Economic and Revenue Outlook

FY 2022-23, FY 2023-24 and FY 2024-25

Michigan Department of Treasury

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SECTION I

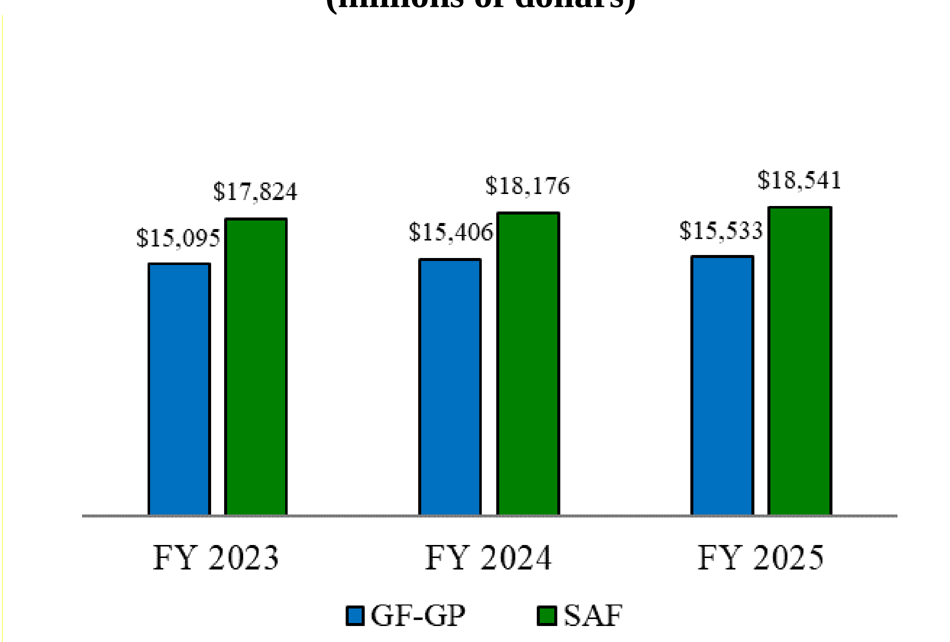
Administration Estimates
Executive Summary

Administration Estimates
Executive Summary
January 13, 2023

Revenue Review and Outlook

- Preliminary FY 2022 GF-GP revenue is $15,205.5 million, up $1,025.8 million from the May 2022 Consensus estimate. Preliminary FY 2022 SAF revenue is $17,825.2 million, up $484.6 million from the May 2022 Consensus estimate.
- FY 2023 GF-GP revenue is forecast to decrease 0.7 percent to $15,094.8 million, up $1,121.3 million from the May 2022 Consensus estimate. FY 2023 SAF revenue is forecast to decrease slightly by 0.01 percent to $17,823.6 million, up $628.3 million from the May 2022 Consensus estimate.
- FY 2024 GF-GP revenue is forecast to increase 2.1 percent to $15,406.3 million, up $1,177.4 million from the May 2022 Consensus estimate. FY 2024 SAF revenue is forecast to increase 2.0 percent to $18,175.9, up $731.0 million from the May 2022 Consensus estimate.
- FY 2025 GF-GP revenue is forecast to increase 0.8 percent to $15,533.3 million. FY 2025 SAF revenue is forecast to increase 2.0 percent to $18,541.2.

Administration GF-GP and School Aid Fund Revenue Estimates (millions of dollars)



Economic Outlook

- Real GDP rose an estimated 1.9 percent in 2022. Real GDP is forecast to rise 0.5 percent in 2023, 0.3 percent in 2024 and 2.0 percent in 2025. Higher interest rates and weak global economic growth are expected to shrink the U.S. economy slightly over most of 2023.
- U.S. employment rose 4.0 percent in 2022, and is forecast to increase 1.3 percent in 2023, fall 0.5 percent in 2024 and then increase 0.6 percent in 2025.
- The national unemployment rate dropped from 5.3 percent in 2021 to 3.6 percent in 2022. The U.S. unemployment rate is forecast to rise to 3.9 percent in 2023, increase to 4.5 percent in 2024 and then fall to 4.2 percent in 2025.
- Housing starts fell an estimated 3.5 percent in 2022. Starts are expected to drop 21.3 percent in 2023, then decrease 2.5 percent in 2024 and rise 11.0 percent in 2025.
- In 2022, light vehicle sales fell to 13.7 million units. With the semi-conductor shortage expected to continue to ease, light vehicle sales are forecast to strengthen. Sales are expected to increase to 15.2 million units in 2023, 15.7 million units in 2024 and 16.2 million units in 2025.
- The U.S. CPI rose an estimated 8.1 percent in 2022. Inflation is forecast to slow to 4.9 percent in 2023, 4.0 percent in 2024 and 3.4 percent in 2025.

Michigan Economic Outlook

- In 2022, Michigan wage and salary employment rose an estimated 3.4 percent. State job growth will grow more slowly over the forecast with Michigan employment expected to increase 1.2 percent in 2023, 0.5 percent in 2024 and 0.8 percent in 2025.
- The Michigan unemployment rate fell from 5.9 percent in 2021 to an estimated 4.3 percent in 2022. The Michigan unemployment rate is forecast to rise to 4.4 percent in 2023, increase to 4.8 percent in 2024 and then decline to 4.4 percent in 2025.
- Michigan wages and salaries rose an estimated 8.2 percent in 2022 and are forecast to increase 5.2 percent in 2023, 3.3 percent in 2024 and 3.9 percent in 2025.
- Michigan personal income was essentially unchanged in 2022 and is forecast to rise 4.9 percent in 2023, increase 4.3 percent in 2024 and rise 4.0 percent in 2025.

Forecast Risks

- The Fed may raise interest rates substantially higher and/or accelerate quantitative tightening substantially faster than expected. The more restrictive monetary policy coupled with unforeseen shocks related to the global pandemic and/or the geopolitical conflicts could push the U.S. economy into a deeper downturn.
- If the supply-side challenges fail to subside or worsen, the U.S. economy could be pushed into a period of stagflation (high inflation along with a shrinking domestic economy).
- The global health crisis continues to evolve. Emerging new variants may exacerbate current supply chain problems and labor shortages and lead to both higher inflation and slower economic growth than expected.
- Demand for new vehicles is expected to remain high, but sales levels will depend on the availability of semiconductors needed for production, which could lead to higher or lower than expected sales.

SECTION II

Economic Review

Economic Review
January 13, 2023

Current U.S. Economic Situation

Recent History

Prior to the start of the COVID-19 pandemic in 2020, the U.S. economy had reported modest but steady growth over a lengthy expansion:

- The U.S. experienced 10 straight years of economic growth, ending in 2019.
- U.S. employment increased for nine straight years.
- U.S. unemployment rate fell for nine straight years to 3.7 percent in 2019 – the lowest annual unemployment rate in 50 years.
- While falling slightly from 2018, light vehicle sales remained close to 17.0 million in 2019.
- After falling to an all-time low in 2009, housing starts rose yearly, up to 1.29 million units in 2019.

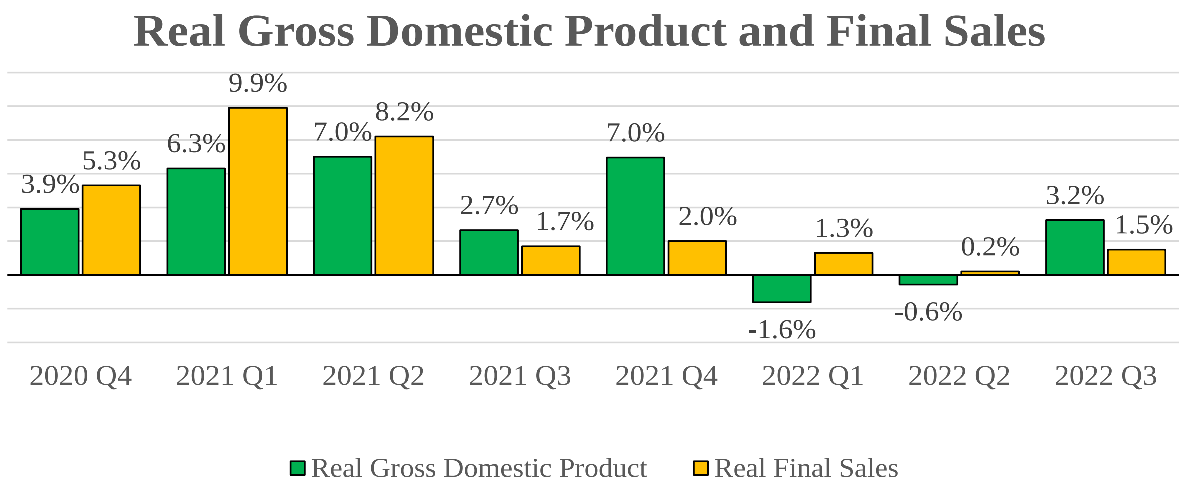
Current Economy

At the start of the COVID-19 pandemic the economy experienced historic and rapid fluctuations. The U.S. economy stalled with real GDP declining at a 4.6 percent annual rate in the first quarter of 2020 and plummeting in the second quarter at a record 29.9 percent annual rate. The economy rebounded in the third quarter with real GDP growing at a record 35.3 percent annual rate, followed by annual growth of 3.9 percent in the fourth quarter. Overall, for calendar year 2020, annual real GDP declined 2.8 percent from 2019.

Real GDP posted historically strong growth in the first half of 2021. Largely due to supply constraints, growth slowed markedly in the third quarter but then accelerated at the end of the year to a 7.0 percent annual rate.

Real GDP declined slightly in the first half of 2022 – falling at a 1.6 percent annualized rate in the first quarter and a 0.6 percent rate in the second quarter due to inventory and trade fluctuations while the fundamentals of the economy continued modest growth. In the third quarter, real GDP grew at a 3.2 percent annual rate, due to a substantial increase in exports paired with a significant decrease in imports and modest increases in consumption and government spending outweighing the substantial declines in investment. In 2022Q3, the level of real GDP stood 4.4 percent above its pre-pandemic 2019Q4 level.

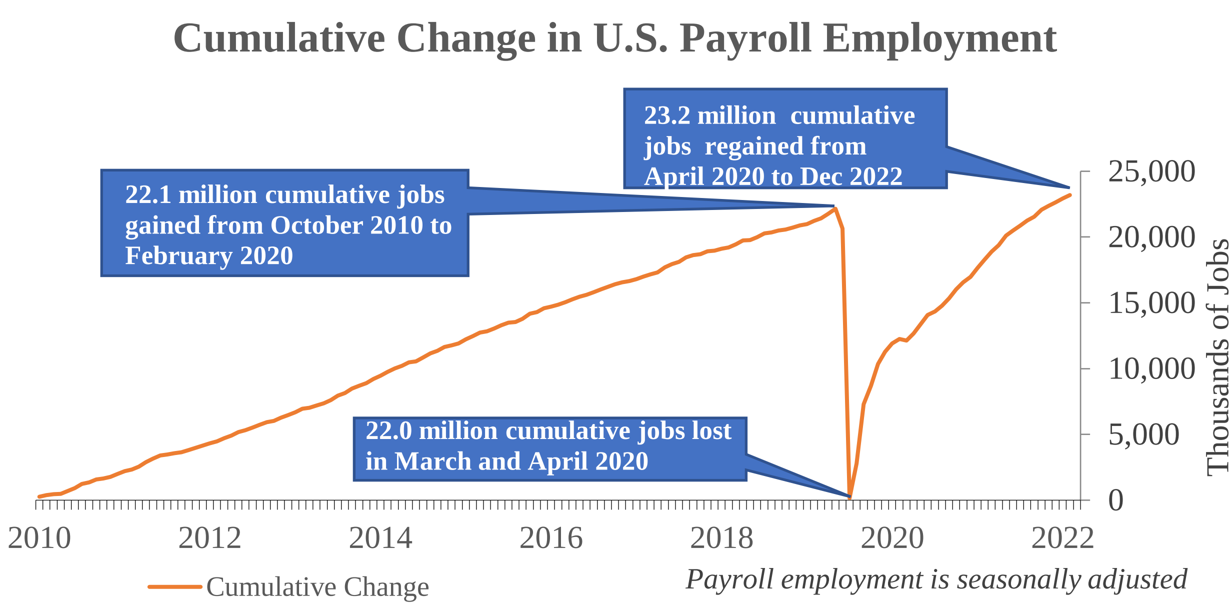
Real final sales, a measure of current domestic demand, which excludes inventory changes and exports but includes imports, grew at a modest 2.0 percent annual rate in 2021Q4 before slowing in the first half of 2022, but rising again in 2022Q3 to a 1.5 percent annual growth rate.



