

The Michigan Economic Outlook for 2023–2024

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Introduction

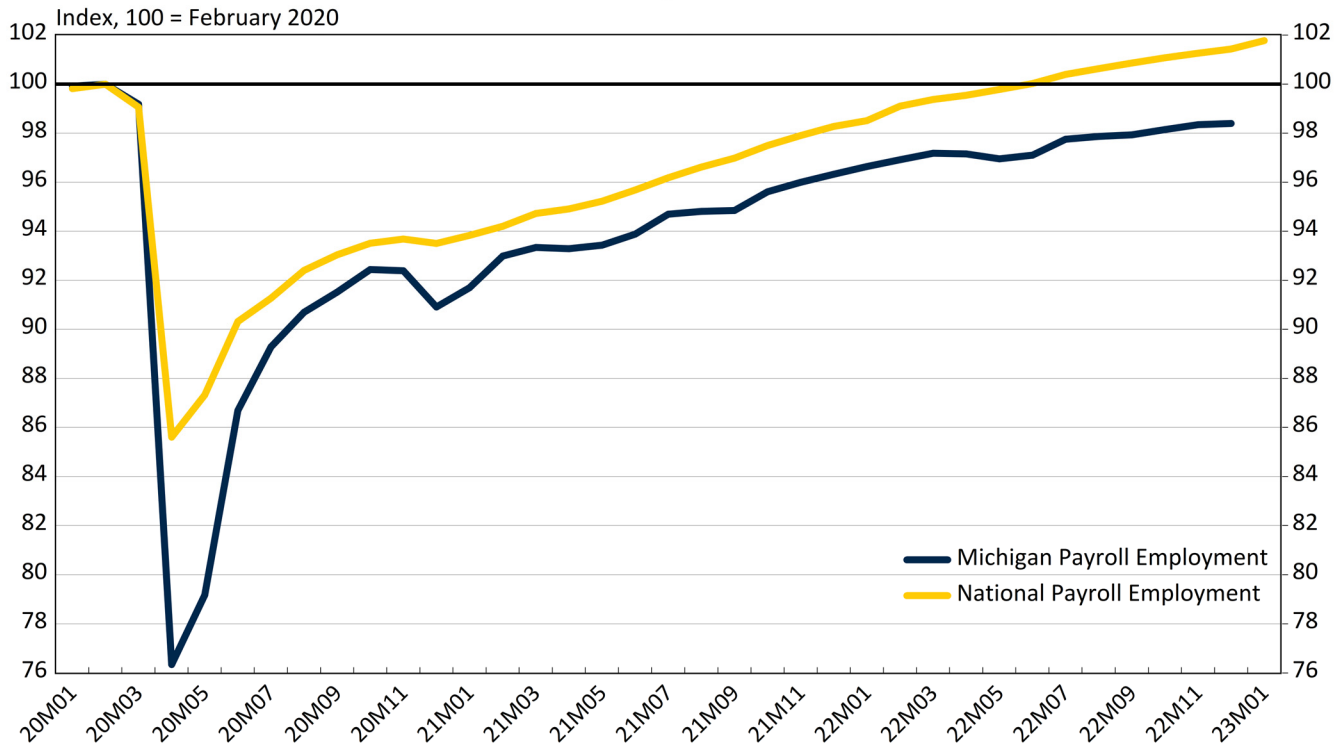
As last summer gave way to fall, Michigan’s economic recovery seemed to be cooling off as well. We were therefore pleasantly surprised to see the state add nearly 20,000 jobs in the fourth quarter of 2022. As shown in Figure 1, those gains brought Michigan’s job count to within 1.6 percent of its pre-pandemic level by year-end. The labor market’s continued strength gives us hope that, in contrast to the state’s protracted and incomplete recoveries from past recessions, Michigan will recover all of its pandemic job losses over the next two years.

Despite the recent good news, there are some signals that the state economy may not be as strong as the payroll job count would suggest. The unemployment rate has drifted up from 4.1 percent in September 2022 to 4.3 percent in December, even as the labor force participation rate has trended in the opposite direction, from 60.1 percent to 59.9 percent over the same period. In fact, the so-called “household survey,” which provides an alternative estimate of employment to the payroll job count, suggests that Michigan’s resident employment count actually declined by 16,600 jobs from September to December. These conflicting signals about the recent past complicate our assessment of the economy’s trajectory over the next two years.

Our baseline forecast remains that Michigan’s economy will slow down but not reverse course amid the mild national recession we expect later this year. We project job growth to slow from 147,000 gains in 2022 to an average of roughly 48,000 per year in 2023 and 2024. The ongoing backlogs of

demand in the automotive sector should protect Michigan's economy from the brunt of the national slowdown we foresee. Our forecast takes Michigan's job count back to its pre-pandemic level by the middle of next year.

Figure 1
Michigan's Jobs Recovery Relative to the Nation's



We do project the state's unemployment rate to tick up in the wake of the national economic slowdown we are forecasting. Michigan's jobless rate rises from 4.3 percent at the end of 2022 to 4.7 percent in mid-2024, as growth in the state's labor force outpaces job growth. Unemployment then ticks back down to 4.5 percent by the end of 2024.

Still, we regard our forecast as largely good news for a state economy that in recent decades has suffered disproportionately during national recessions. A more diverse state economy and a national policy mix that favors domestic manufacturing should propel Michigan to sustained growth over the next two years even as the external environment grows more challenging.

Inputs to the Forecast

Major elements from our U.S. forecast dated February 16, 2023, include the following:

