

INFORMATION CONCERNING THE STATE OF OHIO

The following discusses certain matters relating to general State of Ohio (State) finances and debt, and the State's economy, employment, population, agriculture, resources, tax bases and related subjects. This information is from the State's official records, except for information expressly attributed to other sources, and summarizes and describes current and recent historical information. It is not intended to indicate future or continuing trends in the financial or other positions of the State. No representation is made that past experience, as might be shown by this financial and other information, will necessarily continue in the future.

[NOTE: Except as otherwise indicated, this Annual Information speaks as of June 30, 2023.]

FISCAL MATTERS

General

Consistent with the constitutional provision that no appropriation may be made for a period longer than two years, the State operates on the basis of a fiscal biennium for its appropriations and expenditures. Under current law, the biennium for operating purposes runs from July 1 in an odd-numbered year to June 30 in the next odd-numbered year (e.g., the current fiscal biennium began July 1, 2023, and ends June 30, 2025). Conversely, the biennium for general capital appropriations purposes runs from July 1 in an even-numbered year to June 30 in the next even-numbered year (e.g., July 1, 2022, through June 30, 2024). Within a fiscal biennium, the State operates based on a July 1 to June 30 fiscal year.

The Governor is required to submit the Executive Budget to the General Assembly no later than four weeks after the General Assembly convenes in January each odd-numbered year. In years of a new Governor's inauguration, the budget must be submitted by March fifteenth. Appropriations legislation reflecting that Executive Budget is then introduced for committee hearings and review first in the House and then in the Senate and finally in Conference Committee, with that appropriations legislation as approved by the General Assembly then presented to the Governor for approval (with possible line-item vetoes). See **FISCAL MATTERS – Recent and Current Finances – Current Biennium** for discussion of the enacted budget for the 2024-2025 fiscal biennium.

Authority for appropriating state moneys subject to appropriation rests in the bicameral General Assembly, which consists of a 99-member House of Representatives (elected to two-year terms) and a 33-member Senate (elected to overlapping four-year terms). Members of both houses are subject to term limits, with a maximum of eight consecutive years in either. The Governor has veto power, including the power to make line-item vetoes in bills making appropriations. Vetoes may be overridden by a three-fifths vote of each house.

The Ohio Constitution, Article XII, Section 4, requires the General Assembly to “provide for raising revenue, sufficient to defray the expenses of the state, for each year, and also a sufficient sum to pay the principal and interest as they become due on the state debt.” Therefore, the State is effectively precluded by law from ending a fiscal year or a biennium in a “deficit” position. State borrowing to meet casual deficits or failures in revenues or to meet expenses not otherwise provided for is limited by the Ohio Constitution to \$750,000 (Article VIII, Section 1).

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The General Revenue Fund (GRF) is the largest fund in the State. Personal income and sales and use taxes are the major sources of GRF tax revenue. The last complete fiscal year ended June 30, 2023, with an unobligated GRF fund balance of \$7.357 billion. The State also has a “rainy day” fund (the Budget Stabilization Fund (BSF)) which by law is intended to carry a balance of up to 10 percent of the GRF revenue for the preceding fiscal year.^[1] The BSF balance as of August 1, 2023 was \$3.65 billion (includes \$150 million of transfers), which equals 8.6 percent of FY 2023 GRF revenue. Recent fiscal year-end BSF balances and their percent of GRF revenue for that fiscal year were:

(\$ in Millions)

Fiscal Year-Ending	BSF Balance	Percent of GRF Revenue
2019	\$2,692	8.0%
2020	2,692	8.0
2021	2,692	6.8
2022	2,706 ^(a)	6.7
2023	3,501 ^{(a)(b)}	8.2

- (a) H.B. 110 of the 134th General Assembly authorized the BSF to retain any interest credited to the fund instead of allocating these funds to the GRF beginning in fiscal year 2022. As a result, the BSF accrued \$14.6 million in interest during fiscal year 2022 and \$67.7 million during fiscal year 2023.
- (b) Does not include year-end transfer of \$150 million into BSF that occurred in the following fiscal year, includes approximately \$727.3 million in transfers that occurred during FY 2023.

Listed in the tables below under **Recent Receipts and Disbursements** are the major categories of state revenue sources, including taxes and excises, and the amounts received from those categories. There is no present constitutional limit on the rates of those state levied taxes and excises (except for taxes on intangible property which the State does not currently levy).

At present, the State does not levy ad valorem taxes on real or tangible personal property. Ad valorem taxes on tangible personal property of public utilities and on real property are levied by political subdivisions and local taxing districts, and State law does not currently allow the imposition of a general ad valorem tax on tangible personal property other than that of public utilities. Since 1934, the Ohio Constitution has limited the amount of the aggregate levy of ad valorem property taxes on particular property, without a vote of the electors or municipal charter provision, to 1 percent of true value in money, and statutes limit the amount of that aggregate levy without a vote or charter provision to 10 mills per \$1 of assessed valuation -- commonly referred to in the context of Ohio local government finance as the “ten-mill limitation.” See **TAX LEVELS AND TAX BASES** for a discussion of the phase-out of local tangible personal property taxes in 2006 through 2009.

The Ohio Constitution directs or restricts the use of certain revenues. Highway fees and excises, including gasoline taxes, are limited in use to highway-related purposes. Not less than 50 percent of the receipts from state income taxes must be returned to the originating political subdivisions and school districts. State net lottery profits are allocated to elementary, secondary, vocational, and special education program purposes, including application to debt service on obligations issued to finance capital facilities for a system of common schools.

Ohio constitutional amendments relating to taxation, revenues, expenditures, debt, or other subjects may be proposed by action of three-fifths of the members elected to each house of the General Assembly or by initiative petition signed by electors numbering at least 10 percent of the total number of votes last cast for the Office of Governor. Adoption of a proposed amendment requires approval by a majority of electors voting on it at a statewide election. The Ohio Constitution expressly provides that the General Assembly has no power to pass laws impairing the obligation of existing contracts.

^[1] H.B. 33 of the 135th General Assembly raised the threshold from 8.5 percent to 10 percent.

Accounts and Controls; Financial Reports

With each office performing specific functions relating to State expenditures, the Office of Budget and Management (OBM) and the Treasurer of State account for and report on the State's fiscal affairs.

OBM maintains records of appropriations made by the General Assembly, and its director, appointed by the Governor, certifies the availability of unencumbered appropriations as a condition of contract validity. OBM fiscal functions include the development and oversight of operating and capital budgets as well as the review, processing, and reporting of financial transactions for most state departments and agencies (excluding, among others, institutions of higher education). The OBM Director's certification is required for all expenditure vouchers before OBM may issue state warrants. OBM maintains accounting records that reflect the level of vouchered expenditures. The Treasurer of State maintains the cash and investments that comprise the state treasury and invests state funds, including proceeds of state debt obligations. The Treasurer redeems the warrants issued by OBM when presented for payment by financial institutions and monitors the timing and amount of payments to determine the State's cash flow position for investment purposes.

State financial reporting practices have been and are in accordance with generally accepted accounting principles (GAAP). Each Annual Comprehensive Financial Report (ACFR) includes the State's Basic Financial Statements (BFS) for that fiscal year as examined by the Auditor of State. The most recent ACFRs are accessible via OBM's web page at <https://obm.ohio.gov/wps/portal/gov/obm/areas-of-interest/state-accounting/financial-reporting/acfr>.

The BFS are presented in accordance with a fund classification system prescribed by the Governmental Accounting Standards Board. The GAAP basis financial statement presentation is comprehensive in scope and includes organizations and activities defined within Ohio's reporting entity that are not subject to the State's appropriation process. The "General Fund" as reported in the BFS includes more than just the GRF; it also encompasses the Budget Stabilization Fund and those reimbursement-supported funds that account for activities administered by state agencies and departments and for which special revenue or proprietary fund classifications are considered inappropriate.

Recent Receipts and Disbursements

The following summary statements, prepared by OBM based on its accounting records, include (i) governmental and proprietary appropriated funds, cash receipts and cash disbursements, and (ii) GRF cash basis activity. The governmental and proprietary appropriated funds encompass the General Fund (which includes the GRF and BSF) as well as special revenue, debt service, capital projects, and enterprise fund types.

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**Summary Statement
Governmental and Proprietary Appropriated Funds
(\$ in Millions)**

Cash Receipts					
Source of Receipts	Fiscal Year				
Taxes	2019	2020	2021	2022	2023
Personal Income ^(a)	\$9,313.5	\$8,285.0	\$10,662.8	\$11,247.0	\$11,306.6
Sales and Use	11,053.3	11,160.5	12,639.1	13,611.1	14,404.4
Financial Institutions Tax	202.4	214.9	226.4	202.8	239.2
Commercial Activity Tax	1,932.0	1,979.9	1,972.6	2,366.9	2,543.6
Gasoline ^(b)	1,846.0	2,400.1	2,481.3	2,571.4	2,504.2
Public Utilities and Kilowatt Hour	889.5	841.8	791.8	876.6	950.0
Cigarette ^(c)	918.2	913	926.9	884.6	827.4
Foreign Insurance	325.8	332.5	351.8	357.0	394.8
Highway Use	37.4	44.4	45.3	55.3	54.7
Estate ^(d)	0.2	0.1	0.1	0.1	0.1
Alcoholic Beverages	57.5	54.8	63.7	59.7	66.8
Liquor Gallonage	50.3	53.4	57.6	57.9	57.3
Domestic Insurance Franchise	281.3	308.4	314.9	318.8	392.6
Other ^(e)	110.7	106	189.5	199.3	205.9
Total Taxes	27,018.0	26,694.8	30,723.8	32,807.9	33,647.7
Licenses, Permits and Fees	4,065.1	4,320.2	4,804.9	5,189.5	5,531.7
Sales, Services and Charges	1,665.3	1,671.3	1,902.8	1,958.3	1,944.9
Federal Government ^(f)	23,663.7	29,220.6	34,047.2	38,300.7	35,713.9
Other ^(g)	6,513.2	6,279.1	8,239.9	9,676.3	10,540.1
Proceeds from Sale of Bonds and Notes	1,042.0	1,393.1	1,552.6	553.1	380.0
Total Cash Receipts	\$63,967.4	\$69,579.0	\$81,271.2	\$88,485.7	\$87,758.3

- (a) The State has incrementally reduced personal income tax rates commencing calendar year 2013 (see FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2018-2019, 2020-2021, and Current Biennium and TAX LEVELS AND TAX BASES – Personal Income Tax).
- (b) Beginning July 1, 2019, the gasoline tax and diesel tax were increased from 28.0 cents to 38.5 cents and 47.0 cents per gallon, respectively (see TAX LEVELS AND TAX BASES).
- (c) Beginning October 1, 2019, the minimum age to purchase cigarettes increased from 18 to 21, and a 10 cents/milliliter tax was imposed on vapor products (see FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2020-2021).
- (d) Eliminated effective January 1, 2013; receipts in all years reflect delayed filings or payments.
- (e) Includes residual payments under the corporate franchise tax for FY 2022.
- (f) FY 2020 and FY 2021 increases were associated with the enhanced Federal Medical Assistance Percentage authorized in the Families First Coronavirus Response Act (see FISCAL MATTERS – Recent and Current Finances – Outbreak of COVID-19).
- (g) Largest components consist of various reimbursements, loan repayments, unclaimed funds, and investment income.
- Totals may not foot due to rounding.