Source: Bureau of Economic Analysis

After rising in 113 consecutive months and gaining a cumulative 22.1 million jobs, U.S. employment fell by 1.5 million jobs in March 2020 and then plummeted a record 20.5 million jobs in April. Wage and salary employment rose each month from May through November, and after a slight decline in December, wage and salary employment stood 10.0 million jobs below its February 2020 pre-pandemic level, having recovered over half the jobs lost in March and April.

In 2021, wage and salary employment gains averaged over a half million jobs a month and employment rose a cumulative 6.7 million jobs over the course of the year. Monthly job gains continued in 2022 with the U.S. economy adding another 4.5 million jobs over the course of the year. Since May 2020, U.S. wage and salary employment has increased a net 23.2 million jobs and is 1.2 million jobs (0.8 percent) above February 2020 levels, prior to pandemic.



Source: Bureau of Labor Statistics

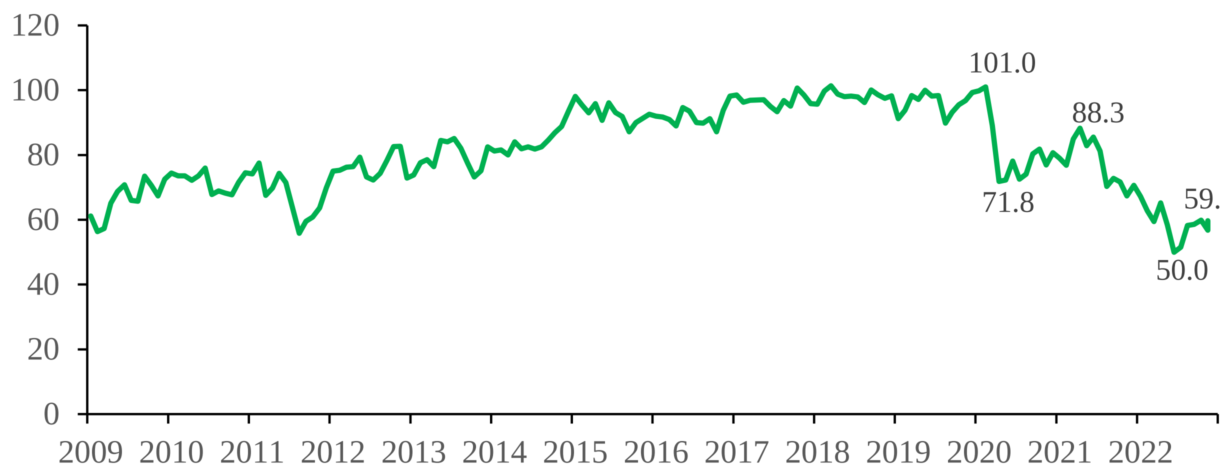
With the massive job losses in March and April of 2020, the unemployment rate rose sharply from 3.5 percent in February to a record high 14.7 percent in April. Employment recovered with the unemployment rate falling each month between May and November 2020, ending at 6.7 percent.

The unemployment rate declined for nearly all of 2021, down to 3.9 percent in December. After rising slightly to 4.0 percent in January 2022, the unemployment rate again fell in February and has remained below 4.0 percent each month through December 2022. Between February 2022 and December 2022, the U.S. unemployment rate has ranged narrowly between 3.5 percent (matching the pre-pandemic February 2020 low rate) and 3.8 percent, and stood at 3.5 percent in December.

While the labor market remains very tight, the market shows some signs of loosening. Job openings, measured by JOLTS, remain well above pre-pandemic highs, but have declined from the record high 11.9 million openings in March 2022 – declining to 10.5 million in November. Similarly, quits, which peaked at 4.5 million in November 2021, dropped to a still historically high 4.0 million in October 2022 before rising in November 2022 to 4.2 million. The job openings rate (number of job openings divided by the sum of job openings and employment), which peaked in March 2022 at 7.3 percent, was down to 6.4 percent in November 2022 – but remained well above the pre-pandemic February 2020 rate of 4.4 percent.

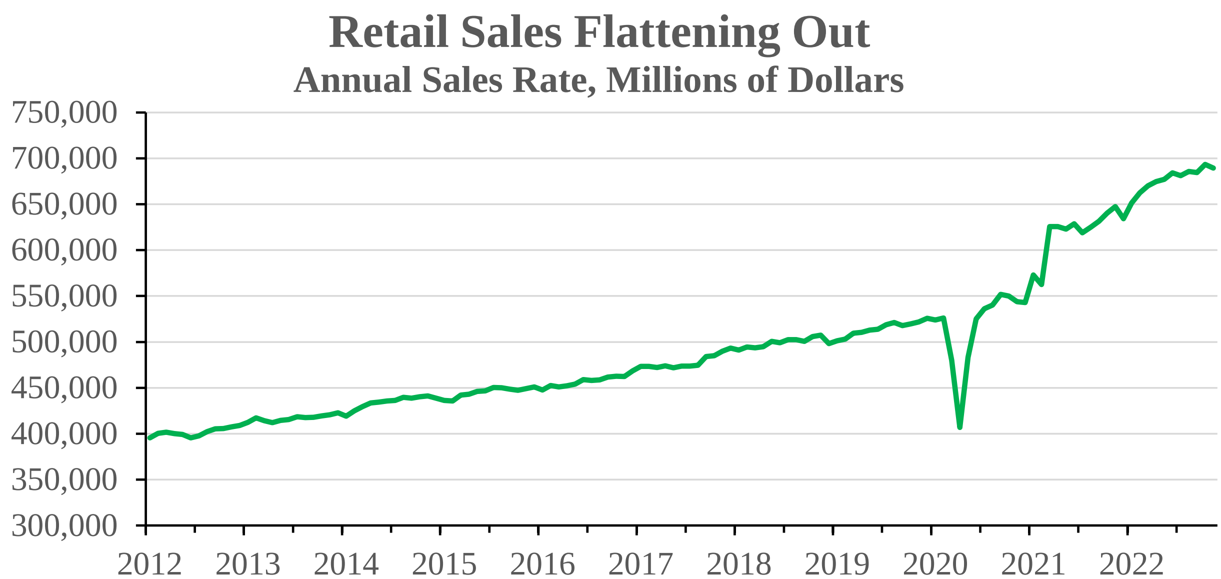
The pandemic and its economic impact greatly affected consumer sentiment. In March and April of 2020, University of Michigan index of consumer sentiment fell a combined 29.2 points to its lowest level in over eight years. By April 2021, consumer sentiment had partially recovered and stood 12.7 points below the index's February 2020 reading. However, consumer sentiment lost ground over the following 14 months due to concerns about rapidly rising inflation. Consequently, in June 2022, consumer sentiment fell to 50 -- an all-time low. Sentiment improved modestly over the following four months before fluctuating in the last two months of the year. The December 2022 sentiment reading remained 10.9 points below last December's level and 41.3 points below the pre-pandemic February 2020 level.

Index of Consumer Sentiment
University of Michigan Consumer Survey



Source: University of Michigan Survey Research Center

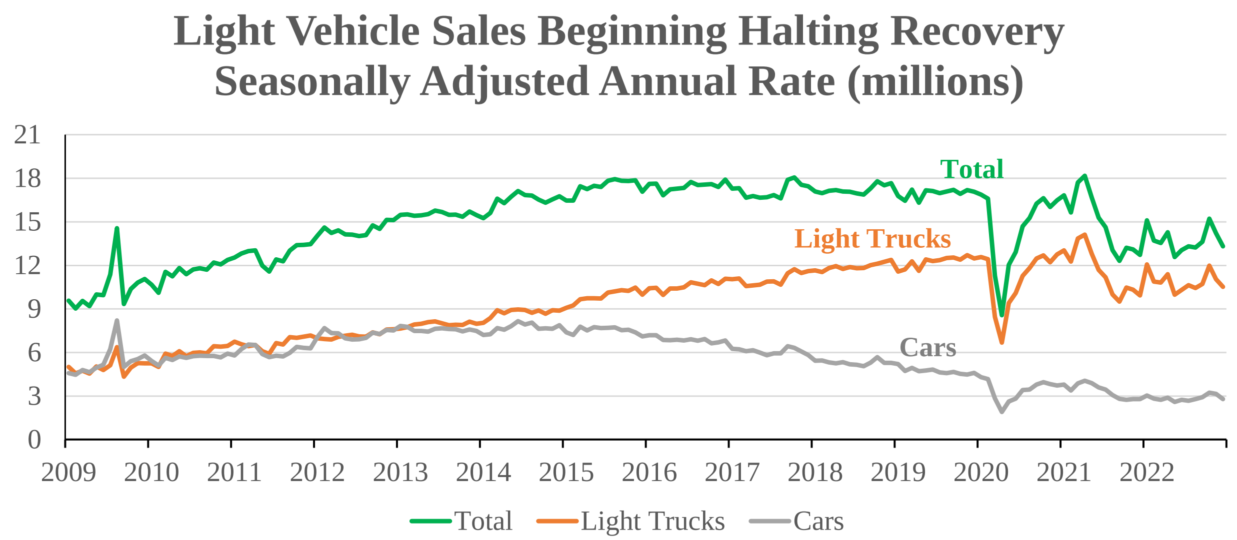
Retail sales fell 5.8 percent in March 2020 year-over-year (y-o-y) and then plummeted a record 20.2 percent y-o-y in April. Retail sales quickly recovered, due in large part to of stepped-up government assistance programs combined with pent-up demand, and y-o-y growth ranged from 2.2 percent to 9.3 percent between June 2020 and February 2021. In early 2021, retail sales experienced a massive acceleration and sales levels continued to grow through mid-2022. However, nominal retail sales flattened out in the second half of 2022 with alternating monthly decreases followed by monthly increases. In November, nominal retail sales were up 6.5 percent from last year – slightly less than the 7.1 percent increase in the overall consumer price index.



Source: U.S. Census Bureau

Light vehicle sales dropped sharply in March and April 2020, with annualized sales plummeting from 16.6 million units in February to 8.6 million units in April – a near 50-year low. Annualized light vehicle sales rose in the following months, up to 16.6 million units by October. Light vehicle sales then fell and rose modestly through February 2021, when sales jumped up sharply in March and rose to 18.2 million units in April – the highest monthly sales rate in over 15 years. However, largely due to supply constraints, sales fell for the next five months and then fluctuated modestly through the end of 2021, ending at an annual sales rate of 12.5 million units in December.

The light vehicle sales rate rebounded to 15.1 million in January 2022 but then declined in both February and March, down to 13.5 million units. Sales rebounded modestly in April but then dropped in May before trending upward over the next four months. Vehicle sales jumped to a 15.1 million unit rate in October before falling the next two months, down to 13.3 million units in December. In calendar year 2022, light vehicle sales rate averaged 13.7 million units – down 8.1 percent from last year. Demand for light vehicles is high, but remains supply constrained. Prices have increased significantly, particularly in used car markets. While prices are starting to come down, demand still remains high and continued supply issues are slowing the decline in prices.