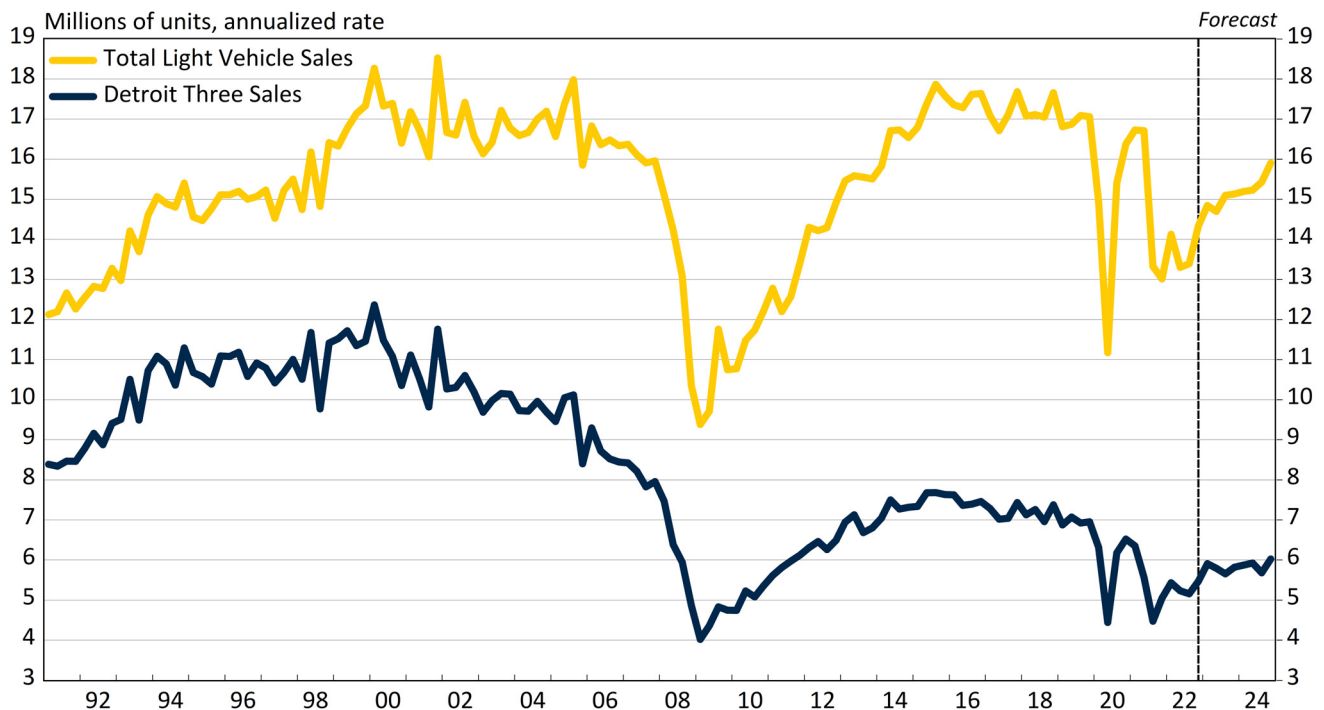
- In the final quarter of 2022, real GDP expanded at a solid 2.9 percent annualized pace. Unfortunately, domestic final sales contributed only 0.9 percentage points to that growth, which may suggest that economic momentum is slowing. We expect that the economy's momentum will fade further this year as the Fed continues to increase interest rates to tame inflation. We project headline real GDP growth to contract by a cumulative 0.1 percent during the second half of 2023, but we expect growth to return next year. The growth pace of real GDP accelerates to 2.4 percent in the second half of 2024 as monetary policy loosens and investment spending picks up.
- The Fed's target range for the federal funds rate currently stands at 4.5–4.75 percent. Our forecast assumes that the Fed will raise the target range for the federal funds rate twice more in upcoming months, to a terminal range for this cycle of 5.0–5.25 percent. We expect the Fed to hold the fed funds rate flat for the rest of 2023, as inflation gradually falls and unemployment slowly inches up. By early 2024, with inflation falling convincingly toward the Fed's 2.0 percent target and the labor market softening, we expect the Fed to start cutting rates at a measured pace.
- Housing market demand has deteriorated rapidly in response to higher mortgage rates. We expect demand to turn around, however, as mortgage rates decline over the next two years. The annual pace of single-family starts declines from nearly 1.2 million in the first quarter of 2022 to 785,000 units in the second quarter of 2023, when we project the 30-year mortgage rate to average 6.2 percent. The pace of single-family construction then recovers to 880,000 units by the end of 2024, as broad economic growth returns and the 30-year mortgage rate decreases to 5.4 percent. Although this recovery is incomplete, single-family construction remains just 9.6 percent below its pre-pandemic level by the end of our forecast, despite the 30-year mortgage rate being roughly 50 percent higher than before the pandemic.
- The labor market has remained impressively resilient considering the rapid increase in interest rates over the course of the past year. Payroll job gains averaged 401,000 per month during 2022, with signs of slowing growth in the final quarter. The January jobs report brought signs of an early spring and renewed optimism surrounding the labor market. Payroll job gains increased by 517,000 in January, but we expect growth to fade by the end of the year as tight monetary policy finally takes hold. Payroll employment declines by roughly 480,000 jobs from the fourth quarter of 2023 to the second quarter of 2024, and the unemployment rate increases from 3.8 percent to 4.2 percent in that time. As job growth picks up in the second half of 2024, the unemployment rate ticks down to 4.1 percent by the end the year.
- As the Fed's battle with inflation rages on, real disposable income continues to wane throughout the country. Real disposable income fell by 6.4 percent in 2022 as headline CPI inflation peaked at 8 percent and the absence of pandemic-era fiscal stimulus resulted in muted growth in nominal incomes. We expect that real disposable income will largely tread water during 2023 amid the national recession we project. Real disposable income growth then picks up to an annualized pace of 1.5 percent by the second half of 2024 as the economy recovers from the recession.
- The return of divided government practically guarantees one thing—legislative gridlock. With fiscal policy largely on cruise control, we anticipate that the federal deficit will increase from 4.4 percent of GDP in fiscal 2022 to an average of 5.0 percent in fiscal 2023–2024. The increase in the deficit comes primarily from larger interest payments as new borrowing is met with higher interest rates.

The Forecast of the State Economy

Detroit Three Light Vehicle Sales

Figure 2 shows our quarterly forecast for total U.S. and Detroit Three light vehicle sales. Sales totaled 13.8 million units in 2022, the lowest annual count since 2011. We expect the annualized pace of light vehicle sales to increase over our forecast, reaching 15.9 million units in the final quarter of 2024, roughly 1.2 million units below its pace in the fourth quarter of 2019. Despite an incomplete sales recovery, we expect auto manufacturers will continue to boast wide profit margins as they ramp up their investments in battery-electric vehicles and maintain their focus on high value-added light trucks. We forecast that light trucks will account for 80.7 percent of vehicle sales in the fourth quarter of 2024, up from 74.7 percent in the first quarter of 2020.

Figure 2
Total U.S. vs. Detroit Three Light Vehicle Sales



The Detroit Three's share of the market increased from 35.9 percent in 2021 to 38.6 percent in 2022 as supply constraints eased over the course of last year. We forecast that the Detroit Three's share of the market will inch up to 38.8 percent in 2023 as production volumes across the industry continue to normalize. Unfortunately, we expect their market share to decline to 38.1 percent in 2024, resuming a

trend that has been in place since 2013. Translating our forecast into unit sales, we predict that Detroit Three light vehicle sales will increase from 5.3 million units in 2022 to 5.8 million this year and 5.9 million in 2024.

The Detroit Three manufacturers enjoyed larger than normal profits in 2022 as vehicle prices rose rapidly, light trucks accounted for a record proportion of sales, and electric vehicle sales picked up. Based on last year's profits, eligible workers will receive profit-sharing checks of up to \$12,750 at GM, \$9,176 at Ford, and \$14,760 at Stellantis. Unfortunately, we expect profits to come down from these recent highs, but we believe they will remain well above their pre-pandemic levels as the Detroit Three manufacturers continue to prioritize profits over market share.

