

OHIO LEGISLATIVE SERVICE COMMISSION

LEGISLATIVE BUDGET OFFICE

February 7, 2023

BASELINE FORECASTS OF GRF REVENUES & MEDICAID EXPENDITURES

FY 2024-FY 2025 Biennial Budget

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ECONOMIC CONDITIONS AND OUTLOOK

State of the Economy

Surging prices and wages in the U.S. led the Federal Reserve, the nation's central bank, to raise short-term interest rates starting last March. This ongoing monetary tightening is aimed at restraining aggregate demand and bringing inflation under control. It appears to be having the desired effect but has further to run and may lead to a more widespread economic downturn this year.

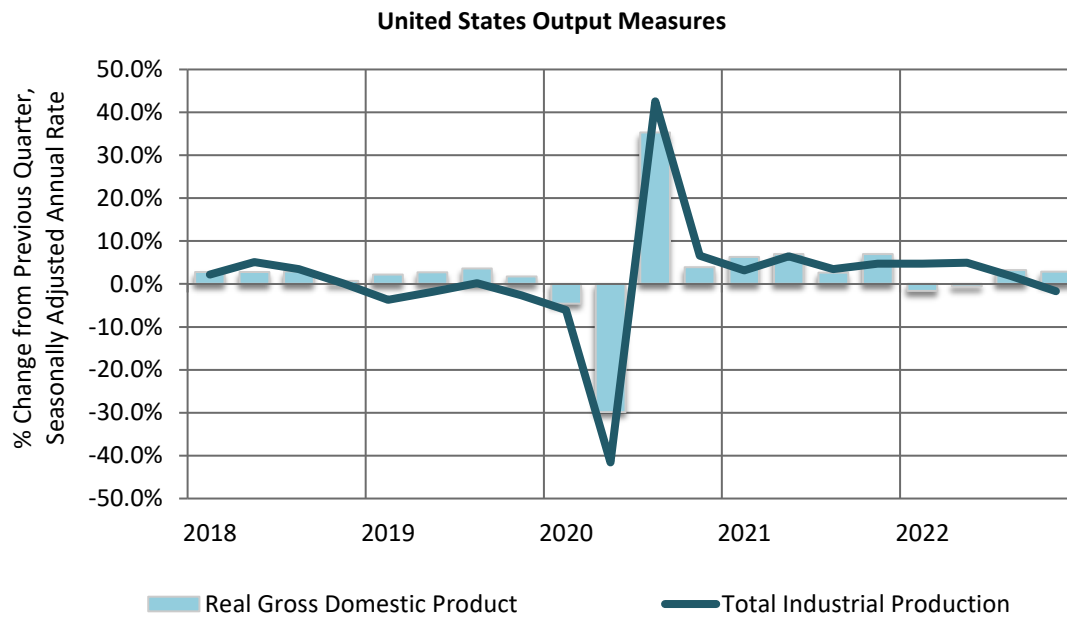
Output growth slowed in 2022, and industrial production nationwide declined in last year's fourth quarter. Employers collectively continued to add to payrolls through the end of 2022, though growth of total employment slowed and some large employers recently have announced layoffs. In January, however, U.S. total nonfarm payroll employment increased 517,000, the largest month-to-month change since last July, and the nationwide unemployment rate fell to 3.4%, lowest since 1969. Economic recovery from the exceptionally sharp, brief 2020 recession is largely complete in the aggregate though not for all industries or regions. The broadest measure of economic activity, national inflation-adjusted gross domestic product (real GDP), was at a new all-time peak at the end of last year.

Contributors to the elevated inflation in this country and elsewhere are numerous, including pandemic disruptions of supply chains; pandemic-related ongoing labor shortages; increased government deficits to fund fiscal stimulus, including transfer payments designed to combat adverse pandemic effects on people's well-being; the very low interest rates set by the central bank in most of 2020, all of 2021, and into 2022, also to support recovery; and Russia's war on Ukraine.

Economic activity in Ohio, as elsewhere, will be constrained by the monetary tightening and the waning of fiscal stimulus enacted in 2020 and 2021. As discussed more fully below, most but not all measures of economic activity in the state show Ohio trailing the nation as a whole in the recovery and expansion following the 2020 recession.

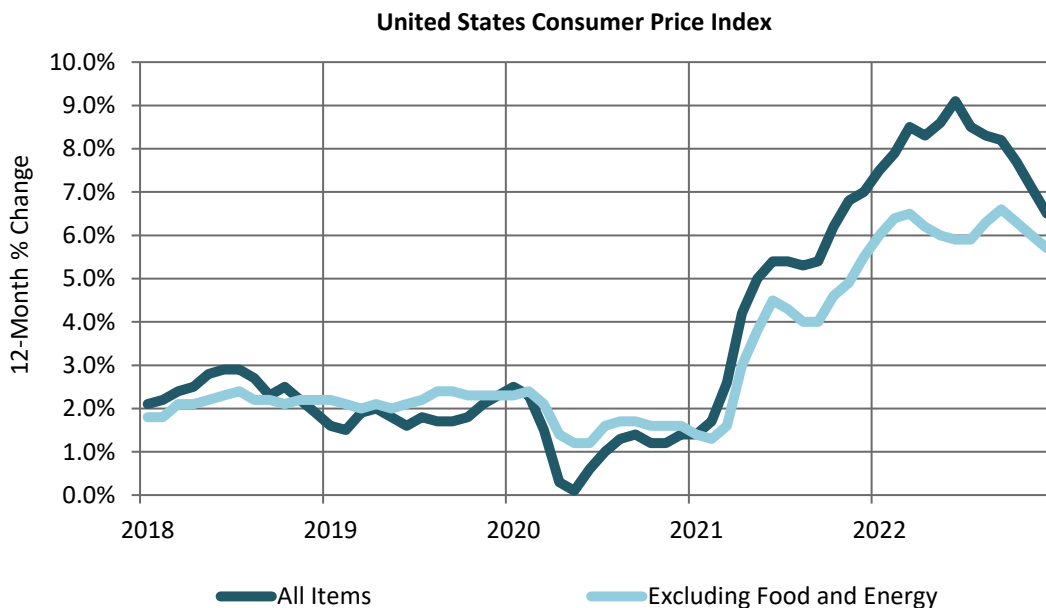
The National Economy

The chart below shows the huge swings in real GDP and industrial production during the past five years. Both output measures plunged in the 2020 second quarter as the COVID-19 pandemic and policy responses to it shut down segments of the economy, then surged in the next quarter as shuttered economic sectors reopened. More recently, real GDP grew more slowly quarter-by-quarter through 2021, contracted in the first two quarters of 2022, then turned higher in last year's third and fourth quarters. Industrial production fell in the 2022 fourth quarter, as manufacturing production was reduced in numerous industries.

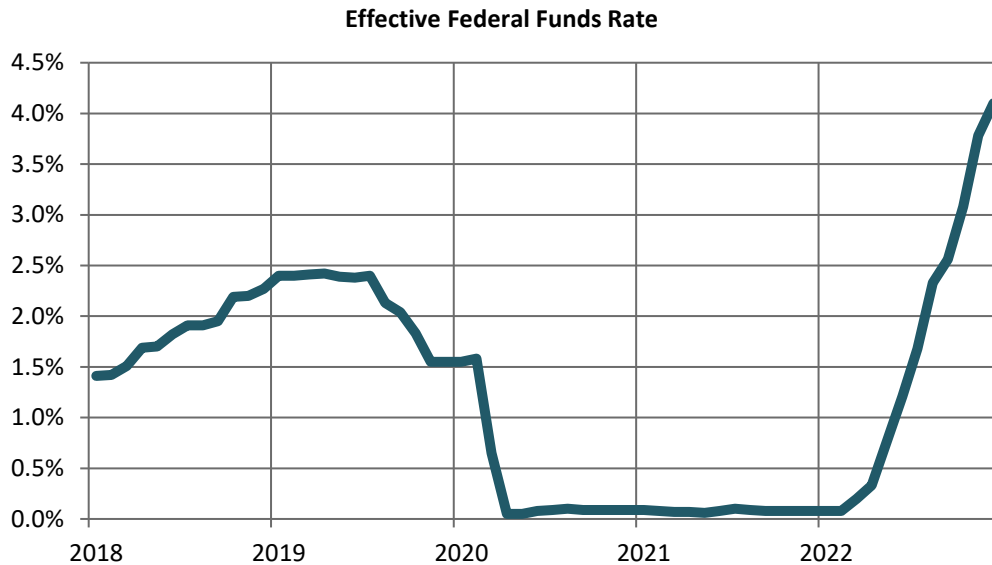


Real consumer spending grew more slowly in 2022, and declined in the last two months of the year, as support from federal transfer programs waned. Rising residential mortgage interest rates in 2022, following sharp home price increases in 2021, made home purchases less affordable, leading to falling housing sales and lower residential fixed investment. Nonresidential fixed investment, in total, grew in 2022, but business investment in structures fell for the third straight year, and growth of equipment buying slowed.

Inflation measured by the consumer price index (CPI) is shown in the following chart, for all items and for consumer prices other than food and energy. The chart shows percent changes in the indexes from a year earlier. Inflation increased in 2021 and reached a peak for all items in June 2022 when the index was 9.1% higher than a year earlier. In last year's second half, food prices rose more slowly and energy prices fell. Prices for other goods also declined in the 2022 second half, but prices for other services continued to rise rapidly.



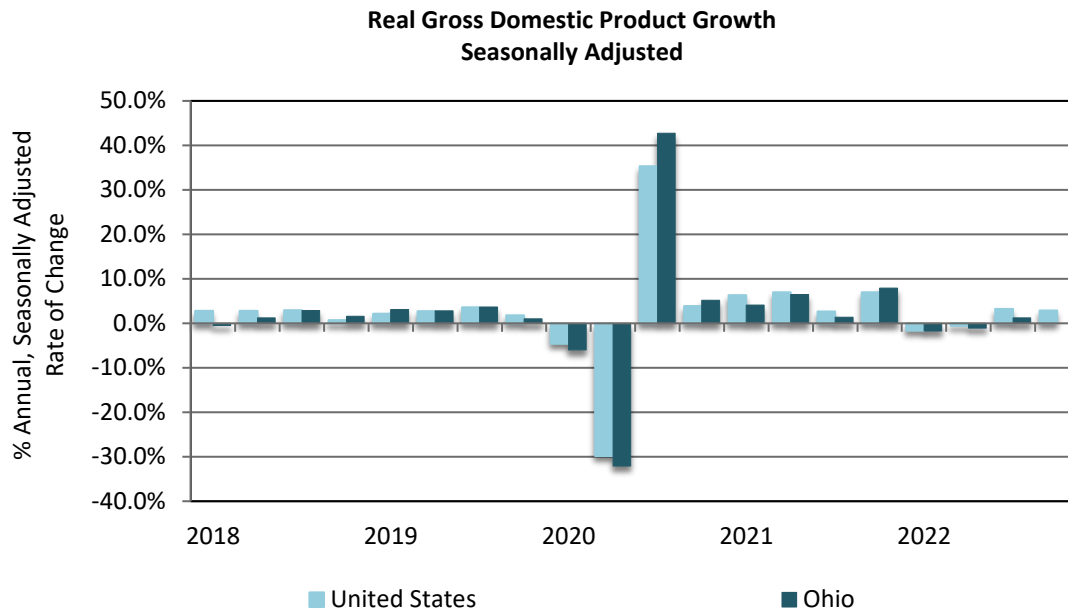
The Federal Reserve sharply increased its target short-term interest rate last year, as shown in the following chart. It also halted a program of buying U.S. Treasury and agency securities, to hold down longer-term interest rates, and began allowing its securities holdings to decline as they matured. The central bank's policy-setting Federal Open Market Committee met January 31-February 1 and raised its interest rate target by one-quarter percentage point, to a range of 4.5% to 4.75%. At that time, central bank policy makers expected further increases in their interest rate target in the future.



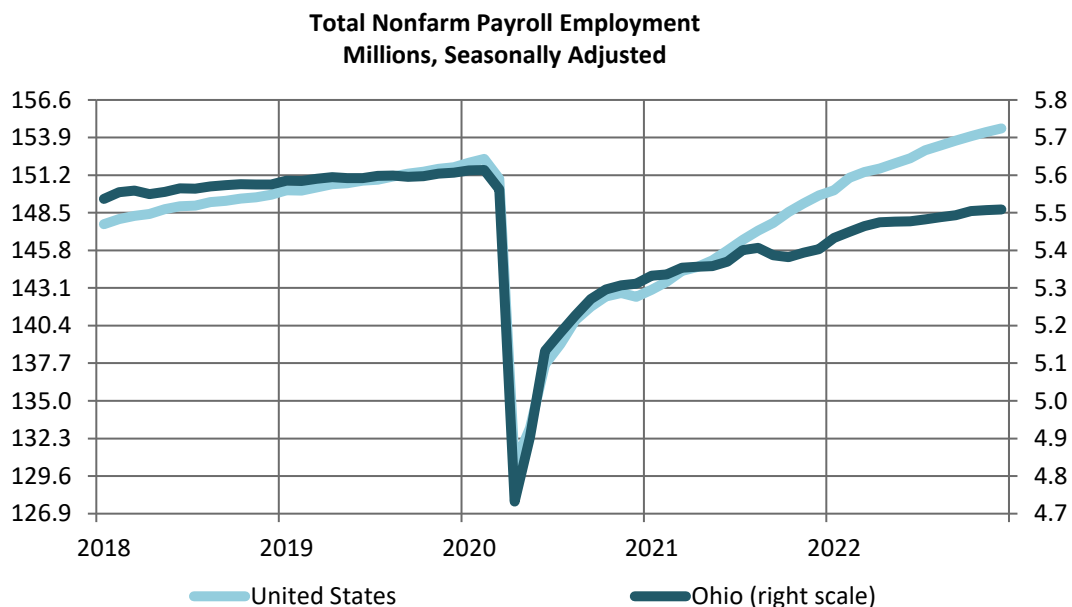
The Ohio Economy

The recovery of Ohio's economy from the pandemic downturn in 2020 has been slightly ahead of that of the nation by the broadest measure, real GDP. From the low point in the 2020 second quarter to the 2022 third quarter, real GDP in the state rose 15.7%, compared with a 15.4% increase in real GDP nationwide. This followed a sharper downturn in the 2020 recession in the state (-10.6%) than nationwide (-9.6%). In the previous expansion period of about ten years, Ohio's economy grew more slowly (21.7%) than the national economy (26.7%).

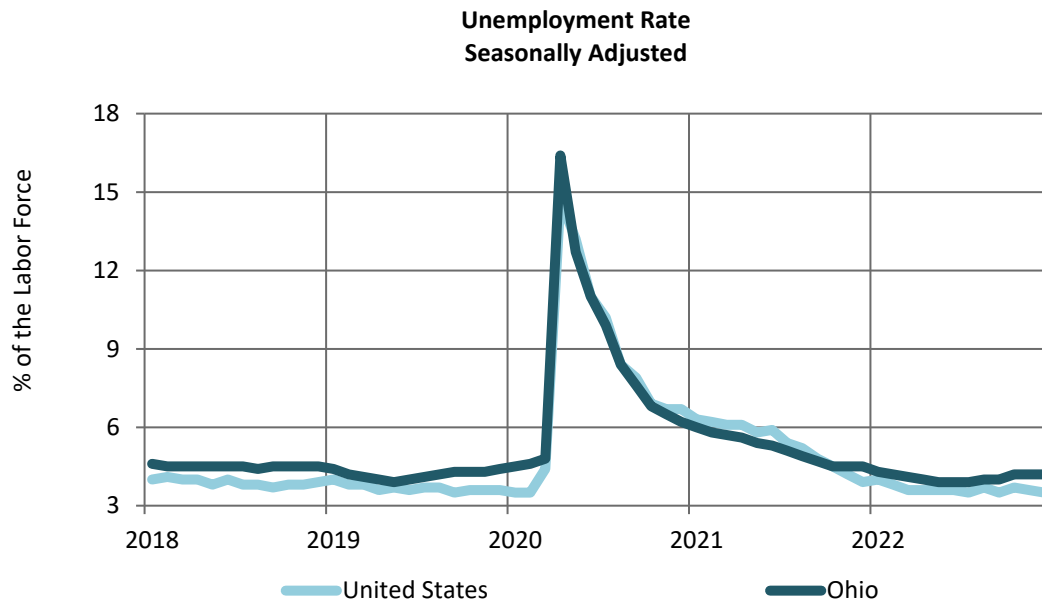
Other measures of economic activity in Ohio and the nation generally show slower growth in the state during the recovery period, as discussed below.



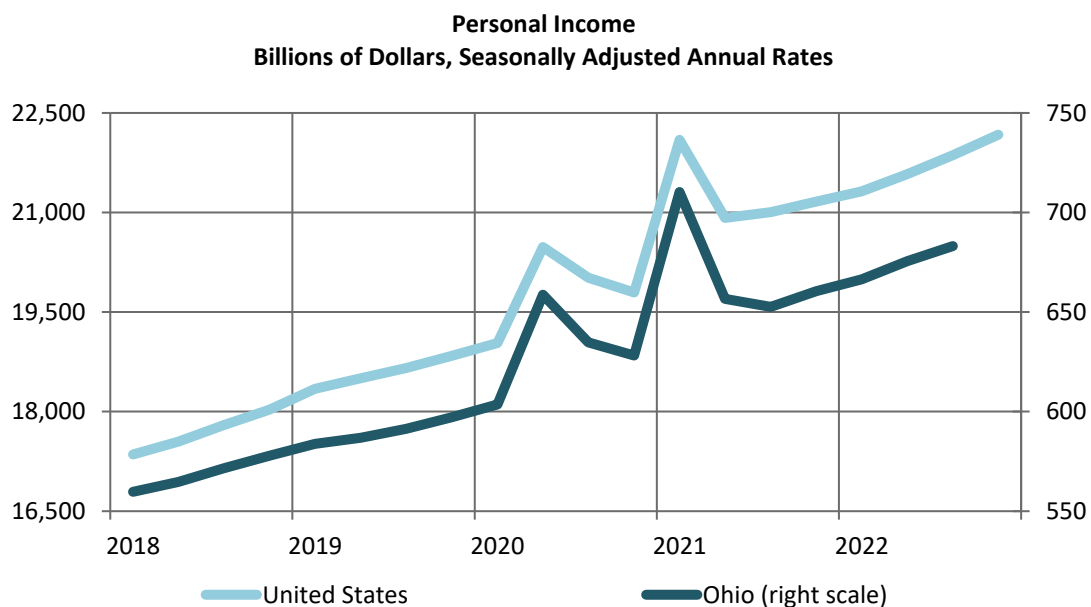
Job growth in Ohio has lagged job growth nationwide. Employment rose in Ohio following the pandemic downturn in 2020, though not as rapidly as nationwide. From the April 2020 recession trough through December 2022, total statewide nonfarm payroll employment rose 16.4%, compared with a 18.5% increase nationwide. Ohio employment as of December was 105,200 (1.9%) below the prerecession peak in February 2020 and 127,100 (2.3%) lower than the all-time peak in 2000. This contrasts with the comparable total nationwide, which rose to a new all-time high in January 2023.



