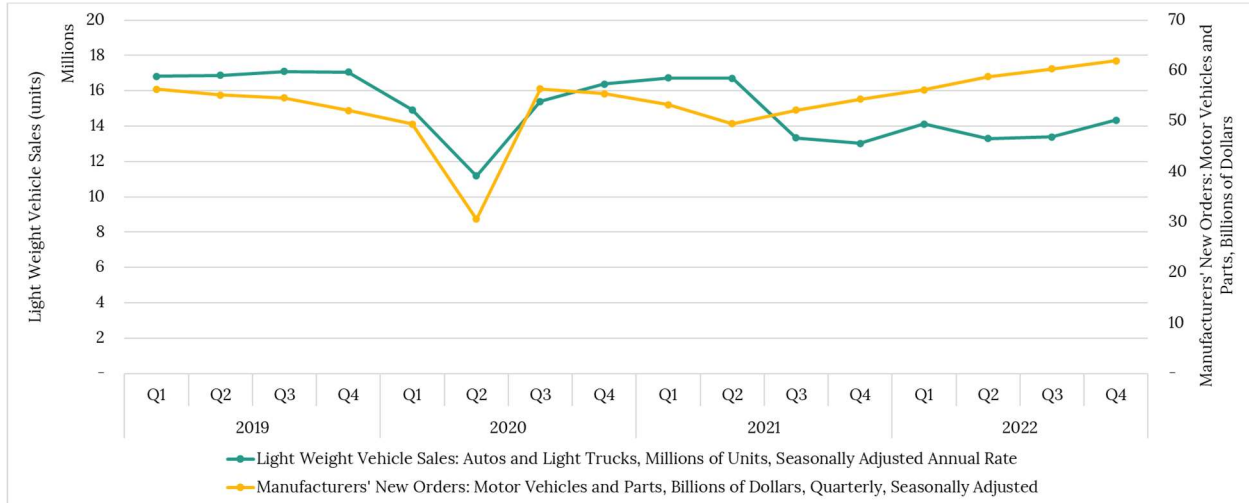
After recovering from the interruptions from the pandemic, new manufacturing orders hit a high in March 2021. Since then, new manufacturing orders have fallen below pre-pandemic levels. In light of current inflation levels, we expect that new manufacturing orders will continue to decline, which poses a major risk to Detroit’s manufacturing employment. The manufacturing backlog index has followed a similar trend to the new manufacturing orders. The Detroit Economic Forecast expects increases in employment in blue collar industries in calendar year 2023, however.²

Fortunately for Detroit’s Manufacturing employment, new manufacturing orders for motor vehicles and parts have increased since mid-2021. We expect that this might play a stronger role in supporting manufacturing employment in Detroit since most of Detroit’s manufacturing employment is in motor vehicles and parts. The University of Michigan’s RSQE also recently stated that “auto backlog might actually protect Michigan in recession”.³ Demand for vehicles, as represented by light weight vehicle sales in the chart below, has also been increasing in the aggregate between the 4th quarter of 2021 and 4th quarter of 2022 (a 10 percent increase over the one-year span).

² Chart included in appendix A

³ Detroit Economic Forecast: [https://lsa.umich.edu/content/dam/econ-assets/Econdocs/RSQE%20PDFs/Detroit_Forecast_\(2023.02\).pdf](https://lsa.umich.edu/content/dam/econ-assets/Econdocs/RSQE%20PDFs/Detroit_Forecast_(2023.02).pdf)