Source: Bureau of Economic Analysis

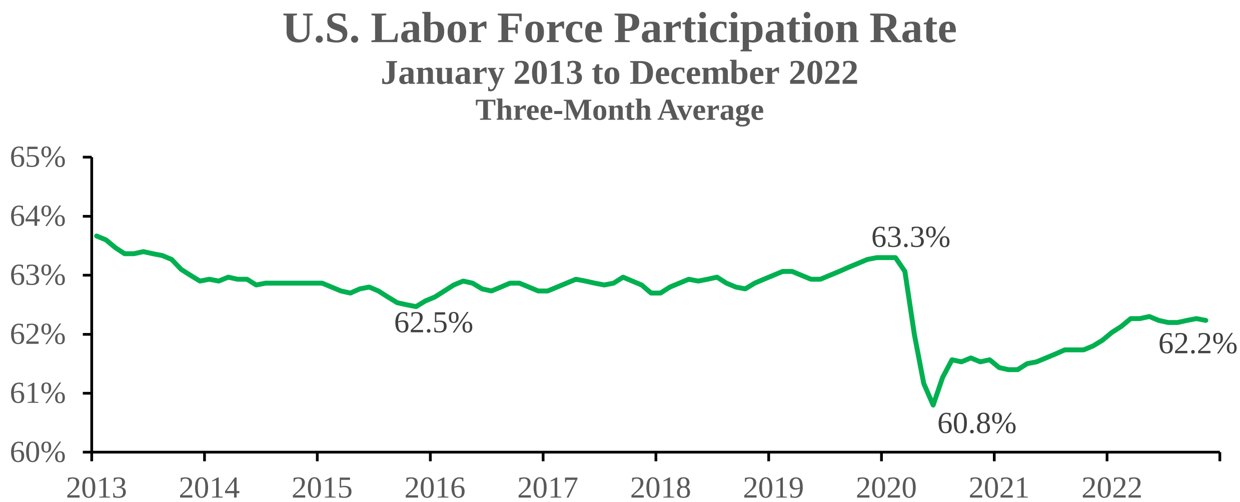
In April 2020, motor vehicle production came to a standstill because of the ongoing pandemic. Production partially restarted in May, picked up significantly in June and rose further in July and August, but declined in September and rose and fell through December. All told, national production dropped 17.7 percent in calendar year 2020. Between 2020Q2 (the onset of the pandemic) and 2021Q2, U.S. production doubled. However, the ongoing semi-conductor shortage pushed y-o-y national production down 20.0 percent in 2021Q3. With supply constraints starting to ease, the national vehicle production y-o-y decline slowed in 2021Q4 and in 2022Q1. Production rose just over 20 percent y-o-y in 2022Q2 and in 2022Q3. Year-to-date, national vehicle production is up 12.9 percent from last year through the first 11 months of the year.

Housing starts dropped sharply in both March and April of 2020, down to a five-year monthly low of 938,000 annualized starts. Through the end of 2020, housing starts rose in all but one of the following months (August). Housing starts fell slightly in January 2021 and, because of inclement weather, dropped substantially in February. Starts rebounded sharply in March, declined in April and then rose in both May and June – rising to a 1.7 million unit rate in June. Starts then fluctuated narrowly across the next four months near a 1.6 million unit rate before trending upward and rising to an almost 16-year high 1.8 million unit rate in April 2022. Starts dropped to a 1.4 million unit rate in July 2022, rose in August and then fell slightly in each of the following three months with starts returning to a 1.4 million annual rate. Through the first 11 months of 2022, the annual rate of housing starts has averaged 1.6 million units.

Labor Force Participation

The labor force participation rate (the share of the working-age population who are in the labor force either working or actively looking for work) reached 63.1 percent in 2019. However, with the onset of the pandemic, the participation rate fell sharply down to 60.2 percent in April 2020. The rate rose to 61.5 percent by July 2020 and to 62.4 percent in March 2022. Since March, the rate has fluctuated between 62.1 percent and 62.3 percent. In calendar year 2022, the size of the U.S. labor force averaged 164.3 million persons. Had 2022 U.S. labor force participation rate averaged 63.1 percent (the 2019 average rate), the size of the U.S. labor force would have been 166.7 million persons– 2.4 million persons larger.

Due to COVID-19's more severe impact on older adults, increased early retirements accounted for a substantial share of the estimated 2.4-million-person reduction in labor force. In calendar year 2022, the labor force participation rate of adults 55 years and older averaged 1.5 percentage points below its pre-pandemic February 2020 rate while the rate of younger adults (25-54 years old) averaged 0.6 percentage point below its February 2020 rate. Lack of available/affordable childcare, and health concerns contributed to the reduction in labor supply.



Source: Bureau of Labor Statistics

Inflation

During the first year of the pandemic (March 2020-February 2021), the overall consumer price index y-o-y inflation remained low, averaging about 1.0 percent, and ranging between 0.1 percent in May 2020 up to 1.7 percent in February 2021. In each of the most recent 18 months, overall consumer prices rose from the prior year by more than 5.0 percent – the first such streak in nearly 40 years. In June 2022, the overall consumer price index rose 9.1 percent y-o-y, which is the fastest y-o-y increase in over 40 years. Year-over-year CPI inflation slowed modestly to a still rapid 7.1 percent by November.

Several factors contributed to the acceleration of inflation including supply chain disruptions, physical input shortages and labor shortages, coupled with strong demand, spurred by historic government stimulus (both fiscal and monetary) and pent-up demand.

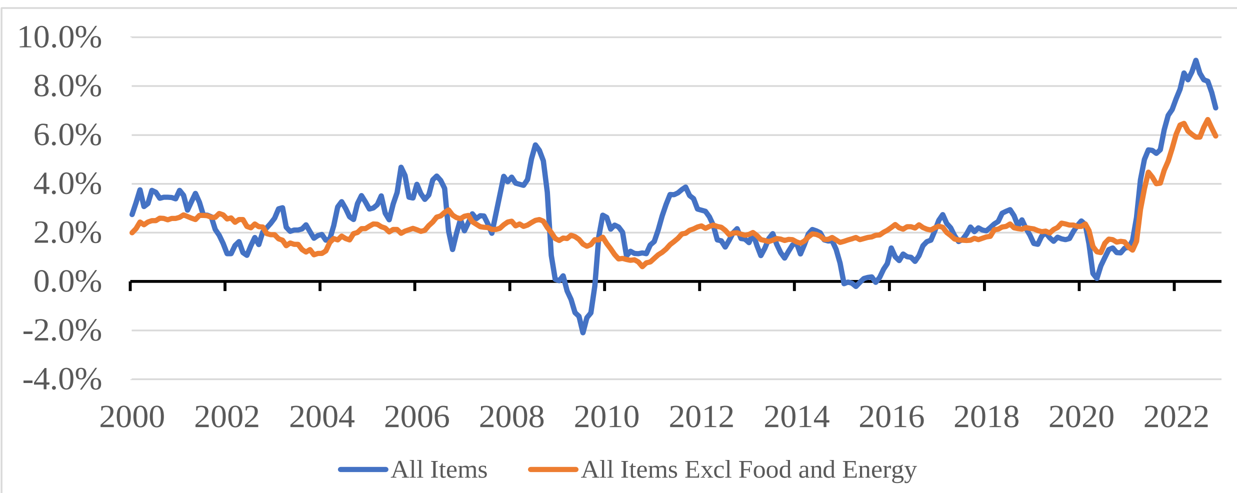
While falling or rising only slightly y-o-y in 2020, producer price increases accelerated substantially over the following 15 months with y-o-y increases accelerating from 1.6 percent in January 2021 to 11.7 percent in March 2022 (a record for the relatively brief current PPI series, which began in late 2009). Since April 2022, PPI inflation has trended modestly slower with the y-o-y increase in the PPI slowing to a still historically fast 7.4 percent in November 2022. Core PPI inflation has also slowed from 9.7 percent in March to a still high 6.2 percent in November.

The y-o-y increase in average hourly private sector earnings has exceeded 4.5 percent for the past 16 months. In calendar year 2022, average hourly earnings were up 5.2 percent from 2021.

Sharp increases in energy prices have played a significant role in the recent acceleration in inflation. While having declined y-o-y through most of 2020, y-o-y energy price increases have exceeded 10 percent each month since April 2021 and peaked at 41.6 percent in June 2022. In recent months, y-o-y energy price increases have slowed but remained high with energy prices up 13.1 percent in November 2022. Food prices have accelerated over the past year – rising more than 10.0 percent y-o-y in each of the past seven months – the first such streak in over 40 years. Food price increases peaked in August 2022 at 11.4 percent before slowing slightly. In November 2022, food prices were up 10.6 percent from last year.

However, the core consumer price index, which excludes food and energy prices, has also accelerated in recent months. While rising less than 2.0 percent y-o-y in each of the first 12 months of the pandemic, the core CPI accelerated – increasing from 4.0 percent in September 2021 to 6.5 in March 2022. Core CPI inflation slowed over the following three months – down to 5.9 percent in June 2022, before increasing in September to 6.6 percent – the fastest y-o-y core CPI in 40 years. Core CPI inflation slowed in October and again in November, down to 6.0 percent.

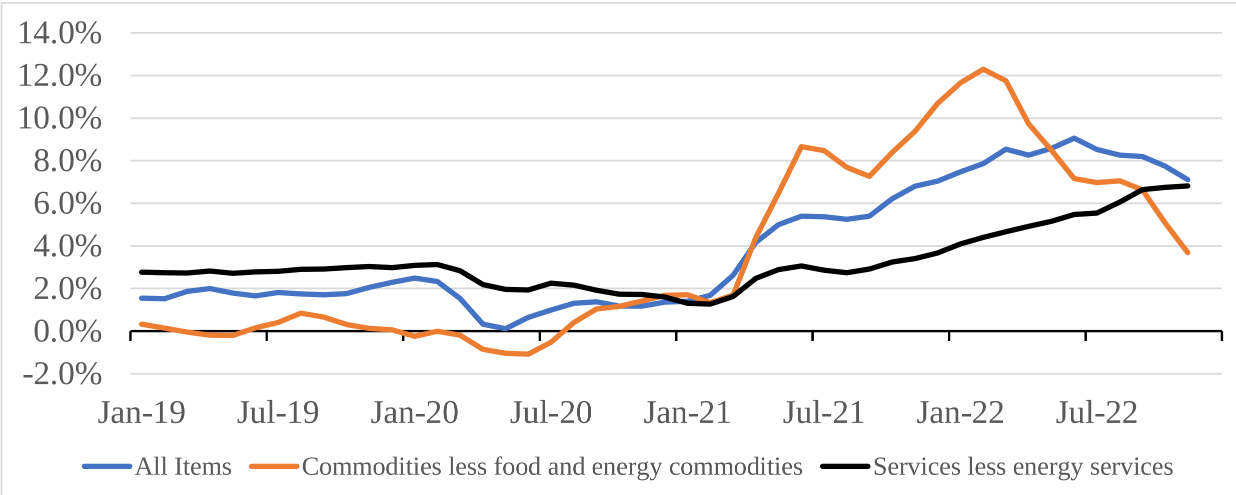
Overall Inflation Slows



Source: Bureau of Labor Statistics

While goods inflation has recently slowed, services inflation has accelerated. The y-o-y increase in the goods CPI excluding energy and food peaked at 12.3 percent in February 2022. Since then, goods inflation excluding food and energy has slowed – down to 3.7 percent by November 2022. However, services inflation excluding energy services has steadily increased over the past 15 months – accelerating from 2.7 percent in August 2021 to 6.8 percent in November 2022.