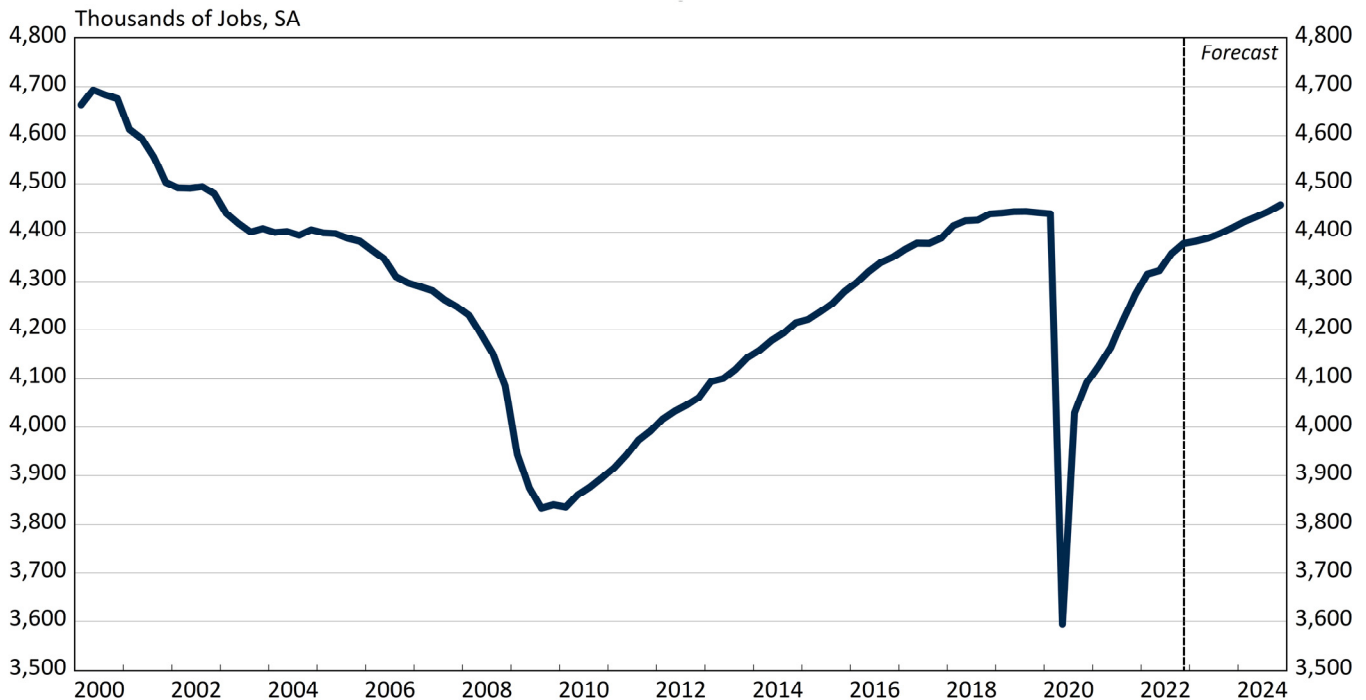
Payroll Employment

Figure 3 shows our forecast of Michigan's quarterly payroll job count. Job growth totaled 146,600 on a calendar year basis in 2022. We expect that growth will slow to 51,400 jobs this year and 45,000 jobs in 2024 as the national economy idles. Despite that deceleration, we expect Michigan's payroll job count to recover to its pre-pandemic level in mid-2024. By the end of 2024, the state's job count exceeds its pre-pandemic level by 18,100, or roughly 0.4 percent. Nonetheless, at the end of our forecast period the state remains 5.0 percent (235,700 jobs) shy of its all-time employment peak in the second quarter of 2000.

Table 1 below displays our forecast for annual job growth for Michigan's individual industries, while Figure 4 splits the state's industries into three groups: "Blue-Collar Industries," "Lower-Education Services Industries," and "Higher-Education Services Industries."¹ The figure plots the recent history and our quarterly forecast for each of these industry groups as index values, with the first quarter of 2020 normalized to a value of 100.

¹ The blue-collar industries comprise mining; construction; manufacturing; and wholesale trade, transportation, and utilities. The higher-education services industries (which generally require employees to hold a Bachelor's Degree or higher educational level) comprise information; finance; professional, scientific, and technical services; management of companies and enterprises; private education and health services; and government. The lower-education services industries (which typically do not require a college education) comprise retail trade; leisure and hospitality; administrative support services and waste management; and other services.

Figure 3
Quarterly Michigan Payroll Employment



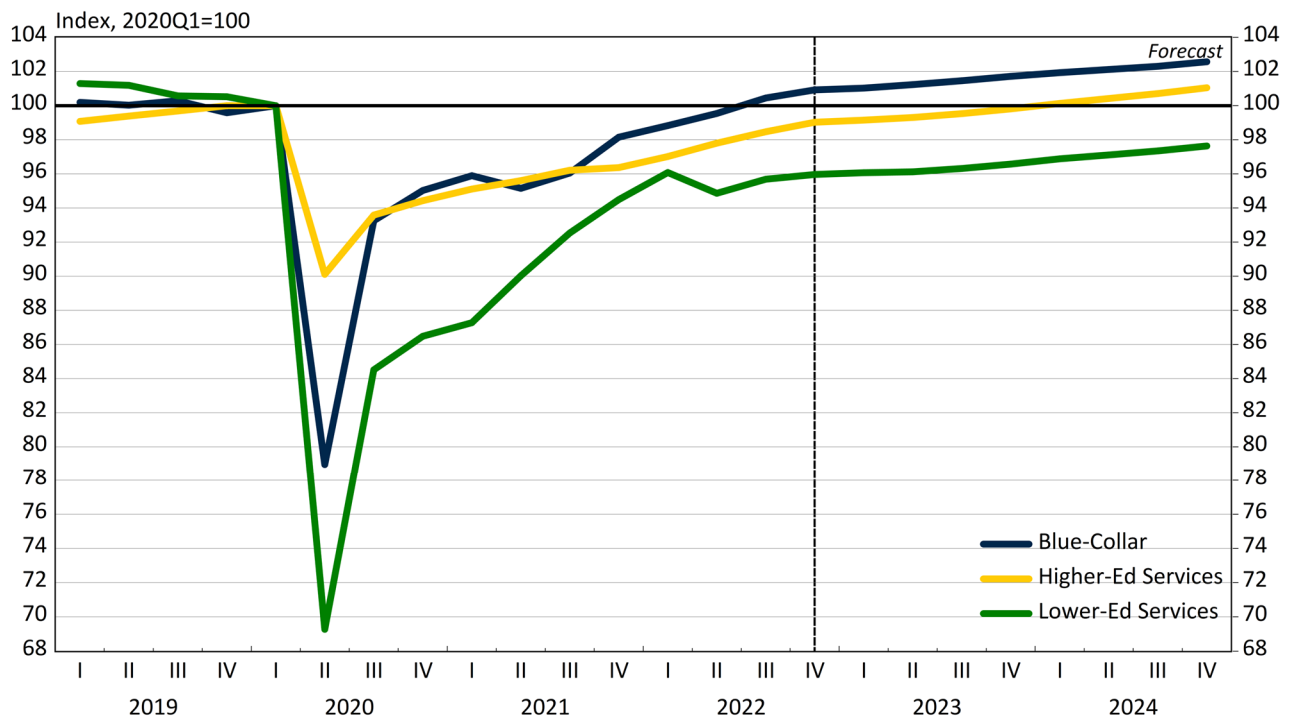
Michigan's **blue-collar industries** recovered their pandemic job losses in the third quarter of 2022 and stood 10,500 jobs higher in the fourth quarter. The construction and manufacturing sectors account for 70 percent of the blue-collar industry group's employment in Michigan. Both of those industries tend to struggle in an environment of monetary tightening.

Until recently, Michigan's construction industry had appeared to be suspended in mid-air, with the run-up in mortgage rates leading to few discernible effects in official measures of real activity. That changed dramatically in the fourth quarter of 2022, though, as statewide building permits plummeted by over 30 percent. The good news is that we believe the cyclical bottom for building permits is now behind us. The bad news is that we expect an extremely slow recovery from here. By the end of 2024, statewide building permits remain 25 percent lower than in the third quarter of 2022.