Cash Disbursements					
Source of Receipts	Fiscal Year				
General Fund	2019	2020	2021	2022	2023
General Revenue Fund	\$32,677.6	\$33,104.0	\$35,630.0	\$35,760.3	\$37,781.7
General Services Fund	5,564.1	5,806.7	6,638.8	7,339.8	7,643.4
Special Revenue Fund ^(h)	22,088.3	24,297.8	29,873.7	37,020.4	37,097.6
Capital Projects Fund ⁽ⁱ⁾	794.8	733.5	456.3	445.8	515.0
Debt Service Fund ^(j)	1,243.1	1,288.7	1,052.5	1,288.8	1,310.0
Enterprise Fund ^(k)	735.3	1,000.4	1,000.4	814.0	977.9
Total Cash Disbursements	\$63,103.2	\$66,231.1	\$74,651.7	\$82,669.0	\$85,325.6

- (a) Includes local government support disbursements.
- (b) Includes amounts disbursed from proceeds of special obligation bonds and highway general obligation bonds.
- (c) Includes the several bond retirement funds for general obligation bonds secured by a pledge of taxes and excises.
- (d) Includes workers' compensation, industrial commission, and lottery including deferred prizes, among others.
- Totals may not foot due to rounding.

Summary Statement
General Revenue Fund Cash Basis Activity
(\$ in Millions)

	Fiscal Year				
	2019	2020	2021	2022	2023
Beginning Cash Balance	\$1,221.0	\$1,538.0	\$1,270.2	\$4,721.5	\$6,547.0
Cash Receipts					
Taxes					
Personal Income ^(a)	8,910.2	7,881.3	10,201.3	10,752.2	10,797.2
Sales and Use ^(b)	10,573.4	10,685.8	12,190.6	13,029.6	13,483.1
Financial Institutions Tax	202.4	214.9	226.4	202.8	239.1
Commercial Activity Tax	1,629.5	1,671.7	1,666.8	1,995.5	2,151.9
Public Utilities and Kilowatt Hour	562.7	532.6	492.9	516.8	528.9
Cigarette ^(c)	918.2	913.0	926.9	884.6	827.4
Domestic Insurance	276.0	303.0	309.7	312.6	386.7
Foreign Insurance	296.3	305.1	324.4	328.4	362.8
Other ^(d)	120.8	115.8	127.8	130.1	138.4
Total Taxes	23,489.6	22,623.0	26,466.9	28,152.5	28,915.5
Federal Government	9,763.9	10,482.0	12,727.2	11,897.3	12,931.4
Licenses, Permits and Fees	64.2	66.6	88.4	99.2	117.1
Investment Income	114.4	131.4	57	52.8	304.5
Other	87.6	121.4	108.9	401.2	225.8
Total Cash Receipts	33,519.7	33,424.6	39,448.3	40,603.1	42,494.5
Cash Disbursements					
Primary, Secondary and Other	8,214.4	7,929.0	7,954.2	8,298.4	8,538.6
Higher Education	2,292.6	2,282.3	2,368.5	2,417.6	2,447.6
Public Assistance and Medicaid	15,052.8	15,471.8	18,094.4	17,079.3	18,483.7
Health and Human Services	1,272.0	1,344.0	1,381.3	1,519.9	1,625.3
Justice and Public Protection	2,222.5	2,386.0	2,387.0	2,652.8	2,758.9
General Government ^(f)	391.3	440.4	421.8	499.4	559.6
Property Tax Reimbursements ^(g)	1,801.2	1,800.6	1,806.1	1,818.2	1,821.1
Debt Service	1,430.8	1,449.9	1,216.8	1,474.8	1,547.0
Total Cash Disbursements	32,677.6	33,104.0	35,630.0	35,760.3	37,781.7
Cash Transfers					
Transfers-in ^(h)	247.9	81.0	97.8	57.1	20.7
Transfers-out ⁽ⁱ⁾	(773.0)	(669.5)	(465.0)	(3,074.3)	(2,289.9)
Ending Cash Balance	\$1,538.0	\$1,270.2	\$4,721.5	\$6,547.0	\$8,990.7

- (a) The State has incrementally reduced personal income tax rates commencing calendar year 2013 (see FISCAL MATTERS – Recent and Current Finances – Recent Biennia –2018-2019, 2020-2021, 2022-2023, and Current Biennium and TAX LEVELS AND TAX BASES – Personal Income Tax).
- (b) FY 2018 decline due to the replacement of the sales tax on Medicaid managed care organizations with a new health insuring corporation provider assessment (see FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2018-2019).
- (c) Beginning October 1, 2019, a 10 cents/milliliter tax was imposed on vapor products (see FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2020-2021).
- (d) Includes alcoholic beverage tax, liquor gallonage, petroleum activity tax and residual payments under the corporate franchise tax and estate tax which are both repealed but may apply to prior tax periods.
- (e) Mainly subsidies to school districts for primary and secondary education.
- (f) Includes amounts for non-highway transportation purposes, including mass transit, rail, and aviation.
- (g) State reimbursements to taxing subdivisions for the 12.5 percent property tax rollback granted to homeowners of real property, for partial real property homestead tax exemptions for the elderly and handicapped (expanded commencing in July 2007), and for revenue reductions resulting from phase-out of local taxes on tangible personal property.
- (h) FY 2019 to FY 2022 include transfers of \$66.0 million, \$66.0 million, \$65.9, and \$28.9 million respectively, from the Petroleum Activity Tax Public Highways Fund; and FY 2019 includes transfers of \$119.7 million from School District and Local Government Property Tax Replacement Funds, respectively.
- (i) FY 2019 to 2023 include transfers of \$275.0 million, \$400.0 million, \$500.0 million, and \$600.0 million to the Foundation Funding – All Students Fund, respectively; FY 2022 included a \$1.2 billion transfer to the Health and Human Services Fund. FY 2023 included \$837.2 million in transfers to several capital funds, authorized in House Bill 687 of the 134th General Assembly, and \$727.0 million to the Budget Stabilization Fund, authorized in H.B. 45 of the 134th General Assembly.

Totals may not foot due to rounding.

Recent and Current Finances

Introductory Information

The summary statements above identify receipts from specific taxes and excises that are sources of significant amounts of revenue to the State, and particularly to the GRF. As noted, there are constitutional limitations on the use of some taxes and excises, and mandated allocations of portions of some others. As the statements portray, a substantial amount of total State-level revenue is distributed to local governments and school districts under ongoing programs, including local property tax relief.

The GRF ending cash and fund balances for FY 2023 were \$8.991 billion and \$7.357 billion, respectively, with \$4.673 billion of that ending fund balance transferred pursuant to statutory designations leaving a balance of \$2.684 billion. Recent biennium-ending GRF balances were:

Biennium	Cash Balance	Fund Balance ^(a)	Fund Balance less Designated Transfers ^(b)
2014-2015	\$1,711,679,000	\$1,286,469,000	\$550,366,000
2016-2017	557,089,900	170,872,600	170,872,600
2018-2019	1,538,011,800	1,146,385,400	833,985,400
2020-2021	4,721,519,000	4,032,264,036	2,533,964,036
2022-2023	8,990,658,720	7,357,142,731	2,684,188,503

(a) Reflects the ending cash balance less amounts encumbered to cover financial commitments made prior to the end of the fiscal year.

(b) Reflects the ending fund balance less any amounts designated for transfer to other funds, including the BSF.

Actions have been and may be taken by the State to ensure revenue/expenditure balance (particularly in the GRF), some of which are described below. None of those actions has been applied to appropriations or expenditures needed for debt service, lease payments, or other payments involving any State debt-related obligations.

The appropriations acts for the 2024-2025 biennium included all necessary appropriations for debt service on State obligations and for lease payments relating to lease rental obligations issued by the Treasurer of State and for certificates of participation (see **FISCAL MATTERS – Recent and Current Finances – Current Biennium** and **State Debt – General**).

The Revised Code imposes a limitation on most GRF appropriations commencing with the 2008-09 fiscal biennium. This statutory limitation initially used FY 2007 GRF appropriations as a baseline (excluding appropriations for debt service, tax relief and refunds, and certain appropriations reflecting moneys received from the federal government) and then applies an annual growth factor equal to the greater of 3.5 percent or the sum of the inflation rates and rate of state population change. Every fourth fiscal year thereafter becomes a new base year. All GRF appropriations since FY 2007 have complied with this limitation.

The following is a general discussion of State finances, particularly GRF receipts and expenditures, for recent and the current biennia. As evidenced by the paragraphs below, the State administrations and both houses of the General Assembly have been and remain committed to taking actions that ensure a balance of GRF resources and expenditures.

Recent Biennia

2018-2019

The 2018-2019 Biennial Appropriations Act was passed by the General Assembly and signed by the Governor (with selective vetoes) on June 30, 2017.

To address lower GRF revenue estimates for the 2018-2019 fiscal biennium, the Act included both across-the-board and targeted spending cuts across most State agencies and programs. The Act provided for the following GRF appropriations:

GRF Appropriations 2018-2019 Biennium (\$ in billions)

Fiscal Year 2017 Expenditures	Fiscal Year 2018 Appropriations	Percent Change Over Fiscal Year 2017 Expenditures	Fiscal Year 2019 Appropriations	Percent Change Over Fiscal Year 2018 Appropriations	2018-2019 Biennium Total Appropriations
\$34.5	\$32.2	-6.7%	\$33.3	3.5%	\$65.5

Major program categories reflected the following GRF appropriation changes (excluding debt service appropriations):

- *Medicaid* – FY 2018 appropriations decreased 15.0 percent over FY 2017 expenditures (as discussed below, driven largely by the replacement of the Medicaid managed care organization sales tax, the receipts of which were being deposited into the GRF, by a new health insuring corporation provider assessment, the receipts of which are now deposited into a dedicated non-GRF fund), and FY 2019 appropriations increased 5.7 percent over FY 2018 appropriations.
- *Elementary and Secondary Education* – FY 2018 appropriations increased 1.5 percent over FY 2017 expenditures, and FY 2019 appropriations increased 1.6 percent over FY 2018 appropriations.
- *Higher Education* – FY 2018 appropriations increased 0.5 percent over FY 2017 expenditures, and FY 2019 appropriations decreased 0.3 percent over FY 2018 appropriations.
- *Mental Health and Developmental Disabilities* – FY 2018 appropriations decreased 0.9 percent over FY 2017 expenditures (driven by the shift in funding of certain Medicaid expenditures to the Medicaid program category), and FY 2019 appropriations increased 2.1 percent over FY 2018 appropriations.
- *Corrections and Youth Services* – FY 2018 appropriations increased 4.2 percent over FY 2017 expenditures, and FY 2019 appropriations increased 1.6 percent over FY 2018 appropriations.

The Act also modified certain components of the school funding formula to better distribute resources to districts with less capacity to raise revenues locally (see **SCHOOLS AND MUNICIPALITIES – Schools**) and limited increases in tuition and fees for two- and four-year higher education institutions.

The Executive Budget, the 2018-2019 Biennial Appropriations Act, and separate appropriations acts for the biennium included all necessary debt service and lease rental or other payment appropriation authority related to State debt obligations.