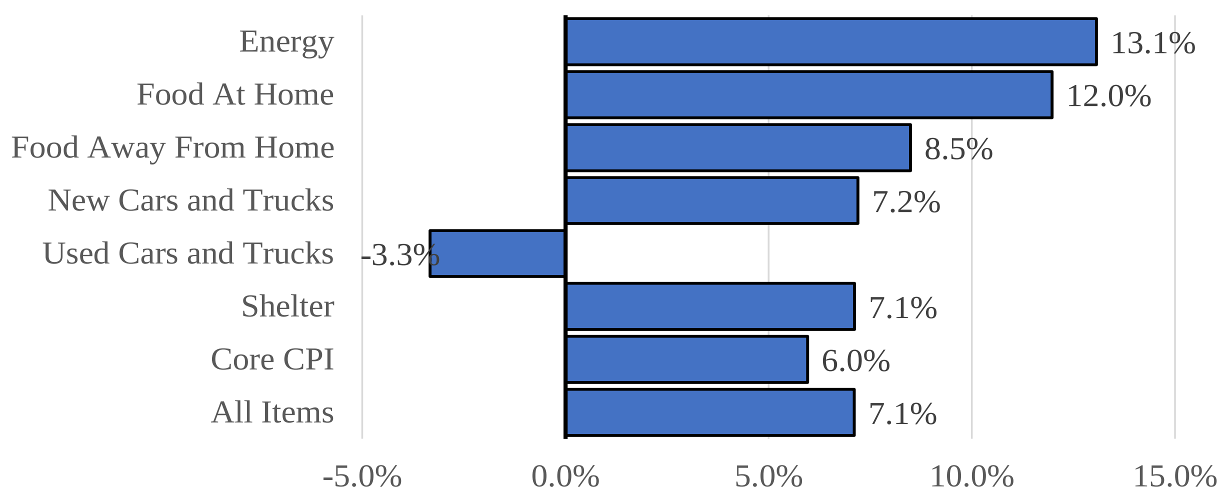
Goods Inflation Slows While Services Inflation Accelerates



Source: Bureau of Labor Statistics

Energy and food, along with new vehicle prices, currently play a key role in supporting high y-o-y inflation. Energy price increases peaked at 41.6 percent in June and slowed to 13.1 percent in November. Inflation for food at home steadily accelerated from 0.7 percent in May 2021 to 13.5 percent in August 2022. Over the past three months, y-o-y increases in prices of food at home have slowed modestly but remained high at 12.0 percent in November. At the same time the y-o-y increase in food away from home has trended upward over the past year with increases accelerating from 4.7 percent in September 2021 to 8.6 percent in October 2022 before slowing slightly to 8.5 percent in November 2022. New vehicle prices were up 7.2 percent from last November.

CPI Indices Increases, November 2021 – November 2022



Source: Bureau of Labor Statistics

Shelter costs steadily accelerated between early 2021 to late 2022 with y-o-y price increases in shelter accelerating from 1.5 percent in February 2021 to 7.1 percent in November 2022. However, there are indications that shelter inflation will begin to moderate by the middle of 2023.

From January 2019 through the first year of the pandemic, the Federal Reserve's preferred inflation gauge (the core personal consumption expenditure price index (the core PCE deflator)) had remained at or below 2.0 percent. Still more, core PCE inflation had remained below 2.5 percent for over 20 years through March 2021. However, in April 2021, y-o-y core PCE index inflation accelerated above 3.0 percent for the first time in nearly 29 years. In February and March 2022, the core PCE was up 5.4 percent y-o-y, the fastest core PCE inflation in nearly 39 years. Since April 2022, the core PCE deflator has moderated slightly and has fluctuated between 4.7 percent and 5.2 percent. In November, the core PCE deflator rose 4.7 percent from last November.

Monetary and Fiscal Policy Actions

Monetary Policy

The Federal Reserve (Fed) took aggressive action to combat the impact of the pandemic and containment restrictions on the economy. In mid-March 2020, the Fed lowered the federal funds rate range to near zero and aggressively stepped up its quantitative easing program under which it purchases Treasury bonds and mortgage bond securities. By October 2021, the Fed's holdings had risen to $8.5 trillion – more than double (106.7 percent) its late February 2020 level.

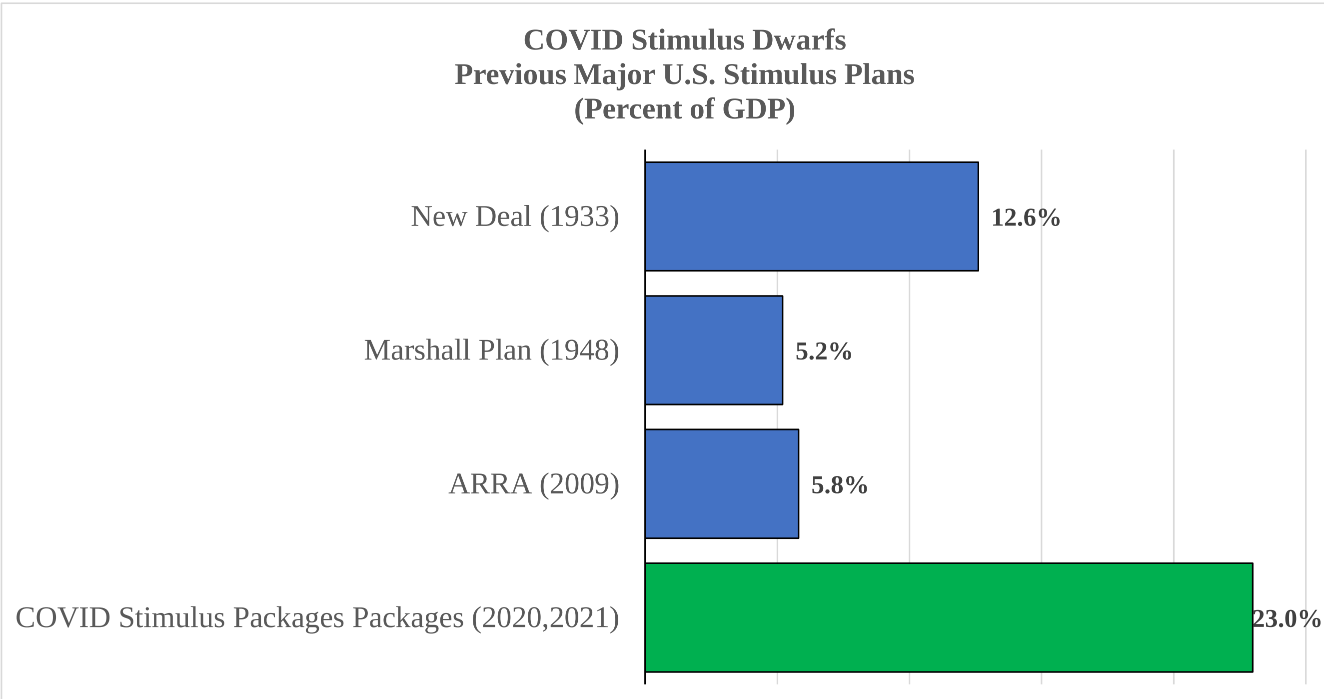
In November 2021, the Fed announced that it would begin tapering its quantitative easing program and the Fed fully ended its program as of March 2022, at which point Fed holdings had risen to $8.9 trillion. In June, the Fed began *reducing the level* of its holdings of Treasury bonds and mortgage bond securities. In late December, Fed holdings had fallen to $8.6 trillion.

After having maintained the target federal funds rate at essentially zero for two years, the FOMC began raising the target federal funds rate in March 2022. The Fed raised the target range 25 basis points in March and increased the range an additional 50 basis points in May. The Fed then raised the target range an additional 75 basis points at each of its meetings in June, July, September and November. Most recently, the FOMC increased the target range 50 basis points at its December meeting. The target federal funds rate now stands at 4.25 percent to 4.50 percent. While slowing the rate of increase in December, the FOMC stated:

> The Committee anticipates that ongoing increases in the target range will be appropriate in order to attain a stance of monetary policy that is sufficiently restrictive to return inflation to 2 percent over time. . . . In addition, the Committee will continue reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities, as described in the Plans for Reducing the Size of the Federal Reserve's Balance Sheet that were issued in May. The Committee is strongly committed to returning inflation to its 2 percent objective.

Fiscal Policy

In response to the pandemic, the federal government enacted three extremely large economic stimulus packages, amounting to nearly $5 trillion in estimated federal spending and tax expenditures. The near $5 trillion stimulus equals 23.0 percent of GDP. As the graph below illustrates, COVID stimulus is tremendously larger than any other previous major stimulus plan.



Sources: Axios Research (December 23, 2020), Bureau of Economic Analysis. The COVID stimulus percentage includes the $1.9 trillion American Rescue Plan (ARP), which was enacted in March 2021.

In the first four quarters of the pandemic (2020Q2-2021Q1) during which the three massive COVID stimulus packages were implemented, nominal (non-inflation adjusted) government transfers increased by $1.7 trillion (55.6 percent) compared to the four quarters a year earlier. However, over the four most recent quarters (2021Q4-2022Q3), government transfers were down by $1.0 trillion (-21.1 percent) compared to the first four quarters of the pandemic.

Overall real (inflation adjusted) federal government consumption and investment expenditures have stagnated with average real federal government consumption and investment expenditures in the four most recent quarters down 0.7 percent compared to the first four quarters of the pandemic.

Current Michigan Economic Situation

Recent History

Prior to the pandemic, Michigan's economy posted a decade of economic growth, but was showing signs of slowing.

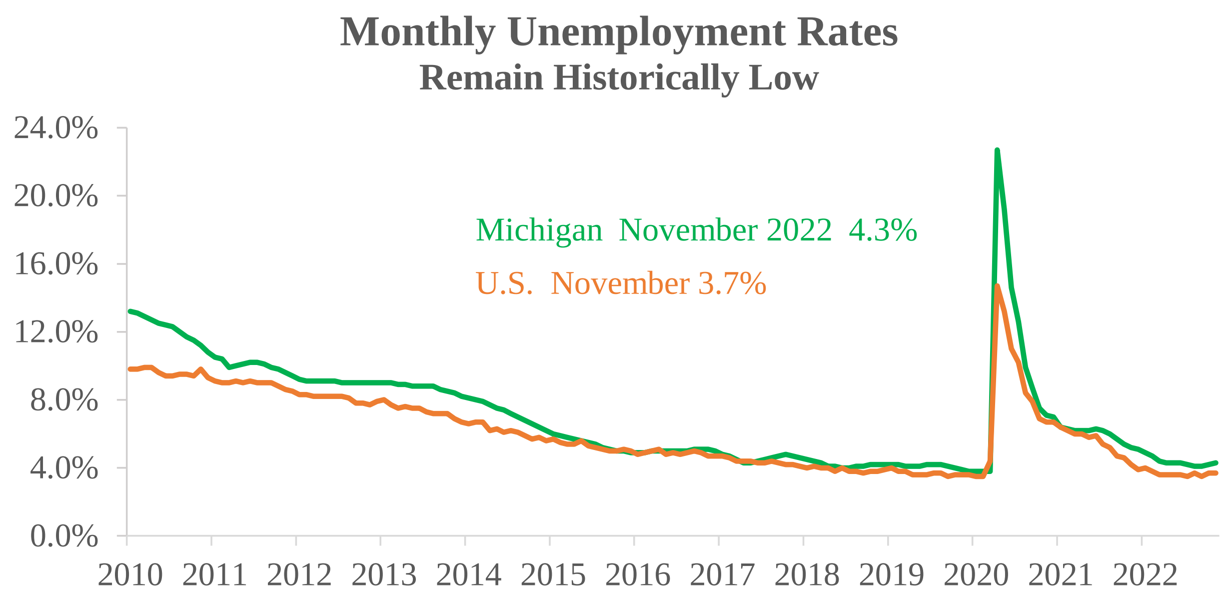
In 2019:

- Both Michigan wage and salary income and personal income increased for the tenth straight year. Wage and salary income grew 2.7 percent, slowing from 3.7 percent growth in 2018, and personal income increased 3.6 percent, slowing from 4.0 percent in 2018.
- Real Michigan gross domestic product (GDP) increased slightly (0.1 percent) after having risen by at least 1.2 percent in each of the prior nine years.
- Michigan wage and salary employment grew for the ninth straight year, but the 0.4 percent increase in 2019 was the slowest annual growth over the nine years.
- The Michigan annual unemployment rate fell for the tenth straight year, falling to 4.1 percent – the lowest Michigan annual unemployment rate since 2000.
- Approximately 1,914,000 vehicles were produced in Michigan, an increase of 4.4 percent from 2018, and well above the historical low of 1,146,000 units produced in 2009.