Ohio's unemployment rate has been higher than the national unemployment rate since November 2021. Ohio's unemployment rate in December was 4.2%, compared with the national unemployment rate of 3.5% in that month and 3.4% in January 2023. The Ohio and national unemployment rates from 2018 through 2022 are shown in the chart below.



Personal income rose sharply in 2020 and 2021 as a result of federal transfer payments enacted in response to the pandemic. Over the full period shown in the chart, Ohio total personal income rose 23.1%, about a 4.5% annual rate. Total personal income nationwide rose 27.5%, a 5.2% annual rate, through last year's third quarter and rose further, at a 5.8% annual rate, in the fourth quarter.



Economic Forecasts

The following are forecasts of key indicators of the economic environment that will determine state revenues during the next biennium. Some of the indicator forecasts were inputs to LBO models used to make state revenue forecasts. Both these economic indicator forecasts and LBO's forecasts for state revenues are inherently subject to uncertainty. The economic indicator projections shown below are from baseline forecasts released in December 2022 by IHS Markit, a unit of S&P Global, an economic forecasting firm used by LBO.

The first line in each table contains quarter-by-quarter projected changes in the indicator at seasonally adjusted annual rates. The second line contains year-over-year projected changes in the indicator averaged over the four quarters of the fiscal year. The unemployment rate tables are IHS Markit's unemployment rate projections for the quarters indicated (first line) and the average of the rates in the quarters of each fiscal year (second line).

U.S. Gross Domestic Product

IHS Markit anticipated a mild recession in the first two quarters of calendar year (CY) 2023, followed by a slow expansion. U.S. real GDP was projected to increase about 1.5% annually on average in the next biennium, as shown below.

U.S. Real GDP Growth												
	2023				2024				2025			
Forecast	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	----- Percent change at annual rate -----											
Quarterly	-1.2	-1.0	1.5	2.0	2.1	2.2	2.1	2.1	1.9	1.9	1.9	1.9
Fiscal Year	0.8				0.8				2.1			

Ohio Gross Domestic Product

The predicted U.S. recession is expected to slow economic activity in Ohio. Real GDP in the state is projected to increase at about a 1.2% annual rate on average in the next biennium, somewhat slower than the nation's growth rate.

Ohio Real GDP Growth												
	2023				2024				2025			
Forecast	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	----- Percent change at annual rate -----											
Quarterly	-1.3	-1.2	0.9	1.3	2.1	2.0	2.0	1.9	1.3	1.6	1.9	1.7
Fiscal Year	-0.2				0.5				1.8			

U.S. Inflation

Inflation, as measured by the rate of increase in the CPI for all urban consumers, is predicted to slow from recent elevated levels and to average around 2.5% annually during the next biennium.

U.S. Consumer Price Index Inflation												
	2023				2024				2025			
Forecast	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	----- Percent change at annual rate -----											
Quarterly	3.9	2.1	2.8	3.0	2.1	1.4	2.4	2.6	2.1	2.1	1.9	2.1
Fiscal Year	6.4				2.7				2.2			

U.S. Personal Income

Nationwide personal income growth was projected to increase following the mild recession predicted for the first half of this calendar year and to grow about 4.5% on average annually during the upcoming biennium.

U.S. Personal Income Growth												
	2023				2024				2025			
Forecast	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	----- Percent change at annual rate -----											
Quarterly	3.9	2.7	4.1	4.3	5.4	4.8	4.7	4.7	5.2	4.7	4.5	4.4
Fiscal Year	4.8				4.2				4.8			

Ohio Personal Income

Income to persons who reside in Ohio was forecast to grow 4.9% during FY 2023. In the next biennium, personal income grows at a 4.5% annual rate on average.

Ohio Personal Income Growth												
	2023				2024				2025			
Forecast	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	----- Percent change at annual rate -----											
Quarterly	4.3	2.8	3.7	4.0	5.8	4.8	4.6	4.6	5.2	4.4	4.3	4.1
Fiscal Year	4.9				4.2				4.8			

U.S. Unemployment Rate

In IHS Markit's December baseline forecast, the national unemployment rate rises during this calendar year as a result of the expected recession in the year's first half, then declines during the next two years. The nationwide unemployment rate was forecast to average around 5.0% during the upcoming biennium.

U.S. Unemployment Rate												
	2023				2024				2025			
Forecast	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
----- Percent of the labor force -----												
Quarterly	3.8	4.4	5.0	5.3	5.3	5.1	4.9	4.8	4.7	4.7	4.6	4.5
Fiscal Year	3.9				5.2				4.8			

Ohio Unemployment Rate

Ohio's unemployment rate was projected to rise this calendar year as a result of the predicted recession, then to decline next year. Statewide unemployment is forecast to average 5.7% of the labor force in the upcoming biennium.

Ohio Unemployment Rate												
	2023				2024				2025			
Forecast	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
----- Percent of the labor force -----												
Quarterly	4.4	5.1	5.7	6.1	6.1	5.9	5.7	5.5	5.4	5.3	5.3	5.2
Fiscal Year	4.4				5.9				5.5			

REVENUE FORECASTS

Summary

The LBO baseline forecasts for FY 2024 and FY 2025 assume the current statutory tax structure, including tax changes enacted by the 134th General Assembly. It thereby includes the changes to the personal income tax (PIT) enacted in H.B. 110 of the 134th General Assembly, including a reduction in the top marginal tax rate on nonbusiness income from 4.797% to 3.99%, along with consolidation of the top two marginal tax brackets, a 3% reduction in other nonbusiness tax rates, and an increase in the income threshold below which no tax is owed from \$22,150 to \$25,000. LBO economists also accounted for a sales tax exemption for employment services. In addition, under H.B. 515, income from the sale of a business was reclassified as business income rather than nonbusiness income, which is expected to result in notable revenue losses in FY 2023 and FY 2024 due to the lower tax rate (3%) on business income. Significant income tax changes were enacted in S.B. 225 and S.B. 246, as well. Other tax changes having smaller revenue effects were also incorporated into the forecast.¹

H.B. 110 included an uncodified provision that temporarily increased the share of GRF tax revenue allocated to the Public Library Fund (PLF) from its statutory level of 1.66% of such revenue to 1.7% for the current biennium. The forecast assumes that the 1.66% share in codified law will resume for the upcoming biennium.²

Three taxes that generated some revenue during FY 2022 and FY 2023, the corporate franchise tax (CFT), the business and property tax, and the estate tax, have been repealed. We expect no revenue from these taxes in future years.³

FY 2023 GRF tax revenue is projected to grow 1.3% from the FY 2022 level. Through January, GRF tax revenue grew 5.8% over the comparable period of FY 2022. The implied slowdown in growth during the remaining months of the fiscal year is notable and suggests some explanation is needed. There are three primary reasons for the projected slowdown. First, IHS Markit, the economic forecasting firm whose December economic forecast serves as the basis for LBO revenue forecasts, forecast a mild recession during the first two quarters of CY 2023, affecting the predicted growth of major taxes. Second, stock market losses in 2022 are expected to reduce capital gains under the PIT and amounts received with tax filings in April. And thirdly, tax policy changes referred to above are also expected to reduce amounts received in April.

¹ H.B. 110 included two income tax deductions for capital gains that are expected to have significant revenue effects, but the provisions are scheduled to take effect in tax year 2026. Due to the delayed effective date, these provisions are expected to have no revenue effects during the upcoming biennium.

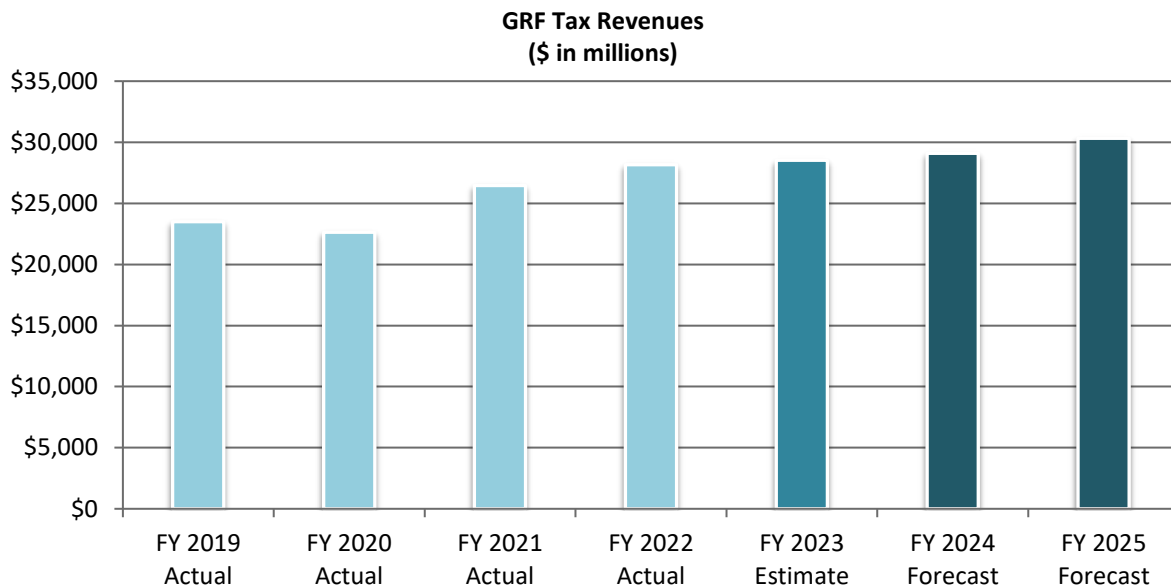
² To give a sense of the amounts involved, assuming the PLF receives 1.66% instead of 1.70% of GRF tax revenue increases the forecast of GRF tax revenue by \$12.1 million in FY 2024, and decreases the expected amount of PLF revenue by the same amount.

³ The total GRF revenue collected from the three taxes amounted to less than \$1.2 million in FY 2022, and FY 2023 revenue through January was less than \$76,000. Recent revenue is due to adjustments to prior filings and audits and drawn out settling of estates. H.B. 110 included a provision exempting from estate tax any property newly discovered after December 31, 2021.

GRF tax revenue under current law is forecast to increase by \$570.6 million (2.0%) in FY 2024. IHS Markit is forecasting a mild recession starting in the current quarter, affecting revenue growth in FY 2024 and the remaining five months of FY 2023. The recession and a gradual decline in inflation are projected to result in tepid growth in revenue from the nonauto sales tax and a slight decline in revenue from the auto sales tax. Most other tax revenue sources are expected to grow at rates more similar to their historic rates. Revenue from the PIT is projected to grow by 4.4%; the economic forecast has vehicle assemblies growing 10% during the two-quarter recession, suggesting Ohio payrolls may not be trimmed as much as in a “typical” recession. Revenue from the commercial activity tax (CAT) is projected to grow by 2.7%. Most other tax sources are expected to grow at moderate rates, as Ohioans’ incomes are expected to recover from the recession. But the cigarette and other tobacco products (OTP) tax, the public utility excise tax, and the foreign insurance tax are expected to yield declining revenues. The cigarette and OTP tax experienced disruptions to its trend rate of decline in FY 2020 and FY 2021 due to the pandemic, but that was followed by accelerated declines in FY 2022 and early FY 2023; the revenue decline is expected to moderate to its historical trend in FY 2024.

GRF tax revenue under current law is forecast to increase by \$1.23 billion (4.2%) in FY 2025. Growth is expected to accelerate for most tax sources, as the economy is projected to grow out of the assumed mild recession. Receipts from the tax on cigarettes and OTP are expected to continue their typical decline, though, and slight decreases are expected in revenue from the kilowatt-hour (kWh) and the public utility excise taxes.

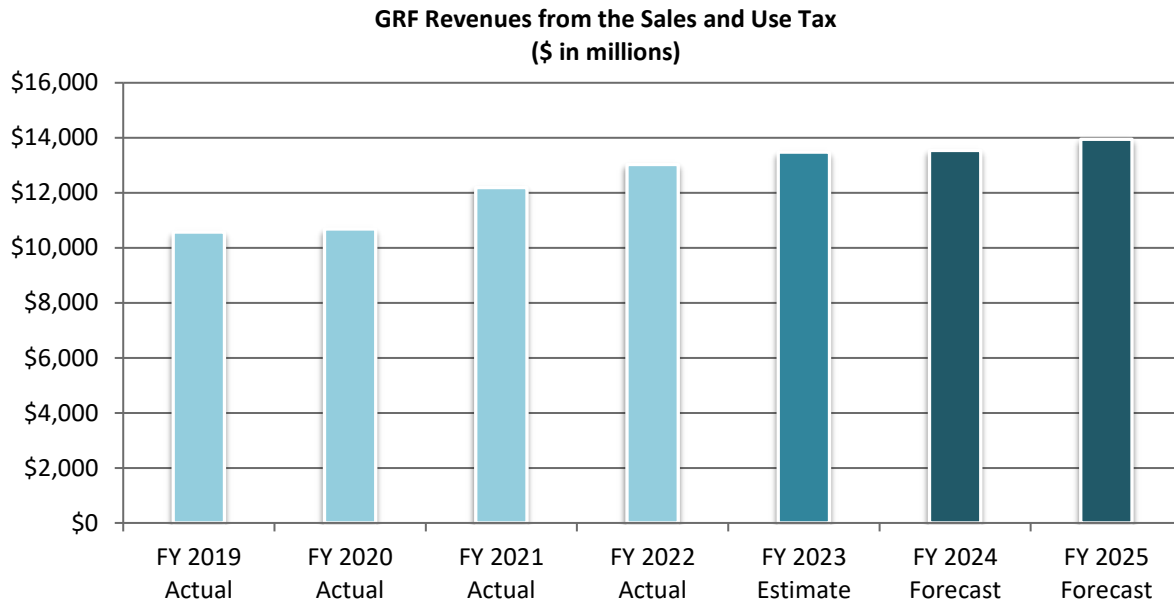
The following chart and table provide overviews of GRF receipts from taxes.



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$23,489.6	\$22,623.2	\$26,466.9	\$28,152.5	\$28,527.0	\$29,097.6	\$30,327.1
Growth	4.8%	-3.7%	17.0%	6.4%	1.3%	2.0%	4.2%

LBO Baseline GRF Tax Revenue Forecasts, FY 2024-FY 2025 (\$ in millions)							
TAX	FY 2022 Actuals	FY 2023 Estimates	Growth Rate	FY 2024 Forecast	Growth Rate	FY 2025 Forecast	Growth Rate
Auto Sales & Use	\$1,949.0	\$2,015.0	3.4%	\$2,012.0	-0.1%	\$2,100.0	4.4%
Nonauto Sales & Use	\$11,080.6	\$11,464.0	3.5%	\$11,528.1	0.6%	\$11,845.5	2.8%
Total Sales & Use	\$13,029.6	\$13,479.0	3.4%	\$13,540.1	0.5%	\$13,945.5	3.0%
Personal Income	\$10,752.2	\$10,474.9	-2.6%	\$10,931.2	4.4%	\$11,654.2	6.6%
Commercial Activity	\$1,995.5	\$2,154.7	8.0%	\$2,212.5	2.7%	\$2,327.3	5.2%
Cigarette	\$884.6	\$835.0	-5.6%	\$818.0	-2.0%	\$802.0	-2.0%
Kilowatt-Hour Excise	\$291.4	\$285.0	-2.2%	\$288.1	1.1%	\$278.5	-3.3%
Foreign Insurance	\$328.4	\$355.0	8.1%	\$353.0	-0.6%	\$353.0	0.0%
Domestic Insurance	\$312.6	\$341.0	9.1%	\$346.0	1.5%	\$351.0	1.4%
Financial Institutions	\$202.8	\$215.0	6.0%	\$220.0	2.3%	\$226.0	2.7%
Public Utility	\$156.3	\$188.9	20.8%	\$184.7	-2.2%	\$182.1	-1.4%
Natural Gas Consumption	\$69.0	\$70.9	2.7%	\$73.6	3.8%	\$73.8	0.2%
Alcoholic Beverage	\$61.7	\$59.5	-3.6%	\$60.0	0.8%	\$60.5	0.8%
Liquor Gallonage	\$57.9	\$57.1	-1.4%	\$59.3	3.9%	\$61.6	3.9%
Petroleum Activity	\$9.3	\$11.0	18.6%	\$11.0	0.0%	\$11.5	4.5%
Corporate Franchise	\$0.7	-\$0.1	-113.9%	\$0.0	100.0%	\$0.0	--
Business & Property	\$0.4	\$0.2	-50.5%	\$0.0	-100.0%	\$0.0	--
Estate	\$0.1	\$0.0	-100.0%	\$0.0	--	\$0.0	--
Total Tax Revenue	\$28,152.5	\$28,527.0	1.3%	\$29,097.6	2.0%	\$30,327.1	4.2%

Sales and Use Tax



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$10,573.4	\$10,685.8	\$12,190.6	\$13,029.6	\$13,479.0	\$13,540.1	\$13,945.5
Growth	4.2%	1.1%	14.1%	6.9%	3.4%	0.5%	3.0%

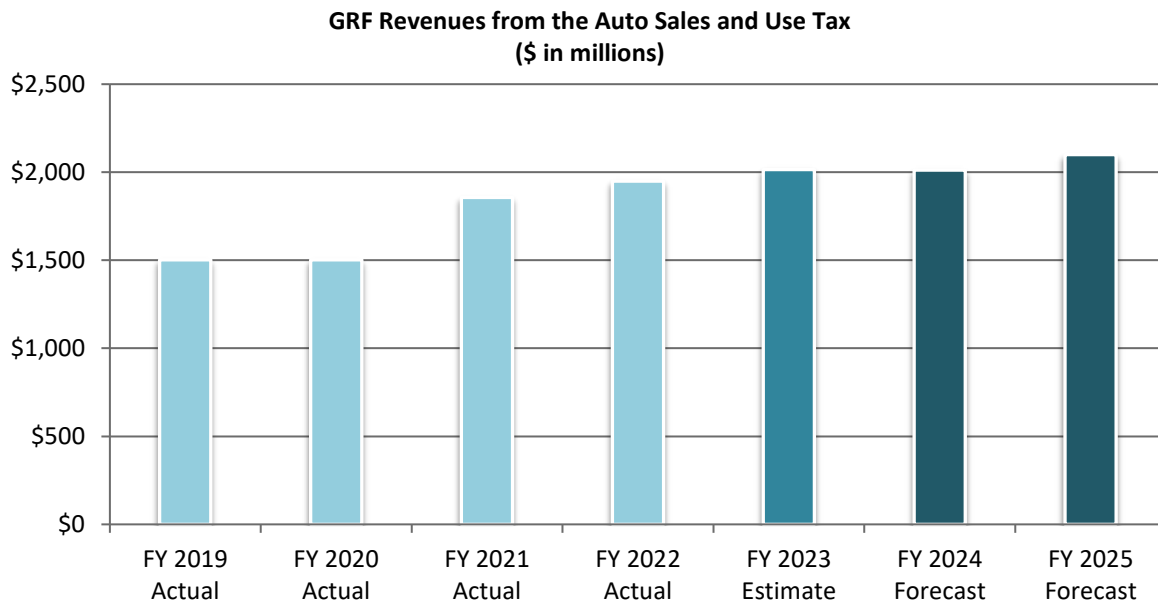
Under current law, the state sales and use tax is levied at a rate of 5.75% on retail sales of tangible personal property, rental of some tangible personal property, and selected services. Major exemptions to the sales and use tax include: food for human consumption off the premises where sold, motor fuel (taxed separately), packaging and packaging equipment, prescription drugs and medical supplies, and property used primarily in manufacturing or used directly in mining or agriculture. There is also a credit for trade-ins on purchases of new motor vehicles.