The foregoing appropriations were based upon available balances and estimated GRF revenue for the biennium as follows:

Estimated State & Federal GRF Revenue 2018-2019 Biennium (\$ in billions)

Fiscal Year 2017 Actual Revenue	Fiscal Year 2018 Est. Revenue	Percent Change Over Fiscal Year 2017 Actual Revenue	Fiscal Year 2019 Est. Revenue	Percent Change Over Fiscal Year 2018 Est. Revenue	2018-2019 Biennium Est. Total Revenue
\$34.2	\$32.3	-5.5%	\$33.3	3.2%	\$65.6

Sources of revenues reflected in the 2018-2019 Biennial Appropriations Act included \$84.5 million in transfers to the GRF from non-GRF funds, \$200 million from unclaimed funds, \$31 million from the sale of prison farmland, and \$20 million from a tax amnesty program.

The 2018-2019 Biennial Appropriations Act reflected certain tax law changes, resulting in an estimated net GRF revenue increase of \$12.8 million in FY 2018 and an estimated net GRF revenue decrease of \$30.8 million in FY 2019, including:

- Reduced the number of personal income tax brackets from nine to seven in tax year 2017 and for certain low-income taxpayers completely exempted the first \$10,500 of taxable income, with increasing bracketed base rates and percentages up to a maximum on incomes over \$210,600 of \$8,073 plus 4.997 percent on the amount over \$210,600 (see **TAX LEVELS AND TAX BASES – Personal Income Tax**).
- Temporarily increased the percent of GRF tax revenues deposited into the public library fund from 1.66 percent to 1.68 percent in each of FY 2018 and FY 2019.
- Increased the state personal income tax deduction from \$2,000 to \$4,000 for contributions to accounts for college savings and care for disabled individuals.
- Authorized a one-time sales tax holiday on the purchase of clothing and school supplies in August 2018 (separate legislation enacted by the General Assembly authorized a sales tax holiday in August 2017).

The 2018-2019 Biennial Appropriations Act also reflected:

- The creation of a new health insuring corporation provider assessment, the revenues of which are being deposited into a non-GRF dedicated purpose fund, to fully replace the forgone GRF sales tax revenue resulting from the federal policy ruling by the Centers for Medicare and Medicaid Services (CMS) that Ohio's sales tax on Medicaid managed care organizations was impermissible as a means of generating revenue to draw federal matching dollars. The GRF revenue loss was estimated to be \$600 million in each of FY 2018 and FY 2019.
- Increased the portion of the commercial activity tax deposited into the GRF (estimated at \$175 million in FY 2018 and \$179 million in FY 2019) from 75 percent to 85 percent to more closely match the amount needed to make compensating payments to school districts and local governments in connection with the prior phase-out of the tangible personal property tax. The requirement to transfer funds in excess of the compensating payments formula to the GRF at the end of each fiscal year remained unchanged (see **TAX LEVELS AND TAX BASES – Property Tax**).

In July 2018, OBM revised the FY 2019 GRF revenue forecast to reflect updated economic assumptions, actual FY 2018 revenue performance, and certain minor tax law adjustments enacted by the General Assembly after adoption of the 2018-2019 Biennial Appropriations Act. As part of this revision, OBM increased the estimated FY 2019 GRF tax revenue forecast by \$531.1 million, a 2.4 percent increase compared to the original FY 2019 tax revenue forecast. This increase in forecasted tax revenues was largely within the personal income tax (increased by \$379.5 million or 4.5 percent) and the sales and use tax (increased by \$129.0 million or 1.3 percent). Effective January 1, 2019, personal income tax employer withholding rates were reduced by 3.3 percent to fully reflect the income tax rate reductions enacted in the 2016-2017 biennial budget. This was estimated to result in a one-time \$148.5 million reduction to personal income tax revenue in FY 2019. FY 2020 personal income tax revenue was not affected as the reduction in withholding was offset by reduced income tax refunds as final returns were filed for tax year 2019.

FY 2019 Financial Results. The State ended FY 2019 with GRF cash and fund balances of \$1.54 billion and \$1.15 billion, respectively. Of that ending GRF fund balance, the State carried forward \$834.0 million, including \$168.8 million reserved to maintain the statutory target of one-half of one percent of FY 2019 GRF revenues as an ending fund balance, and transferred \$172.0 million to the H2Ohio fund (see **2020-2021** below for discussion of this fund), \$31.0 million to the statewide treatment and prevention fund, \$39.0 million to the emergency purposes and disaster services funds, \$20.0 million to the school bus purchase fund, \$19 million to the tobacco use prevention fund, and \$31.4 million across six other smaller purposes.

2020-2021

The 2020-2021 Biennial Appropriations Act, which was preceded by a 17-day Interim Appropriations Act, was passed by the General Assembly, and signed by the Governor (with selective vetoes) on July 18, 2019. Reflecting the tax law changes described herein and an underlying economic forecast prepared in the first half of 2019, that Act provided for the GRF appropriations outlined below. The underlying economic forecast did not consider the economic effects of the pandemic as described below under **Outbreak of COVID-19**.

GRF Appropriations 2020-2021 Biennium (\$ in billions)

Fiscal Year 2019 Expenditures	Fiscal Year 2020 Appropriations	Percent Change Over Fiscal Year 2019 Expenditures	Fiscal Year 2021 Appropriations	Percent Change Over Fiscal Year 2020 Appropriations	2020-2021 Biennium Total Appropriations
\$32.7	\$34.0	4.0%	\$36.0	6.0%	\$70.0

Major program categories reflected the following GRF appropriation changes (excluding GRF debt service appropriations):

- *Medicaid* – FY 2020 appropriations increased 3.3 percent over FY 2019 expenditures, and FY 2021 appropriations increased 11.8 percent over FY 2020 appropriations.
- *Elementary and Secondary Education* – including transfers from the GRF in support of student wellness and success, FY 2020 appropriations increased 3.9 percent over FY 2019 expenditures, and FY 2021 appropriations increased 0.2 percent over FY 2020 appropriations.
- *Higher Education* – FY 2020 appropriations increased 4.6 percent over FY 2019 expenditures, and FY 2021 appropriations increased 2.6 percent over FY 2020 appropriations.
- *Mental Health and Developmental Disabilities* – excluding Medicaid program services, FY 2020 appropriations decreased 1.4 percent over FY 2019 expenditures, and FY 2021 appropriations increased 2.8 percent over FY 2020 appropriations.
- *Corrections and Youth Services* – FY 2020 appropriations increased 4.0 percent over FY 2019 expenditures, and FY 2021 appropriations increased 3.5 percent over FY 2020 appropriations.

The 2020-2021 Biennial Appropriations Act also created the H2Ohio fund to support water quality projects in Lake Erie and across Ohio’s rivers, lakes, and waterways. The H2Ohio fund was initially seeded by a \$172 million transfer from the FY 2019 ending GRF fund balance.

The Executive Budget, 17-day Interim Appropriations Act, the 2020-2021 Biennial Appropriations Act, and separate appropriations acts for the biennium all included necessary debt service and lease rental or other payment appropriation authority related to State debt obligations for the entire biennium.

The foregoing appropriations were based upon available balances and estimated GRF revenue for the biennium and have been adjusted with updated revenue forecasts as of June 10, 2020, as follows:

Estimated State & Federal GRF Revenue 2020-2021 Biennium (\$ in billions)

Fiscal Year 2019 Actual Revenue	Fiscal Year 2020 Est. Revenue	Percent Change Over Fiscal Year 2019 Actual Revenue	Fiscal Year 2021 Est. Revenue	Percent Change Over Fiscal Year 2020 Est. Revenue	2020-2021 Biennium Total Est. Revenue
\$33.8	\$33.2	-1.6%	\$36.0	8.5%	\$69.3

The 2020-2021 Biennial Appropriations Act reflected the following tax policy and allocation changes, among others, which resulted in a net GRF revenue decrease of \$410 million in FY 2020 and \$177 million in FY 2021:

- An across-the-board 4.0 percent reduction in state personal income tax rates and elimination of the bottom two income tax brackets (effective in tax year 2019), coupled with a freeze on the indexing

of the income tax brackets (through tax year 2020). The tax bracket changes eliminated any tax liability for individuals with taxable income less than \$21,750 (see **TAX LEVELS AND TAX BASES – Personal Income Tax**).

- Modified eligibility for various means-tested state personal income tax credits such that high-income taxpayers with little non-business income are not eligible for the tax credits (effective tax year 2019).
- Created two new non-refundable tax credits, one for lead abatement expenses capped at \$5 million annually (effective in tax year 2020) and one for Qualified Opportunity Zone investments that is limited to no more than \$50 million per fiscal biennium (effective in tax year 2019).
- Increased the legal age to purchase tobacco products from 18 to 21 years old and created a tax on the volume of nicotine-containing vapor products (effective October 2019).
- Modified the presumption of a seller having a substantial nexus with Ohio in accordance with *South Dakota v. Wayfair, Inc.* for purposes of collecting the sales and use tax on retail sales through “marketplace facilitators” (effective October 2019).
- Temporarily increased the percent of GRF tax revenues deposited into the local government fund from 1.66 percent to 1.68 percent in each of FY 2020 and FY 2021.
- Temporarily increased the percent of GRF tax revenues deposited into the public library fund from 1.66 percent to 1.70 percent in each of FY 2020 and FY 2021.

OBM updated the FY 2021 GRF revenue forecast to reflect economic assumptions (influenced by the COVID-19 Pandemic) and actual FY 2020 revenue performance. For further information relating to the updated FY 2021 GRF revenue forecast see **Outbreak of COVID-19** below.

FY 2021 Financial Results: The State ended FY 2021 with GRF cash and fund balances of \$4.72 billion and \$4.03 billion, respectively. As authorized in the 2022-2023 Biennial Appropriations Act, the entire fund balance was carried forward into FY 2022, including \$197.7 million reserved to maintain the statutory target of one-half of one percent of FY 2021 GRF revenues as an ending fund balance, and \$1.2 billion transferred to the Health and Human Services Fund, \$132 million transferred to the H2Ohio Fund, \$100 million transferred to the Investing in Ohio Fund, and \$66.3 million transferred across three other smaller purposes.

FY 2021 GRF tax revenues were greater than both the original forecast derived in July 2019 for the enacted FY 2020-2021 operating budget as well as the updated forecast issued with the FY 2022-2023 Executive operating budget. Tax revenues for the fiscal year were \$1.54 billion above the original forecast. Of the \$1.54 billion positive variance, \$774.6 million occurred during the last quarter of the fiscal year, with sales tax revenues exceeding estimates by large margins in each month of the quarter.

2022-2023

The 2022-2023 Biennial Appropriations Act was passed by the General Assembly and signed by the Governor (with selective vetoes) on June 30, 2021. Reflecting the tax law changes described below and a conservative underlying economic forecast, that Act provides for the following GRF appropriations:

GRF Appropriations 2022-2023 Biennium (\$ in billions)

Fiscal Year 2021 Expenditures	Fiscal Year 2022 Appropriations	Percent Change Over Fiscal Year 2021 Expenditures	Fiscal Year 2023 Appropriations	Percent Change Over Fiscal Year 2022 Appropriations	2022-2023 Biennium Total Appropriations
\$35.6	\$34.9	-2.0%	\$39.3	12.6%	\$74.3

Major program categories reflected the following GRF appropriation changes (excluding GRF debt service appropriations):

- *Medicaid* – FY 2022 appropriations decreased 11.7 percent over FY 2021 expenditures, and FY 2023 appropriations increased 26.1 percent over FY 2022 appropriations.