Employment in the construction industry has yet to reflect the slowdown in permitting; in fact, the state's construction industry added 2,500 jobs in the fourth quarter of last year. We do expect job losses over the course of 2023, but we are cautiously optimistic that they will be limited. Nonresidential construction projects, a remaining backlog of incomplete residential projects, and labor hoarding amid a

tight labor market should all cushion employment in the construction industry this year. We expect the industry to lose 700 jobs on a fourth-quarter-to-fourth-quarter basis in 2023 before adding back 2,300 during 2024 as the Fed takes its foot off the brakes of monetary policy and mortgage rates decline.

Figure 4
Job Growth in Michigan
Blue-Collar, Higher-Education Services, and Lower-Education Services Industries



Although the pace of domestic vehicle assemblies has recovered partially from the microchip shortage of the past two years, it is still not back to pre-pandemic levels. It is even further from making up for the gap left by two years of production shortfalls. We therefore expect employment in Michigan's transportation equipment manufacturing industry to continue growing over the next two years, despite emerging signs of strain on auto purchasers and borrowers. The state's transportation equipment manufacturing industry adds 6,100 jobs in 2023 before slowing to 1,500 job gains in 2024. Our forecast assumes that there will not be a prolonged work stoppage associated with the negotiation of new labor contracts at the Detroit Three automakers later this year.

We believe Michigan's non-automotive manufacturing sector will face a more challenging environment over the next two years. Real consumption of goods begins falling in our forecast in the second quarter of this year and declines every quarter through the middle of 2024. Although the broad

exchange value of the dollar has fallen from its recent highs, the dollar remains strong from a historical perspective over our forecast horizon. Still, Michigan's non-automotive manufacturing sector remains well short of its pre-pandemic employment level, and industrial policy is already leading to significant capital investment in domestic manufacturing. We expect non-transportation equipment manufacturing to add an average of 3,500 jobs per year over the next two years, for an average annual growth rate of roughly 0.8 percent.

Table 1
Forecast of Payroll Jobs in Michigan by Major Industry Division
(Thousands of Jobs)

	2022	Forecast Employment Change		
		'22-'23	'23-'24	'22-'24
Total Jobs	4342.9	51.4	45.0	96.4
Total Government	585.4	4.6	4.2	8.7
Total Private	3757.4	46.8	40.9	87.7
Natural resources and mining	7.6	0.2	-0.1	0.2
Construction	179.1	2.0	0.6	2.6
Manufacturing	605.5	8.9	5.8	14.7
Transportation equipment manufacturing	190.0	6.1	1.5	7.6
Other manufacturing	415.5	2.8	4.3	7.0
Trade, transportation, and utilities	799.8	-0.9	0.5	-0.3
Retail trade	455.1	-5.9	-3.1	-9.0
Transportation, Warehousing, and Utilities	173.3	1.8	2.8	4.5
Wholesale trade	171.3	3.3	0.9	4.2
Information	55.5	2.1	-0.1	2.1
Financial activities	236.7	-2.0	1.2	-0.8
Professional and business services	659.0	6.1	7.3	13.3
Professional, scientific & technical services	318.4	5.2	2.2	7.4
Management of companies & enterprises	72.1	0.7	0.9	1.6
Admin & support & waste mgmt.	268.5	0.2	4.1	4.4
Private education and health services	657.0	16.3	13.6	29.9
Leisure and hospitality	397.1	13.9	11.0	24.9
Other services	160.2	0.0	1.1	1.1
Addendum: Percent Change in Total Jobs	3.5	1.2	1.0	2.2

RSQE: February 2023

We expect Michigan's blue-collar industries as a whole to grow to about 29,300 jobs, or 2.6 percent, above their pre-pandemic employment level by the end of 2024. Our forecast of continued growth in Michigan's overall job count depends on our assessment that the state's blue-collar industries

will weather the upcoming national slowdown better than in the past. Jobs in these industries tend to generate spillover effects in the state's services industries, so if employment in Michigan's blue-collar industries falters, our overall forecast is likely to turn out to be too optimistic.

Michigan's **higher-education services industries** have not quite recovered from their pandemic job losses, but they are getting close. In total, these industries added 44,200 jobs in 2022, taking them to within 1 percent of their pre-pandemic job count by the end of the year. We expect growth in these industries to continue over the next two years but at a slower pace going forward, with 26,900 job gains this year and 22,000 in 2024.

We project the state's finance industry to lose 2,000 jobs this year as rising interest rates take their toll on the state's mortgage industry. The industry recovers 1,200 jobs next year as inflation falls towards the Federal Reserve's 2 percent target and mortgage rates dip into the mid-5 percent territory.

Employment in Michigan's government sector remains well below its pre-pandemic level, which in turn was far below its high-water mark from early in the millennium. In fact, in the second half of 2022, government's share of statewide employment was the lowest since 1957. We expect government employment to grow by an average of 4,400 jobs per year in 2023 and 2024. Our forecast would take government employment to within 3.5 percent of its pre-pandemic level by the end of next year.

Michigan's private education and health services sector has recently started to show signs of an earnest recovery, although it also remains well below its pre-pandemic employment level. The sector added 7,100 jobs last year, but the pace of growth accelerated in the fourth quarter. We expect job gains to average 15,000 per year over the next two years, bringing the private education and health services sector to just above its pre-pandemic employment level by the end of 2024. Michigan's aging population ought to drive continued recovery in this sector despite lingering concerns about nursing home care from the pandemic and ongoing labor shortages.

Total employment in Michigan's higher-education services industries climbs by 1.4 percent this year and 1.1 percent in 2024. That growth takes total employment in these industries to 20,500 jobs, or 1.0 percent, above the pre-pandemic level by the end of next year.

Michigan's **lower-education services industries** actually lost jobs from the first to the fourth quarters of 2022. The decline came from puzzling job losses in the second quarter, after which these industries recovered some of the lost ground. We expect their recovery to continue at a moderate pace over the next two years.

The major job gainer among the lower-education services industries is the leisure and hospitality sector. It added a whopping 38,100 jobs in 2022, but the calendar year average growth rate partly reflected the sector's rapid reopening in 2021. On a fourth-quarter-to-fourth-quarter basis, the sector added 15,000 jobs last year. We forecast an additional 13,900 job gains in leisure and hospitality in 2023 and another 11,000 in 2024. Our forecast takes leisure and hospitality to within 1 percent of its pre-pandemic job count by the end of next year.

Employment in Michigan's retail trade sector heads in the opposite direction over our forecast. It declined by 6,600 jobs from the first quarter of 2022 to the fourth quarter. We expect job losses in the retail sector to continue, as the shift towards e-commerce shows no sign of letting up. We project retail trade to lose 5,900 jobs in 2023 and another 3,100 in 2024.

The other two sectors we categorize in Michigan's lower-education services industries are administrative support services and waste management and other services. We expect employment in these industries largely to tread water this year in the face of the mild national recession we are forecasting. Growth returns in 2024, with 4,100 job additions in administrative support services and waste management and 1,100 in other services.