For forecasting purposes, the tax is separated into two parts: auto and nonauto. Auto sales and use tax collections generally arise from the sale of motor vehicles while nonauto sales and use tax collections arise from other sales. One major exception is auto taxes arising from leases, which are paid at the lease signing and are mostly recorded under the nonauto tax. The level of auto sales is dependent on the level of incentives provided by manufacturers and dealers and changes in gasoline prices. Incentive programs also affect the way consumers decide whether to purchase or lease their vehicles, affecting both the auto component of the tax and the nonauto component.

Revenue from this tax historically has increased nearly every year by percentages in the low single digits, except when there were changes in tax rates, major changes in the tax base, or a recession. FY 2020 revenue growth was affected by a stay-at-home requirement and business closures from an effort to slow the COVID-19 pandemic outbreak. Various federal income support programs buttressed FY 2021 and FY 2022 sales and use tax revenue by offsetting the economic

drag from the COVID-19 pandemic. Revenue growth in FY 2023 has moderated, bringing it into the historically typical range. IHS Markit is projecting a mild recession in the first two quarters of CY 2023, slowing revenue growth in the second half of the current fiscal year. Total sales and use tax revenues under current law are projected to rise very modestly in FY 2024, largely due to the predicted recession and reduced price inflation, and the auto sales tax is forecast to decline slightly. Total revenue growth is projected to accelerate in FY 2025, to a rate more in line with historical norms.

Auto Sales and Use Tax

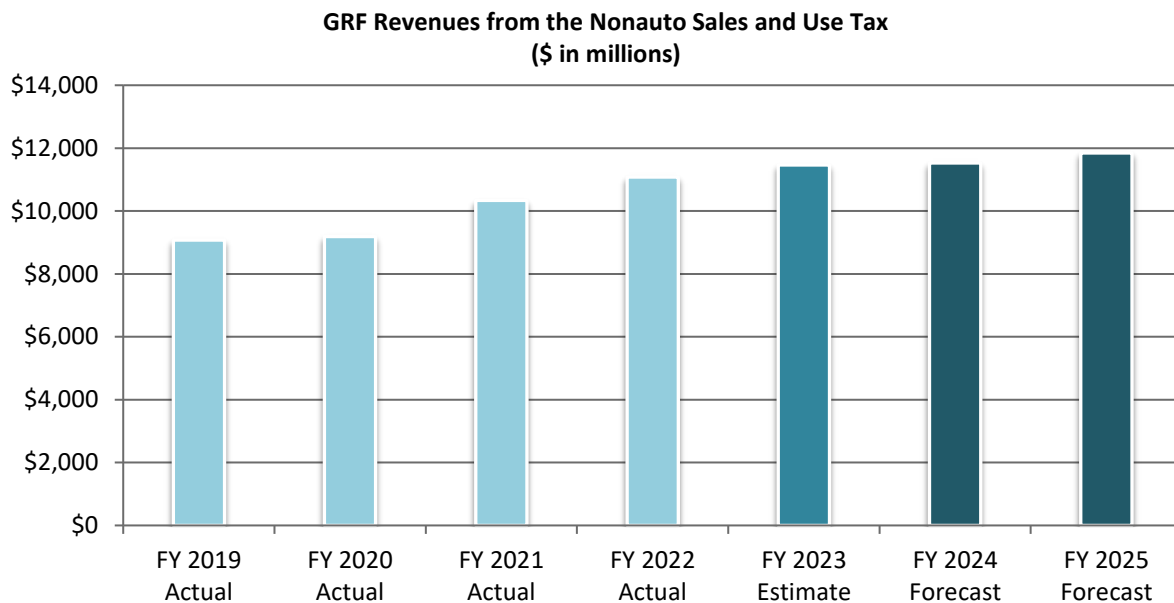


\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$1,501.7	\$1,502.7	\$1,856.6	\$1,949.0	\$2,015.0	\$2,012.0	\$2,100.0
Growth	4.2%	0.1%	23.6%	5.0%	3.4%	-0.1%	4.4%

The forecast for the auto sales and use tax is based on statistical regressions of its quarterly tax base against new Ohio auto registrations, new vehicle prices, wages and salaries, Ohio personal consumption expenditures on motor vehicles and parts, and interest rates. The regressions also include a stock market index, to capture the effects of changes in wealth on auto sales. The COVID-19 pandemic sharply reduced vehicle sales in the final three and a half months of FY 2020, limiting growth that year. But the tax base grew in FY 2021 and FY 2022, supported by federal income support programs responding to the pandemic and by rising prices due to supply chain disruptions largely attributable to the pandemic. Rising prices have more than offset a decline in unit sales of vehicles; unit sales nationally have been weaker in recent years than they were prior to the pandemic.

Revenue received during the first seven months of FY 2023 grew 5.3% compared to the first seven months of FY 2022, a rate somewhat higher than historical growth experience. That growth is projected to moderate in the second half of FY 2023, due to the predicted recession and to falling prices for vehicles, especially in the used car market. Falling prices, lingering effects of the recession, and rising interest rates are projected to result in little change in the tax base in FY 2024. Revenue growth is projected to resume in FY 2025, due to rising incomes and falling interest rates that year. Projected FY 2025 growth is restrained slightly due to expected decreases in average vehicle prices.

Nonauto Sales and Use Tax

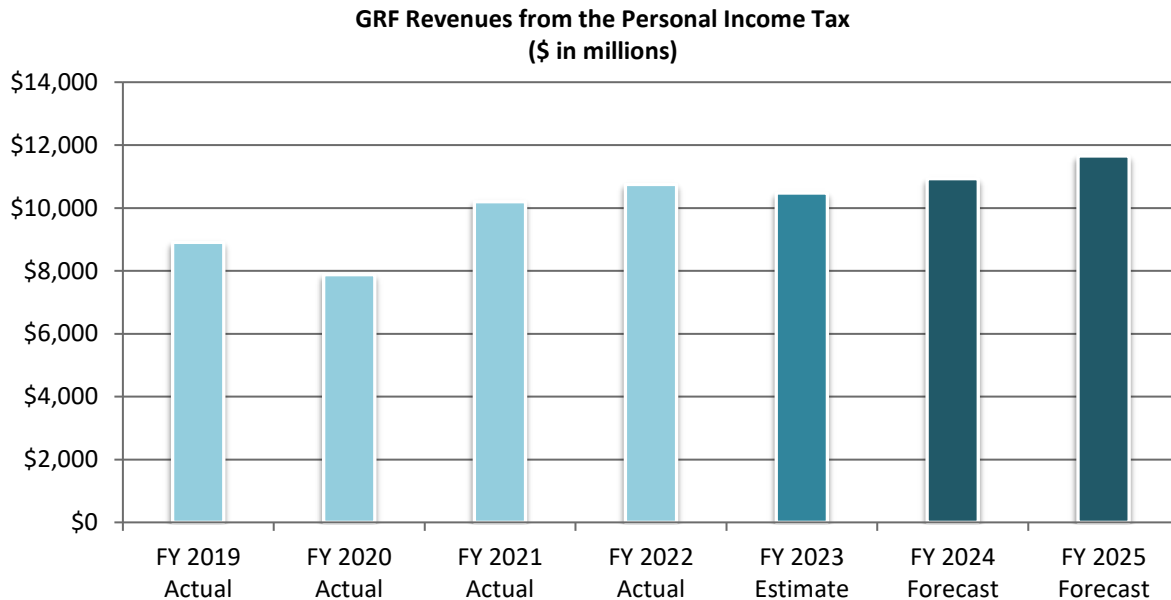


\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$9,071.7	\$9,183.0	\$10,334.0	\$11,080.6	\$11,464.0	\$11,528.1	\$11,845.5
Growth	4.2%	1.2%	12.5%	7.2%	3.5%	0.6%	2.8%

The forecast for the nonauto sales and use tax is based on statistical regressions of the quarterly nonauto sales and use tax base against Ohio retail sales, employment, disposable income, and housing values. Revenue growth in FY 2019 was slightly higher than historical norms, boosted by a provision of H.B. 166 which imposed collection of sales taxes by marketplace facilitators and other remote sellers. FY 2020 saw slower growth due to disruptions caused by the pandemic, including business closures and stay-at-home requirements. FY 2021 and FY 2022 saw much sharper growth, due to a shift in consumer spending toward taxable goods and away from services, many of which are nontaxable. FY 2022 growth was restrained slightly by an exemption for employment services enacted in H.B. 110.

Nonauto sales and use tax revenue in the first seven months of FY 2023 was 4.0% greater than revenue received during FY 2022 through January. As with the auto component of the tax, revenue growth is projected to moderate in the second half of the year due to the predicted mild recession and to reduced price inflation. Those factors are predicted to dampen Ohio retail sales in FY 2024 as well, slowing revenue growth to 0.6% in FY 2024. In FY 2025, revenue growth is projected to accelerate to a rate in line with historical growth rates, due to expected income growth and expansion of economic activity.

Personal Income Tax



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$8,910.2	\$7,881.3	\$10,201.3	\$10,752.2	\$10,474.9	\$10,931.2	\$11,654.2
Growth	5.9%	-11.5%	29.4%	5.4%	-2.6%	4.4%	6.6%

The PIT is levied on Ohio taxable income, which equals federal adjusted gross income (FAGI) as reported to the U.S. Internal Revenue Service (IRS), plus or minus various adjustments and minus personal and dependent exemptions. A taxpayer's tax liability before credits is determined by applying Ohio's graduated tax rates to the taxpayer's Ohio taxable nonbusiness income. These tax rates currently range up to 3.99% for the highest incomes. Business income has been given separate treatment since tax year (TY) 2013, with the first \$250,000 of a taxpayer's business income currently exempted from tax by a deduction.⁴ The balance, taxable

⁴ The \$250,000 threshold is for single taxpayers and joint filers. Married taxpayers filing separately may deduct up to the first \$125,000 of business income.

business income, is taxed at a 3% rate. Certain credits may be subtracted to derive the taxpayer's final tax liability.

The estimate of PIT revenues in FY 2023 and the forecasts for FY 2024 and FY 2025 are based on the results of models of revenue collections. The models work with four components of state income tax collections: (1) employer withholding, (2) payments from individual taxpayers (quarterly estimated tax payments and annual returns), (3) other revenues (trust income and miscellaneous collections), and (4) refunds. The data are largely organized on a fiscal-year basis. Withholding is estimated using an average of two different statistical models, as a function of Ohio wage and salary income, nonfarm payroll employment, withholding rates, the amount of wages per employee, and the number of employees per household. The individual taxpayer component is also estimated by averaging two models, as a function of the Standard and Poor's (S&P) 500 index (used to represent capital gains), proprietors' income, dividend income, interest income, rental income, household holdings of equities and nonfinancial assets, tax rate variables, and the estimated impact of the business income deduction and the lower tax rate on taxable business income. All other income tax collections are a function of revenue trends in miscellaneous collections and the S&P 500 index (used as a predictor of receipts derived from taxable trusts). Refunds are a function of gross tax collections (withholding plus individual plus other), the change in gross tax collections from the previous year, the value of the personal exemption, the percent of business income that may be deducted, a variable representing the 3% rate on taxable business income, refunds in the previous year, and tax rate variables. Projections of future values of the explanatory variables are from economic forecasting firm IHS Markit, except for withholding and tax rates and personal exemption amounts.

The global COVID-19 pandemic and related U.S. economic shutdowns led policymakers to delay until July 2020 the due date for TY 2019 final settlements, as well as due dates for quarterly estimated tax payments. The due date for TY 2020 final settlements was also delayed but remained within FY 2021. These changes resulted in weak PIT revenues in FY 2020 and strong revenues in FY 2021. PIT revenues continued strong in FY 2022, particularly from withholding.

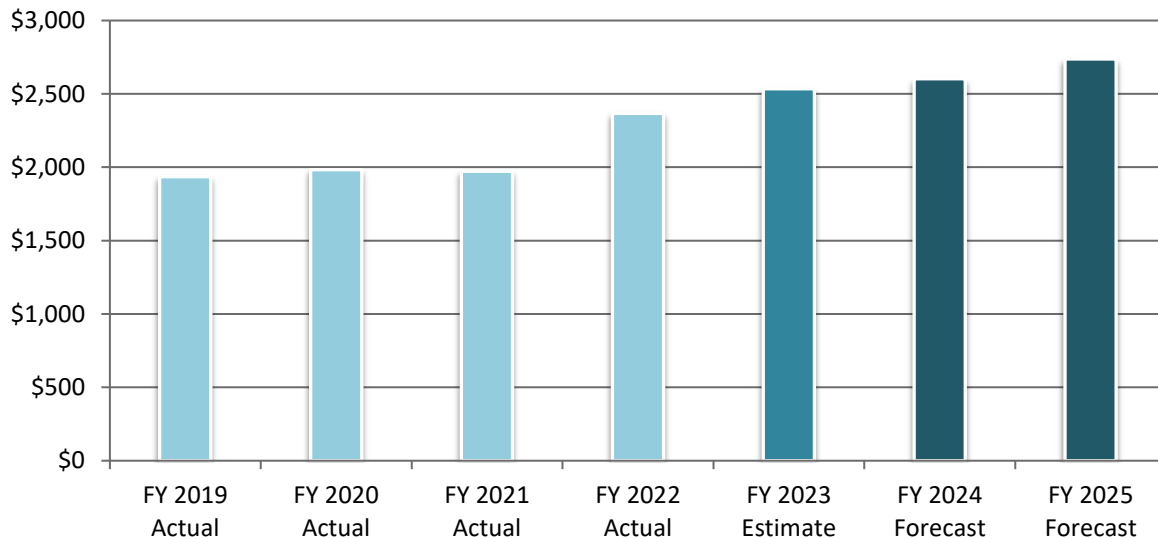
Income tax rates on nonbusiness income were reduced by between 38% and nearly 47%, depending on tax bracket, from TY 2004 to TY 2021. Withholding rates were reduced 38%. Income tax rates were reduced 21% between TY 2004 and TY 2011 by H.B. 66 of the 126th General Assembly, as modified by H.B. 318 of the 128th General Assembly. Income tax rates were lowered an additional 10% between TY 2012 and TY 2014 by H.B. 59 and H.B. 483, both of the 130th General Assembly. Income tax rates were cut another 6.3% in TY 2015 by H.B. 64 of the 131st General Assembly; 4.0% in TY 2019 by H.B. 166 of the 133rd General Assembly; and 3.0% to 16.8%, depending on tax bracket, in TY 2021 by H.B. 110 of the 134th General Assembly, which also eliminated taxes on nonbusiness taxable income of \$25,000 or less. Other tax changes were enacted over this period, including the separate treatment of business income.

Through January, FY 2023 GRF revenues from the PIT were 6.5% above estimate and 6.7% above revenues in the first seven months of FY 2022. The large increases from estimate and a year ago resulted particularly from strength in withholding, though almost all other components also showed sizable positive variances. Gross collections through December were 7.3% above estimate and 8.5% higher than FY 2022 year-to-date levels. Net of refunds, collections were 5.9% and 6.7% higher, respectively, than estimate and a year ago.

The FY 2023 estimate for GRF revenues from the PIT is \$10,474.9 million, a 2.6% decrease from FY 2022 revenues. This represents a substantial decrease in year-over-year growth in the remaining months of FY 2023. Revenue received with annual returns and estimated payments due in April and June are expected to fall well below FY 2022 levels due to several factors: (1) declines in stock prices in 2022, reducing capital gains incomes, (2) reclassification of income derived from sales of certain businesses, enacted in H.B. 515, as business income, thereby making such income eligible for the business income deduction and the 3% tax rate on business income, and (3) other tax policy changes enacted in S.B. 225 and S.B. 246. An additional factor is timing-related, as Department of Taxation officials report that tax filings by pass through entities (PTEs) appear to have been made earlier than usual this fiscal year due to the effects of one of the S.B. 246 provisions.⁵ GRF revenues under current law are projected to grow by 4.4% in FY 2024 and by 6.6% in FY 2025.

Commercial Activity Tax

All Funds Revenues from the Commercial Activity Tax
(\$ in millions)



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
All Funds Revenue	\$1,934.9	\$1,983.8	\$1,972.5	\$2,366.9	\$2,535.0	\$2,603.0	\$2,738.0
Growth	7.2%	2.5%	-0.6%	20.0%	7.1%	2.7%	5.2%
GRF Share	\$1,629.5	\$1,671.7	\$1,666.8	\$1,995.5	\$2,154.7	\$2,212.5	\$2,327.3

⁵ This provision pertains to a limit of \$10,000 on the federal income tax deduction for state or local income or sales taxes paid. The IRS determined that if the taxes are paid by a PTE, they need not be taken into account in applying this limit for an individual who is a partner or owner of the PTE.