- *Elementary and Secondary Education* – including transfers from the GRF in support of student wellness and success, FY 2022 appropriations increased 5.8 percent over FY 2021 expenditures, and FY 2023 appropriations increased 2.0 percent over FY 2022 appropriations.
- *Higher Education* – FY 2022 appropriations increased 2.7 percent over FY 2021 expenditures, and FY 2023 appropriations increased 0.1 percent over FY 2022 appropriations.

The 2022-2023 Biennial Appropriations Act revised the school funding formula to consider resident income levels in addition to property tax values (see **SCHOOLS AND MUNICIPALITIES – Schools**). The Act also authorized the BSF to retain interest earnings.

The foregoing appropriations were based upon available balances and estimated GRF revenue for the biennium as follows:

Estimated State & Federal GRF Revenue 2022-2023 Biennium (\$ in billions)

Fiscal Year 2021 Actual Revenue	Fiscal Year 2022 Est. Revenue	Percent Change Over Fiscal Year 2021 Actual Revenue	Fiscal Year 2023 Est. Revenue	Percent Change Over Fiscal Year 2022 Est. Revenue	2022-2023 Biennium Total Est. Revenue
\$39.5	\$36.6	-7.5%	\$39.9	9.3%	\$76.6

Because of an extension in the filing date for tax year 2019 returns, an estimated \$719.0 million in income tax revenue was received in FY 2021 rather than in FY 2020, thereby impacting the FYs 2021-2022 growth rate.

Amended Substitute House Bill 110, the biennial budget for FYs 2022-2023, included several transfers from the General Revenue Fund. Estimated FY 2022 transfers from the General Revenue Fund total \$2.98 billion, the largest of which is \$1.2 billion for the Health and Human Services Fund.

The 2022-2023 Biennial Appropriations Act reflected the following tax policy and allocation changes, among others, which were estimated to result in a net GRF revenue decrease of \$1.0 billion in FY 2022 and \$977.0 million in FY 2023:

- Made an across-the-board 3.0 percent reduction in state personal income tax rates on non-business income, except for consolidating the top two income brackets and setting the new top rate at 3.99 percent.
- Increased the threshold for zero tax liability, in which filers with taxable incomes below \$25,000 are no longer subject to Ohio personal income tax.
- Contained a one-year (tax year 2021) suspension of bracket indexing, and two-year (tax years 2021 and 2022) suspension of personal exemption indexing.
- Established new non-refundable tax credits for home-schooling expenses, for tuition paid to non-chartered private schools, and for contributions made to non-profit scholarship granting organizations.
- Repealed sales and use tax on employment services; also enacted an exemption for sales of investment coins and bullion.
- Continued the increase, on a temporary basis, of the percent of GRF tax revenues deposited into the public library fund from 1.66 percent to 1.70 percent in each of FY 2022 and FY 2023.

On January 21, 2022, Governor Mike DeWine announced Intel Corporation's plan to invest \$20 billion to construct a new semiconductor manufacturing plant in Ohio for which the State appropriated \$691 million for state and local infrastructure improvement, \$600 million for onshoring incentive grants, and an estimated \$650 million 30-year job creation tax credit. Incentives included performance benchmarks allowing the State to recover proceeds disbursed should the company fail to meet contracted obligations. The State's assistance is from available resources and not funded by debt proceeds. The positive impact of this development on Ohio is expected to lead to 20,000 additional jobs – 3,000 direct Intel jobs, 7,000 construction jobs throughout the build period, and 10,000 or more indirect and support jobs.

Since enactment of the operating budget for the FY 2022-2023 biennium, several tax law changes were passed by the Ohio General Assembly. These include:

- Income tax credit to assist new farmers.
- Income tax credit for employers of students enrolled in a career-technical education program.
- Temporary increase in the total amount of issued historic building rehabilitation tax credits, and modifications to the Ohio opportunity zone tax credit program.
- Define capital gains from sales of investment in a business as “business income” and therefore eligible for either the Ohio business income deduction or subject to the 3 percent income tax rate.
- Establish a tax on pass-through entities, wherein an individual investor’s share of such tax is not subject to the \$10,000 limit of the federal income tax deduction on state and local taxes paid.

FY 2023 Financial Results. The State ended FY 2023 with GRF cash and fund balances of \$8.99 billion and \$7.36 billion, respectively. As authorized in the 2024-2025 budget bill, the entire fund balance was carried forward into FY 2024, including \$212.6 million reserved to maintain the statutory target of one-half of one percent of FY 2023 GRF revenues. The FY 2024-2025 budget bill also included several FY 2023 ending balance transfers including \$741.0 million to the Expanded Sales Tax Holiday fund, \$700.0 million to the One-Time Strategic Community Investments Fund, and \$667.0 million to the All Ohio Future Fund.

FY 2023 GRF tax revenues were greater than both the original forecast derived in July 2021 for the enacted FY 2022-2023 operating budget as well as the updated forecast issued in August 2022. Tax revenues for the fiscal year were \$994.2 million above the updated forecast. This variance was driven by the personal income tax, which was \$645.1 above estimate in fiscal year 2023. In addition, sales and use taxes were \$149.2 million above estimate, and the commercial activity tax outperformed estimate by \$82.9 million.

Outbreak of COVID-19

As has been widely reported, the outbreak of COVID-19, a new strain of coronavirus that can result in severe respiratory disease, was first detected in December of 2019, and declared a pandemic by the World Health Organization. Governor DeWine and the Director of the Ohio Department of Health (ODH) issued a declaration of a state of emergency on March 9, 2020 and rescinded the order thereby ending the state-declared public health emergency on June 17, 2021. During that period, the Governor and the General Assembly took certain actions to mitigate the economic effect of the COVID-19 outbreak on the State’s financial position.

On March 27, 2020, President Trump signed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) to address the economic disruption caused by the COVID-19 pandemic. Under the CARES Act, the State was directly allocated a minimum of \$2.49 billion of the total \$4.53 billion granted by the Federal Government to the State and its eligible local governments. These funds were used for necessary expenditures incurred due to COVID-19. The State maintains a comprehensive presentation of financial and transactional data online, The Ohio Checkbook (<https://checkbook.ohio.gov>), and more information on Federal Funding for COVID-19 in Ohio can be found at <https://checkbook.ohio.gov/Coronavirus/>.

To balance the State budget in Fiscal Year 2020 (due to anticipated declines in revenue and increased costs relating to the State’s response to the COVID-19 pandemic), Governor DeWine directed spending cuts of approximately \$775 million for the remainder of the fiscal year (June 30, 2020), including: \$210 million in Medicaid spending; \$300 million in K-12 education spending; \$110 million in higher education spending; \$55 million in other education spending; and \$100 million in other State agencies and programs spending. The State also continued the previously announced hiring freezes, travel limitations, and contracting restrictions.

Initial revised FY 2021 revenue projections indicated that available state revenue receipts and balances in the GRF were projected to be \$36 billion, approximately \$2.43 billion less than originally estimated (and \$200 million less than the reserve held in the BSF as stated above). In response to those updated revenue projections for FY 2021 and in addition to the budgetary controls already in place, OBM and the Department of Administrative Services (DAS) implemented cost savings measures to further reduce expenditures by

state agencies, boards, and commissions including continuing employment-related freezes and mandatory cost savings programs for exempt employees for FY 2021. On March 25, 2021, DAS rescinded the order that froze all exempt employee pay rates and step increases effective with the pay period beginning April 11, 2021.

On January 22, 2021, Governor DeWine signed an executive order formally finalizing the FY 2021 budget reductions at \$390 million across all agencies. Because this reduction was less than the previously anticipated cuts, the Governor authorized the Department of Education to allot an additional \$160 million and the Department of Higher Education to allot an additional \$100 million of enacted FY 2021 GRF appropriations previously withheld. To provide further relief for Ohioans and to align with the extended Federal tax filing deadline, the State also adjusted its 2020 tax filing date from April 15, 2021, to May 17, 2021.

On March 11, 2021, President Biden signed into law the American Rescue Plan Act of 2021 (ARPA). This \$1.9 trillion economic stimulus and COVID-19 relief package was aimed at providing emergency assistance to individuals, businesses, and state and local governments affected by COVID-19, among other measures. Under ARPA, the Federal Government allocated approximately \$10.7 billion to Ohio’s state and local governments with an additional \$268.6 million allocated specifically for use in state capital projects to continue efforts to mitigate the fiscal effects stemming from COVID-19.

In the initial months of the COVID-19 pandemic, unemployment insurance claims increased significantly from an average of 7,915 claims per week during the first 11 weeks of 2020 to 274,288 during the week ending March 28, 2020. Between January and June 2020, Ohio’s Unemployment Trust Fund balance dropped from \$1.26 billion to zero. On June 16, 2020, Ohio received an advance from the federal government to continue to pay the increased unemployment insurance claims. On September 3, 2021, Ohio paid off its \$1.47 billion loan using ARPA funds.

Like other states, Ohio is aware of and is investigating allegations of overpayment or fraud with respect to unemployment claims and will pursue repayment where warranted. Such potential overpayment or fraud, and repayment thereof, will have no material effect on the State’s ability to pay debt service on its bonded indebtedness. The State has improved preventative safeguards to limit overpayments or fraudulent payments of unemployment compensation.

Current Biennium

The 135th General Assembly passed, and the Governor signed four bills that provide appropriations to operate State government through fiscal years 2024 and 2025. House Bills 23, 31, 32, and 33 collectively referred to as the “2024-2025 budget” provide the following GRF appropriations:

GRF Appropriations 2024-2025 Biennium (\$ in billions)

Fiscal Year 2023 Expenditures	Fiscal Year 2024 Appropriations	Percent Change Over Fiscal Year 2023 Expenditures	Fiscal Year 2025 Appropriations	Percent Change Over Fiscal Year 2024 Appropriations	2024-2025 Biennium Total Appropriations
\$37.8	\$41.5	9.7%	\$44.8	8.0%	\$86.2

Major program categories reflect the following GRF appropriation changes (excluding GRF debt service appropriations):

- *Medicaid* – FY 2024 appropriations increase 10.8% percent over FY 2023 expenditures, and FY 2025 appropriations increase 13.9 percent over FY 2024 appropriations.
- *Elementary and Secondary Education* – including transfers from the GRF in support of student wellness and success, FY 2024 appropriations increase 10.4 percent over FY 2023 expenditures, and FY 2025 appropriations increase 3.6 percent over FY 2024 appropriations.
- *Higher Education* – FY 2024 appropriations increase 6.8 percent over FY 2023 expenditures, and FY 2025 appropriations increase 2.0 percent over FY 2024 appropriations.

The foregoing appropriations were based upon available balances and estimated GRF revenue for the biennium as follows:

Estimated State & Federal GRF Revenue 2024-2025 Biennium (\$ in billions)

Fiscal Year 2023 Actual Revenue	Fiscal Year 2024 Est. Revenue	Percent Change Over Fiscal Year 2023 Actual Revenue	Fiscal Year 2025 Est. Revenue	Percent Change Over Fiscal Year 2024 Est. Revenue	2024-2025 Biennium Total Est. Revenue
\$42.5	\$42.3	-0.6%	\$45.0	6.3%	\$87.3

The FY 2024-2025 biennial budget was conservatively crafted with several transfers from the General Revenue Fund to use one-time resources for one-time investments. Estimated FY 2024 transfers from the General Revenue Fund total \$5.6 billion, including \$667 million for the All Ohio Future Fund and \$700 million for the One Time Strategic Community Investments Fund.