Current Economy

The pandemic's impact on Michigan's economy mirrored the national impact. After rising to a 17-year monthly high in February 2020, Michigan wage and salary employment fell modestly in March (-36,300 jobs) and then plummeted in April – losing a record 1.0 million jobs. Michigan regained jobs each month between May and November before losing jobs in December. Through December 2020, Michigan had regained a net 648,700 jobs.

State employment rose in each of the first three months of 2021 before falling slightly in April and rising slightly in May. Employment gains accelerated in June and July, slowed in the following three months, and accelerated in October before slowing in November. State employment posted modest gains each month between November 2021 and March 2022, inclusive. After declining in April and May 2022, Michigan employment has risen each subsequent month through November 2022. In 2021, Michigan employment regained an additional 240,900 jobs. Through November, Michigan employment has regained another net 95,100 jobs in 2022. On net, Michigan regained 984,700 jobs between May 2020 and November 2022 – 93.5 percent of the jobs lost in March and April 2020.



Source: Bureau of Labor Statistics.

With the massive employment losses, Michigan's unemployment rate rose sharply in April 2020, from 3.8 percent to 22.7 percent. The rate quickly dropped to 7.0 percent by December 2020 and fell to 5.1 percent by the end of 2021. The state's unemployment rate declined to 4.1 percent in August 2022 before rising slightly in October and November, up to 4.3 percent. Michigan's labor force participation rate remains significantly lower than its pre-pandemic rate with the November 2022 rate (59.9 percent) well below the State's average 61.7 percent rate in 2019.

Largely because of the CARES Act and state unemployment insurance payments, personal income rose in the second quarter of calendar year 2020 despite a substantial decline in economic activity. In 2020Q2, while Michigan real GDP fell 12.8 percent from a year earlier, personal income *rose* 16.3 percent y-o-y. Michigan personal income increased at a still strong 9.4 percent y-o-y in 2020Q3 before slowing to 5.5 percent in 2020Q4. Then, in 2021, with the convergence of two federal stimulus packages, Michigan personal income rose 19.0 percent y-o-y before falling 2.2 percent from 2020Q2, when the massive CARES package was implemented. Michigan personal income increased 2.3 percent y-o-y in 2021Q3 and then rose 4.9 percent in 2021Q4. Personal income declined 6.7 percent between 2021Q1, the quarter in which the American Rescue Act was enacted, and 2022Q1. Personal income rose a slight 0.9 percent y-o-y in 2022Q2 and a modest 2.7 percent in 2022Q3.

Excluding transfer payments, which encompass the federal stimulus direct relief payments and all unemployment insurance payments, Michigan personal income excluding transfers dropped 6.4 percent y-o-y in 2020Q2 and then rose slightly y-o-y in each of the next three quarters. Michigan personal income excluding transfer payments rebounded sharply from a year earlier in 2021Q2. While slowing, state personal income excluding transfers still rose substantially y-o-y each quarter between 2021Q3 and 2022Q3 – with increases ranging between 5.5 percent and 7.9 percent.

Personal Income Year-over-Year Percent Changes

Sources: Bureau of Economic Analysis.

SECTION III

Administration Economic Forecast

Administration Economic Forecast
January 13, 2023

Administration Economic Forecast Summary

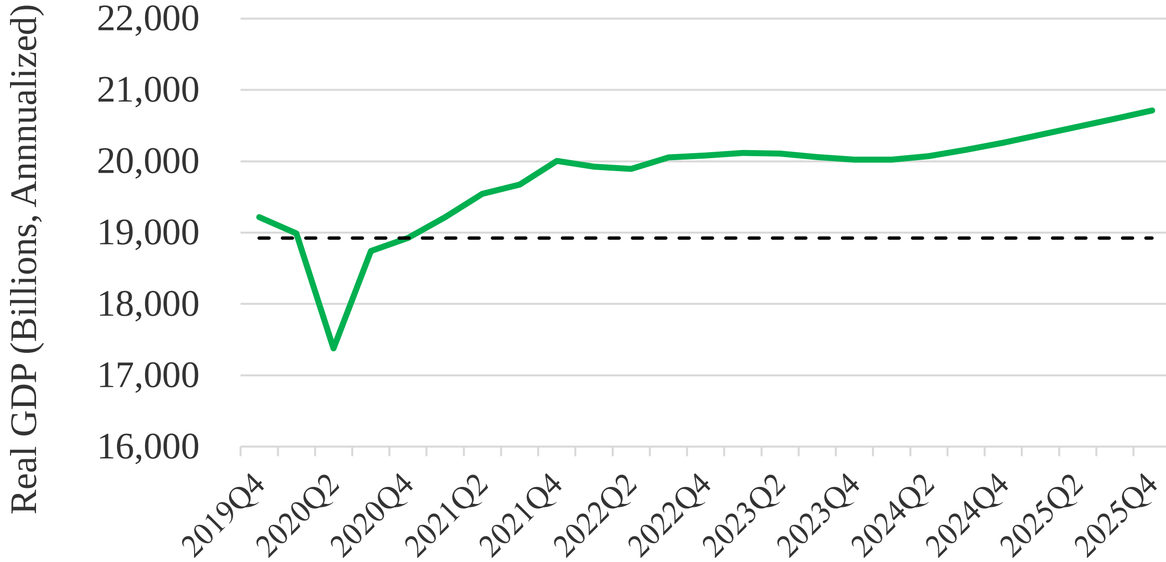
Table 1 provides a one-page summary table of the Administration forecast of the U.S. and Michigan economies.

2023, 2024 and 2025 U.S. Economic Outlook

Real (inflation adjusted) GDP is expected to increase over the forecast horizon. After declining 2.8 percent in 2020 (the largest annual decline since 1946), real GDP rose 5.9 percent in calendar year 2021 – the fastest annual real GDP growth since 1984. Real GDP growth is estimated to have slowed to 1.9 percent in 2022 and then forecast to slow further to 0.5 percent in 2023 and 0.3 percent in 2024 before accelerating to modest 2.0 percent growth in 2025.

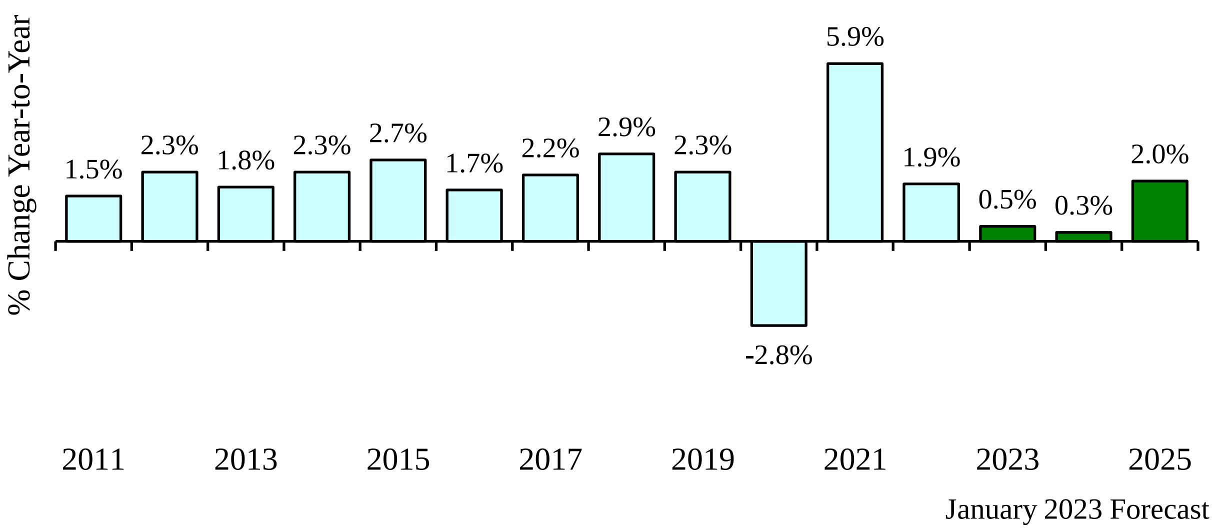
Real GDP fully regained the losses from the first two quarters of 2020 in 2021Q2 – four quarters following the steep drop. With continued growth through 2021Q4, real GDP stood 4.1 percent above its pre-pandemic 2019Q4 level. Real GDP dropped in each of the first two quarters of 2022 but rose in 2022Q3, is estimated to have risen in 2022Q4 and is forecast to rise slightly in 2023Q1. However, under the pressure of a weak global economy and higher interest rates, real GDP is forecast to decline slightly in each of the following three quarters and then remain essentially unchanged in 2024Q1. Real GDP is forecast to rise over the balance of the forecast horizon, but do so initially at slow rates before accelerating to modest growth throughout 2025. By the end of the forecast (2025Q4), real GDP is projected to be up 7.8 percent from its level six years earlier, directly before the pandemic in 2019Q4.

U.S. Economy Projected to Contract Slightly Then Recover Modestly



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2023.

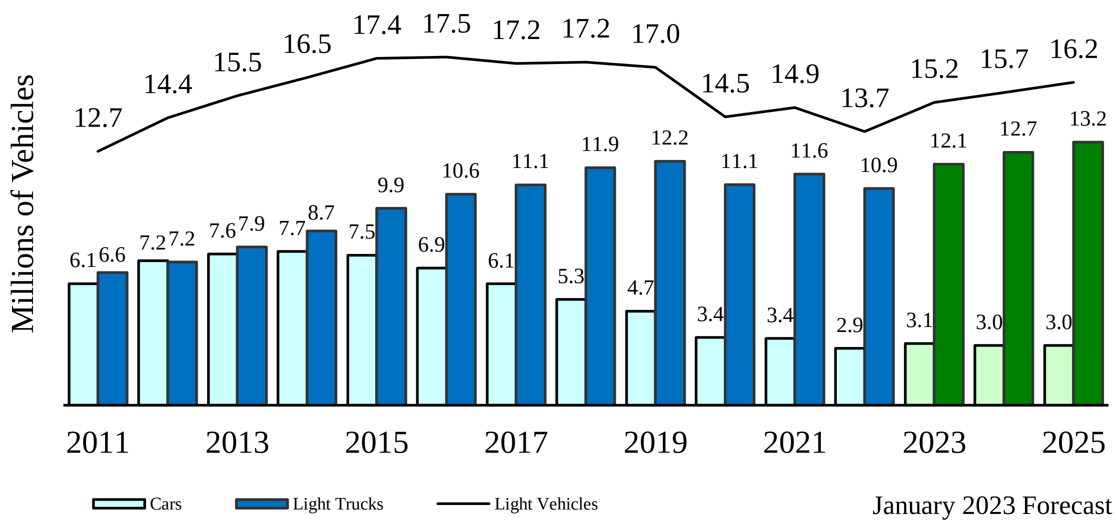
Annual Real GDP Growth Stagnates Then Re-accelerates



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2023.