The CAT is a privilege tax on business entities operating in Ohio. Generally, business entities with annual taxable gross receipts below \$150,000 are exempt from the CAT, and those with annual taxable gross receipts above \$150,000 and less than \$1 million pay the minimum tax of \$150. Taxpayers with taxable gross receipts between \$1 million and \$2 million pay \$800 plus 0.26% of the taxable gross receipts in excess of \$1 million, those with taxable gross receipts between \$2 million and \$4 million pay \$2,100 plus 0.26% of the taxable gross receipts in excess of \$1 million, and those with taxable gross receipts in excess of \$4 million pay \$2,600 plus 0.26% of the taxable gross receipts in excess of \$1 million. Taxpayers who pay the minimum tax pay the CAT once a year. Other CAT taxpayers generally pay the CAT each quarter, based on taxable receipts in the previously concluded quarter. Major tax credits available against the tax include the job retention, job creation, research and development (R&D), R&D loan repayment, and credit for net operating losses and other deferred tax assets.

Current law earmarks revenues from the CAT for the GRF and for reimbursing school districts and other local governments for the reductions and phase out of local taxes on most tangible personal property. This revenue sharing changed over the years, and the latest change in H.B. 49 of the 132nd General Assembly increased the GRF share to 85%, up from 75%, effective July 1, 2017.⁶ Earmarked amounts that exceed the required reimbursement payments to school districts and other local governments are transferred back into the GRF.

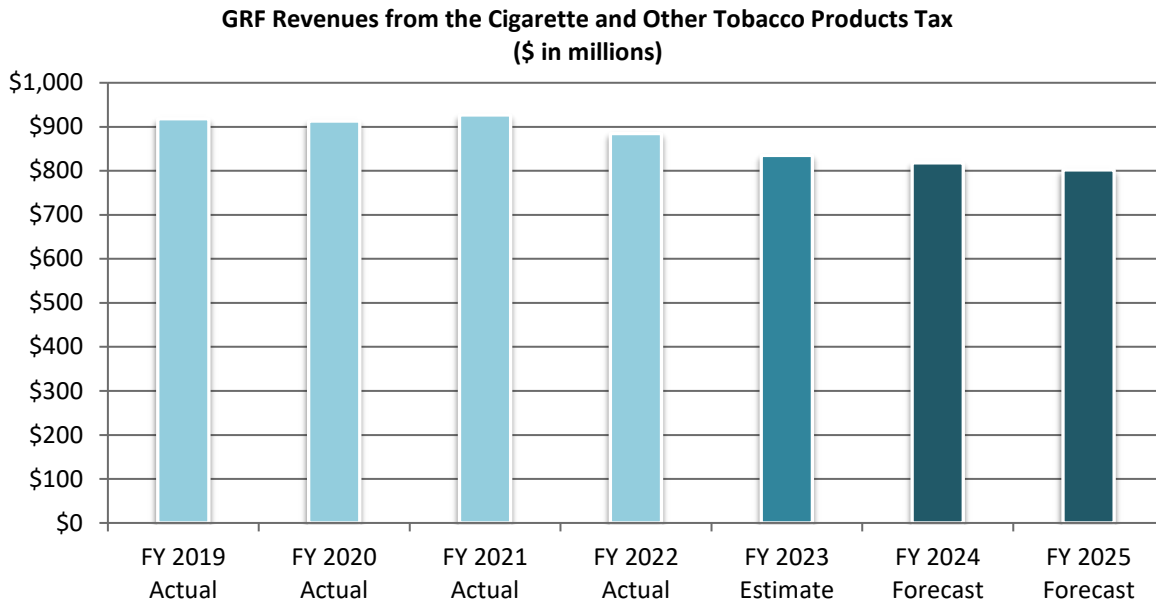
CAT collections are directly linked to levels of economic activity. FY 2021 receipts declined primarily because of weak revenue in the first fiscal quarter of that year, due to the COVID-19 pandemic reducing businesses' gross receipts in the previous quarter. Strong revenue growth in FY 2022 was due in part to the same phenomenon – weak revenue in the first quarter of the prior year. However, actual GRF revenue from the tax depends on the value of tax credits and refunds claimed each year.⁷

The CAT forecast is based on statistical regressions and trend analyses of quarterly CAT collections. The two regressions use Ohio's Industrial Production Index, total Gross State Product (GSP), GSP Manufacturing sector, and GSP Wholesale Trade sector to forecast taxable gross receipts. The forecasted tax base is an average of both equations with some adjustments for estimates of tax credits applied against the tax. GRF revenue received during FY 2023 through January was 12.6% greater than revenue received during the corresponding months of FY 2022. That growth rate is projected to decline somewhat in the second half of the year, due in part to the expected mild recession. Revenue growth in FY 2024 is somewhat restrained due to the same cause, but revenue growth in FY 2025 is projected to accelerate along with overall economic conditions.

⁶ Other revenues from the CAT are split between the School District Tangible Property Tax Replacement Fund (13%) and the Local Government Tangible Property Tax Replacement Fund (2%) for reimbursement purposes. Also, a provision in current law allows the Tax Department to deduct 0.65% of CAT collections to defray administrative costs.

⁷ Tax credits and resulting refunds change annually and have varied significantly in the last few years: refunds were \$159.2 million in FY 2018, \$136.6 million in FY 2019, \$122.1 million in FY 2020, \$161.1 million in FY 2021, and \$97.6 million in FY 2022.

Cigarette and Other Tobacco Products Tax



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$918.2	\$913.0	\$926.9	\$884.6	\$835.0	\$818.0	\$802.0
Growth	-2.3%	-0.6%	1.5%	-4.6%	-5.6%	-2.0%	-2.0%

The cigarette and OTP tax is levied on cigarettes, cigars, chewing tobacco, snuff, smoking tobacco, and other tobacco products. Cigarettes are taxed at a rate of \$1.60 per pack of 20 cigarettes. Receipts from the sales of cigarettes were 87% of total receipts in FY 2022. The tax on OTP is an ad valorem tax, generally 17% of the wholesale price paid by wholesalers for the product, except for “little cigars” which is 37% of the wholesale price, and “premium cigars” which was \$0.52 per cigar in FY 2020.⁸ Revenue from that portion of the tax base grows with OTP price increases. H.B. 166 of the 133rd General Assembly levied a tax of 10¢ per milliliter (or gram) of vapor product (depending on the form of the product) that contains nicotine and is depleted as it is used in an electronic smoking product.⁹ Revenue collected from the tax is deposited into the GRF.

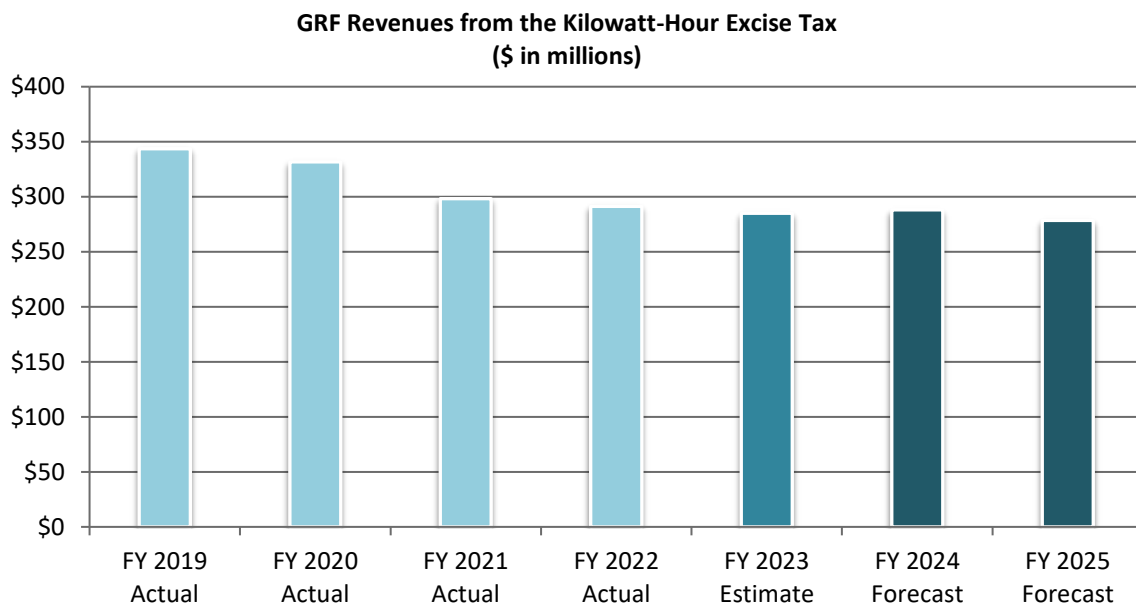
⁸ A “little cigar” is defined as a smoking roll that does not satisfy the excise tax law’s definition of a cigarette, that contains an integrated cellulose acetate filter or other filter, and that is not wrapped in natural leaf tobacco. Generally, a “premium cigar” is a smoking roll other than a cigarette or little cigar. The tax rate on premium cigars is indexed annually for inflation.

⁹ Of total receipts in FY 2020 of \$82.4 million from the sale of OTP, the tax on vapor products contributed \$3.6 million, or about 4%, according to the Ohio Department of Taxation.

There is a long-term trend downward in revenue from the tax, due entirely to the tax on cigarettes. There is an upward trend in revenue from the tax on OTP, primarily from increases in the wholesale price of those products, which typically has partially offset decreases in revenue from the tax on cigarettes. The COVID-19 pandemic temporarily suspended the historical trends, most notably by reversing the downward trend for revenue from sales of cigarettes. During the pandemic, fewer opportunities for travel and entertainment might have afforded smokers more disposable income for cigarettes and more time at home seems to have allowed more occasions for tobacco use. The associated disruptions account for the slower decline in FY 2020 revenue from the tax and the increase in FY 2021. Revenue received during FY 2022 and the first half of FY 2023 saw sharper declines than were typical prepandemic. Through the first seven months of this year, tax revenue declined 6.4% compared to FY 2022 through January.

The forecast for the cigarette and OTP tax is based on trend analyses of recent consumption of cigarettes and price increases for OTP. The forecast assumes the long-term annual decline in per capita cigarette consumption moderates in the next biennium to a rate similar to historical rates of decline.

Kilowatt-Hour Excise Tax



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$343.6	\$331.8	\$298.2	\$291.4	\$285.0	\$288.1	\$278.5
Growth	0.4%	-3.4%	-10.1%	-2.3%	-2.2%	1.1%	-3.3%

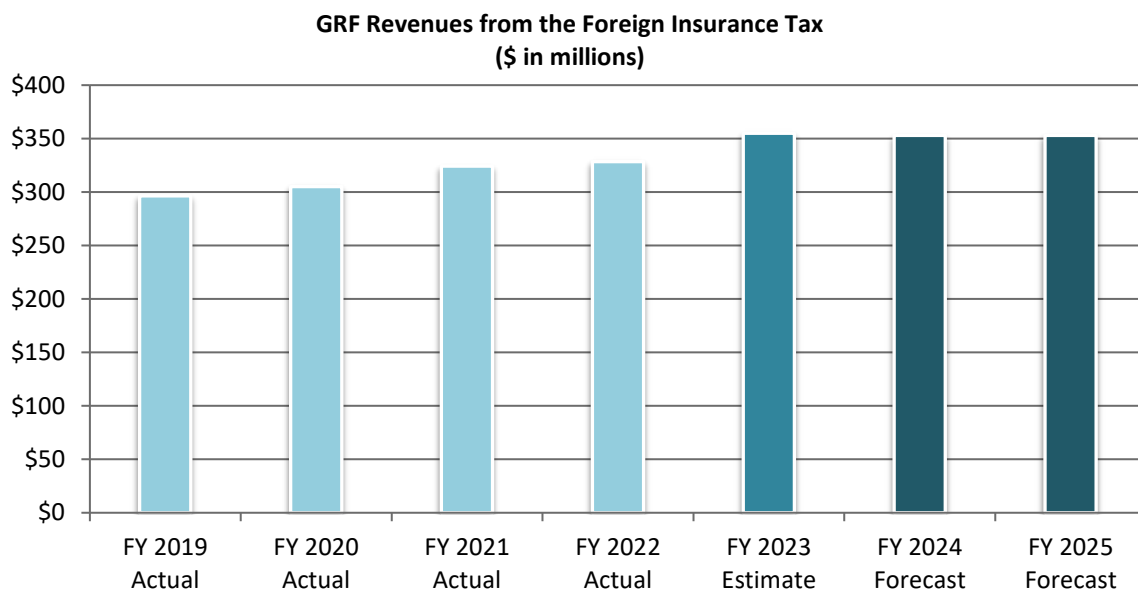
The kWh excise tax is levied on electric distribution companies with end users in Ohio. The tax rate depends on the volume of electricity used by the customer. There are three distinct marginal tax rates: \$0.00465 per kWh for the first 2,000 kWhs consumed in a month,

\$0.00419 per kWh for the next 13,000 kWhs consumed, and \$0.00363 per kWh for all kWhs consumed over 15,000. Very large users, those that use over 45 million kWh per year, have the option of self-assessing the tax, which enables them to pay a lower rate. Beginning January 1, 2011, self-assessors have paid a flat tax rate of \$0.00257 per kWh for the first 500 million kWhs used in a year and \$0.001832 per kWh over 500 million.

Total (all funds) revenue from the tax has been fairly stable over the years, though there was a 3% drop in FY 2020. Half of the share of GRF total tax revenue that is transferred to the PLF is debited against this tax source for accounting purposes.¹⁰ As a result, the annual growth rate for the GRF portion of this tax may deviate from this tax's total revenue growth rate.

Revenue to all funds from the tax is estimated to increase slightly in both FY 2024 and FY 2025. The forecast of total kWh tax revenues was generated using a model that used Ohio's gross state product as a proxy for overall economic conditions and used an Ohio manufacturing industrial production index, cooling degree days, and Ohio population growth as proxies for electricity consumption growth in commercial, industrial, and residential sectors.

Foreign Insurance Tax



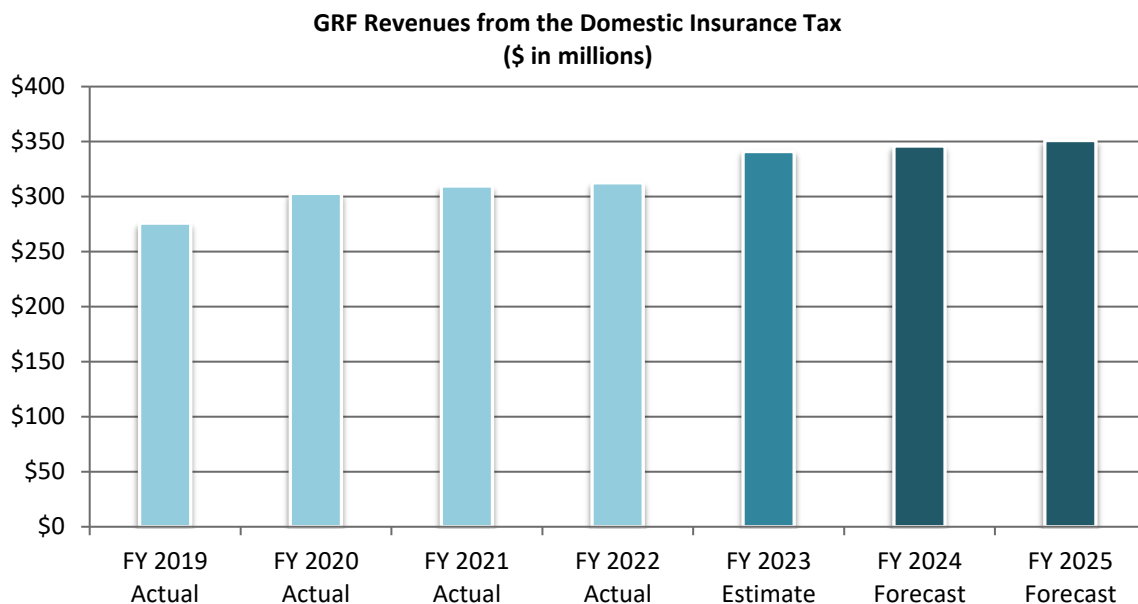
\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$296.3	\$305.1	\$324.4	\$328.4	\$355.0	\$353.0	\$353.0
Growth	7.2%	3.0%	6.3%	1.2%	8.1%	-0.6%	0.0%

¹⁰ Prior to FY 2016, 12% of revenues from the tax was shared with two property tax replacement funds and 88% was deposited into the GRF. Prior to FY 2012, the GRF received 63% and the property tax replacement funds shared the other 37%.

The foreign insurance tax is levied on premiums collected by insurance companies headquartered in a state other than Ohio. The tax is generally 1.4% of premiums; the primary exception is foreign insurance companies that are health insuring corporations (HICs), which pay 1.0% of premiums. Premiums paid for property and casualty insurance accounted for slightly over half of the revenue from the tax in FY 2022, with premiums paid for life and health insurance accounting for a substantial portion of the remainder.

Revenue from this tax depends on overall economic conditions and on interest rates. Insurance companies derive revenue from both the premiums they collect and the interest earned from investing those premiums. The forecast is the average derived from several models, which generally used Ohio personal income as a proxy for overall economic conditions, used median home prices in Ohio as a proxy for claims growth, and used changes in six-month Treasury bill yields as a proxy for company revenues from investing premiums. Higher interest rates partially account for the projected lack of tax revenue growth over the upcoming biennium. A tax credit for mixed-use transformational developments, enacted by S.B. 39 of the 133rd General Assembly, also contributes to the projected lack of revenue growth.