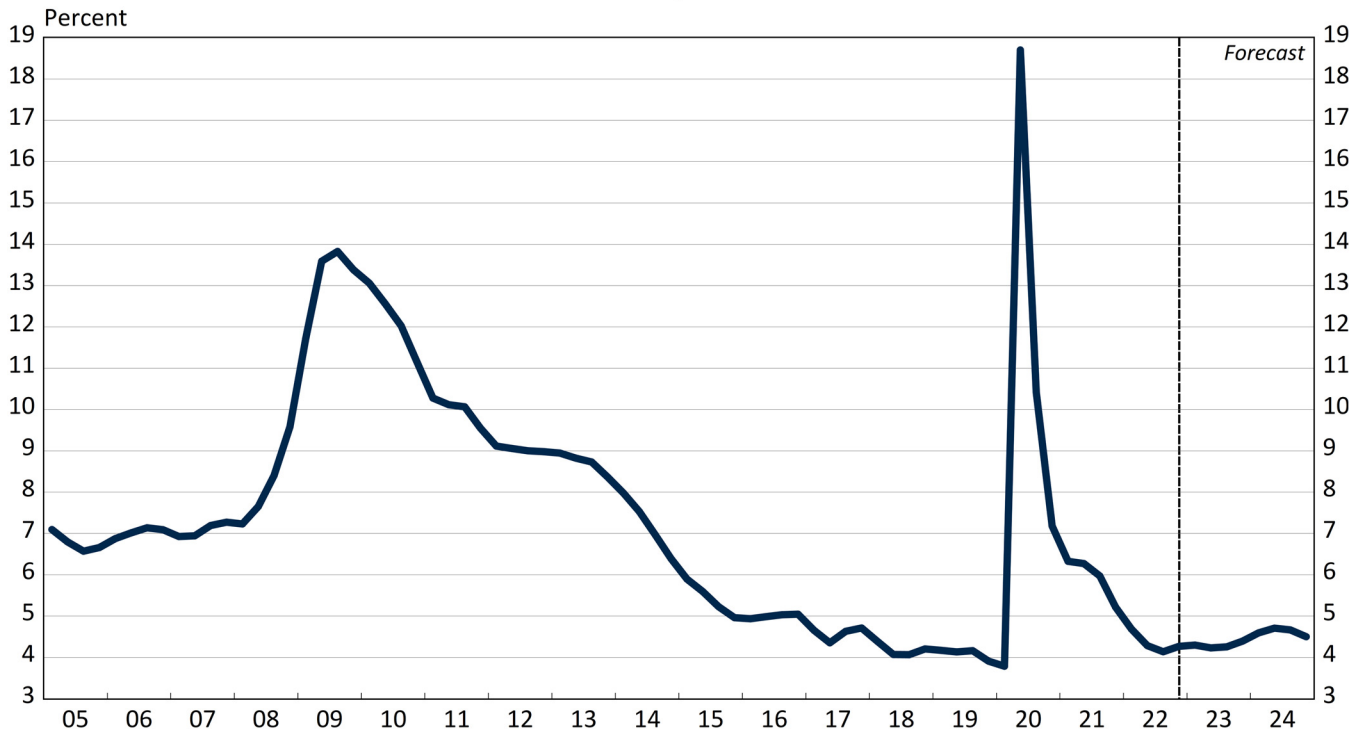
Our forecast leaves Michigan's lower-education services industries 31,700 jobs, or 2.4 percent, shy of their pre-pandemic employment level by the end of 2024. The sluggish recovery of Michigan's labor force is a major constraint on the growth rate in these industries.

Unemployment and Labor Force Participation Rates

Figure 5 shows history and our forecast for Michigan's quarterly unemployment rate. The state's jobless rate averaged 4.3 percent in the fourth quarter of 2022, down 1.0 percentage point from a year earlier. We project Michigan's unemployment rate to hold steady around 4.3 percent over most of 2023 as the national economy gradually loses steam. The state unemployment rate begins to increase in the

fourth quarter of 2023 and rises to 4.7 percent by the second quarter of 2024. With real economic activity and job growth picking up, the unemployment rate ticks down to 4.5 percent in the final quarter of the year.

Figure 5
Quarterly Michigan Unemployment Rate

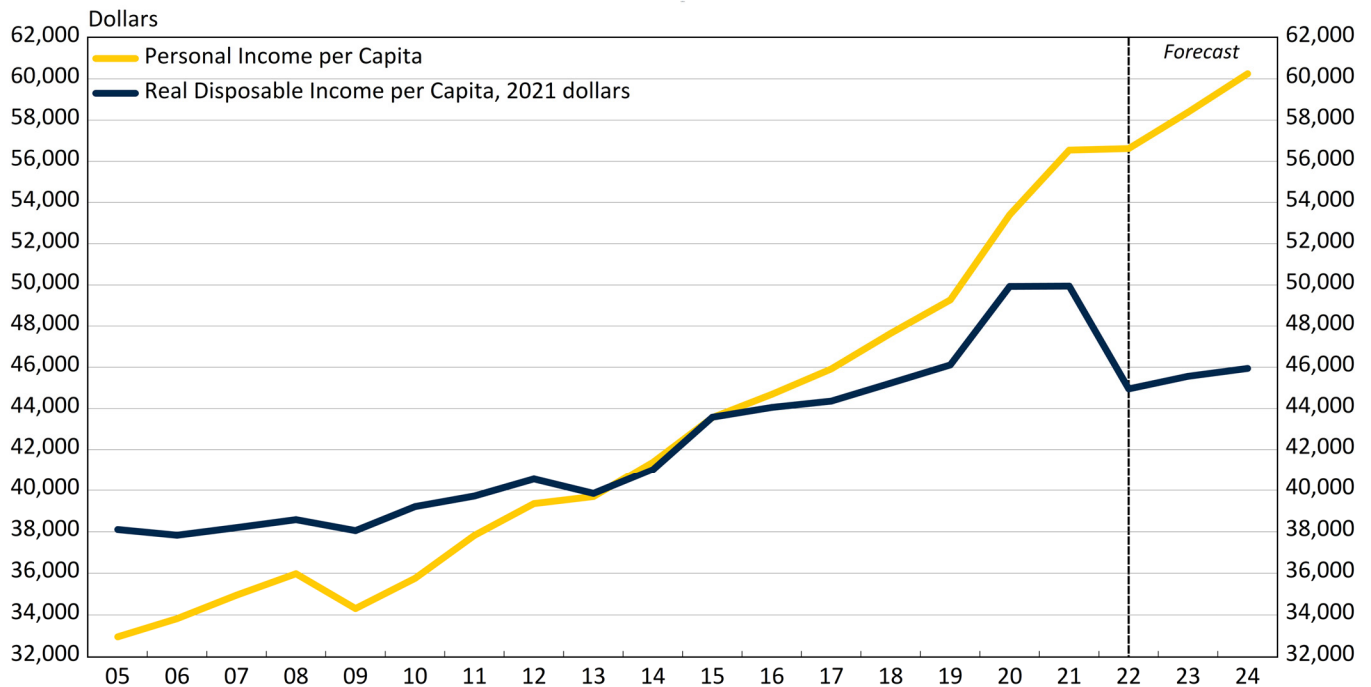


Michigan's labor force participation rate has edged up from 59 percent in the beginning of 2021 to 59.9 percent in the last quarter of 2022. We expect the state's labor force participation rate to move mostly sideways this year, ending 2023 at 60 percent. Michigan's labor force participation rate inches up to 60.2 percent by the fourth quarter of 2024 as the labor market continues its slow healing process from the pandemic. Unfortunately, the state's participation rate at the end of our forecast period remains well below its pre-pandemic level of 61.6 percent, and we expect Michigan to continue to struggle with its aging populace and slow population growth. Michigan's dwindling working age population represents one of the largest hurdles the state must overcome if it is ever going to get back to its all-time employment peak in the second quarter of 2000.