As a result of sharp declines over the first half of 2020, **light vehicle sales** declined from 17.0 million units in 2019 to 14.5 million units in 2020. In 2021, light vehicle sales rose modestly to 14.9 million units and then declined to 13.7 million units in 2022. Light vehicle sales are expected to increase gradually over the forecast horizon – rising to 15.2 million units in 2023, 15.7 million units in 2024 and 16.2 million units in 2025. Light trucks continue to dominate the light vehicle market over the forecast horizon.

Vehicle Sales Rebound Gradually Over Forecast Horizon



Source Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2023.

The **U.S. unemployment rate** dropped from 8.1 percent in 2020 to 5.3 percent in 2021 The national unemployment rate fell to 3.6 percent in 2022 and is forecast to rise to 3.9 percent in 2023 and 4.5 percent in 2024 before falling to 4.2 percent in 2025.

U.S. wage and salary employment recovered its steep 2020Q2 losses by 2022Q3. Quarterly employment is projected to rise through mid-2023 before declining slightly in late 2023 and early 2024. Employment then regains those losses by the second half of 2025 and rises slightly above mid-2023 levels by the end of the forecast horizon. After having declined 5.8 percent in 2020, annual **U.S. wage and salary employment** rose 2.8 percent in 2021. Wage and salary employment rose 4.0 percent in 2022, and is projected to increase 1.3 percent in 2023, decline 0.5 percent in 2024 and rise 0.6 percent in 2025.

After having risen 1.2 percent in 2020, the **U.S. consumer price index (CPI)** increased 4.7 percent in 2021. The U.S. CPI rose an estimated 8.1 percent in 2022 and is forecast to increase 4.9 percent in 2023, increase 4.0 percent in 2024 and rise 3.4 percent in 2025. The personal consumption price deflator rate is estimated to have risen 6.3 percent in 2022 and is projected to increase 4.3 percent in 2023, 2.8 percent in 2024 and 2.5 percent in 2025.

The **three-month Treasury bill rate** averaged 0.1 percent in 2021, during which the federal funds rate remained near zero. In the face of stubborn inflation, the Fed is expected to raise the federal funds rate near 6.0 percent by 2023Q3 and then maintain rates near 6.0 percent through 2024Q1. The Fed is then expected to gradually lower rates over the balance of the forecast horizon. As a result, the Treasury bill rate is expected to average 2.1 percent in 2022, 5.6 percent in 2023, 5.4 percent in 2024 and 4.4 percent in 2025.

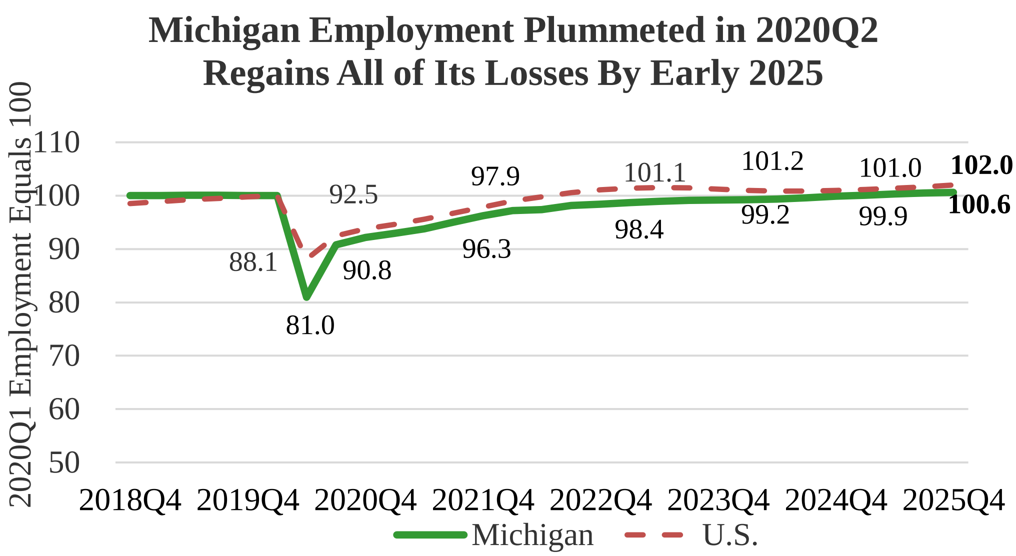
Housing starts jumped 16.0 percent in 2021. In 2022, housing starts are estimated to have decreased 3.5 percent. Under the weight of higher mortgage rates, housing starts are forecast to drop 21.3 percent in 2023 and fall an additional 2.5 percent in 2024 before rising 11.0 percent in 2025. In 2025, housing starts total 1.3 million – down 17.8 percent from total starts in 2021.

2023, 2024 and 2025 Michigan Economic Outlook

Michigan wage and salary employment is forecast to rise over each quarter of the forecast horizon. By 2022Q3, Michigan employment had regained 93.1 percent of its 19.0 percent decline in 2020Q2. As a result, 2022Q3 Michigan employment remained 1.3 percent below its 2020Q1 level. Michigan employment is expected to be down 0.8 percent from its pre-pandemic level at the end of 2023 but be 0.6 percent *above* its pre-pandemic level in 2025Q4.

In 2020, annual Michigan wage and salary employment declined 9.1 percent -- the largest annual Michigan employment decline since 1958. Michigan employment rose 3.8 percent in 2021 and is estimated to have increased 3.4 percent in 2022. State employment is forecast to rise 1.2 percent in 2023, 0.5 percent in 2024 and 0.8 percent in 2025.

In 2020, annual **Michigan manufacturing employment** dropped 11.1 percent. Michigan manufacturing employment increased 4.8 percent in 2021, is estimated to have risen 3.7 percent in 2022 and is projected to rise 2.2 percent in 2023, 0.6 percent in 2024 and 0.4 percent in 2025.



Source: Michigan Department of Technology, Management, & Budget, U.S. Bureau of Labor Statistics and January 2023 Administration Forecast.

The **Michigan unemployment rate** rose to 10.0 percent in 2020 before falling to 5.9 percent in 2021. The rate is estimated to have declined to 4.3 percent in 2022. The state unemployment rate is projected to rise to 4.4 percent in 2023 and 4.8 percent in 2024 and then return to 4.4 percent in 2025.

Table 1

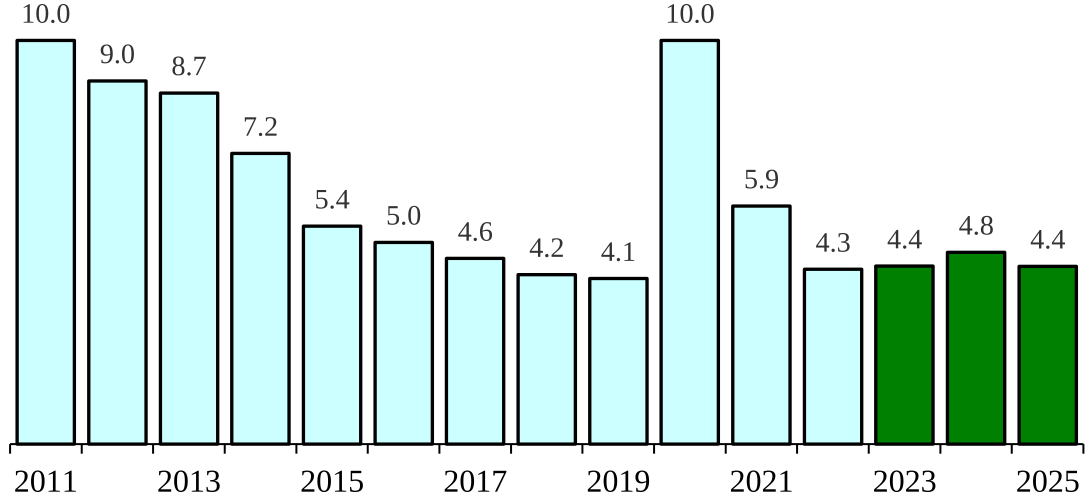
Administration Economic Forecast

January 2023

	Calendar 2021 Actual	Calendar 2022 Estimated	Percent Change from Prior Year	Calendar 2023 Forecast	Percent Change from Prior Year	Calendar 2024 Forecast	Percent Change from Prior Year	Calendar 2025 Forecast	Percent Change from Prior Year
United States									
Real Gross Domestic Product (Billions of Chained 2012 Dollars)	$19,610	$19,982	1.9%	$20,082	0.5%	$20,143	0.3%	$20,545	2.0%
Implicit Price Deflator GDP (2012 = 100)	118.9	127.3	7.1%	133.3	4.7%	137.1	2.8%	140.5	2.5%
Consumer Price Index (1982-84 = 100)	270.970	292.838	8.1%	307.113	4.9%	319.336	4.0%	330.105	3.4%
Consumer Price Index - Fiscal Year (1982-84 = 100)	266.616	287.723	7.9%	304.336	5.8%	316.338	3.9%	326.856	3.3%
Personal Consumption Deflator (2012 = 100)	115.6	122.9	6.3%	128.2	4.3%	131.8	2.8%	135.1	2.5%
3-month Treasury Bills Interest Rate (percent)	0.1	2.1		5.6		5.4		4.4	
Unemployment Rate - Civilian (percent)	5.3	3.6		3.9		4.5		4.2	
Wage and Salary Employment (millions)	146.124	152.014	4.0%	153.990	1.3%	153.220	-0.5%	154.140	0.6%
Housing Starts (millions of starts)	1.601	1.545	-3.5%	1.216	-21.3%	1.186	-2.5%	1.316	11.0%
Light Vehicle Sales (millions of units)	14.9	13.7	-8.1%	15.2	10.7%	15.7	3.3%	16.2	3.2%
Passenger Car Sales (millions of units)	3.4	2.9	-14.9%	3.1	8.7%	3.0	-3.2%	3.0	0.0%
Light Truck Sales (millions of units)	11.6	10.9	-6.2%	12.1	11.2%	12.7	5.0%	13.2	3.9%
Big 3 Share of Light Vehicles (percent)	35.9	38.9		38.8		38.1			
Michigan									
Wage and Salary Employment (thousands)	4,194	4,336	3.4%	4,388	1.2%	4,410	0.5%	4,445	0.8%
Unemployment Rate (percent)	5.9	4.3		4.4		4.8		4.4	
Personal Income (millions of dollars)	$567,807	$568,375	0.1%	$596,225	4.9%	$621,863	4.3%	$646,737	4.0%
Real Personal Income (millions of 1982-84 dollars)	$229,135	$211,799	-7.6%	$211,744	0.0%	$212,210	0.2%	$214,037	0.9%
Wages and Salaries (millions of dollars)	$261,812	$283,280	8.2%	$298,011	5.2%	$307,845	3.3%	$319,851	3.9%
Detroit Consumer Price Index (1982-84 = 100)	247.805	268.356	8.3%	281.579	4.9%	293.041	4.1%	302.161	3.1%
Detroit CPI - Fiscal Year (1982-84 = 100)	244.089	263.397	7.9%	279.104	6.0%	290.145	4.0%	299.981	3.4%

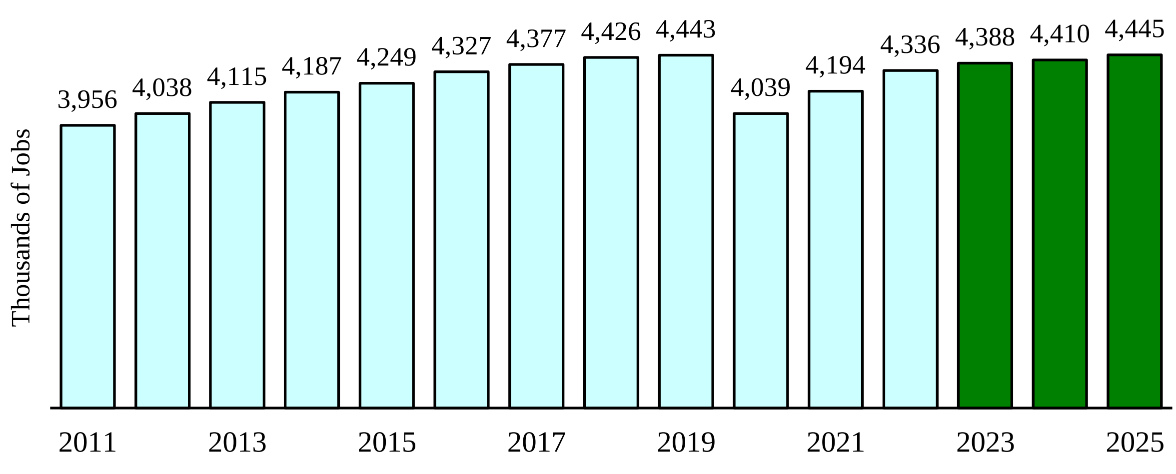
Source: Michigan Department of Technology, Management, & Budget, U.S. Bureau of Labor Statistics and January 2023 Administration Forecast.