Domestic Insurance Tax



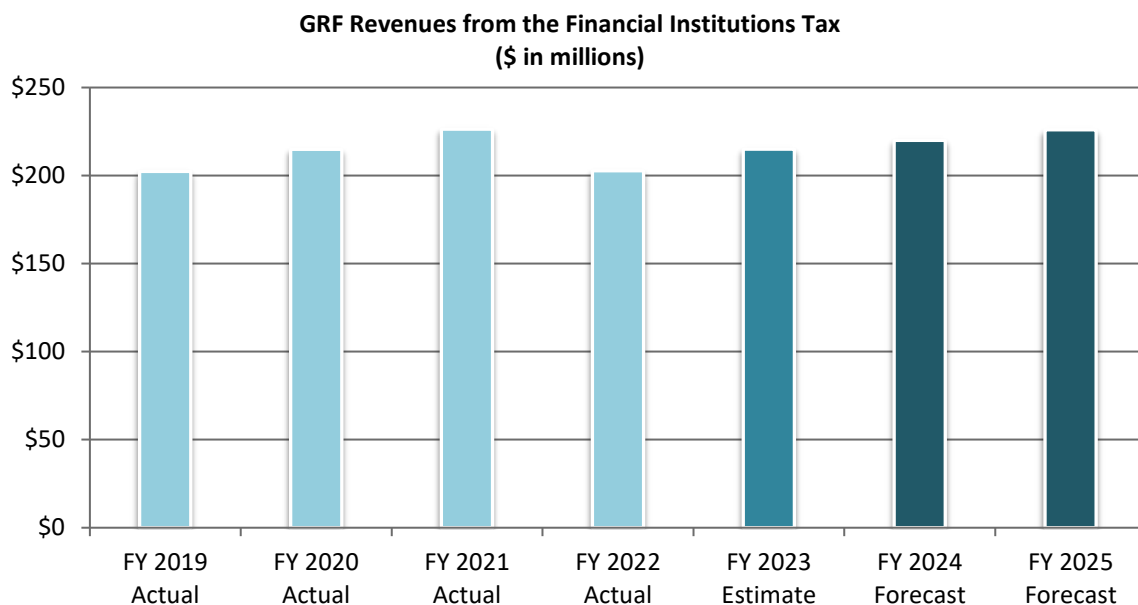
\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$276.0	\$303.0	\$309.7	\$312.6	\$341.0	\$346.0	\$351.0
Growth	-0.9%	9.8%	2.2%	0.9%	9.1%	1.5%	1.4%

The domestic insurance tax is levied on premiums collected by insurance companies headquartered in Ohio. The tax is generally 1.4% of premiums; the primary exception is domestic insurers that are HICs, which pay 1.0% of premiums. This tax structure is the same as the foreign

insurance tax structure. About 60% of the tax liability under the tax in FY 2022 was attributable to premiums paid for health insurance. Premiums paid to property and casualty insurers were responsible for about 35% of tax liabilities.

Growth in tax revenue in recent years has been primarily due to growth in revenue attributable to HICs¹¹ and increases in Medicaid coverage. Revenues from this tax in the future will be primarily driven by Medicaid managed care. The forecast for revenue paid by HICs is based on the LBO Medicaid forecast for expenditures for managed care. Revenue attributable to other premium sources declined for a number of years but seems to be bottoming out. Such revenue is projected to increase during the upcoming biennium in line with growth in personal consumption expenditures for financial and insurance services. Revenue growth is restrained during the upcoming biennium by a fairly new transformational mixed-use development tax credit, as described in the section about the foreign insurance tax.

Financial Institutions Tax



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$202.4	\$214.9	\$226.4	\$202.8	\$215.0	\$220.0	\$226.0
Growth	0.7%	6.2%	5.4%	-10.4%	6.0%	2.3%	2.7%

¹¹ H.B. 1 of the 128th General Assembly subjected premiums paid to Medicaid HICs to the tax.

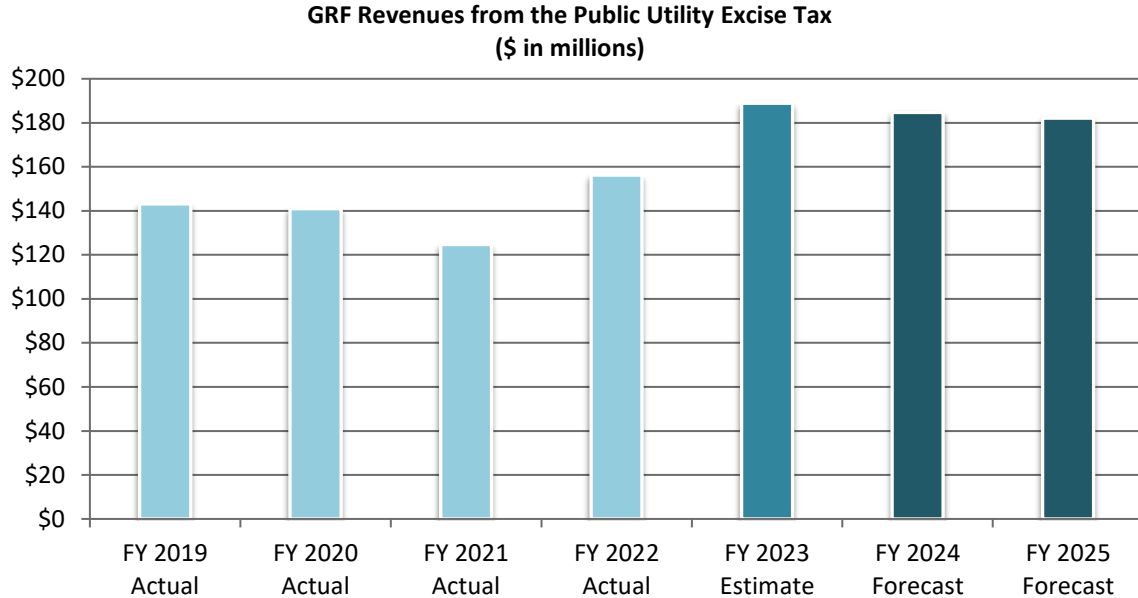
The financial institutions tax (FIT) is a tax on banks and other types of financial institutions. The FIT was first levied in TY 2014.¹² All receipts from the FIT are credited to the GRF. The FIT is levied on the “total Ohio equity capital” of financial institutions, which includes a firm’s common stock, perpetual preferred stock, surplus, retained earnings, treasury stock, and unearned employee stock ownership plan shares. Taxpayers operating in multiple states are required to apportion total equity capital in proportion to gross receipts apportioned to Ohio. Beginning January 1, 2020, the tax base (total equity capital) is limited to 14% of a financial institution’s total consolidated assets; this provision was enacted under H.B. 166 of the 133rd General Assembly.

The FIT specifies three tax rates: a rate of 0.8% (8 mills) applied to the first \$200 million of a taxpayer’s total Ohio equity capital, a rate of 0.4% (4 mills) applied to a taxpayer’s total Ohio equity capital between \$200 million and \$1.3 billion, and a rate of 0.25% (2.5 mills) applied to the amount of a taxpayer’s total Ohio equity capital in excess of \$1.3 billion. The minimum tax is \$1,000. Estimated payments are due on January 31, March 31, and May 31 of the tax year, and each taxpayer must file an annual report and file all tax payments by October 15 of each year.

Due to the payment schedule outlined above, during the first half of a fiscal year the primary revenue activity is from the state paying out refunds, resulting in negative revenue being recorded for the tax. Through December 2022, \$10.4 million in refunds was paid out, considerably less than refunds paid during the first half of FY 2022 (\$51.8 million). That suggests higher than average revenue growth this year, but there will be little evidence on which to base the FY 2023 estimate until at least the end of February. Revenues from the FIT are projected to increase from the FY 2023 estimate during the next biennium, generally in line with economic activity in Ohio’s financial sector. Between FY 2016 and FY 2022, revenue from the tax has ranged from a low of \$187.3 million to a high of \$226.4 million. Statistical regressions are not employed in forecasting this tax due to insufficient historical experience with revenue.

¹² The FIT was created by H.B. 510 of the 129th General Assembly as a replacement for the corporate franchise tax (CFT) and the dealers in intangibles tax (DIT), which were both eliminated at the end of 2013.

Public Utility Excise Tax



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$143.2	\$141.0	\$124.7	\$156.3	\$188.9	\$184.7	\$182.1
Growth	20.1%	-1.5%	-11.6%	25.4%	20.8%	-2.2%	-1.4%

The public utility excise tax (PUET) is imposed on the gross intrastate receipts of natural gas utilities, pipeline companies, heating companies, waterworks, and water transportation companies. Other types of public utilities are exempt from the tax, as are all public utilities owned by municipal corporations. Companies subject to the tax pay 4.75% of gross receipts, except for pipeline companies which pay 6.75%. All companies receive an annual deduction of \$25,000. Gross receipts from sales of merchandise, interstate transactions, sales to other utilities for resale, sales to federal government entities, and billings on behalf of other entities are exempt from the tax.

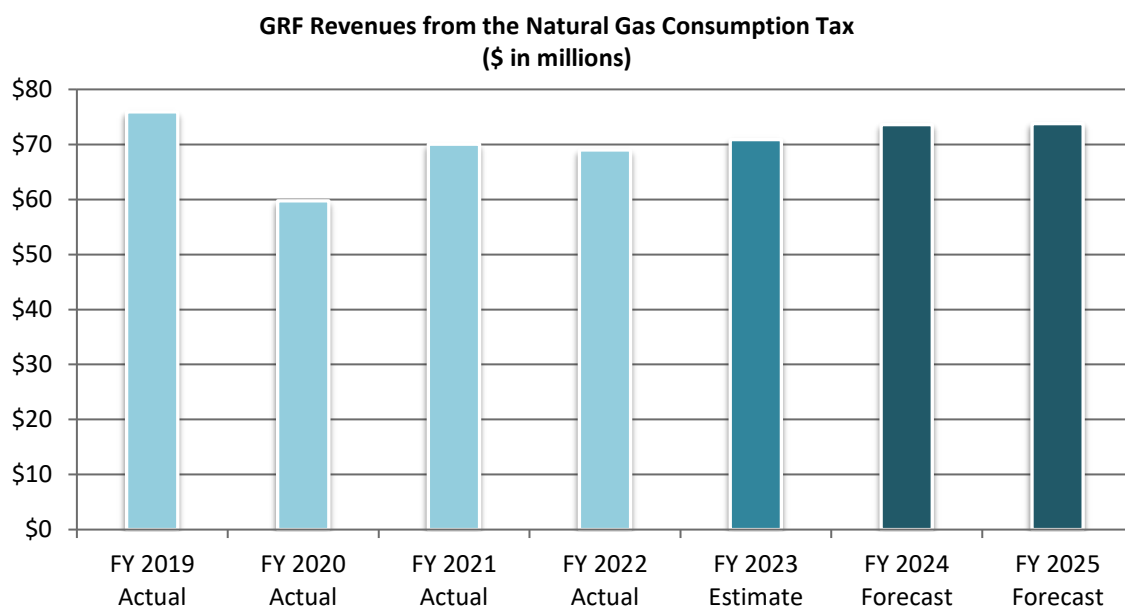
Most of the revenue from the PUET is from natural gas companies. They accounted historically for 95% or more of total PUET revenue. In recent years, pipelines have accounted for a growing share of revenues from this tax. Changes in natural gas prices and consumption remain the main determinants of PUET revenues. All revenue from the PUET goes to the GRF.

Revenue from this tax rose 25% to \$156.3 million in FY 2022, the highest amount since FY 2009. Physical volumes of natural gas delivered to electric power plants have been rising for more than a decade as the industry has relied increasingly on natural gas to power generators, and less on coal. Taxes due from pipelines also have grown substantially.

Through December 2022, FY 2023 receipts from the PUET were 24% higher than in the year-earlier period. The rise was chiefly due to higher natural gas prices, though quantities of gas delivered also grew. Spot market prices for natural gas have since fallen from a peak last August. Tax revenues for all of FY 2023 are projected to be 20.8% higher than in FY 2022. Annual PUET revenues are forecast to decline 2.2% in FY 2024 and 1.4% in FY 2025.

The forecast is based on projections from the U.S. Energy Information Administration (EIA), released January 10, 2023, showing prices for natural gas delivered to customers through 2024. In this forecast, natural gas prices fall from a 2022 peak but remain above 2021 levels. Other public utility excise taxes, on water works, water transport, and heating companies, are assumed to remain stable.

Natural Gas Consumption Tax



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$75.9	\$59.7	\$70.1	\$69.0	\$70.9	\$73.6	\$73.8
Growth	9.1%	-21.3%	17.3%	-1.5%	2.7%	3.8%	0.2%

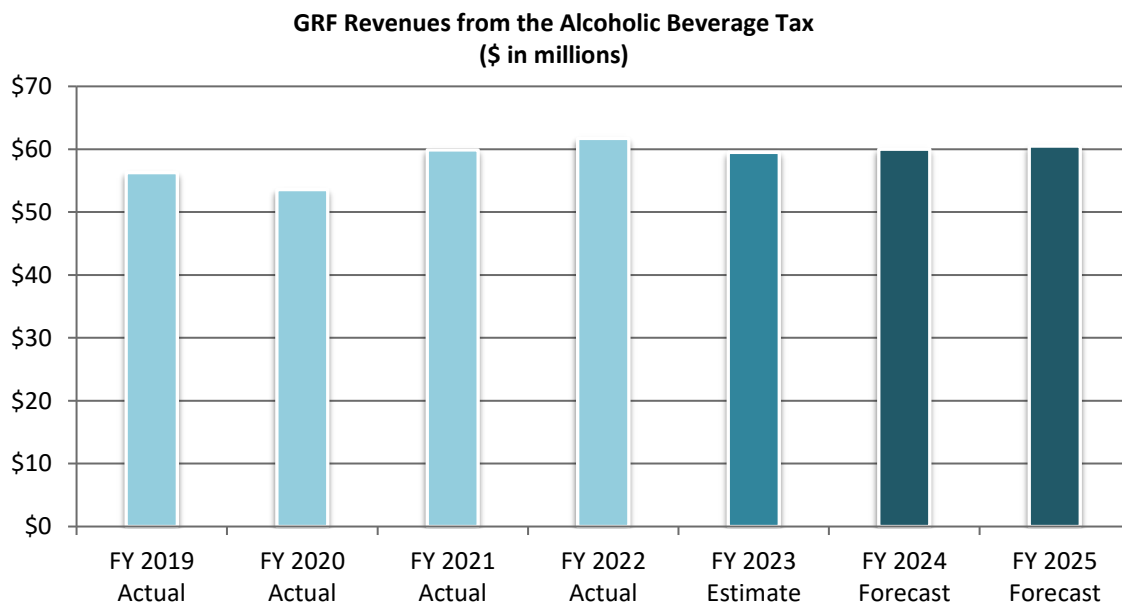
The natural gas consumption tax (also referred to as the natural gas distribution tax or Mcf tax) is levied on natural gas distribution companies, based on natural gas distributed through the meters of end users in Ohio. The base for the tax is the volume of natural gas measured in Mcf (1,000 cubic feet). The tax rate depends on the volume distributed to a customer. There are three marginal tax rates: \$0.1593 per Mcf for the first 100 Mcfs distributed to an end user in a month, \$0.0877 per Mcf for the next 1,900 Mcfs, and \$0.0411 per Mcf for all natural gas distributed to the end user in excess of 2,000 Mcfs in the month. Natural gas distributors with 70,000 or fewer customers, up from 50,000 prior to 2009, may pay the rate specified on the total

quantity of natural gas distributed in Ohio in a month, as if the distribution was to a single customer. Flex customers, generally industrial or commercial customers with very large natural gas consumption (over one billion cubic feet per year in any of the previous five years) at a single location, or that meet other specified requirements, pay \$0.02 per Mcf. About half of annual revenue from this tax is typically received in the fiscal fourth quarter, mostly in May, as a result of natural gas consumption for heating during January through March and a lag in the required payment of the tax by natural gas distribution companies to the state.

The GRF started to receive revenues from the Mcf tax in FY 2012; prior to that, revenue was split between two property tax replacement funds. Full-year revenue from this tax has ranged from \$83.7 million in FY 2003 to \$57.8 million in FY 2013. FY 2022 revenues fell 1.5%, with milder winter weather likely a factor. Revenues in the current fiscal year through December were 5.4% above year-earlier revenues. For all of FY 2023, revenues are projected to rise 2.7%, followed by increases of 3.8% in FY 2024 and 0.2% in FY 2025.

The forecast is based on EIA annual projections for natural gas consumption by residential, commercial, and industrial users in East North Central states. Natural gas consumption by the electric power industry is poorly correlated with Mcf tax revenue so was excluded. The EIA forecast drives a regression model of Mcf revenues based on the historical volume of natural gas deliveries to Ohio residential, commercial, and industrial customers and a variable to represent the change in the tax in 2009 noted above.

Alcoholic Beverage Tax



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$56.3	\$53.6	\$59.9	\$61.7	\$59.5	\$60.0	\$60.5
Growth	1.0%	-4.6%	11.6%	3.1%	-3.6%	0.8%	0.8%

The alcoholic beverage tax applies to sales of beer, malt beverages, wine, and mixed alcoholic beverages. All beverages brewed or fermented from malt products and containing at least 0.5% alcohol by volume (ABV) are included in the tax base. The tax is levied on a per-container rate depending on the type of beverage sold. Beer is taxed at varying rates that are equivalent to 0.14 cents per ounce for bottles and cans with a volume of 12 ounces or less (about 10.1 cents for a six pack of 12 ounce containers). Wine containing less than 14% ABV is taxed at 32 cents per gallon (about 6.3 cents for a standard 750 milliliter (ml) bottle). Wine with between 14% and 21% ABV is taxed at \$1.00 per gallon (or 19.8 cents for a standard 750 ml bottle). Mixed beverages are taxed at \$1.20 per gallon (or 23.8 cents for a standard 750 ml bottle). A portion of the tax paid on each gallon of wine is deposited into the Ohio Grape Industries Fund. All other revenue from the alcoholic beverage tax is deposited into the GRF. During the first half of FY 2023, about 63% of the tax's revenue was from the sale of beer and malt beverages, down from 75% during the first six months of FY 2019, reflecting a continuing shift in consumers' choices over alcoholic beverages.

Revenue during FY 2023 through January was 4.7% lower than it was during the first seven months of FY 2022. This seems to reflect a pullback from increased consumption of alcoholic beverages coinciding with the initial COVID-19 outbreak. The forecast for tax revenue is based on trend analysis. Revenue is projected to return to its long-run rate of growth starting in FY 2024.