The 2024-2025 biennial budget includes the following tax policy changes:

- The number of businesses subject to the commercial activities tax will be dramatically reduced by 90% by excluding up to \$3 million in gross receipts per business in 2024 and up to \$6 million in gross receipts per business in 2025.
- The sports gaming tax rate increases to 20% with proceeds dedicated to the school funding formula.
- Personal income tax reductions in the budget will reduce the number of personal income. By 2024, the state personal income tax will have two rate brackets (one consisting of taxable income between \$26,051 and \$100,000, and the other consisting of income above \$100,000), with marginal tax rates of 2.75 percent and 3.5 percent, respectively. There remains no tax liability if taxable income is \$26,050 or below.
- A new expanded sales tax holiday will use surplus revenue to provide tax relief to consumers in August 2024 and future years if tax receipts exceed budgeted estimates.
- The state sales tax on baby products, such as diapers, wipes, car seats, and strollers is eliminated, which will save Ohio families \$16 million per year.
- The supply of affordable single-family housing will be supported by a new tax credit totaling \$200 million over four years.
- New low-income housing tax credits in the amount of \$100 million per fiscal year, allocated over a four-year period, will go toward the development and rehabilitation of low-income, multi-family rental housing projects that increase the affordable housing supply.
- Ohioans planning to purchase a home will be able to open a home ownership savings account. Qualifying contributions to such accounts shall receive tax-favored treatment. Contributions of up to \$5,000 per year for individuals and \$10,000 per year for couples filing jointly, may be deducted from the contributor's Ohio personal income tax return (with a lifetime maximum \$25,000 deduction per contributor per account).

Fiscal Year 2023 ended the fiscal year with the largest GRF cash balance in Ohio history. The Budget Stabilization Fund is at an all-time high and House Bill 33 raised the cap to 10% of the GRF so the reserve will continue to grow. The FY 2024 biennial budget is balanced. As noted above, the State is effectively precluded by its Constitution from ending a fiscal year or a biennium in a "deficit" position. OBM continually monitors and analyzes revenues, expenditures, and related developments and prepares a detailed [Monthly Financial Report](#), for full transparency of financial position.

Cash Flow

Because GRF cash receipts and disbursements do not precisely coincide, temporary GRF cash flow deficiencies can occur periodically throughout the fiscal year. The Ohio Revised Code provides for

effective management of cash flow by permitting the adjustment of payment schedules and the use of the Total Operating Fund. The State has not done and does not do external revenue anticipation borrowing.

The Total Operating Fund includes the total consolidated cash balances, revenues, disbursements, and transfers of the GRF and several other specified funds (including the BSF). Total Operating Fund cash balances are consolidated only for the purpose of meeting cash flow requirements, and, except for the GRF, a positive cash balance must be maintained for each discrete fund included in the Total Operating Fund. The GRF is permitted to incur a temporary cash deficiency by drawing upon the available consolidated cash balance in the Total Operating Fund. The amount of that permitted GRF cash deficiency at any time is limited by statute to 10 percent of GRF revenues for the then preceding fiscal year. The State plans for and manages monthly GRF cash flow deficiencies within each fiscal year and those deficiencies have been within the limitations discussed above.

STATE DEBT

General

The incurrence or assumption of debt by the State without a popular vote is, with limited exceptions, prohibited by the Ohio Constitution. The State is authorized to incur debt limited in amount to \$750,000 to cover casual deficits or to address failures in revenues or to meet expenses not otherwise provided for. The Constitution also expressly precludes the State from assuming the debts of any county, city, town, or township, or of any corporation. An exception, however, exists in both cases, for debts incurred to repel invasion, suppress insurrection, or defend the State in war. The Constitution further provides that "Except the debts above specified...no debt whatever shall hereafter be created by, or on behalf of the State."

By 20 constitutional amendments approved from 1921 to present, Ohio voters have authorized the incurrence of State general obligation debt and the pledge of taxes or excises to its payment, all related to the financing of capital facilities, except for three that funded bonuses for veterans, one to fund coal technology research and development, and one to fund specified research and development activities. Currently, tax supported general obligation debt of the State is authorized to be incurred for the following purposes: highways, local infrastructure, coal development, natural resources and parks, higher education, common schools, conservation, and research and development. Authorizations for site development and veterans' compensation purposes have been fully exhausted or expired. Although supported by the general obligation pledge, highway debt is also backed by a pledge of and has always been paid from the State's motor fuel taxes and other highway user receipts that are constitutionally restricted in use to highway related purposes.

State special obligation debt, the owners, or holders of which are not given the right to have excises or taxes levied by the General Assembly to pay principal and interest, is authorized for purposes specified by Section 2i of Article VIII of the Constitution. The Treasurer of State currently issues the special obligations authorized under that section for parks and recreation and mental health facilities, and for facilities to house branches and agencies of state government and their functions, including: state office buildings and facilities for the Department of Administrative Services (DAS) and others, the Ohio Department of Transportation (ODOT), correctional and juvenile detention facilities for the Departments of Rehabilitation and Correction (DRC) and Youth Services (DYS), and various cultural facilities, and has issued previously for the Department of Public Safety (DPS). Debt service on all these special obligations is paid from GRF appropriations, except for debt issued for ODOT and DPS facilities which is paid from highway user receipts. All those debt service payments are subject to biennial appropriations by the General Assembly pursuant to leases or other agreements entered into by the State.

Certificates of Participation (COPs). State agencies have also improved buildings/equipment, information systems, and non-highway transportation projects with local and State use, in connection with which the State has entered into lease-purchase agreements with terms ranging from 8 to 20 years. Certificates of Participation (COPs) have been issued with regards to those agreements that represent fractionalized interests in, and are payable from, the State's anticipated lease payments. The maximum annual payment from GRF appropriations under those existing agreements is \$45.3 million in FY 2025 and the total GRF-

supported principal amount outstanding is \$198.7 million as of June 30, 2023. Payments by the State are subject to biennial appropriations by the General Assembly with the lease terms subject to automatic renewal for each biennium for which those appropriations are made. The approval of the OBM Director and either the General Assembly or the State Controlling Board is required if COPs are to be publicly offered in connection with those agreements.

Revenue Bonds. Certain state agencies issue revenue bonds that are payable from revenues from or relating to revenue producing facilities, such as those issued by the Ohio Turnpike and Infrastructure Commission. As confirmed by judicial interpretation, such revenue bonds do not constitute “debt” under the constitutional provisions described above. The Constitution authorizes state bonds for certain economic development and housing purposes (the latter issued by the Ohio Housing Finance Agency) to which tax moneys may not be obligated or pledged. See the discussion of expanded housing finance authority, and permitted pledges to it, below under **Additional Authorizations**.

Tax Credits in Support of Other Long-Term Obligations. The State has authorized the issuance of fully refundable tax credits in support of “credit-collateralized bonds” issued from time to time by the Columbus-Franklin County Finance Authority to provide funding for the Ohio Capital Fund to promote venture capital investment in Ohio and any additional bonds that may be issued to refinance those outstanding bonds or provide additional funding for that purpose. Those tax credits may be claimed by the bond trustee for the purpose of restoring the bond reserve fund for those credit-collateralized bonds in the event it is drawn upon and its required balance is not restored from other sources. Those credits may not be claimed after June 30, 2036, and the maximum amount of tax credits that may be claimed is \$20 million in any fiscal year. The bond trustee has filed such tax credit claims in connection with the payment of Bond Service Charges each February and August from February 15, 2017 through February 15, 2023. Tax credit payments made with respect to those tax credit claims (exclusive of certain required repayments to the State) totaled \$7.5 million in FY 2017, \$15.4 million in FY 2018, \$13.5 million in FY 2019, \$15.2 million in FY 2020, \$10.7 million in FY 2021, \$10.0 million in FY 2022, \$8.8 million in FY 2023, and \$8 million so far in FY 2024. Total outstanding principal on the credit-collateralized bonds after the August 15, 2023, payment date is \$56.76 million with the highest annual debt service payment due on the outstanding credit-collateralized bonds occurring in FY 2024 in the amount of approximately \$16.9 million. Proceeds of the Ohio Capital Fund bonds fund investments in venture capital funds to promote investment in seed and early-stage Ohio-based business enterprises.

Prior Economic Development and Revitalization Obligations. Prior to the February 1, 2013, granting of a 25-year franchise on the State’s spirituous liquor system to JobsOhio, there were \$725 million of outstanding state bonds and notes secured by a pledge of the State’s profits from the sale of spirituous liquor. In connection with the granting of that franchise, provision was made for the payment of all the debt service on those bonds and notes which are now defeased and no longer outstanding obligations of the State. Those bonds and notes were originally issued to fund a statewide economic development program that assisted in the financing of facilities and equipment for industry, commerce, research, and distribution, including technology innovation, by providing loans and loan guarantees. Under its franchise agreement with JobsOhio, the State may not issue additional obligations secured by a pledge of profits from the sale of spirituous liquor during the 25-year term of that franchise.

Obligations and Funding Commitments for Highway Projects Payable from Highway-Related Non-GRF Funds. As described above, the State issues general obligations for highway infrastructure and special obligations for ODOT and DPS transportation facilities that are paid from the State’s motor fuel tax and other highway user receipts that are constitutionally restricted in use to highway related purposes. In addition, the State has and expects to continue financing selected highway infrastructure projects by issuing federal highway grant anticipation revenue (GARVEE) bonds and entering into agreements that call for debt service payments to be made from federal Title 23 transportation funds allocated to the State, subject to biennial appropriations by the General Assembly. The highest annual State payment under those agreements in the current or any future fiscal year is \$144.3 million in FY 2024. In the event of any insufficiency in the anticipated federal allocations to make payments on GARVEE bonds, the payments are to be made from any lawfully available moneys appropriated to ODOT for the purpose.

In December 2014, ODOT entered into its first public-private agreement to provide “availability payments” in support of the development and operation of a state highway improvement project. Those availability payments commenced in December 2018 and are paid from non-GRF funds available to ODOT remaining after the payment of debt service on highway general obligations, ODOT special obligations, and GARVEE bonds. The availability payment in FY 2023 was \$26.8 million, with availability payments estimated to increase modestly each year from \$27.4 million in FY 2024 to a maximum payment of \$39.9 million in FY 2053. Availability payments are subject to biennial appropriation by the General Assembly with the public-private agreement subject to automatic renewal for each biennium if and when those availability payments are appropriated for that biennium.