Personal Incomes and Inflation

Figure 6 shows our forecast for Michigan personal income per capita, measured in nominal dollars, and real disposable income per capita, measured in 2021 dollars. Personal income per capita in Michigan increased by 14.8 percent between 2019 and 2021, from \$49,300 to \$56,500, owing to the unprecedented federal stimulus that was injected into the economy during the COVID-19 pandemic. On a quarterly basis, personal income per capita peaked in the first quarter of 2021 and then fell in each subsequent quarter of the year as the federal stimulus waned. In 2022, however, rising labor income pushed personal income per capita back into growth territory, registering \$56,800 as of the third quarter, when the currently available income data ends. On a calendar year basis, we expect personal income per capita to average \$56,600 for 2022 when all of the data is in, essentially level with 2021. We project growth to pick up going forward—personal income per capita averages 3.2 percent growth in 2023 and 2024. That would bring Michigan’s personal income per capita to \$60,300 in 2024, 22 percent higher than in 2019.

Figure 6
Personal Income per Capita and Real Disposable Income per Capita in Michigan



Our forecast for real disposable income per capita in Michigan, also shown in Figure 6, was produced by combining our forecast of nominal personal income with our forecasts for taxes and local inflation. It provides a common way to measure the standard of living of the state's residents and helps to illustrate why many Michiganders may feel like the state has entered a recession despite continued economic growth. Indeed, the trajectory of Michigan's real disposable income per capita over the past two years paints a different picture of Michigan's financial well-being than an examination of nominal personal income provides by itself.

After skyrocketing by 8.3 percent in 2020 amid low inflation and the federal support programs, Michigan's real disposable income per capita leveled off in 2021 as inflation began to accelerate. On a quarterly basis, real disposable income per capita peaked in the first quarter of 2021 before sharply declining over the remainder of the year, just as with nominal income. That downward trend has continued in 2022—on a calendar year basis, we expect real disposable income per capita in Michigan to post a 10 percent loss when the final data is released for 2022. It is no wonder that many Michiganders have been feeling the pinch over the past year.

The good news is that our forecast calls for a return to growth in living standards over the next two years, as inflation slows and nominal income growth picks up. The bad news is that growth will remain modest as the national economy enters a soft patch and inflation takes time to decline back toward the Fed's 2 percent target. We forecast that real disposable income per capita will increase by 1.3 percent in 2023 and 0.9 percent in 2024. That growth would take real disposable income per capita to nearly \$46,000 in 2024, just a touch below 2019's average of \$46,100. Unfortunately, that means that state residents will see zero growth in living standards over a period of five years, from 2019 to 2024, despite the rise of nominal incomes during that time.

Figure 7
Annual Local Inflation

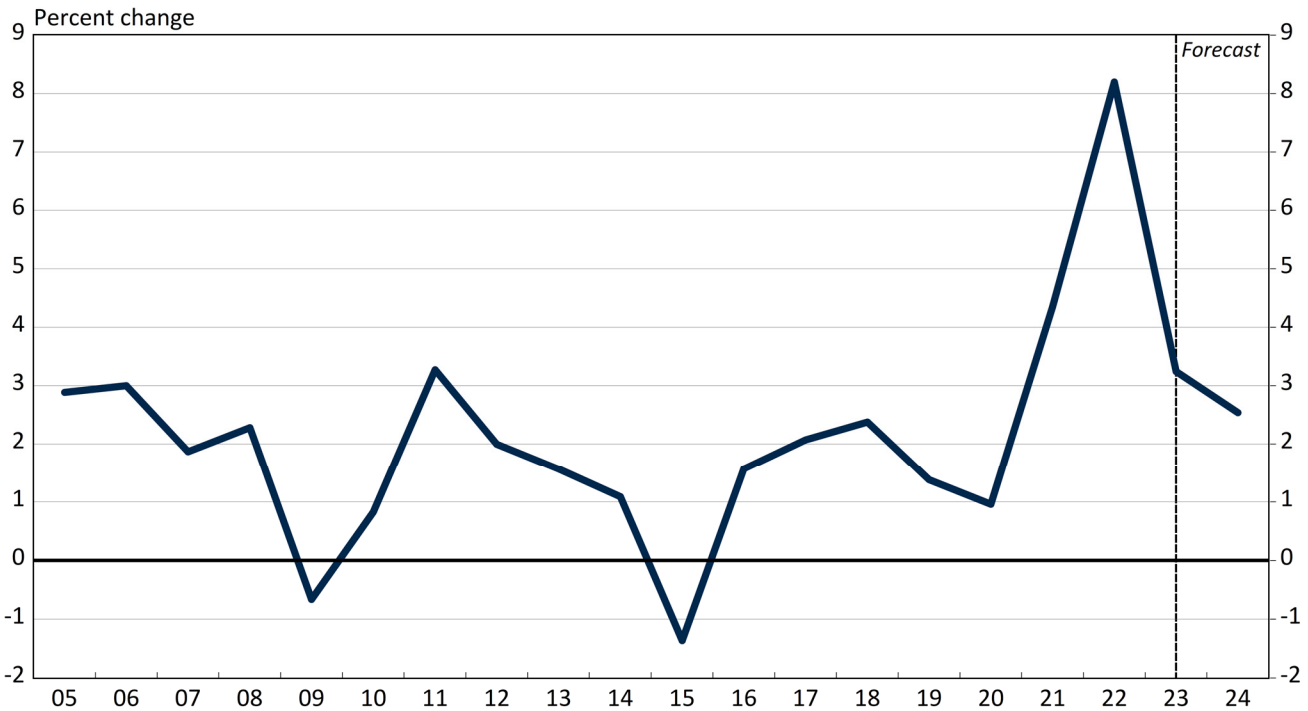
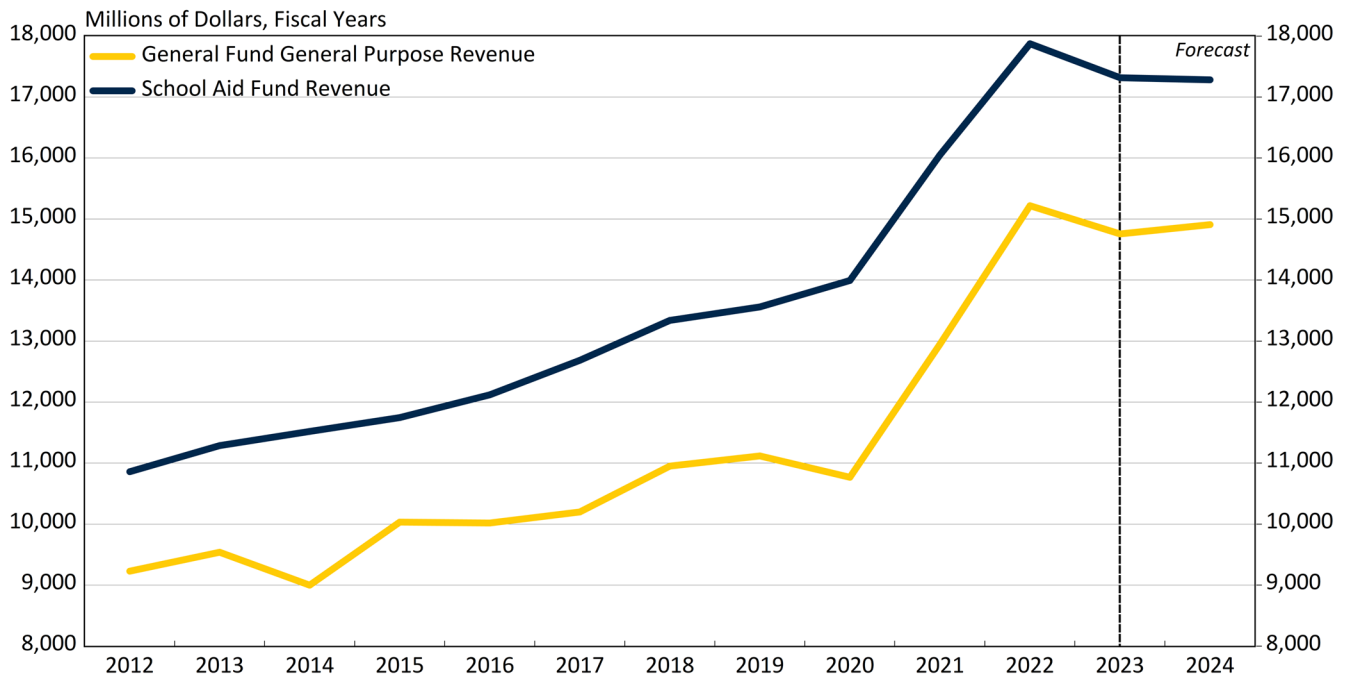