Liquor Gallonage Tax

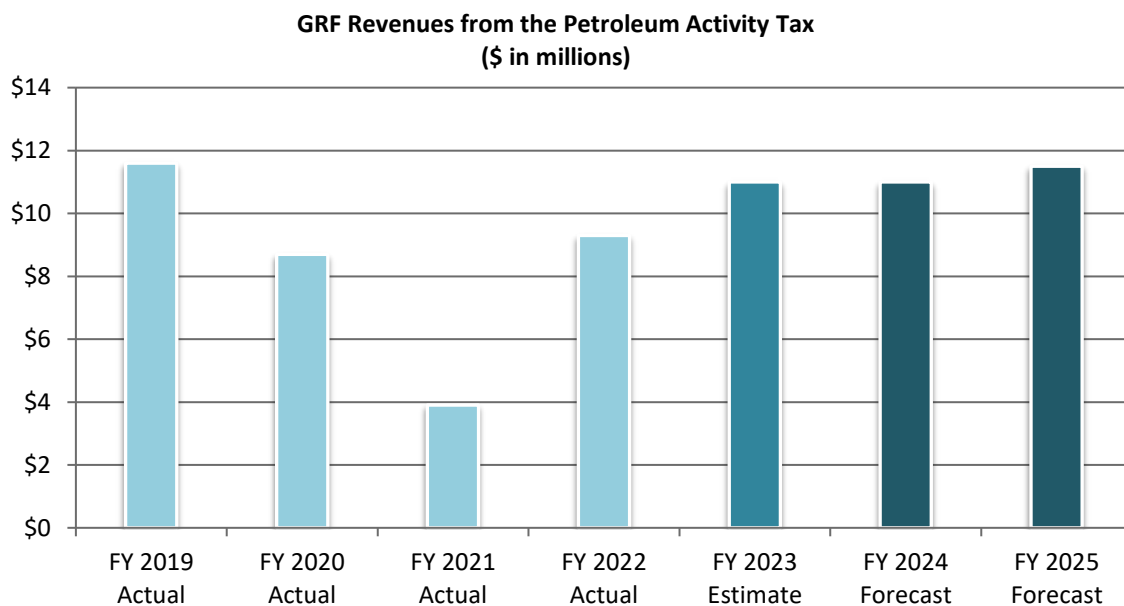


\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$50.3	\$53.4	\$57.6	\$57.9	\$57.1	\$59.3	\$61.6
Growth	4.6%	6.0%	8.0%	0.5%	-1.4%	3.9%	3.9%

The liquor gallonage tax is levied at the rate of \$3.38 per gallon of spirituous liquor. This is the equivalent of 67.0 cents per standard 750 ml bottle. The tax is based on the volume of liquor sold and the rate has not changed since 1993, therefore all growth in revenue has come from unit sales. Among alcoholic beverage market shares, spirits have grown mostly at the expense of beer sales, though the market share for wine increased notably during the COVID-19 pandemic response. All revenue from the liquor gallonage tax is deposited into the GRF.

During the first seven months of FY 2023, revenue from the tax decreased by 1.2% compared to the first half of FY 2022. As with the alcoholic beverage tax, this appears to be a pullback from a rise in liquor sales during the COVID-19 pandemic and resulting social distancing orders, which caused a spike in revenue from this tax source during FY 2021. Currently anticipated FY 2023 collections are \$57.1 million, 1.4% below FY 2022. LBO estimates the tax will produce \$59.3 million in GRF revenue in FY 2024 and \$61.6 million in FY 2025. The forecast of liquor gallonage tax receipts is based on trend analysis and assumes that revenue growth returns to its long-run average rate in FY 2024.

Petroleum Activity Tax



\$ in millions	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Revenue	\$11.6	\$8.7	\$3.9	\$9.3	\$11.0	\$11.0	\$11.5
Growth	48.0%	-27.4%	-55.5%	138.4%	18.6%	0.0%	4.5%

The petroleum activity tax (PAT), which commenced on July 1, 2014, was enacted in H.B. 59 of the 130th General Assembly as a replacement for the CAT on motor fuel. On December 7, 2012, the Supreme Court of Ohio ruled that imposing the CAT on gross receipts from the sale of motor vehicle fuel and allocating the revenues to the GRF was unconstitutional.

and that revenue arising from the sale of motor fuel used on public highways must be used for public highway purposes.

The PAT is computed on the basis of the gross receipts received by a “supplier” from the first sale of motor fuel delivered to a location in the state. The PAT tax rate is 0.65% on a supplier’s gross receipts, to be paid quarterly by suppliers. A “supplier” is a person that either acquires motor fuel from a terminal or refinery “rack” and distributes that fuel within the state, or who imports motor fuel for sale or distribution within the state but outside of a bulk distribution system.¹³ A “rack” is defined as a mechanism that delivers motor fuel from a terminal or refinery into a means of transport other than a pipeline or vessel.

Revenue from the tax is initially credited to the Petroleum Activity Tax Fund, minus moneys required to pay tax refunds. Of the amount remaining, 1% is transferred to the Petroleum Activity Tax Administration Fund to offset Department of Taxation costs. Next, PAT receipts from fuels sold to propel vehicles on public highways are transferred to the Petroleum Activity Tax Public Highways Fund; these moneys comprise the bulk of PAT collections, and must be used for maintaining the state highway system or paying debt service on highway bond obligations. Any revenue from sales of motor fuel not used to propel vehicles on public highways is transferred to the GRF.

GRF revenue received during the first six months of FY 2023 was 66.3% more than revenue received during the comparable FY 2022 period, due in large part to a spike in motor fuel prices that seems to be subsiding. The growth rate is projected to moderate in the second half of the year. There is still very limited experience with revenue from the tax, since the structure of the tax differs significantly from that of the CAT. This limited experience means that a formal model of tax revenue would have little if any reliability. Flat revenue in FY 2024 assumes stable prices for motor fuels during the coming year, following declines in the second half of this year; tax revenue growth in FY 2025 assumes gradual price increases.

¹³ A bulk distribution system is defined as refineries, pipelines, fuel terminals, or marine vessels.

MEDICAID SERVICE EXPENDITURE FORECAST

Forecast Summary

Medicaid is a joint state-federal program that provides health care coverage to low-income individuals. The Medicaid forecast includes both state and federal shares of Medicaid expenditures. LBO forecasts most caseload-driven service expenditures and assumes no changes from current law or administrative policies in the baseline forecast. LBO's baseline forecasts for FY 2023 through FY 2025 are shown in the first row of the table below. Certain Medicaid service expenditures incurred by the Ohio Department of Medicaid (ODM) depend more on administrative policies than caseloads. These expenditures were estimated by ODM and are listed as "add-ons" in the table below. Similarly, Medicaid service expenditures incurred by the Department of Developmental Disabilities (DDD) are driven more by administrative policies and appropriations. These expenditures, which were provided by DDD, are listed as "DDD services" in the table below.

As seen from the table, total Medicaid service expenditures are projected to increase from an estimated \$36.01 billion in FY 2023 to \$38.16 billion in FY 2024, an increase of 6.0% or \$2.15 billion. In FY 2025, Medicaid service expenditures are projected to total \$40.17 billion, an increase of 5.3% or \$2.01 billion from FY 2024. These increases largely reflect increases in per member per month costs as overall Medicaid caseload is expected to decline somewhat in both FY 2024 and FY 2025.

Total Medicaid Service Expenditures (Excluding Administration) (Combined State and Federal Dollars, \$ in Millions)					
Category	FY 2023 Estimates	FY 2024 Forecast	Growth Rate	FY 2025 Forecast	Growth Rate
LBO forecast	\$28,261.0	\$29,925.2	5.9%	\$31,145.8	4.1%
Add-ons	\$4,442.4	\$4,836.5	8.9%	\$5,487.2	13.5%
DDD services	\$3,311.0	\$3,401.9	2.7%	\$3,536.2	3.9%
Total	\$36,014.4	\$38,163.6	6.0%	\$40,169.1	5.3%

LBO forecasts Medicaid expenditures for two reasons. First, Medicaid services are an entitlement for those who meet eligibility requirements. This means that if an individual is eligible for the program then that individual is guaranteed the benefits and the state is obligated to pay for them. Second, the program's costs represent a significant portion of the GRF budget. In FY 2022, Medicaid expenditures represent approximately 47.8% of total GRF expenditures (including both state and federal shares) and 21.7% when only the state share of the GRF is considered.

Medicaid provides financial reimbursement to health care professionals and institutions for providing approved medical services, products, and equipment to Medicaid enrollees. As shown in the equation below, forecasted Medicaid service expenditures are equal to the forecasted number of Medicaid beneficiaries (members) each month – the caseload – multiplied

by the forecasted cost per Medicaid beneficiary each month – the per member per month (PMPM) cost.

$$\text{Expenditures} = \text{Caseload} \times \text{PMPM Cost}$$

Medicaid service expenditures can generally be placed into various payment categories. Total forecasted Medicaid service expenditures are the sum of forecasted expenditures for each of these categories.

LBO Baseline Forecast of Medicaid Service Expenditures by Payment Category (Combined State and Federal Dollars, \$ in Millions)							
Category	FY 2022 Actuals	FY 2023 Estimates	Growth Rate	FY 2024 Forecast	Growth Rate	FY 2025 Forecast	Growth Rate
Managed Care	\$21,854.0	\$23,739.6	8.6%	\$25,786.5	8.6%	\$26,945.8	4.5%
CFC	\$8,100.8	\$7,004.6	-13.5%	\$7,129.0	1.8%	\$7,650.2	7.3%
Group VIII	\$7,126.1	\$6,505.0	-8.7%	\$6,475.6	-0.5%	\$6,579.0	1.6%
ABD	\$3,766.1	\$2,896.6	-23.1%	\$2,762.0	-4.6%	\$2,951.2	6.9%
MyCare	\$2,861.0	\$3,027.9	5.8%	\$3,101.4	2.4%	\$3,174.3	2.4%
OhioRISE*	\$0.0	\$418.8	-	\$888.1	112.1%	\$989.2	11.4%
SPBM*	\$0.0	\$3,886.7	-	\$5,430.5	39.7%	\$5,602.0	3.2%
Fee-For-Service	\$4,418.7	\$4,521.4	2.3%	\$4,138.7	-8.5%	\$4,200.0	1.5%
Nursing Facilities	\$1,677.9	\$1,493.1	-11.0%	\$1,512.5	1.3%	\$1,543.6	2.1%
Hospitals	\$791.1	\$878.6	11.1%	\$705.9	-19.7%	\$720.6	2.1%
Aging Waivers	\$401.5	\$385.0	-4.1%	\$360.9	-6.3%	\$368.6	2.1%
Prescription Drugs	\$317.1	\$384.0	21.1%	\$302.6	-21.2%	\$307.4	1.6%
Home Care Waivers	\$147.3	\$139.8	-5.1%	\$133.2	-4.7%	\$132.1	-0.9%
Behavioral Health	\$120.6	\$158.0	31.0%	\$112.1	-29.1%	\$108.4	-3.4%
All Other	\$963.3	\$1,082.9	12.4%	\$1,011.4	-6.6%	\$1,019.4	0.8%
Total	\$26,273	\$28,261	7.6%	\$29,925	5.9%	\$31,146	4.1%

*Both OhioRISE and SPBM were first implemented in FY 2023 and their expenditures for FY 2023 do not reflect each payment category's full fiscal year effect.

Caseload Forecast

Summary

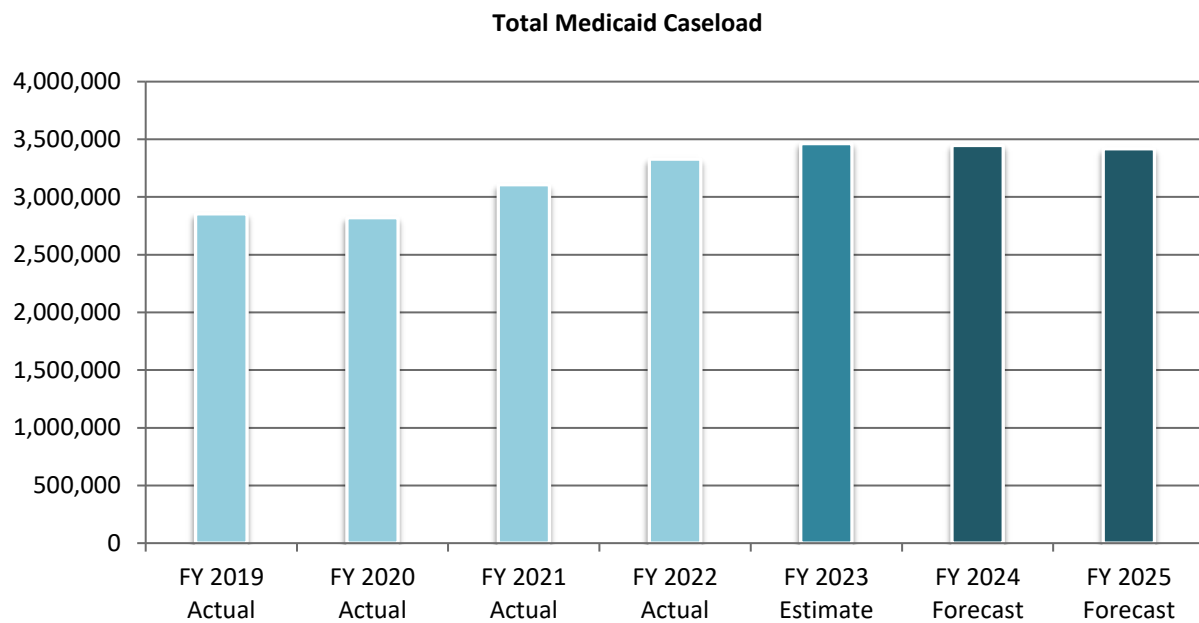
Ohio Medicaid currently provides health care coverage to (1) uninsured children up to age 19 in families with income up to 206% of federal poverty guidelines (FPG), (2) insured children up to age 19 in families with income up to 156% FPG, (3) pregnant women in families with income up to 200% FPG, (4) parents or caretaker relatives with income up to 90% FPG, (5) adults age 19 to 64 with income up to 133% FPG, and (6) individuals who meet the Supplemental Security Income (SSI) standard and are age 65 and older, or are legally blind, or are determined disabled by the Social Security Administration. Medicaid coverage is also available to working Ohioans with disabilities through the Medicaid Buy-In for Workers with Disabilities Program. Under this program, individuals with income up to 250% FPG may qualify and those with income greater than 150% FPG must pay a monthly premium. Youth who aged out of foster care on their 18th birthday are also eligible for Medicaid coverage until age 26, regardless of income.

The federal Medicare Program provides health care coverage for most of Ohio's elderly population; however, many of the elderly are "dually eligible" (i.e., eligible for both Medicare and Medicaid). The Medicaid Program supplements dual eligibles' Medicare benefits by providing assistance with Medicare premiums, copayments, and deductibles to certain low-income seniors.

As described below, during the COVID-19 public health emergency (PHE), continuous enrollment requirements and other related federal law changes led to large increases in Ohio's Medicaid caseload numbers. On March 31, 2023, the federal continuous enrollment requirements will generally end and states will begin the process of routine redeterminations and disenrollments. LBO expects the disenrollments as a result of the restart of routine redeterminations of eligibility to take place over a period of many months. The disenrollment number is expected to be higher than the growth from new enrollments, resulting in overall declining caseload numbers during the unwinding period.

The total number of persons enrolled in Medicaid is expected to decrease from an estimated 3.463 million in FY 2023 to 3.447 million in FY 2024 (a 0.47% decrease), and to 3.418 million in FY 2025 (a 0.83% decrease). This forecast is shown in the following table and chart.

Total Medicaid Caseload (in millions)							
	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
Caseload	2.854	2.822	3.107	3.329	3.463	3.447	3.418
Growth	-4.96%	-1.12%	10.09%	7.13%	4.04%	-0.47%	-0.83%



Continuous Enrollment and Future Disenrollment

The Medicaid caseload forecast for FY 2023 through FY 2025 is heavily impacted by federal law changes related to the COVID-19 PHE. This section briefly discusses how the continuous enrollment requirements and related changes in several federal COVID-19 response acts have led to higher caseload growth since March 2020, and how the eventual ending of those requirements (to be implemented in Ohio beginning in April, 2023) are expected to lead to overall caseload decline in the next biennium.

Since March of 2020, Medicaid has experienced numerous changes related to the COVID-19 pandemic. In March 2020, Congress passed three acts allocating additional federal funding to states for several programs addressing the COVID-19 pandemic: the Coronavirus Preparedness and Response Supplemental Appropriations Act (signed March 6), the Families First Coronavirus Response Act (FFCRA, March 18), and the Coronavirus Aid, Relief, and Economic Security (CARES) Act (March 27). The second act, the FFCRA, increases the federal medical assistance percentage (FMAP) by 6.2 percentage points for certain Medicaid expenditures incurred after January 1, 2020, and throughout the duration of the COVID-19 PHE. To qualify for the increase, the FFCRA requires states do the following: (1) maintain eligibility standards or procedures that are no more restrictive than those in place on January 1, 2020, (2) not charge premiums that exceed those in place on January 1, 2020, (3) provide testing, services, and treatments (including vaccines, specialized equipment, and therapies related to COVID-19) without cost-sharing requirements, (4) provide continuous coverage to individuals enrolled onto the program during the emergency period, and (5) not require local political subdivisions to pay a greater portion of the nonfederal share of expenditures than was required on March 11, 2020.

Of these requirements for receiving the additional FMAP, one with a large influence on Medicaid caseloads is the requirement to provide continuous coverage to Medicaid enrollees during the COVID-19 PHE. The growth in Ohio's Medicaid caseloads since March 2020 is mainly attributable to an increase in applications and approvals for coverage at the beginning of the pandemic, followed by the suspension of routine redeterminations of eligibility. On a national basis,

the Kaiser Family Foundation reports that total Medicaid and the Children's Health Insurance Program (CHIP) enrollment in the U.S. grew by approximately 28% from February 2020 to September 2022. While this growth on the national level was influenced by factors in addition to the FFCRA's continuous coverage requirements, the continuous coverage requirements have been one key contributory factor to the national caseload increase, as well as Ohio's caseload increase.

In December 2022, Congress passed the Consolidated Appropriations Act, 2023 (CAA). Among its many provisions, the CAA provides for a gradual unwinding of both the enhanced FMAP and the continuous coverage provision. On March 31, 2023, the CAA ends the continuous coverage requirement. In accordance with previously issued guidance from the Centers for Medicare and Medicaid Services (CMS), states will have up to 14 months to fully resume routine eligibility and enrollment processes.

The CAA also phases down the increased FMAP over the last nine months of 2023, provided the state meets certain disenrollment requirements. The scheduled phase-down is shown in the following table. The CAA includes penalty reductions in the FMAP if states do not meet new Medicaid reporting requirements effective April 1, 2023.

2023 Enhanced FMAP Schedule	
Date	Percentage Point Increase
Jan. 1-Mar. 31	6.2%
Apr. 1-Jun. 30	5.0%
Jul. 1-Sep. 30	2.5%
Oct. 1-Dec. 31	1.5%

Eligibility redetermination and disenrollment will be a complex process for ODM. The manner and pace may depend on various policy decisions and the administrative capacity of the Department, including its IT systems and coordination with county departments of job and family services. The unwinding will have significant influence on Medicaid caseloads for FY 2023 and the FY 2024-FY 2025 biennium. For ODM to remain eligible for the enhanced FMAP throughout CY 2023 they must follow all federal requirements for disenrollments and have accurate contact information for all enrollees they contact regarding redetermination. When enrollees are contacted regarding their redetermination, states may not disenroll anyone solely on the basis of returned mail until making a good faith effort to contact the enrollee via alternate communication methods. Prior to the redetermination process, states must submit documentation to CMS, including a renewal distribution plan due in February 2023, a system readiness artifact data set due in February 2023, and baseline unwinding data, due on the eighth day of the month in which a state begins its unwinding process.