Automotive Sales and Manufacturers' New Orders

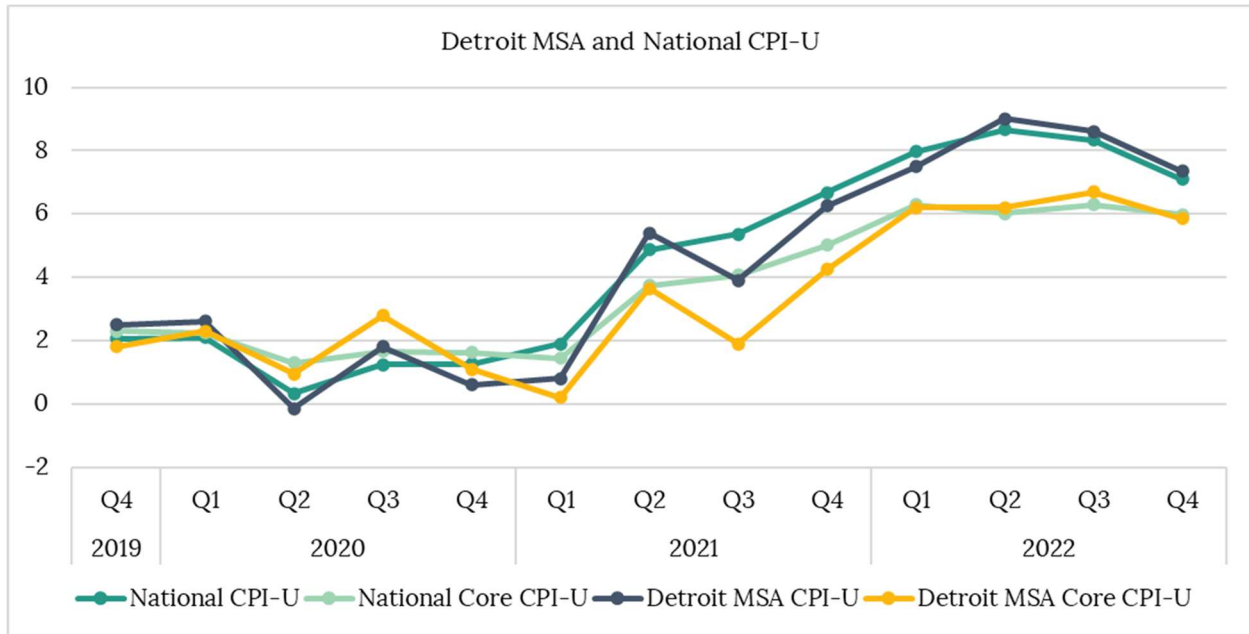


Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics

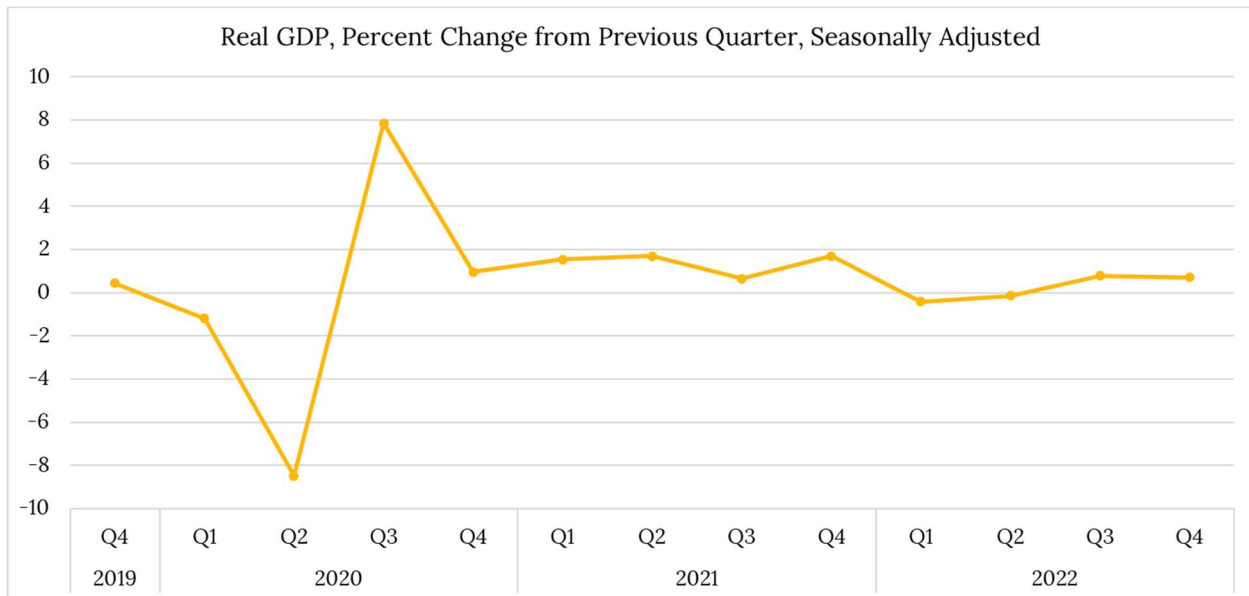
Although some of the ISM patterns are concerning, we remain optimistic about the future of Detroit’s economy. We expect manufacturing and construction employment in Detroit to be shielded from the upcoming national slowdown as supply chain pressures continue to ease, nonresidential construction projects carry on, and a backlog of vehicle demand remains to be fulfilled.

Key Growth and Inflation Indicators

The first graph below shows the percent change from the previous year for the headline Consumer Price Index (CPI) and CPI excluding food and energy for the country and the Detroit Metropolitan Statistical Area (MSA). The percent change represents the change of prices for a given quarter, or the inflation rate. Core CPI inflation peaked at a lower rate than headline CPI inflation because the core measure does not include energy prices and food prices, which spiked in the first half of 2022. The second graph below shows the annualized percent change of real GDP from the previous quarter for reference. The 4th quarter of 2019 is included as a pre-pandemic reference in both graphs.