State Unemployment Rate Rises Slightly Over Forecast Then Falls



Source: Michigan Department of Technology, Management, & Budget, U.S. Bureau of Labor Statistics and January 2023 Administration Forecast.

Michigan Wage and Salary Employment Plummets in 2020 Rebounds in 2021-2025



Source: Michigan Department of Technology, Management, & Budget, U.S. Bureau of Labor Statistics and January 2023 Administration Forecast.

Michigan wages and salaries rose 7.9 percent in 2021, are estimated to have risen 8.2 percent in 2022 and are forecast to increase 5.2 percent in 2023, 3.3 percent in 2024 and 3.9 percent in 2025.

Michigan personal income increased 5.6 percent in 2021, is estimated to have increased 0.1 percent in 2022 and is expected to rise 4.9 percent in 2023, 4.3 percent in 2024 and 4.0 percent in 2025.

The **Detroit CPI** rose 4.3 percent in 2021 is estimated to have increased 8.3 percent in 2022 and is forecast to rise 4.9 percent in 2023, 4.1 percent in 2024 and 3.1 percent in 2025. After rising 1.3 percent in 2021, **real (inflation adjusted) Michigan personal income** is estimated to have fallen 7.6 percent in 2022 and is forecast remain unchanged in 2023 and then rise 0.2 percent increase in 2024 and increase 0.9 percent in 2025.

Fiscal Year Economics

Michigan's largest taxes are the individual income tax ($14.5 billion in FY 2021) and sales and use taxes ($12.0 billion). Income tax withholding is the largest component of the income tax. Withholding ($11.1 billion) is most affected by growth in wages and salaries. **Michigan wages and salaries** increased 7.1 percent in FY 2021. In FY 2022, wages and salaries increased 8.3 percent. Wages and salaries then are projected to rise 5.8 percent in FY 2023, 3.9 percent in FY 2024 and 3.6 percent in FY 2025.

Sales and use taxes depend, in part, on **Michigan disposable (after tax) income** and inflation. In FY 2022, disposable income fell an estimated 2.4 percent, but is projected to rise in each the next three fiscal years – rising 5.3 percent in FY 2023, 5.3 percent in FY 2024 and 4.1 percent in FY 2025. Prices, as measured by the **Detroit CPI**, rose 7.9 percent in FY 2022. The Detroit CPI is forecast to increase 6.0 percent in FY 2023, 4.0 percent in FY 2024, and 3.4 percent in FY 2025.

Forecast Risks

The risks to the baseline forecast are weighted to the downside and include:

- Given the high level of current inflation and the numerous external challenges the Fed is currently facing, the Fed may raise interest rates higher and/or accelerate quantitative tightening faster than expected. The more restrictive monetary policy coupled with unforeseen shocks related to the global pandemic and/or geopolitical conflicts could push the U.S. economy into a deeper downturn.
- The baseline forecast assumes that supply chain problems and supply chain shortages induced by the pandemic and polices to contain the virus both domestically and abroad and by the Russia-Ukraine war will subside and thus moderate inflation. If the supply-side challenges fail to subside or worsen, the U.S. economy could be pushed into a period of stagflation (high inflation along with a shrinking domestic economy).
- Geopolitical conflicts and economic sanctions could accelerate and sustain inflation at faster rates than forecast and could also have a greater negative impact on domestic economic activity.

- The pandemic continues to evolve, and emerging new variants may exacerbate current supply chain problems and labor shortages and lead to both higher inflation and slower economic growth than expected.
- Demand for new vehicles will be high this coming year, which could drive sales higher than predicted. However, the semiconductor shortage has already limited vehicle production for several months and may continue to depress the number of vehicles for sale.
- In general, shortages of other raw materials and labor shortages may constrain growth more than assumed along with increasing inflation faster than expected.

SECTION IV

Administration
Revenue Estimates

Administration Revenue Estimates
January 13, 2023

Revenue Estimate Overview

The revenue estimates presented in this section consist of baseline revenues, revenue adjustments, and net revenues. Baseline revenues provide an estimate of the effects of the economy on tax revenues. For these estimates, FY 2022 is the base year. Any non-economic changes to the taxes occurring in FY 2023, FY 2024 and FY 2025 are not included in the baseline estimates. Non-economic changes are referred to in the tables as "tax adjustments". The net revenue estimates are the baseline revenues adjusted for tax adjustments.

This treatment of revenue is best illustrated with an example. Suppose tax revenues are $10.0 billion in a given year, and that based on the economic forecast, revenues are expected to grow by 5.0 percent per year. Baseline revenue would be $10.0 billion in Year 1, $10.5 billion in Year 2, and $11.0 billion in Year 3. Assume a tax rate cut is in place that would reduce revenues by $100 million in Year 1, $200 million in Year 2, and $300 million in Year 3. If Year 1 is the base year, the revenue adjustments for Year 1 would be $0 since the tax cut for this year is included in the base. The revenue adjustments for Year 2 would be $100 million, and the revenue adjustments for Year 3 would be $200 million, since the revenue adjustments are compared to the base year.

In the example above, the baseline revenues would be $10.0 billion, $10.5 billion, and $11.0 billion, for Years 1 through 3, respectively. The revenue adjustments would be $0 in Year 1, $100 million in Year 2, and $200 million in Year 3. The $200 million in Year 3 represents the tax cuts since Year 1. Net revenue would be $10.0 billion in Year 1, $10.4 billion in Year 2, and $10.8 billion in Year 3.

The following revenue figures are presented on a Consensus basis. Generally speaking, the Consensus estimates do not include certain one-time budget measures, such as withdrawals from the Budget Stabilization Fund, the sale of buildings, and so on. The figures also do not include constitutional revenue sharing payments to local governments from the sales tax. In addition, the estimates only include enacted legislation and do not include the effects of any proposed changes. The School Aid Fund estimates consist of taxes plus the transfer from the State Lottery Fund.

FY 2022 Revenue Outlook

Preliminary FY 2022 GF-GP revenue is estimated to be $15,205.5 million, a 17.5 percent increase compared to FY 2021. The FY 2022 GF-GP revenue estimate is $1,025.8 million above the May 2022 Consensus estimate. SAF revenue is forecast to be $17,825.2 million, a 10.8 percent increase compared to FY 2021. The FY 2022 SAF estimate is $484.6 million above the May 2022 Consensus estimate (see Table 2).

Table 2

FY 2021-22 Preliminary Final Revenue Estimates

(millions)

	Administration January 13, 2023		Change from May 2022 Consensus
	Amount	**Growth**	
General Fund - General Purpose			
Baseline Revenue	$16,856.5	13.4%	---
Tax Cut Adjustments	($1,651.0)	---	---
Net Resources	$15,205.5	17.5%	$1,025.8
School Aid Fund			
Baseline Revenue	$17,763.7	9.6%	---
Tax Cut Adjustments	$61.5	---	---
Net Resources	$17,825.2	10.8%	$484.6
Combined			
Baseline Revenue	$34,620.2	11.4%	---
Tax Cut Adjustments	($1,589.5)	---	---
Net Resources	$33,030.7	13.8%	$1,510.4

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

FY 2023 Revenue Outlook

FY 2023 GF-GP revenue is estimated to be $15,094.8 million, a 0.7 percent decrease compared to FY 2022. The FY 2023 GF-GP revenue estimate is $1,121.3 million above the May 2022 Consensus estimate. SAF revenue is forecast to be $17,823.6 million, unchanged compared to FY 2022. The FY 2023 SAF estimate is $628.3 million above the May 2022 Consensus estimate (see Table 3).

Table 3

FY 2022-23 Administration Revenue Estimates

(millions)

	Administration January 13, 2023		Change from May 2022
	Amount	**Growth**	**Consensus**
General Fund - General Purpose			
Baseline Revenue	$16,498.3	-2.1%	---
Tax Cut Adjustments	($1,403.5)	---	---
Net Resources	$15,094.8	-0.7%	$1,121.3
School Aid Fund			
Baseline Revenue	$17,957.3	1.1%	---
Tax Cut Adjustments	($133.7)	---	---
Net Resources	$17,823.6	0.0%	$628.3
Combined			
Baseline Revenue	$34,455.6	-0.5%	---
Tax Cut Adjustments	($1,537.2)	---	---
Net Resources	$32,918.4	-0.3%	$1,749.6

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

FY 2024 Revenue Outlook

FY 2024 GF-GP revenue is forecast to increase 2.1 percent to $15,406.3 million from FY 2023. The FY 2024 GF-GP revenue estimate is $1,177.4 million above the May 2022 Consensus estimate. FY 2024 SAF revenue is forecast to increase 2.0 percent to $18,175.9 from FY 2023. The FY 2024 SAF estimate is $731.0 million above the May 2022 Consensus estimate (see Table 4).

Table 4

FY 2023-24 Administration Revenue Estimates

(millions)

	Administration January 13, 2023		Change from May 2022
	Amount	**Growth**	**Consensus**
General Fund - General Purpose			
Baseline Revenue	$16,731.4	1.4%	---
Tax Cut Adjustments	($1,325.1)	---	---
Net Resources	$15,406.3	2.1%	$1,177.4
School Aid Fund			
Baseline Revenue	$18,323.9	2.0%	---
Tax Cut Adjustments	($148.0)	---	---
Net Resources	$18,175.9	2.0%	$731.0
Combined			
Baseline Revenue	$35,055.3	1.7%	---
Tax Cut Adjustments	($1,473.1)	---	---
Net Resources	$33,582.2	2.0%	$1,908.4

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

FY 2025 Revenue Outlook

FY 2025 GF-GP revenue is forecast to increase 0.8 percent to $15,533.3 million from FY 2024. FY 2025 SAF revenue is forecast to increase 2.0 percent to $18,541.2 from FY 2024. (see Table 5).

Table 5

FY 2024-25 Administration Revenue Estimates

(millions)

	Administration January 13, 2023	
	Amount	**Growth**
General Fund - General Purpose		
Baseline Revenue	$16,856.2	0.7%
Tax Cut Adjustments	($1,322.9)	---
Net Resources	$15,533.3	0.8%
School Aid Fund		
Baseline Revenue	$18,697.2	2.0%
Tax Cut Adjustments	($156.0)	---
Net Resources	$18,541.2	2.0%
Combined		
Baseline Revenue	$35,553.4	1.4%
Tax Cut Adjustments	($1,478.9)	---
Net Resources	$34,074.5	1.5%

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

Constitutional Revenue Limit

Article IX, Section 26, of the Michigan Constitution establishes a limit on the amount of revenue State government can collect in any given fiscal year. The revenue limit for a given fiscal year is equal to 9.49 percent of the State's personal income for the calendar year prior to the year in which the fiscal year begins. For example, FY 2020 revenue is compared to CY 2018 personal income. If revenues exceed the limit by less than 1 percent, the State may deposit the excess into the Budget Stabilization Fund (BSF). If the revenues exceed the limit by more than 1 percent, the excess revenue is refunded to taxpayers.