Caseloads by Eligibility

The Medicaid caseload is often presented in two main eligibility categories: covered families and children (CFC) and aged, blind, and disabled (ABD). Generally, state law does not specify which persons fit into which categories. Rather, the categories have in large part been

created administratively. CFC includes families, children, and pregnant women, and, after the Patient Protection and Affordable Care Act (ACA) of 2010 expansion, low-income individuals age 19 through 64, also often presented separately and called Group VIII. The ABD category includes certain low-income individuals who are aged (age 65 or older), blind, or disabled. In addition to CFC and ABD, there are a few programs that provide partial Medicaid coverage and are treated separately in the forecast. Individuals in these programs are grouped under the Other category.

Medicaid caseloads, particularly for the CFC group, are affected by changes in the economy. As unemployment increases, workers and their dependents may lose access to employer coverage and may become eligible to enroll in Medicaid. Caseloads are also affected by policy changes. For example, the increase in caseloads beginning in FY 2021 was largely due to the redetermination suspension set as a condition for accepting the enhanced FMAP during the COVID-19 PHE.

The PHE has had a major impact in historic caseload numbers as well as forecasted figures for the near future. The impact of the COVID-19 pandemic on Medicaid caseloads began to show in March 2020 and continued throughout 2021 and 2022. From March 2020 through December 2022, caseloads increased by nearly 700,000 (24%) cases. The growth in caseloads came from an increase in the number of new Medicaid applications and approvals during the unprecedented spike in unemployment seen in March and April of 2020. The caseload number has remained elevated due to the suspension of routine eligibility redeterminations and the disenrollments that would otherwise accompany a finding of ineligibility.

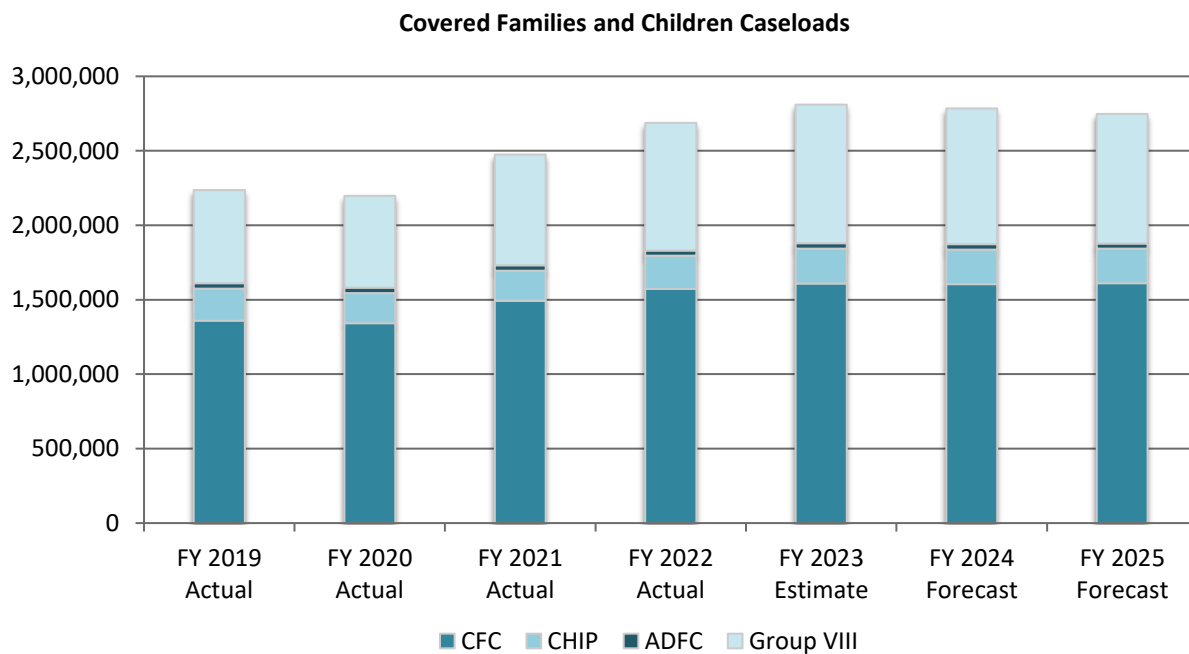
CFC category caseload forecasts are shown in the table and associated chart below. LBO forecasts that the overall CFC caseload will decrease by 24,790, or 0.88%, in FY 2024, and decrease by 36,295, or 1.30%, in FY 2025. For forecasting purposes, the CFC category is further broken down into traditional CFC (which includes Healthy Start/Healthy Families (HS/HF)), the CHIP, the Adopted and Foster Care Children (ADFC) Program, and Group VIII.

Covered Families and Children Caseloads							
	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
CFC (HS/HF)	1,359,984	1,342,448	1,492,059	1,572,519	1,608,905	1,603,727	1,610,359
Growth	-4.21%	-1.29%	11.14%	5.39%	2.31%	-0.32%	0.41%
CHIP	214,280	201,331	203,779	222,203	234,815	233,891	232,879
Growth	-3.28%	-6.04%	1.22%	9.04%	5.68%	-0.39%	-0.43%
ADFC	36,284	36,555	35,633	35,205	35,070	35,079	35,066
Growth	1.32%	0.75%	-2.52%	-1.20%	-0.38%	0.03%	-0.04%
Group VIII	625,016	617,730	743,874	857,061	930,812	912,115	870,213
Growth	-9.54%	-1.17%	20.42%	15.22%	8.61%	-2.01%	-4.59%
Total CFC	2,235,564	2,198,064	2,475,345	2,686,988	2,809,603	2,784,813	2,748,518
Growth	-4.96%	-1.68%	12.61%	8.55%	4.56%	-0.88%	-1.30%

CFC (HS/HF): Traditional Covered Families and Children under the Healthy Start/Healthy Families Program

CHIP: Children's Health Insurance Program

ADFC: Adopted and Foster Care Children

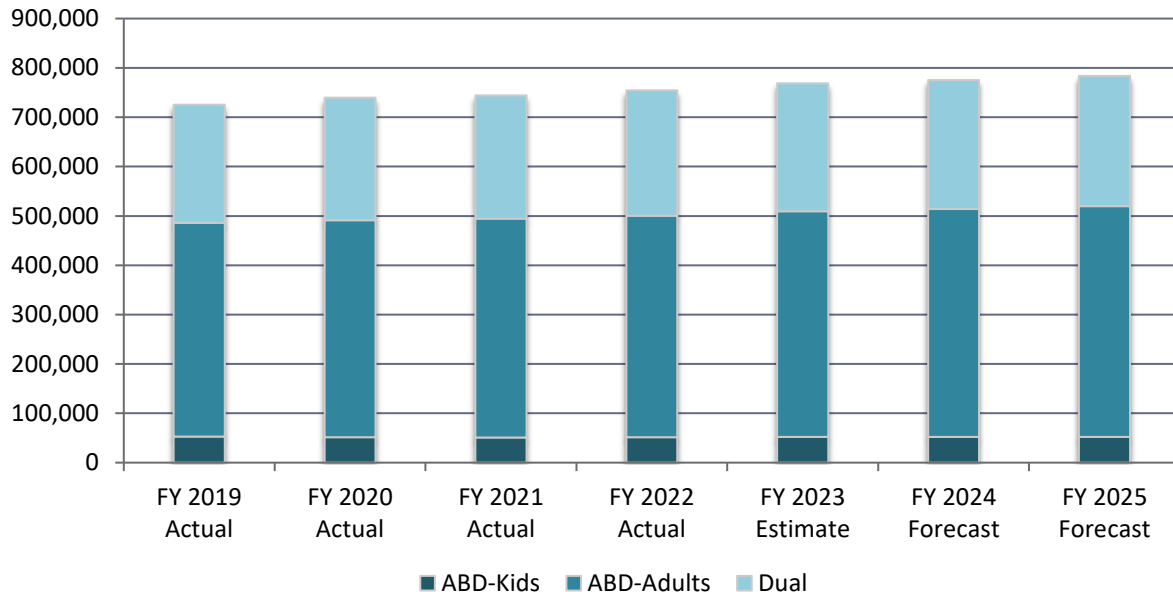


ABD category caseload forecasts are presented in the table and associated chart below. LBO forecasts that the overall ABD caseload will increase by 6,895, or 0.90%, in FY 2024 and by 7,936, or 1.02%, in FY 2025. The reason for the expected growth in the ABD caseload totals while overall Medicaid enrollment is projected to decline is the recategorization of certain Medicaid enrollees. During the PHE, some categories, such as CFC and Group VIII, grew at historically high rates. During the unwinding process some enrollees who no longer qualify for Medicaid under their previous category might re-enroll under another category. One category expected to pick up some enrollees is the ABD category, as some CFC and Group VIII recipients may receive determinations of disability or turn age 65.

The Medicaid caseload for ABD has been increasing since April 2020. Furthermore, the caseload for dual eligibles has been increasing since the first quarter of 2019. For forecasting purposes, the ABD category is broken down into children (ABD-Kids), adults (ABD-Adults), and dual eligibles (individuals eligible for both Medicaid and Medicare).

Aged, Blind, and Disabled Caseloads							
	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
ABD-Kids	52,736	51,666	51,250	51,461	52,116	52,155	52,155
Growth	0.12%	-2.03%	-0.80%	0.41%	1.27%	0.07%	0.00%
ABD-Adults	433,674	439,898	443,097	448,945	457,222	462,091	467,544
Growth	-0.44%	1.44%	0.73%	1.32%	1.84%	1.06%	1.18%
Dual	239,293	248,163	249,860	253,939	259,362	261,351	263,833
Growth	-1.08%	3.71%	0.68%	1.63%	2.14%	0.77%	0.95%
Total ABD	725,702	739,726	744,207	754,345	768,701	775,596	783,532
Growth	-0.38%	1.93%	0.61%	1.36%	1.90%	0.90%	1.02%

Aged, Blind, and Disabled Caseloads

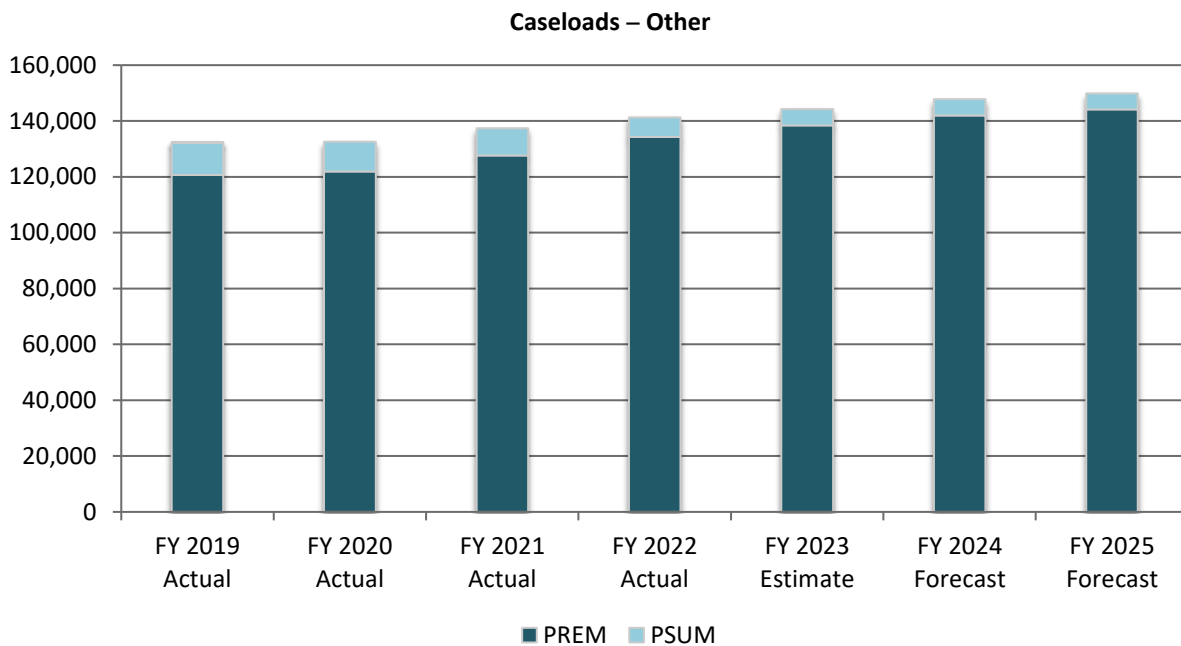


“Other” category caseload forecasts are shown in the table and chart below. The Other category includes two programs: Medicare premium assistance (PREM), which helps certain qualified Medicare beneficiaries pay their Medicare premiums, and the presumptive eligibility (PSUM) group, which includes those who receive immediate health care services through certain Medicaid providers if they are presumed to be eligible.

Caseloads – Other							
	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
PREM	120,666	121,897	127,685	134,299	138,464	141,981	144,108
Growth	1.08%	1.02%	4.75%	5.18%	3.10%	2.54%	1.50%
PSUM	11,563	10,696	9,719	6,949	5,793	5,802	5,799
Growth	-50.17%	-7.49%	-9.14%	-28.50%	-16.63%	0.15%	-0.05%
Total Other	132,229	132,593	137,405	141,248	144,258	147,783	149,907
Growth	-7.26%	0.28%	3.63%	2.80%	2.13%	2.44%	1.44%

PREM: Medicare premium assistance

PSUM: Presumptive eligibility



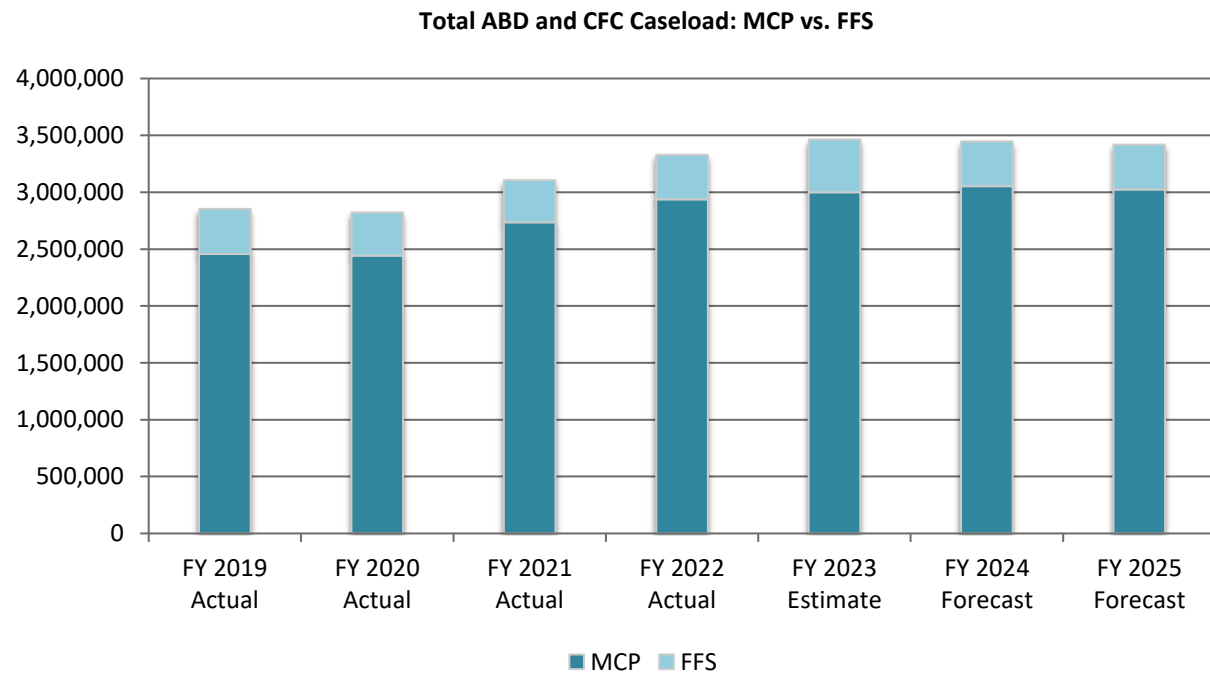
Caseloads by Service Delivery System

Two major service delivery systems for Medicaid are managed care plan (MCP) and fee-for-service (FFS). Historically, Medicaid paid most service providers a set fee for the specific type of service rendered to Medicaid enrollees (termed “fee-for-service” reimbursement). Now, Medicaid pays for most services through a MCP. A typical MCP is one in which the beneficiary receives all care through a single point of entry, and the plan is paid a fixed monthly premium per beneficiary (said to be a “capitated” rate) for any health care included in the benefit package, regardless of the amount of services actually used.

In forecasting Medicaid expenditures, the costs of recipients enrolled in MCPs are generally treated separately from the FFS categories. Managed care has grown steadily since its first implementation in all 88 Ohio counties in 2006. Over time, this implementation has dramatically shifted Medicaid expenditures from the FFS categories to the managed care categories. The structure of the managed care rollout evolved from voluntary enrollment to mandatory enrollment. Most Medicaid recipients are currently required to enroll in managed care, including many who formerly were served on an FFS basis.