Sources: Bureau of Labor Statistics and Federal Reserve Bank of St. Louis

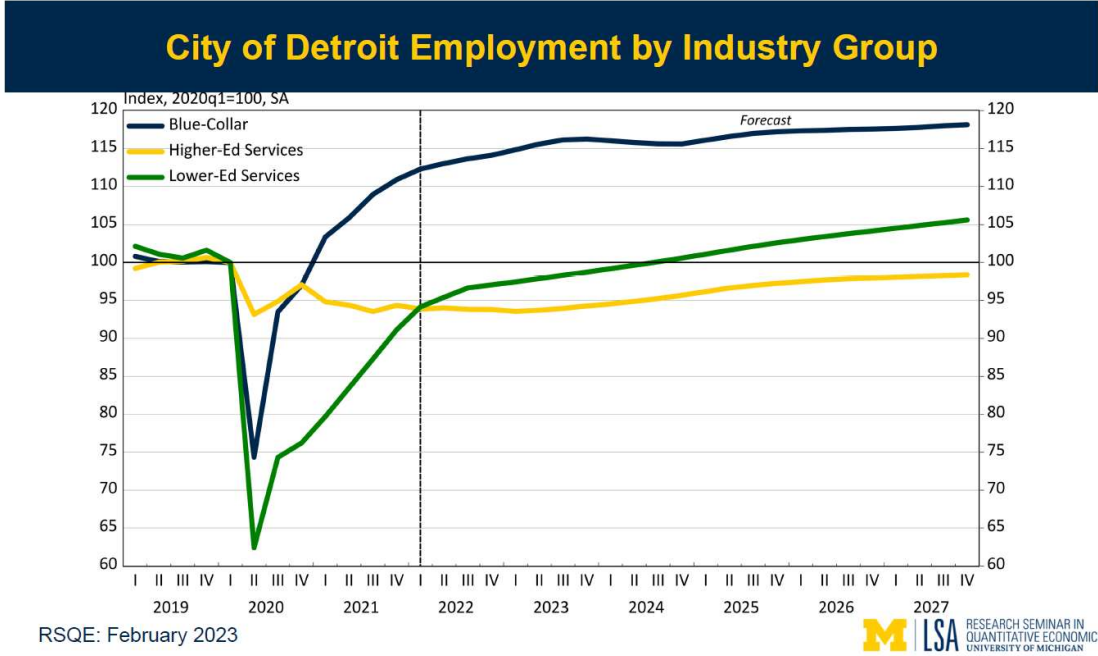


Sources: Bureau of Economic Analysis and Federal Reserve Bank of St. Louis

Next Data Releases

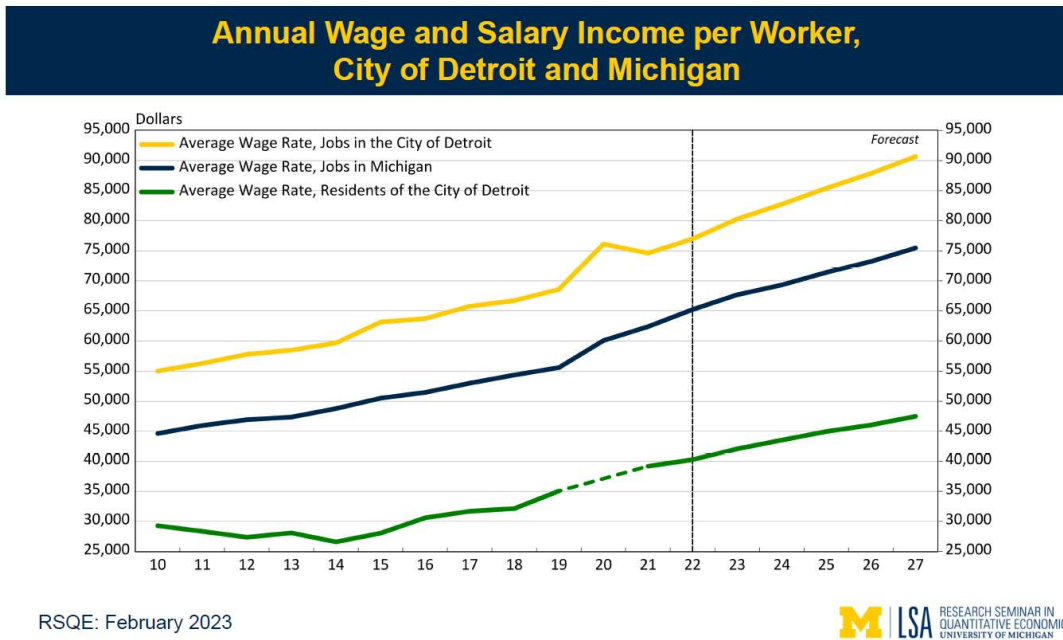
- GDP release for Q1 2023: April 27, 2023
- January 2023 CPI data: February 14, 2023

Appendix A



Source: RSQE, University of Michigan

Appendix B



Source: RSQE, University of Michigan

For more information on this graph, please visit [https://lsa.umich.edu/content/dam/econ-assets/Econdocs/RSQE%20PDFs/Detroit_Forecast_\(2023.02\).pdf](https://lsa.umich.edu/content/dam/econ-assets/Econdocs/RSQE%20PDFs/Detroit_Forecast_(2023.02).pdf)