Figure 7 shows the history and our forecast of Detroit CPI inflation on a calendar year basis. After years of relative dormancy before the pandemic, local inflation rose to 4.4 percent in 2021, fueled by the combination of strong consumer demand for durable goods, continued federal stimulus, and widespread supply-chain disruptions. Russia’s invasion of Ukraine resulted in a second surge in 2022—local inflation leapt to 8.2 percent, its fastest rate since 1981, with the increase in both energy and agricultural prices that we saw last year. Thankfully, the rate of inflation has begun to subside, but not without aggressive intervention by the Fed. Although we expect the Fed to be successful in taming inflation, the process will be gradual. We forecast local inflation to average 3.2 percent in 2023 before cooling further to 2.5 percent in 2024, roughly seven-tenths of a percentage point higher than its 2016–2019 average.

The State Revenue Outlook

At January's Consensus Revenue Estimating Conference (CREC) in Lansing, state officials agreed on preliminary revenue forecasts for fiscal years 2023–25 while also presenting preliminary book closing figures for fiscal 2022. Michigan experienced explosive tax revenue growth once again in fiscal 2022, with combined General Fund General Purpose (GFGP) and School Aid Fund (SAF) revenues climbing by over \$4 billion for the second year in a row. Over half of fiscal 2022's increase came from net income tax revenue, while a third came from sales tax payments.

Figure 8
Michigan Tax Revenues, General and School Aid Funds



The January CREC projections call for combined GFGP and SAF revenues to fall by \$618 million in fiscal 2023 before gaining back \$525 million in fiscal 2024. RSQE's own revenue forecast is somewhat more conservative. We forecast a combined GFGP and SAF revenue loss of just over \$1 billion in fiscal 2023, followed by a gain of only \$120 million in fiscal 2024. Normally, a revenue forecast that calls for a loss of that magnitude, trailed by a meager rebound, would be cause for alarm. As shown in Figure 8, however, both GFGP and SAF revenues are projected to remain well above their historical trends

throughout the forecast period. Our forecast puts combined GFGP and SAF tax revenues in fiscal 2024 roughly \$7.5 billion, or 30 percent, higher than in fiscal 2019.

Before turning to a more in-depth discussion of our forecast, we would be seriously remiss if we did not mention the ongoing developments in Lansing surrounding changes to the state's tax laws. At the time of our writing, simple majorities in both the House and Senate have passed House Bill 4001, which would make substantial changes to the state's tax code. The bill has yet to be sent to Governor Whitmer's desk for her signature, though. That is because Democrats in the Senate still need a two-thirds majority vote to give the bill immediate effect and activate certain key features, which they have so far been unable to achieve. The features of the bill as currently written affecting GFGP and SAF revenue during the forecast period include:

- A phase-out of the current three-tier system for taxing retirement and pension income.
- An increase in the value of Michigan's Earned Income Tax Credit (EITC) from 6 percent to 30 percent of the federal credit.
- For fiscal years 2023–25, after the first \$1.2 billion of Corporate Income Tax (CIT) revenue is deposited into the General Fund, the next \$600 million will be redirected into various placemaking, strategic outreach, and development funds.
- The percentage of gross income tax revenue deposited into the School Aid Fund would be gradually increased over fiscal years 2024–27 to compensate for the reduction in revenue from the modifications to pension and retirement income, thereby zeroing out any potential loss to the SAF.
- If the bill is given immediate effect from a two-thirds vote, then \$800 million of CIT revenues from fiscal 2022 would be used to issue \$180 "inflation relief" checks to each Michigan tax filer.

The main reason for the delay in sending the legislation to Governor Whitmer seems to be that a vote for immediacy (and thereby, the inflation relief checks) would block a reduction in the state's personal income tax rate of approximately 0.2 percentage points. Otherwise, that cut to the personal income tax

rate is likely to be triggered due to a provision of the 2015 road funding law, which set a cap for general fund revenues in any year. If HB 4001 is not given immediate effect, when the state's Annual Comprehensive Financial Report is released in March, it is expected to show that GFGP revenue in fiscal 2022 exceeded its cap, automatically triggering a reduction in the state's personal income tax rate.

It is our view that the political stand-off over the \$180 checks could lead to substantial changes in the final package or even imperil the bill entirely. Our historical practice is to forecast state tax revenue based on current tax law. As such, and especially given the uncertainty at the time of writing, we have not yet made any adjustments to account for expected tax changes. We will update our revenue projections accordingly when changes to state tax laws are officially enacted. Still, to provide a sense of the magnitude of the potential changes, we note that both the Senate Fiscal Agency and the House Fiscal Agency estimate that if HB 4001 were enacted with immediate effect, it would reduce GFGP revenue by \$800 million in fiscal 2022, over \$1 billion in fiscal 2023, \$1.2 billion in fiscal 2024, \$1.4 billion in fiscal 2025, and \$1 billion in fiscal 2026.² The School Aid Fund is not projected to be impacted.

We now describe our forecast of state revenues in more detail. Table 2 breaks down the recent history as well as our forecast for fiscal years 2023–24. The upper portion details GFGP revenues, and the lower portion summarizes SAF revenues.

Net Personal Income Tax Revenue

- Net personal income tax revenue jumped by 17.6 percent in fiscal 2022, well above initial expectations, driven by solid growth in income tax withholding and combined quarterly, annual, and flow-through entity tax payments.
- The state's new flow-through entity tax has now been in existence for over a year, but we will need more years of hard data before we are able to say much about its overall effects on GFGP and SAF revenues. It was designed as a workaround to the cap on state and local tax deductions (or "SALT cap") on federal tax returns and was expected to be revenue neutral in the long run. Taxpayers that elect the new tax would previously have been paying quarterly estimated tax on their flow-through income. For that reason, we expect the flow-through entity tax to primarily offset reductions in quarterly income tax revenue. While quarterly payments fell in fiscal 2022, they did not drop as much as observers had projected, which is one reason why net personal income tax revenue came in above expectations.

² The HFA and SFA analyses can be accessed from the House Bill 4001 (2023) Michigan Legislature webpage at: <http://legislature.mi.gov/doc.aspx?2023-HB-4001>.