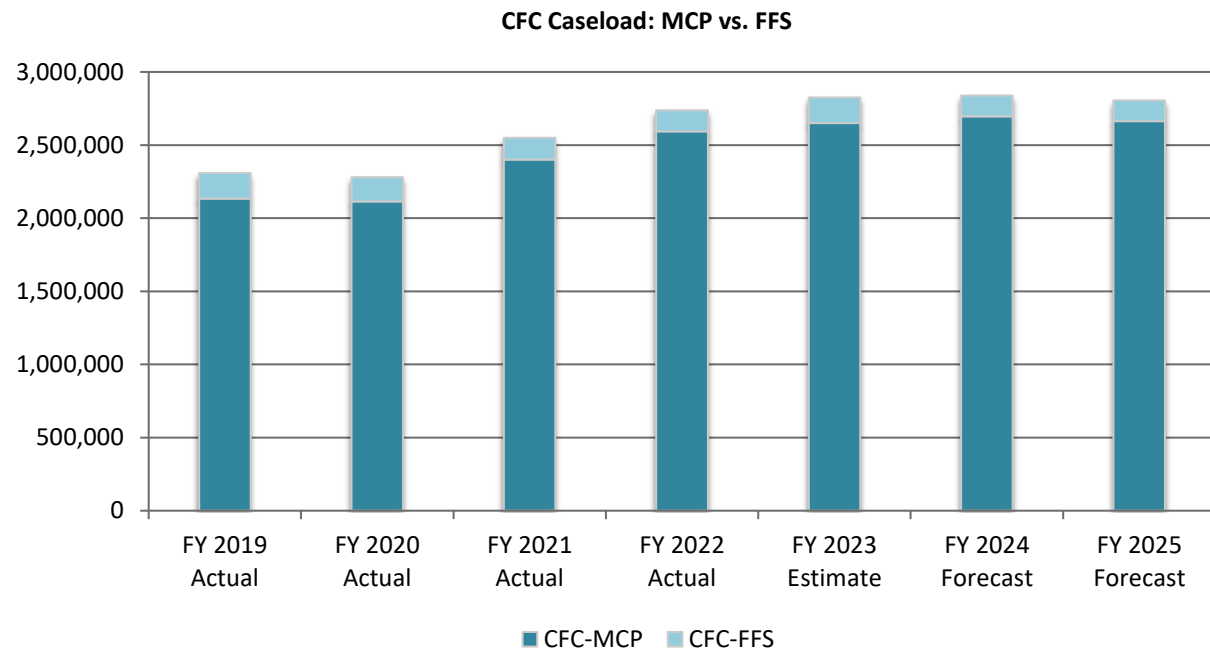
Forecasted total caseloads for the two delivery systems are shown in the table and associated chart below. Beginning in March 2022, ODM has held more enrollees in FFS categories as preparation for the implementation of the various components of Next Generation Managed Care. This is expected to continue through FY 2023, after which the FFS categories will return to their recent typical sizes. The managed care share of the total caseload increases from 86.1% in FY 2019 to about 88.5% in FY 2025.

Total ABD and CFC Caseload: MCP vs. FFS							
	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
MCP	2,457,423	2,442,456	2,736,261	2,937,198	2,999,544	3,053,438	3,023,572
Growth	-3.22%	-0.61%	12.03%	7.34%	2.12%	1.80%	-0.98%
FFS	396,780	379,765	370,835	391,443	463,655	393,403	394,551
Growth	-14.47%	-4.29%	-2.35%	5.56%	18.45%	-15.15%	0.29%

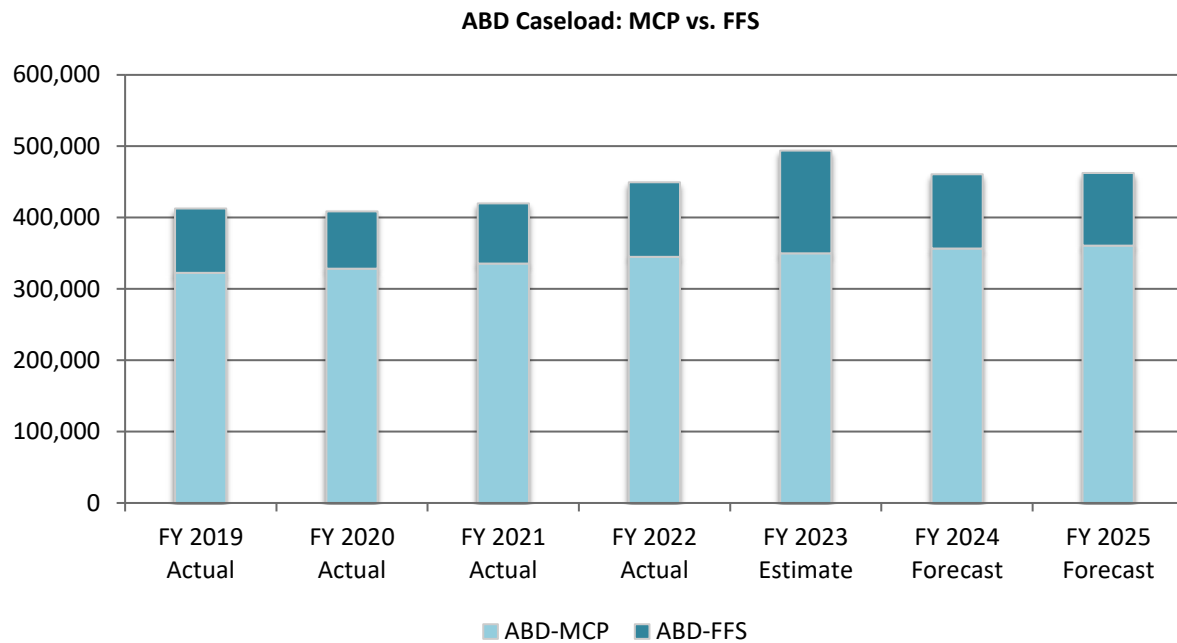


The following two tables and associated charts detail forecasted caseloads for the two service delivery systems for the CFC and ABD populations. The managed care share of the CFC population increases from 92.5% in FY 2019 to 94.9% in FY 2025. The managed care share of the ABD population decreases slightly, from 78.1% in FY 2019 to 78.0% in FY 2025.

CFC Caseload: MCP vs. FFS							
	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
CFC-MCP	2,134,731	2,114,003	2,400,689	2,592,427	2,649,562	2,696,622	2,662,898
Growth	-4.42%	-0.97%	13.56%	7.99%	2.20%	1.78%	-1.25%
CFC-FFS	174,307	167,099	149,193	145,653	175,492	141,691	142,847
Growth	-17.62%	-4.14%	-10.72%	-2.37%	20.49%	-19.26%	0.82%



ABD Caseload: MCP vs. FFS							
	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Estimate	FY 2024 Forecast	FY 2025 Forecast
ABD-MCP	322,691	328,453	335,572	344,771	349,982	356,816	360,673
Growth	5.51%	1.79%	2.17%	2.74%	1.51%	1.95%	1.08%
ABD-FFS	90,244	80,072	84,238	104,543	143,905	103,929	101,797
Growth	-17.76%	-11.27%	5.20%	24.11%	37.65%	-27.78%	-2.05%



PMPM Cost Forecast

The second component of the forecast equation is the PMPM cost. These costs depend on the services required for each member type and reimbursement rates set by ODM. Although generally the ABD population makes up less than 20% of the total caseload, it comprises almost 60% of the total service costs. This is because the ABD population's health care needs are generally higher. The service delivery system also affects the PMPM cost forecast. The state pays for services through MCPs at a fixed capitation rate, whereas the state pays for the FFS population based on the cost of services actually received. Generally, PMPM costs are forecasted based on the trends in the data and current policies. Following is a discussion of factors affecting the PMPM forecast for the largest service categories.

Managed Care

LBO's forecast assumes annual capitation rate growth of between 3.7% and 4.5% in 2024 and between 3.9% and 4.9% in 2025 for ABD and CFC populations. In addition, the forecast assumes growth of 4.9% in 2024 and 5.3% in 2025 for Group VIII. These growth rates were calculated by the independent risk management, benefits, and technology firm Milliman, the state's contracted actuary for Medicaid. Federal regulations require each state's managed care capitation rate to be actuarially sound. Generally, the MCP capitation rates are set at the beginning of each calendar year.

Capitation rates have increased to account for policy changes during the FY 2022-FY 2023 biennium, including capitation rates which are paid to hospitals. Beginning in 2021 under provisions of S.B. 310 of the 133rd General Assembly, and continued via H.B. 110 of the 134th General Assembly and subsequent approved Controlling Board actions, ODM has been providing additional Medicaid funding to hospitals due to COVID-19. Managed care rates calculated by Milliman take into account the Hospital Additional Payment (HAP) program. The HAP program's purpose is to increase hospital reimbursement above historical levels. The

additional payments are calculated separately for inpatient services and outpatient services, but apply to both types of hospital services.

During the FY 2022-FY 2023 biennium, two additional categories of Medicaid Managed Care were introduced as part of ODM's Next Generation Managed Care redesign. These categories are the Single Pharmacy Benefit Manager (SPBM) and the Ohio Resilience through Integrated Systems and Excellence (OhioRISE) programs. The SPBM provides pharmacy benefits across all Medicaid MCPs with the goal of improving management and administration of pharmacy benefits, gaining increased financial accountability, and assuring alignment with clinical and policy goals while improving transparency. OhioRISE aims to keep families together by creating more in-home and community-based services for children with the most complex behavioral health challenges. As recipients receive services through these new categories, payments made to other MCPs will be lower because they are no longer being compensated for care that will now be provided by the SPBM or OhioRISE.

Nursing Facilities

ODM updates nursing facility (NF) payment rates on a semiannual basis. Recent statewide average per diem rates are shown in the following table. LBO's baseline forecast assumes the FY 2023 rate will continue throughout the FY 2024-FY 2025 biennium.

Nursing Facility Payment Rates, Statewide Average	
Date	Per Diem
Jan.-Jun. 2021	\$212
Jul.-Dec. 2021	\$226
Jan.-Jun. 2022	\$222
Jul.-Dec. 2022	\$232
Jan.-Jun. 2023 (Estimated)	\$232
FY 2024-FY 2025 (Assumed)	\$232

Monthly NF caseload (both FFS and MyCare¹⁴) decreased by 8,300 or 17% from February 2020, the start of the COVID-19 PHE, through February 2021, when the caseload was at its lowest point in the past three years. According to Milliman, the timing of this NF caseload decrease is consistent with an increase in deaths attributed to COVID-19 in the state's data. LBO's projection assumes that there will be some replacement of the NF population through FY 2025.

¹⁴ MyCare is the name for Ohio's program for people eligible for both Medicare and Medicaid.

Hospitals

Since FY 2020, hospital spending has been significantly influenced by the COVID-19 PHE. In March 2020, CMS recommended that healthcare providers postpone elective procedures until further notice to preserve personal protective equipment. On April 16, 2020, a White House recommendation gave the green light for elective surgical procedures to resume. Many hospitals postponed elective surgeries due to the COVID-19 PHE. Since then, the availability of elective surgical procedure services has depended on a hospital's capacity to meet the needs of caring for COVID-19 patients. The trends in COVID-19 also affect the utilization of these services. Hospital care utilization rebounded gradually starting in FY 2021.

In FY 2022, certain hospitals received provider relief payments. H.B. 169 of the 134th General Assembly required a portion of the enhanced FMAP authorized under the FFCRA to be used to fund provider relief payments. It allocated \$124 million in FY 2022 for critical access, rural, and distressed hospitals, as determined by the Medicaid Director. The bill further permitted the Medicaid Director to make relief payments to home and community-based services providers which include critical access, rural, and distressed hospitals, as authorized under the American Rescue Plan Act of 2021.

Starting in March 2022 and continuing throughout FY 2023, ODM temporarily held out new Medicaid enrollees from managed care enrollment in anticipation of enrolling them in Next Generation Managed Care plans. Individuals who are newly eligible for managed care, those who are currently in Medicaid FFS but not enrolled with a MCP, and those with a gap in eligibility of 91 days or more have received care paid for through Medicaid FFS until February 1, 2023, when they start transitioning to an Ohio Medicaid Next Generation plan. This temporary hold-out resulted in an increase in hospital payments under FFS in FY 2023.

For FY 2024, FFS hospital spending is expected to fall. This expectation is driven mostly by the assumption that ODM will resume its normal managed care enrollment process as planned. For FY 2025, hospital spending is expected to normalize and transition away from pandemic-related impacts on utilization.

Assumptions and Methodology

As indicated earlier, the Medicaid service expenditure and enrollment projections made by LBO economists are "baseline" or based on current law; that is, they are consistent with current legislation and administrative policy. These projections did not analyze any proposed changes included in the executive budget or future changes in state or federal policy that would affect the Medicaid Program. Furthermore, various "add-ons," including Medicaid Part D and Medicare Buy-In, were projected by ODM and added to the LBO baseline forecast; LBO economists did not forecast the add-ons.

Assumptions and Data Sources

Projections of Medicaid service expenditures and enrollment are dependent on demographic and economic assumptions such as economic growth, population growth, and the growth in health care prices. In addition, assumptions regarding participation rates and the coverage of and enrollment in other health insurance programs affect Medicaid expenditures and enrollment projections. The nature and quality of the available data also affect the projections.

The data on which the LBO forecast is based are provided by ODM. ODM data sources include the following:

- Ohio MITS (Medicaid Information Technology System);
- BIAR (Business Intelligence Analytical Reporting);
- Data Warehouse;
- OAKS (Ohio Administrative Knowledge System); and
- ADAT (Advanced Data Analytics Tool).

Ohio MITS is a browser-based healthcare administration platform that allows providers to submit claims and other relevant data electronically. BIAR is a subsystem of MITS that among other things, allows users to run queries and develop reports. The Data Warehouse stores data accumulated from various sources within ODM. OAKS is a system used by the state to manage its purchasing, general ledger, accounts receivable, and accounts payable information. Lastly, ADAT by IBM Health Insights/Merative Health Insights accesses Medicaid data from the Data Warehouse and provides software tools to analyze aspects of the Medicaid Program.

Methodology Summary

To forecast Medicaid service expenditures for the FY 2024-FY 2025 biennium, LBO economists used both trend analysis and regression analysis. Trend analysis uses historical results to predict future outcomes. Regression analysis predicts the value of one variable from known or assumed values of other variables related to it.

Regression analysis is used for estimating the relationship between a dependent variable and one or more independent variables when historical data is available. For example, the unemployment rate was included in a regression analysis as an independent variable when forecasting Medicaid caseloads (i.e., the dependent variable). Likewise, trend analysis might be employed to estimate the change in the cost of providing a specific set of benefits over time. In order to estimate this change, trend factors may also be applied. To select appropriate trend factors, the forecaster consults sources that provide regional and national economic indicators and indexes that offer broad perspectives of industry trends in the U.S., the Midwest region, and Ohio. For example, the U.S. Department of Labor CPI data (local, regional, and national) and IHS Markit data were all considered and evaluated by LBO economists to produce this forecast.

Additional difficulty arises when the effects of certain recent statutory or policy changes on the dependent variable or on trends are not yet apparent. For instance, January and February of 2023, when this forecast was developed, saw large changes in federal guidelines governing Medicaid as redeterminations and disenrollments were once again permitted after having been suspended for nearly three years. This period also saw structural changes in Ohio's Medicaid Program, as ODM implemented aspects of Next Generation Medicaid such as the SPBM and OhioRISE. While it is fully expected these changes will have major effects on Medicaid caseloads and costs, the historical data do not yet exist to allow for regression or trend analysis. LBO economists used related data and their knowledge of economic principles to develop a forecast that has the greatest likelihood of accuracy among the options available.

After numerous forecasts are produced using the methodologies described above, LBO economists choose the most appropriate models by employing statistical tests for goodness of

fit and considering expected growth patterns. The models with the poorest fit are eliminated. LBO economists also consider historical patterns, along with economic and policy expectations when determining the best model and producing the final forecasts.

LBO economists generate baseline forecasts for major expenditure categories by first calculating the PMPM costs for each category. For each typical expenditure category and subcategory, separate forecasts are done for the average cost per member.

Background on Medicaid

Medicaid, established in 1965 in Title XIX of the Social Security Act, is a joint state-federal program that provides health care coverage to low-income individuals. State agencies administer Medicaid subject to oversight by the CMS in the U.S. Department of Health and Human Services (HHS). State participation in Medicaid is voluntary, but since 1982 all states have participated. The federal government provides reimbursement to the states and offers guidance on how to use federal funds, but each state shapes and administers its program to suit the needs of its own population. For instance, states determine their own eligibility requirements and scope of services, set provider payment rates, and administer their own programs. Consequently, Medicaid operates as more than 50 distinct programs – one for each state and territory, and the District of Columbia.

Federal Poverty Guidelines

States use FPGs in developing their income-eligibility criteria for various Medicaid groups. FPGs are the income guidelines established and issued each year in the Federal Register by HHS. Public assistance programs usually define income standards in relation to the FPGs. The table below provides the 2022 poverty guidelines for various family sizes for the 48 contiguous states and the District of Columbia. Alaska and Hawaii have unique living costs and are provided a different set of guidelines not shown here.

2022 Federal Poverty Guidelines	
Family Size	Poverty Guidelines
1	\$13,590
2	\$18,310
3	\$23,030
4	\$27,750
5	\$32,470
6	\$37,190
7	\$41,910
8	\$46,630

Changes to the Medicaid Program over Time

Medicaid has undergone many changes since its inception. The program was initially established to provide medical assistance only to those individuals receiving assistance through Aid to Families with Dependent Children (AFDC) and state programs for the elderly. Over the years, Congress has incrementally expanded Medicaid eligibility to reach more Americans living below or near poverty, regardless of their welfare eligibility.

In 1972, Congress enacted a federal cash assistance program for ABD people called SSI, which broadened Medicaid coverage to include this population. A significant expansion of Medicaid was to provide health insurance coverage not just to the welfare population but also to other low-income families, especially low-income children and pregnant women.

In 1996, Medicaid was delinked from welfare with the enactment of the Temporary Assistance to Needy Families (TANF) Program. Families who receive TANF benefits do not automatically qualify for Medicaid as they did under the AFDC Program.

In 1997, the State Children's Health Insurance Program (SCHIP) was created. When it was reauthorized in 2007, it was renamed the CHIP. Title XXI of the Social Security Act added health care coverage for children in low- and moderate-income families who were ineligible for Medicaid, but could not afford private insurance. Under CHIP, states were offered the option of implementing this health care coverage as a stand-alone program with different benefit packages or as part of their existing Medicaid benefit. Ohio opted to implement CHIP as a Medicaid expansion beginning in 1998.

The most recent changes to Medicaid came with the enactment of the ACA of 2010. The goal of the ACA was to increase access to health insurance through a coordinated system of "insurance affordability programs," including a mandatory expansion of Medicaid to all individuals under age 65 whose income is at or below 133% FPG,¹⁵ and the creation of health insurance exchanges. A 2012 U.S. Supreme Court decision made the expansion voluntary. Ohio implemented its expansion in 2014, and by early 2023 it had been implemented by 29 states and the District of Columbia. The ACA also modified how income is calculated for most Medicaid applicants, including those in the new eligibility group, known as Group VIII, because of the section of the law granting eligibility. In 2014, states began using modified adjusted gross income (MAGI) to determine eligibility of most applicants. MAGI is adjusted gross income as defined in the Internal Revenue Code, modified by applying a 5% "disregard." This method of determining eligibility eliminated resource tests.

¹⁵ Under the ACA, the eligibility is 133% FPG. However, a 5% income disregard is allowed, which makes the effective minimum threshold 138% FPG.