Variable Rate Debt

The State currently has \$374,165,000 in outstanding variable rate debt as follows with liquidity provided by the State for all these issues:

Dated Date	Outstanding	Purpose/Series	Rate Period	Final Maturity
12/15/2003	\$14,225,000	Common Schools, 2003D	Weekly	3/15/2024
4/1/2005	25,550,000	Common Schools, 2005A/B	Weekly	3/15/2025
6/7/2006	39,220,000	Common Schools, 2006B/C	Weekly	6/15/2026
10/26/2016	61,170,000	DRC Prison Facilities, 2016B/C	Weekly	10/1/2036
8/7/2019	45,000,000	DRC Prison Facilities, 2019C	Weekly	10/1/2039
8/12/2020	57,000,000	Parks & Recreation Facilities, 2020B	Weekly	12/1/2040
4/21/2021	57,000,000	DRC Prison Facilities, 2021B	Weekly	10/1/2040
1/5/2022	75,000,000	Parks & Recreation Facilities, 2022B	Weekly	12/1/2041

Interest Rate Swaps

As part of its debt management, the State is also party to the following floating-to-fixed interest rate swap agreements with a total notional amount currently outstanding of \$78,995,000:

Outstanding Notional Amount	Related Bond Series	State Pays	State Receives	Counterparty	Effective Date	Termination Date
\$14,225,000	Common Schools 2003D	3.414%	SOFR ^a	JP Morgan/ Wells Fargo	9/14/2007	3/15/2024
25,550,000	Common Schools 2005A/B	3.102%	SIFMA ^b	JP Morgan	3/15/2007	3/15/2025
39,220,000	Common Schools 2006B/C	3.202%	SOFR ^a	US Bank/ RBC	6/15/2006	6/15/2026

(a) Variable interest rate based on a percentage of one-month Secured Overnight Financing Rate (SOFR) plus a fixed increment beginning July 1, 2023.

(b) Variable interest rate based on Securities Industry and Financial Markets Association (SIFMA) rate beginning September 15, 2021.

For all its swap agreements, the State has established minimum uncollateralized counterparty rating thresholds of AA-/Aa3. Under each of these agreements, the counterparty is required to progressively post collateral securing the State's position if the counterparty's credit ratings fall below these minimum thresholds.

Constitutional Limitation on Annual Debt Service

A 1999 constitutional amendment provides an annual debt service “cap” applicable to most future issuances of State general obligations and other State direct obligations payable from the GRF or net State lottery

proceeds. Generally, new obligations may not be issued if debt service for any future fiscal year on those new and then outstanding obligations of those categories would exceed 5 percent of the total of estimated GRF revenues (excluding GRF receipts from the American Recovery and Reinvestment Act of 2009) plus net State lottery proceeds for the fiscal year of issuance. Those direct obligations of the State include general obligations and special obligations that are paid from the State's GRF but exclude (i) general obligation debt for third frontier research and development, development of sites and facilities, and veterans' compensation, and (ii) general obligation debt payable from non-GRF funds, such as highway bonds that are paid from highway user receipts. Pursuant to the implementing legislation, the Governor has designated the OBM Director as the state official responsible for making the 5 percent determinations and certifications. Application of the 5 percent cap may be waived in a particular instance by a three-fifths vote of each house of the Ohio General Assembly.

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The following table presents a current summary of State debt authorizations and the principal that has been issued and is outstanding against those authorizations. The General Assembly has appropriated sufficient moneys to meet debt service requirements for the current biennium (ending June 30, 2023) on all the obligations included in this and the accompanying tables.

	Authorized by General Assembly	Issued ^(a)	Outstanding ^(b)
Obligations Payable from the GRF			
General Obligations			
Coal Development ^(c)	\$262,000,000	\$254,000,000	\$18,340,000
Infrastructure ^{(d)(e)(m)}	5,210,000,000	4,694,726,136	1,778,460,000
Natural Resources ^(f)	521,000,000	484,620,000	93,900,000
Common School Facilities ^(e)	6,515,100,000	5,611,200,000	2,029,515,000
Higher Education Facilities	5,255,000,000	4,374,445,000	1,869,600,000
Conservation ^(g)	900,000,000	682,625,000	282,260,000
Research & Development ^(h)	1,200,000,000	971,000,000	173,400,000
Site Development	150,000,000	150,000,000	-
Veterans Compensation ⁽ⁱ⁾	200,000,000	83,910,000	10,520,000
		Total:	\$6,255,995,000

Special Obligations			
DAS Facilities	\$2,320,800,000	\$2,069,900,000	\$450,610,000
DRC Prison Facilities ^(e)	3,073,000,000	2,346,500,000	465,740,000
DYS Facilities	529,800,000	400,000,000	83,055,000
Cultural & Sports Facilities	874,000,000	740,475,000	157,910,000
Mental Health Facilities	2,075,700,000	1,817,085,000	225,550,000
Parks & Recreation Facilities ^(e)	1,590,400,000	1,089,000,000	561,170,000
		Total:	\$1,944,035,000

Obligations Payable from Non-GRF Sources^(l)			
Highway User Receipts			
G.O. Highway ^{(k)(m)}	\$4,048,000,000	\$3,462,760,000	\$750,040,000
ODOT Facilities	385,000,000	379,455,000	164,675,000
		Total:	\$914,715,000

Federal Transportation Grants			
ODOT GARVEE Highway ^(l)	n/a	\$3,020,280,000	\$780,195,000

(a) Excludes refunding bonds; includes bonds refunded; reflects payments of amounts due as of June 30, 2023.

(b) Excludes refunded bonds; includes refunding bonds; reflects payments of amounts due as of June 30, 2023.

(c) Not more than \$100,000,000 may be outstanding at any time.

(d) Not more than \$5,625,000,000 may be issued with the annual issuance currently limited to no more than \$175,000,000 in each fiscal year beginning in FY 2018 through FY 2022 and \$200,000,000 in each fiscal year beginning in FY 2023 through FY 2027, plus any obligations unissued from previous fiscal years.

(e) Includes adjustable-rate bonds.

(f) Not more than \$50,000,000 may be issued in any fiscal year and not more than \$200,000,000 may be outstanding at any time.

(g) Not more than \$50,000,000 may be issued in any fiscal year plus any obligations unissued from previous fiscal years and not more than \$400,000,000 may be outstanding at any time.

(h) Not more than \$1,200,000,000 may be issued with the annual issuance now limited to no more than \$175,000,000 in any fiscal year plus any obligations unissued from previous fiscal years.

(i) Constitutional authorization was self-implementing and did not require further General Assembly authorization. No more new obligations may be issued under this authorization.

(j) See discussion above of "availability payments" under ODOT's first public-private agreement, which payments are expected to be made from biennial appropriations of non-GRF funds available to ODOT and remaining after the payment of debt service on highway general obligations, special obligations and GARVEE bonds shown above.

(k) Not more than \$220,000,000 may be issued in any Fiscal Year plus any amount unissued from previous fiscal years, and not more than \$1,200,000,000 may be outstanding at any time.

(l) Debt service on these "GARVEE" bonds is paid from federal transportation grants apportioned to the State (Title 23 of the U.S. Code).

(m) Includes authorized amounts in HB 23 of the 135th General Assembly, effective July 2023.

The following table shows total debt service by fiscal year on State obligations payable from the GRF:

**Annual Debt Service Requirements on State Obligations
Paid from the GRF**

FY	General Obligations			Special Obligations			Total GRF Debt Service		
	Education (a)(b)(e)	Infrastructure (b)(e)	All Other(c)(e)	DAS Facilities(e)	DRC Facilities(b)(e)	All Other(b)(d)(e)	Principal(e)	Interest(b)(e)	Total(b)(e)
2024	\$617,286,746	\$230,563,233	\$124,921,966	\$64,878,203	\$69,701,519	\$158,888,794	\$910,490,000	\$355,750,459	\$1,266,240,459
2025	571,262,708	231,050,466	102,525,070	65,105,947	65,065,886	152,401,831	872,450,000	314,961,908	1,187,411,908
2026	466,018,037	196,369,718	96,437,795	42,436,383	41,582,233	135,937,050	700,330,000	278,451,216	978,781,216
2027	375,626,556	194,064,558	78,141,866	42,486,022	41,709,043	126,417,375	610,885,000	247,560,420	858,445,420
2028	343,243,167	177,026,033	76,059,836	42,750,237	41,658,626	120,031,769	580,975,000	219,794,667	800,769,667
2029	335,843,693	166,422,771	54,484,393	42,603,532	37,977,833	109,680,156	554,455,000	192,557,377	747,012,377
2030	348,963,167	152,840,426	39,220,125	38,276,891	35,113,531	105,163,844	552,415,000	167,162,983	719,577,983
2031	357,314,715	152,666,130	38,136,775	35,532,388	35,126,087	93,115,750	569,125,000	142,766,846	711,891,846
2032	309,385,760	129,642,036	28,751,850	35,855,752	29,799,318	59,567,969	473,180,000	119,822,684	593,002,684
2033	268,550,009	122,442,148	19,250,200	33,441,741	29,719,457	40,257,895	413,270,000	100,391,449	513,661,449
2034	250,687,874	122,431,420	15,876,450	29,779,898	29,986,498	27,321,690	392,395,000	83,688,830	476,083,830
2035	226,845,442	98,818,332	7,213,500	29,784,086	26,821,351	27,317,506	348,815,000	67,985,217	416,800,217
2036	202,652,500	98,794,082	-	23,809,672	26,841,095	27,324,252	326,860,000	52,561,601	379,421,601
2037	155,414,400	86,917,400	-	23,807,402	26,763,053	27,314,386	282,265,000	37,951,641	320,216,641
2038	108,538,050	75,660,700	-	18,172,625	21,444,191	27,320,658	225,905,000	25,231,224	251,136,224
2039	62,131,900	62,209,375	-	18,171,375	13,718,631	27,315,302	168,180,000	15,366,583	183,546,583
2040	37,330,100	37,022,250	-	12,680,750	13,715,298	16,694,910	108,530,000	8,913,308	117,443,308
2041	37,332,050	25,026,500	-	6,216,000	6,582,275	16,694,014	87,520,000	4,330,839	91,850,839
2042	-	14,106,750	-	-	-	8,678,601	21,985,000	800,351	22,785,351
							\$8,200,030,000	\$2,436,049,605	\$10,636,079,605

- (a) Consists of common schools and higher education general obligation bonds.
 - (b) Includes estimated debt service on adjustable-rate bonds.
 - (c) Includes natural resources, coal development, conservation, research and development, site development and veterans' compensation general obligation bonds.
 - (d) Includes lease-rental bonds for mental health, parks and recreation, cultural and sports facilities, and facilities for the Department of Youth Services.
 - (e) Excludes refunded bonds; includes refunding bonds; as of June 30, 2023.
- Totals may not foot due to rounding.

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The following table shows total debt service by fiscal year on certain State obligations payable from the indicated non-GRF revenues:

**Annual Debt Service Requirements on State Obligations
Paid from Non-GRF Revenues**

FY	Highway User Receipts			GARVEE Federal Transportation Grants ^(c)
	Highway G.O.	ODOT/DPS Facilities ^(a)	Total ^(b)	
2024		\$21,589,740		\$144,335,453
2025	135,896,145	21,592,000	157,488,145	143,598,705
2026	105,788,550	21,590,000	127,378,550	108,638,875
2027	102,438,300	21,588,000	124,026,300	108,640,875
2028	99,042,550	21,589,250	120,631,800	108,640,000
2029	81,880,550	21,586,750	103,467,300	108,645,000
2030	62,247,000	21,583,750	83,830,750	84,547,000
2031	59,675,500	13,443,250	73,118,750	43,259,125
2032	41,909,250	13,445,000	55,354,250	43,263,000
2033	40,103,000	13,445,000	53,548,000	22,874,500
2034	24,671,750	5,067,000	29,738,750	12,672,000
2035	11,071,750	5,068,500	16,140,250	12,669,000
2036	6,000,500	5,070,000	11,070,500	-
2037	5,727,750	5,066,000	10,793,750	-

- (a) Lease rental payments are paid from highway user receipts for these Ohio Department of Transportation and Department of Public Safety facilities.
- (b) As of June 30, 2023.
- (c) Debt service paid from federal transportation grants apportioned to the State under Title 23 of the U.S. Code.
Totals may not foot due to rounding.