FY 2021 revenues were $7.7 billion below the revenue limit. State revenues will also be well below the limit for FY 2022 through FY 2025. FY 2022 revenues are expected to be about $7.1 billion below the limit, FY 2023 revenues $10.4 billion below the limit, FY 2024 revenues $9.6 billion below the limit, and FY 2025 revenues $11.6 billion below the limit (See Table 6).

Table 6

Administration Revenue Limit Calculation

(millions)

	FY 2021 Actual June 2022	FY 2022 Actual Jan 2023	FY 2023 Actual Jan 2023	FY 2024 Actual Jan 2023	FY 2025 Actual Jan 2023
Revenue Subject to Limit	$38,940.0	$43,293.9	$43,457.8	$44,321.0	$45,000.5
Revenue Limit	**CY 2019**	**CY 2020**	**CY 2021**	**CY 2022**	**CY 2022**
Personal Income	$491,632	$530,809	$567,807	$568,375	$596,225
Ratio	9.49%	9.49%	9.49%	9.49%	9.49%
Revenue Limit	$46,655.9	$50,373.8	$53,884.9	$53,938.8	$56,581.8
Amount Under (Over) Limit	**$7,715.9**	**$7,079.8**	**$10,427.1**	**$9,617.8**	**$11,581.3**

Budget Stabilization Fund Calculation

The Management and Budget Act contains provisions for calculating a recommended deposit or withdrawal from the BSF. The calculation looks at personal income net of transfer payments. The net personal income figure is adjusted for inflation. The change in this figure for the calendar year determines whether a pay-in or pay-out is recommended. If the formula calls for a deposit into the BSF, the deposit is made in the next fiscal year. If the formula calls for a withdrawal, the withdrawal is made during the current fiscal year.

PA 613 of 2018 prohibits the legislature from appropriating money from the fund for a fiscal year when the annual growth rate of real personal income less transfer payments for the calendar year in which that fiscal year ends is estimated to be greater than 0% at the most recent consensus revenue estimating conference. When the annual growth rate is estimated to be less than 0% at the most recent consensus revenue estimating conference, the legislature may appropriate by law for the fiscal year ending in the current calendar year no more than 25% of the prior fiscal year ending balance in the fund as reported in the comprehensive annual financial report. If personal income is forecast to be negative for subsequent fiscal years, the Legislature then could appropriate up to 25% of the available Fund balance in the first fiscal year for each subsequent fiscal year.

If real personal income less transfer payments grows by more than 2 percent in a given calendar year, the fraction of income growth over 2 percent is multiplied by the current fiscal year's GF-GP revenue to determine the pay-in for the next fiscal year.

Real calendar year personal income is projected to be between 0 and 2 percent between 2023 and 2025. This results in no pay-ins or pay-outs from FY 2023 to FY 2025.

School Aid Fund Revenue Adjustment Factor

The School Aid Fund (SAF) revenue adjustment factor for the next fiscal year is calculated by dividing the sum of current year and subsequent year SAF revenue by the sum of current year and prior year SAF revenue. The SAF revenue totals are adjusted for any change in the rate and base of the SAF taxes. The year for which the adjustment factor is being calculated is used as the base year for any tax adjustments. For FY 2024, the SAF revenue adjustment factor is calculated to be 1.0158 (See Table 7). For FY 2025, the SAF revenue adjustment factor is calculated to be 1.0206 (See Table 8).

Table 7

Administration School Aid Revenue Adjustment Factor

For Fiscal Year 2024

	FY 2022	**FY 2023**	**FY 2024**
Baseline SAF Revenue	$17,763.7	$17,957.3	$18,323.9
Balance Sheet Adjustments	$61.5	($133.8)	($148.0)
Net SAF Estimates	$17,825.2	$17,823.5	$18,175.9
Subtotal Adjustments to FY 2024 Base	($209.5)	($14.2)	$0.0
Baseline Revenue on a FY 2024 Base	$17,615.7	$17,809.3	$18,175.9

School Aid Fund Revenue Adjustment Calculation for FY 2024

Sum of FY 2022 & FY 2023	$17,615.7	+	$17,809.3	=	$35,424.9
Sum of FY 2023 & FY 2024	$17,809.3	+	$18,175.9	=	$35,985.1

FY 2024 Revenue Adjustment Factor	**1.0158**

Note: Factor is calculated off a FY 2024 base year.

Table 8

Administration School Aid Revenue Adjustment Factor

For Fiscal Year 2025

	FY 2023		FY 2024		FY 2025
Baseline SAF Revenue	$17,957.3		$18,323.9		$18,697.2
Balance Sheet Adjustments	($133.7)		($148.0)		($156.0)
Net SAF Estimates	$17,823.6		$18,175.9		$18,541.2
Subtotal Adjustments to FY 2024 Base	($22.3)		($8.0)		$0.0
Baseline Revenue on a FY 2024 Base	$17,801.3		$18,167.9		$18,541.2
School Aid Fund Revenue Adjustment Calculation for FY 2025					
Sum of FY 2022 & FY 2023	$17,801.3	+	$18,167.9	=	$35,969.2
Sum of FY 2023 & FY 2024	$18,167.9	+	$18,541.2	=	$36,709.1
FY 2025 Revenue Adjustment Factor					**1.0206**

Note: Factor is calculated off a FY 2025 base year.

Revenue Detail

The estimated tax and revenue totals include the effects of all enacted tax changes. The revenue totals by tax are presented separately for GF-GP and for the SAF (See Tables 9 and 10). Tax totals for the income, sales, use, CIT/MBT, tobacco and casino taxes for all funds are also included (See Table 11).

Table 9

Administration General Fund General Purpose Revenue Detail

(millions)

	FY 2023		FY 2024		FY 2025	
	Amount	**Growth**	**Amount**	**Growth**	**Amount**	**Growth**
GF-GP Tax Amounts						
Income Tax	$9,181.5	-0.3%	$9,524.9	3.7%	$9,656.3	1.4%
Sales	$1,709.5	0.9%	$1,743.4	2.0%	$1,782.5	2.2%
Use	$1,183.3	-1.0%	$1,171.3	-1.0%	$1,194.4	2.0%
Cigarette	$158.3	-0.3%	$156.0	-1.5%	$154.8	-0.8%
Beer & Wine	$50.0	1.6%	$51.0	2.0%	$52.0	2.0%
Liquor Specific	$65.0	-0.3%	$65.3	0.5%	$65.7	0.6%
Insurance Co. Premium	$415.0	-1.2%	$420.0	1.2%	$425.0	1.2%
CIT/MBT	$1,355.1	-11.4%	$1,315.3	-2.9%	$1,369.5	4.1%
Telephone & Telegraph	$33.0	-5.7%	$32.0	-3.0%	$31.0	-3.1%
Oil & Gas Severance	$35.0	-17.1%	$33.0	-5.7%	$30.0	-9.1%
Essential Services Assess.	$143.0	5.6%	$152.0	6.3%	$159.0	4.6%
Penalties and Interest	$140.0	0.1%	$142.0	1.4%	$144.0	1.4%
Railroad/Car Loaning	$3.0	0.0%	$3.0	0.0%	$3.0	0.0%
Enhanc. Enforce/ACS	($150.0)	4.5%	($151.0)	0.7%	($152.0)	0.7%
Total GF-GP Taxes	$14,321.7	-1.6%	$14,658.2	2.3%	$14,915.2	1.8%
GF-GP Non-Tax Revenue						
Federal Aid	$10.0	-29.1%	$10.0	0.0%	$10.0	0.0%
From Local Agencies	$0.1	NA	$0.1	0.0%	$0.1	0.0%
From Services	$7.0	536.4%	$7.0	0.0%	$7.0	0.0%
From Licenses & Permits	$14.0	30.8%	$14.0	0.0%	$14.0	0.0%
Miscellaneous	$10.0	-88.5%	$10.0	0.0%	$10.0	0.0%
Interfund Interest	$315.0	312.3%	$285.0	-9.5%	$150.0	-47.4%
Liquor Purchase	$325.0	-0.7%	$330.0	1.5%	$335.0	1.5%
Charitable Games	$2.0	NA	$2.0	0.0%	$2.0	0.0%
Transfer From Escheats	$90.0	-35.6%	$90.0	0.0%	$90.0	0.0%
Other Non Tax	$0.0	0.0%	$0.0	0.0%	$0.0	0.0%
Total Non Tax	$773.1	17.8%	$748.1	-3.2%	$618.1	-17.4%
Total GF-GP Revenue	$15,094.8	-0.8%	$15,406.3	2.1%	$15,533.3	0.8%

Table 10

Administration School Aid Fund Revenue Detail

	FY 2023		FY 2024		FY 2025	
	Amount	**Growth**	**Amount**	**Growth**	**Amount**	**Growth**
School Aid Fund						
Income Tax	$3,862.0	-4.9%	$3,955.8	2.4%	$4,019.5	1.6%
Sales Tax	$7,972.0	1.4%	$8,100.5	1.6%	$8,263.7	2.0%
Use Tax	$868.4	1.0%	$869.2	0.1%	$884.8	1.8%
Liquor Excise Tax	$79.6	4.5%	$80.6	1.3%	$81.6	1.2%
Cigarette & Tobacco	$284.3	-0.1%	$279.1	-1.8%	$276.3	-1.0%
Marijuana Excise Tax	$74.0	0.0%	$78.0	5.4%	$82.0	5.1%
State Education Tax	$2,581.2	5.7%	$2,710.6	5.0%	$2,833.0	4.5%
Real Estate Transfer	$481.9	-11.8%	$468.8	-2.7%	$460.0	-1.9%
Industrial Facilities Tax	$42.0	1.4%	$42.5	1.2%	$43.0	1.2%
Casino (45% of 18%)	$115.0	11.3%	$117.0	1.7%	$118.0	0.9%
iGaming, Sports Betting	$250.4	-4.2%	$256.5	2.4%	$260.6	1.6%
Commercial Forest	$4.0	-7.0%	$4.0	0.0%	$4.0	0.0%
Other Spec Taxes	$23.0	10.6%	$23.0	0.0%	$23.0	0.0%
Subtotal Taxes	$16,637.8	0.0%	$16,985.6	2.1%	$17,349.5	2.1%
Lottery Transfer	$1,185.8	-0.5%	$1,190.3	0.4%	$1,191.7	0.1%
Total SAF Revenue	$17,823.6	0.0%	$18,175.9	2.0%	$18,541.2	2.0%

Table 11

Administration Major Tax Totals

	FY 2023		FY 2024		FY 2025	
	Amount	**Growth**	**Amount**	**Growth**	**Amount**	**Growth**
Major Tax Totals (Includes all Funds)						
Income Tax	$13,713.3	-1.6%	$14,150.5	3.2%	$14,345.7	1.4%
Sales Tax	$10,932.0	1.3%	$11,106.8	1.6%	$11,329.4	2.0%
Use Tax	$2,599.7	1.0%	$2,602.2	0.1%	$2,649.0	1.8%
CIT/MBT	$1,355.1	-11.4%	$1,315.3	-2.9%	$1,369.5	4.1%
Cigarette and Tobacco	$794.4	-0.2%	$782.6	-1.5%	$776.2	-0.8%
Casino Tax	$115.0	1.6%	$117.0	1.7%	$118.0	0.9%