- As with many of the state's tax revenue sources, we expect net personal income tax revenue to retract in fiscal 2023 after running above trend the previous two fiscal years. Net personal income tax revenue declines by 2.6 percent amid drops in annual, quarterly, and flow-through entity tax payments. Pushing in the other direction, we project withholding to rise 3.5 percent in fiscal 2023 with the ongoing jobs recovery. Net personal income tax revenue rebounds with modest growth of 2.2 percent in fiscal 2024 as withholding and flow-through tax payments pick up.

Consumption Tax Revenue

- GFGP consumption tax revenue in Michigan is driven by distributions from the sales and use taxes, with smaller contributions from excise taxes on cigarettes and alcohol.
- Consumer demand for taxable goods continued to be remarkably robust in fiscal 2022. Consumers are gradually shifting their spending back to services, but the process has been slower than initially expected. Combined with inflationary pressures in goods markets, not to mention at the pumps, the slow rotation back to services resulted in sales tax revenue that continued to run at elevated levels in fiscal 2022.
- Gross sales tax revenue expanded by 14.6 percent in fiscal 2022. Gross use tax revenue, which saw explosive growth of 43.7 percent in fiscal 2021, eased back by 1.9 percent in fiscal 2022. We expect both gross sales and gross use tax revenues to draw back during the next two fiscal years, though not all the way to their pre-pandemic trends.
- We forecast combined gross sales and use tax revenue to decline by 2.5 percent in fiscal 2023 and another 2.0 percent in fiscal 2024 as consumers transition back to services and the overall economic environment softens. Even so, gross sales and use tax revenue in fiscal 2024 is projected to total 27.0 percent higher than in fiscal 2019. We expect gross sales and use tax revenue to remain above its pre-pandemic trend for the foreseeable future.
- Combining the General Fund's share of gross sales and use tax revenue with the excise taxes on cigarettes and alcohol, GFGP consumption tax revenue rose by 4.2 percent in fiscal 2022. As spending on taxable goods eases and inflation begins to subside, we project GFGP consumption tax revenue to contract by 5.1 percent in fiscal 2023 and another 3.2 percent in fiscal 2024.

Business Tax Revenue

- Business tax revenue comes primarily from the state's corporate income tax (CIT), insurance company premiums, and oil and gas severance tax payments. Certain businesses continue to pay taxes and claim credits under the previously used Michigan Business Tax (MBT) instead of the CIT. Variability in the timing of when MBT refunds are claimed can lead to swings in the state's overall business tax revenue. All business tax revenue accrues to the General Fund.
- Business tax revenue jumped by 25.7 percent in fiscal 2022, most of which came from a sharp rise in CIT payments. In fact, though, nearly all components of business tax revenue saw improvements in fiscal 2022—MBT refunds increased only slightly, while insurance company premiums and oil and gas severance tax payments saw large relative gains.
- As with personal income and consumption tax revenues, total business tax revenue is projected to fall in fiscal 2023 as economic growth softens. We expect a decline of 15.4 percent in fiscal 2023 followed by a small rebound of 1.6 percent in fiscal 2024, bringing total business tax revenue back in line with its pre-pandemic trend.

Total General Fund Revenue

- In fiscal 2022, exceptionally strong collections from the personal income tax, the sales tax, and the corporate income tax combined for a total GFGP revenue gain of nearly \$2.3 billion, or 17.5 percent, in fiscal 2022.
- We forecast most of the GFGP's revenue sources to decline in fiscal 2023, resulting in an overall loss of \$462 million, or 3 percent, despite continued growth in personal income tax withholding. GFGP revenue growth begins to pick up again by 1.0 percent in fiscal 2024. That growth trajectory leaves total GFGP revenue in fiscal 2024 nearly \$3.8 billion higher than the fiscal 2019 level, still well above the pre-pandemic trajectory.

Total School Aid Fund Revenue

- Almost half of total SAF revenue comes from sales and use tax collections, while one-fifth derives from the personal income tax, and about one-seventh comes from the state education property tax. Other taxes, such as the real estate transfer tax, liquor tax, casino tax, and tobacco tax, as well as lottery transfers, all contribute smaller amounts.
- In fiscal 2022, total SAF revenue grew by over \$1.8 billion, or 11.4 percent, with over half of that coming from sales tax growth and a third coming from contributions from the personal income tax.
- The housing market got off to a blistering start in fiscal 2022 but has since cooled significantly due to rising mortgage rates. Still, state education property tax (SEP) contributions to the SAF grew by 7.8 percent in fiscal 2022, while real estate transfer tax revenue expanded by 11.5 percent.
- For homeowners in Michigan, the annual growth of a property's taxable value is limited to the lesser of inflation or 5 percent for property that is not sold or transferred. Rising inflation, therefore, means that the state is likely to see continued gains in state education property tax (SEP) revenue, barring a severe crash in house prices.
- We expect that SEP revenue growth will decelerate to 3.3 percent in fiscal 2023 and 2.4 percent in fiscal 2024 as the pace of inflation cools. Elevated mortgage rates and cooling home sales, however, lead real estate transfer tax revenue to decline by 29.9 percent in fiscal 2023 and another 12.0 percent in fiscal 2024.
- With most of the major tax categories retreating in fiscal 2023, we expect total SAF revenue to contract by 3.1 percent this fiscal year. SAF growth stays mostly flat in fiscal 2024 as income tax revenue picks up, but sales tax revenue continues to contract. Even so, total SAF revenue is forecast to finish fiscal 2024 over \$3.7 billion higher than in fiscal 2019.

Table 2
State Revenues by Fiscal Year
(Millions of dollars, except as noted)

	Actual		RSQE Forecast	
	2021	2022	2023	2024
<u>General Fund General Purpose</u>				
Personal income tax	7,723	9,212	9,093	9,330
(% change)	(12.4)	(19.3)	(-1.3)	(2.6)
Consumption taxes	3,049	3,176	3,016	2,918
(% change)	(29.1)	(4.2)	(-5.1)	(-3.2)
Sales	1,498	1,705	1,633	1,635
Use	1,244	1,192	1,104	995
Other consumption	307	279	278	288
Business taxes	1,585	1,993	1,685	1,712
(% change)	(55.3)	(25.7)	(-15.4)	(1.6)
MBT/SBT/Corporate income	1,210	1,531	1,233	1,255
Other business	376	462	452	456
Other GFGP taxes	164	182	170	180
GFGP tax revenue	12,521	14,563	13,964	14,140
(% change)	(20.9)	(16.3)	(-4.1)	(1.3)
Nontax revenue	429	656	793	770
GFGP revenue	12,951	15,219	14,757	14,910
(% change)	(20.3)	(17.5)	(-3.0)	(1.0)
<u>School Aid Fund</u>				
SAF taxes	14,632	16,628	16,127	16,097
(% change)	(14.2)	(13.6)	(-3.0)	(-0.2)
Lottery transfer	1,420	1,248	1,190	1,186
(% change)	(20.3)	(-12.1)	(-4.7)	(-0.3)
Earmarked state SAF revenue	16,052	17,876	17,317	17,284
(% change)	(14.7)	(11.4)	(-3.1)	(-0.2)
<u>Addendum</u>				
Combined GFGP and SAF revenue	29,003	33,096	32,074	32,193
(% change)	(17.1)	(14.1)	(-3.1)	(0.4)
Gross sales and use taxes	12,031	13,358	13,026	12,761
(% change)	(18.7)	(11.0)	(-2.5)	(-2.0)

RSQE: February 2023