The following table shows the principal amount of those obligations that are currently scheduled to be outstanding as of July 1 of the indicated years, as of June 30, 2023:

Year	Obligations Payable from the GRF			Non-GRF Obligations
	Education ^(a)	Other GO ^(b)	Special Obligations ^(c)	Highway User Receipts ^(d)
2024	\$3,453,630,000	\$2,101,355,000	\$1,734,555,000	\$783,335,000
2029	1,961,420,000	1,084,435,000	924,590,000	291,815,000
2034	735,155,000	436,980,000	397,925,000	38,905,000
2039	69,910,000	70,145,000	77,980,000	-

- (a) Includes bonds for common school and higher education capital facilities.
- (b) Includes natural resources, coal development, infrastructure improvement, conservation, research and development, site development and veterans' compensation general obligation bonds.
- (c) Includes lease-rental bonds for various state capital facilities.
- (d) Includes general obligations for highways and lease-rental bonds for ODOT and DPS facilities.

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The following tables show certain historical debt information and comparisons. These tables include only outstanding obligations of the State for which debt service is paid from the GRF.

Fiscal Year	Principal Amount Outstanding	Outstanding Debt Per Capita	Outstanding Debt as Percent of Annual Personal Income
1990	\$3,707,055,058	\$342	1.83%
2000	6,308,680,025	556	1.94
2010	8,586,655,636	744	2.03
2019	9,496,850,000	812	1.68
2020	9,432,955,000	807	1.60
2021	9,818,225,000	840	1.58
2022	9,153,950,000	779 ^(a)	1.35
2023	8,200,030,000	698 ^(a)	1.21 ^(b)

Fiscal Year	Debt Service Payable	Total GRF Revenue and Net State Lottery Proceeds	Debt Service as Percent of GRF Revenue and Lottery Proceeds	Debt Service as Percent of Annual Personal Income
1990	\$488,676,826	\$12,230,682,298	4.00%	0.24%
2000	871,313,814	20,711,678,217	4.21	0.27
2010	710,284,236 ^(c)	24,108,466,000 ^(d)	2.95	0.17
2019	1,402,757,299	34,921,508,000	4.02	0.25
2020	1,414,866,835	34,551,772,000	4.09	0.24
2021	1,176,720,278 ^(c)	40,723,295,400	2.89	0.19
2022	1,435,175,069	41,894,141,300	3.43	0.21
2023	1,503,565,816	43,778,291,300	3.43	0.22 ^(b)

(a) Based on July 2022 Census population estimate.

(b) Based on preliminary 2022 personal income data.

(c) Reduction is due in large part to the restructuring of certain GRF debt service payments resulting in net savings of \$416.8 million in FY 2010 and \$363.7 million in FY 2021.

(d) Excludes federal funds from the American Recovery and Reinvestment Act of 2009.

Debt Authorizations

For the 2023-2024 capital biennium, the General Assembly approved \$3.51 billion in new capital appropriations, with \$2.28 billion of new, GRF-supported debt authorizations, and included authority for the Director of the OBM to support appropriations through GRF cash transfers if there are sufficient cash balances. As of June 30, 2023, GRF cash transfers in the amounts of \$493,750,000 for General Obligation programs and \$280,000,000 for Special Obligation programs have occurred. However, additional State borrowing for capital and other purposes may continue to be needed in the future.

The following additional GRF-supported debt authorizations reflect all the new 2023-2024 capital appropriations effective September 2022:

General Obligation

- \$470,100,000 for capital improvements for elementary and secondary public schools.
- \$300,000,000 for local infrastructure projects.
- \$402,000,000 for higher education facilities.
- \$9,000,000 for natural resources facilities.
- \$100,000,000 for conservation purposes.

Special Obligation

- \$336,000,000 for prisons and local jails.
- \$99,800,000 for youth services facilities.
- \$151,100,000 for state administrative facilities.
- \$49,000,000 for cultural facilities (including both arts and sports facilities).
- \$75,700,000 for mental health facilities (including local projects).
- \$287,000,000 for parks and recreation facilities (including local projects).

Past constitutional authorizations are:

- 2014 – Additional \$1.875 billion of general obligation debt for public infrastructure as a ten-year extension of the existing local government infrastructure program authorized in 2005, with an increase in the annual issuance amount from \$150 million to \$175 million in the first five fiscal years and \$200 million in each fiscal year thereafter.
- 2010 – \$700 million of State general obligation debt to renew and continue programs for research and development in support of Ohio industry, commerce, and business, with those obligations not subject to the 5 percent debt service cap described above. The authorization is in addition to the below-referenced 2005 constitutional amendment for the same purpose. The amount of all State general obligations that may be issued for, and the amounts of proceeds from those State general obligations that may be committed to, those research and development purposes, are limited to no more than \$450 million total for the period including State FY 2006 through FY 2011, no more than \$225 million in FY 2012 and no more than \$175 million in any fiscal year thereafter, plus any amounts that in any prior fiscal year could have been but were not issued.
- 2009 – Provides compensation to persons who have served in active duty in the United States armed forces at any time during the Persian Gulf, Afghanistan, and Iraq conflicts, with those general obligation bonds not subject to the 5 percent direct obligation debt service cap described above. Not more than \$200 million may be issued and no obligations may be issued later than December 31, 2013.
- 2008 – Land conservation and revitalization purposes (including statewide brownfields clean-up). Each of the two purposes are authorized up to \$50 million in principal amount in any fiscal year, plus any amount unissued from previous fiscal years, with not more than \$200 million to be outstanding at any time. The bonds for conservation purposes are general obligations, and those for revitalization purposes are special obligations payable from revenues and receipts designated by the General Assembly (previously a portion of the State's net liquor profits). The authorization is in addition to the 2000 constitutional amendment for the same purposes.
- 2005 – \$500 million over ten years of State general obligation debt in support of research and development, and \$150 million over ten years of State general obligation debt for the development of sites for industry, commerce, distribution and research and development, with those obligations not subject to the 5 percent debt service cap described above. Also authorizes an additional \$1.35 billion of general obligation debt for public infrastructure as a ten-year extension of the existing local government infrastructure program, with an increase in the annual issuance amount from \$120 million to \$150 million in the last five fiscal years, which continues to be subject to the 5 percent debt service cap.
- 2000 – Land conservation and revitalization purposes (including statewide brownfields clean-up) each authorized up to \$50 million in principal amount in any fiscal year plus any amount unissued from previous fiscal years, with not more than \$200 million to be outstanding at any time. The bonds for conservation purposes are general obligations, and those for revitalization purposes are special obligations payable from revenues and receipts designated by the General Assembly (previously a portion of the State's net liquor profits).
- 1999 – Facilities for a system of common schools throughout the state and for state-supported and state-assisted institutions of higher education. The amendment also provides for the 5 percent direct obligation debt service cap described above.
- 1995 – Additional highway bonds and extension of the local infrastructure bond program. For the latter, it authorized an additional \$1.2 billion of the State's full faith and credit obligations to be

issued over 10 years, with not more than \$120 million issued in any fiscal year. The highway finance portion authorizes not more than \$1.2 billion to be outstanding at any time and not more than \$220 million to be issued in any fiscal year.

- 1994 – Pledges the State’s full faith and credit and taxing power to meet certain guarantees under the State’s tuition credit program. Through this program, individuals purchase tuition credits which are guaranteed to cover a specified amount when applied to tuition and other eligible higher education costs. Under the amendment, to secure the tuition guarantees, the General Assembly shall appropriate money sufficient to offset any deficiency that occurs in the trust fund, at any time necessary to make payment of the full amount of any tuition payment or refund required by a tuition payment contract.
- 1990 – Supplements the previous constitutionally authorized loans-for-lenders and other housing assistance programs, financed in part with State revenue bonds. The amendment authorizes the General Assembly to provide for State assistance for housing in a variety of ways, including State borrowing for the purpose by the issuance of obligations secured by a pledge of all or such portion of State revenues or receipts as it authorizes (but not by a pledge of the State’s full faith and credit).
- 1985 – Finance grants or make or guarantee loans for research and development of coal technology that will encourage the use of Ohio coal. Those grants or loans are available to any individual, association, or corporation doing business in the state or to any educational or scientific institution located in the state. Not more than \$100 million of general obligation bonds may be outstanding at any time.

ECONOMY AND EMPLOYMENT

Ohio has a diverse economy. While Ohio has a strong manufacturing presence in chemicals, food and beverages, motor vehicles, and fabricated metal products, the greatest growth in Ohio’s economy in recent years has been in the non-manufacturing sectors. Ohio’s 2022 economic output, as measured by gross state product (GSP), totaled \$822.7 billion, 3.20 percent of the national GDP and seventh largest among the states. The State ranks fourth within the manufacturing sector (\$129.4 billion) and fifth in durable goods (\$68.3 billion). As a percent of Ohio’s 2022 GSP, 15.7 percent was attributable to manufacturing, with 23.0 percent attributable to the goods-producing sectors and 33.6 percent to the business services sectors, including finance, insurance, and real estate. Ohio is the ninth largest exporting state with 2022 merchandise exports totaling \$56.4 billion. The State’s leading export products are machinery (including electrical machinery), motor vehicles (including parts), aircraft/spacecraft, and plastics, which together accounted for more than half of the total.

Non-farm payroll employment in Ohio, in a diversifying employment base, decreased from 2001 through 2003, increased from 2004 through 2006, decreased from 2007 through 2010, and increased from 2011 through 2022. In the last three decades, there has been a shift toward the services industry, with manufacturing employment decreasing since its 1969 peak. The non-manufacturing sector employs approximately 87.7 percent of all non-farm payroll workers in Ohio. The changing mix of employment sectors nationally and in Ohio are shown in the following tables.

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**Ohio Nonfarm Payroll Jobs by Industry Type
Not Seasonally Adjusted (in 000)**

	1990	2000	2010	2020	2021	2022
Mining & Logging	18	13	11	9	9	9
Construction	192	246	169	219	224	234
Manufacturing	1,060	1,021	621	653	665	683
Trade, Transportation & Public Utilities	963	1,115	945	1,006	1,032	1,056
Financial Activities	255	305	277	303	308	319
Professional & Business Services*	455	647	629	694	718	742
Educational & Health Services*	539	679	839	895	897	904
Leisure & Hospitality*	400	483	475	466	505	541
Information & Other Services*	279	331	284	253	266	276
Government	722	785	786	759	751	766
Total	4,882	5,624	5,036	5,256	5,373	5,530

Data prior to 1990 in these categories were classified as a single "Services" category under the 1987 Standard Industrial Classification (SIC) system. All data in table reflects the current North American Industry Classification System (NAICS).

Totals may not foot due to rounding.

Source: U.S. Department of Labor, Bureau of Labor Statistics, National and State Current Employment Statistics.

Distribution of Nonfarm Payroll Jobs by Industry Type (%)

	1990		2000		2010		2020		2021		2022	
	Ohio	U.S.	Ohio	U.S.	Ohio	U.S.	Ohio	U.S.	Ohio	U.S.	Ohio	U.S.
Mining & Logging	0.4	0.7	0.2	0.5	0.2	0.5	0.2	0.4	0.2	0.4	0.2	0.4
Construction	3.9	4.8	4.4	5.1	3.4	4.2	4.2	5.1	4.2	5.1	4.2	5.1
Manufacturing	21.7	16.2	18.2	13.1	12.3	8.8	12.4	8.6	12.4	8.4	12.3	8.4
Trade, Transportation & Public Utilities	19.7	20.7	19.8	19.9	18.8	18.9	19.1	18.7	19.2	19.0	19.1	18.8
Financial Activities	5.2	6.0	5.4	5.9	5.5	5.9	5.8	6.1	5.7	6.0	5.8	5.9
Professional & Business Services	9.3	9.9	11.5	12.6	12.5	12.8	13.2	14.2	13.4	14.5	13.4	14.8
Educational & Health Services	11.0	10.1	12.1	11.6	16.7	15.3	17.0	16.3	16.7	16.2	16.4	16.0
Leisure & Hospitality	8.2	8.5	8.6	9.0	9.4	10.0	8.9	9.4	9.4	9.6	9.8	10.4
Information & Other Services	5.7	6.3	5.9	6.7	5.6	6.2	4.8	5.7	4.9	5.7	5.0	5.8
Government	14.8	16.8	14.0	15.7	15.6	17.3	14.4	15.4	14.0	15.1	13.8	14.5

Totals may not foot due to rounding.

Source: U.S. Department of Labor, Bureau of Labor Statistics, National and State Current Employment Statistics. The distribution percentages are as calculated by OBM.

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Ohio and U.S. unemployment rates have been as follows:

Average Monthly Unemployment Rates (Seasonally Adjusted)

Year	Ohio	U.S.
1990	5.6%	5.6%
2000	4.0	4.0
2005	5.9	5.1
2006	5.4	4.6
2007	5.6	4.6
2008	6.4	5.8
2009	10.3	9.3
2010	10.3	9.6
2011	8.8	8.9
2012	7.4	8.1
2013	7.5	7.4
2014	5.8	6.2
2015	5.0	5.3
2016	5.1	4.9
2017	5.0	4.4
2018	4.5	3.9
2019	4.2	3.7
2020	8.3	8.1
2021	5.1	5.4
2022	4.0	3.6
2023 January	4.0	3.4
February	3.9	3.6
March	3.8	3.5
April	3.7	3.4
May	3.6	3.7
June	3.4	3.6

Source: U.S. Bureau of Labor Statistics.

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The following are the private sector employers that had the highest number of full-time equivalent employees (estimated and rounded) in Ohio in 2022:

OHIO'S TOP 25 PRIVATE SECTOR EMPLOYERS – 2022

Company	Employment Headcount (Estimated)	Sector
Cleveland Clinic Health System	56,986	Health Care
Walmart Inc.	55,232	Retail: General Merchandise
Amazon.com, Inc.	45,000	Retail: General Merchandise
The Kroger Co.	44,077	Retail: Food Stores
University Health Systems Inc.	30,891	Health Care
Mercy Health	30,510	Health Care
Ohio Health	30,488	Health Care
JPMorgan Chase & Co.	20,228	Finance: Bank
ProMedica Health System	18,712	Health Care
Giant Eagle Inc.	17,400	Retail: Food Stores
Cincinnati Children's Hospital Medical System	17,204	Health Care
FedEx Corporation.	15,250	Transportation: Air Delivery
United Parcel Service, Inc.	15,236	Transportation: Air Delivery
Kettering Health	14,413	Health Care
Lowe's Companies, Inc.	14,400	Retail: Home Improvement
Honda Motor Co., Ltd.	14,400	Manufacture: Motor Vehicles
Nationwide Children's Hospital	14,027	Health Care
Progressive Corp.	13,236	Finance: Insurance
Nationwide Mutual Insurance Co.	13,000	Finance: Insurance
The Home Depot, Inc.	12,600	Retail: Home Improvement
Target Corporation	12,410	Retail: General Merchandise
Meijer, Inc.	12,219	Retail: General Merchandise
TriHealth, Inc.	12,003	Health Care
CVS Health Corp.	11,650	Retail: Drug Stores
Cedar Fair, L.P.	11,200	Entertainment: Theme Parks

Boldface indicates headquartered in Ohio.

Source: Department of Development, Office of Research, Dec. 2022.

POPULATION

Ohio's 2020* decennial census population of 11,797,517 indicated a 2.3 percent population growth over 2010 and ranked Ohio seventh among the states in population. The following tables show selected census figures:

Ohio Population — Total and by Age Group

Year	Total	Rank Among States	Decennial Growth Rate	0-19 Years	20-64 Years	65 and over
1990	10,847,115	7	0.5%	3,141,000	6,299,100	1,407,000
2000	11,353,140	7	4.7	3,216,000	6,629,400	1,507,800
2010	11,536,504	7	1.6	3,067,126	6,847,363	1,622,015
2020	11,797,517	7	2.3	2,921,500	6,801,918	2,074,099

* July 2023 Census population estimate is 11,756,058.

Source: U.S. Census Bureau Web Site, Metropolitan Area Population Estimates v.2022

Population of Ohio Metropolitan Areas^(a)

	1990	2000	2010	2020	2021	2022
Cleveland	2,202,069 ^(b)	2,250,871 ^(b)	2,077,240 ^(b)	2,086,509	2,073,183 ^(b)	2,063,132 ^(b)
Cincinnati	1,526,092 ^(c)	1,646,395 ^(c)	2,130,151 ^(d)	2,258,932 ⁽ⁱ⁾	2,259,955 ⁽ⁱ⁾	2,265,051 ⁽ⁱ⁾
Columbus	1,345,450 ^(e)	1,540,157 ^(e)	1,836,536 ^(e)	2,141,756 ^(e)	2,146,951 ^(e)	2,161,511 ^(e)
Dayton	951,270 ^(f)	950,558 ^(f)	979,835 ^(f)	814,162 ⁽ⁱ⁾	813,183 ⁽ⁱ⁾	812,595 ⁽ⁱ⁾
Akron	657,575	694,960	703,200	701,625	696,225	697,627
Toledo	614,128	618,203	651,429	646,012	642,320	640,384
Youngstown-Warren	600,895 ^(g)	594,746 ^(g)	565,773 ^(g)	540,211 ^(g)	537,837 ^(g)	535,499 ^(g)
Canton-Massillon	394,106	406,934	404,422	401,183	400,330	399,316
Hamilton-Middletown	291,479	332,807	(d)	(d)	(d)	(d)
Lima	154,340	155,084	106,331	102,107	101,792	101,115
Mansfield	174,007 ^(g)	175,818 ^(g)	124,475	124,962	125,327	125,319
Steubenville	142,523 ^(h)	132,008 ^(h)	124,454 ^(h)	116,680 ^(h)	115,811 ^(h)	114,235 ^(h)
Springfield	(f)	(f)	(f)	135,879	135,747	134,831

(a) SMSAs in 1970 & 1980, MSAs in 1990, 2000 & 2010 (PMSA's for Cleveland, Cincinnati, Akron, and Hamilton-Middletown).

(b) Lorain-Elyria included with Cleveland.

(c) Includes 12 counties (two in Indiana and six in Kentucky).

(d) Includes 15 counties (three in Indiana and seven in Kentucky); includes Hamilton-Middletown.

(e) Newark added.

(f) Springfield added.

(g) Includes three counties (one in Pennsylvania).

(h) Weirton added; includes two counties in West Virginia.

(i) Includes 16 counties (four in Indiana and seven in Kentucky); includes Hamilton-Middletown

(j) Springfield removed.

Source: U.S. Census Bureau Web Site, Metropolitan Area Population Estimates v.2022

AGRICULTURAL AND RESOURCES BASES

With 13.5 million acres (of a total land area of 26.4 million acres) in farmland and an estimated 77,800 individual farms, agriculture and related sectors are an important segment of Ohio's economy. Ohio's 2021 crop production value of \$7.3 billion ranked tenth among states and represented 3.1 percent of the U.S. total value. Ohio's 2021 livestock production value of \$3.9 billion ranked eighteenth among states and represented 2.0 percent of the U.S. total value. As of 2021, Ohio accounts for 4.1 percent of total U.S. cash receipts for corn and 6.6 percent for soybeans. In 2021, Ohio's agricultural sector output (consisting of crops, livestock, poultry, dairy, services and forestry, and all farm-related income) totaled \$11.1 billion and represented 2.6 percent of the U.S. total value. Ohio farm expenses and purchased inputs (feed, seed, chemicals, fertilizer, livestock, utilities, labor, and machinery) totaled \$8.2 billion. The net farm income on Ohio farms in 2021 was \$4.4 billion.

The availability of natural resources, such as water and energy, is a nationwide concern. With Lake Erie and the Ohio River on the State's borders, and many lakes and streams throughout the State, water is accessible and abundant throughout Ohio. With the launch of the H2Ohio program in 2019, the state is investing in water quality initiatives to ensure this precious resource continues to benefit Ohioans for generations to come. Additionally, Ohio is a strong energy producing state. As of 2020, Ohio ranks sixth in consumer-grade natural gas production, generating 2.3 trillion cubic feet and has sizable coal resources ranking sixteenth among the states in both coal reserves and coal production in 2020.

STATE EMPLOYEES AND COLLECTIVE BARGAINING AGREEMENTS

Since 1985, the number of regular state employees (excluding employees who are not paid by state warrant such as state university employees) has ranged from a low of 48,838 in March 2022, to a high of 68,573 in 1994. The State engages in collective bargaining with five employee unions representing 14 bargaining

units, and generally operates under three-year agreements. The State's current collective bargaining agreements expire between February 28, 2024 and June 30, 2024.

RETIREMENT SYSTEMS

The State has established five public retirement systems to provide retirement, disability retirement and survivor benefits, and other post-employment benefits such as retiree health care. None of these benefits are guaranteed under the Ohio Constitution or under State law, or subject to bargaining under the State's current public employee collective bargaining law.

The Public Employees Retirement System (PERS), the largest of the five, covers both state and local public employees and non-teaching employees at public higher education institutions. The State Teachers Retirement System (STRS) covers teaching employees at school districts and public higher education institutions. The School Employees Retirement System (SERS) covers non-teaching employees at school districts and community colleges. The Highway Patrol Retirement System (HPRS) covers State troopers, and the Ohio Police and Fire Pension Fund (OP&F) covers local safety forces. Full financial information for each retirement system can be found on its individual website as part of its Annual Comprehensive Financial Report and/or annual report.

The five retirement systems began reporting pensions in accordance with GASB Statement No. 67, Financial Reporting for Pension Plans, in FY 2014, and the State began reporting pensions in accordance with GASB Statement No. 68, Accounting and Financial Reporting for Pensions, in FY 2015. The retirement systems also began reporting in accordance with GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, in FY 2017, and the State began reporting in accordance with GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, in FY 2018.

The retirement systems were created by and operate pursuant to state law. As reflected in the 2012 pension reform acts discussed below, the General Assembly has the power to amend the structure and benefit levels, impose or revise contribution rates or amounts, and to make other changes. The systems have never been subject to the funding and vesting requirements of the federal Employee Retirement Income Security Act (ERISA). Federal law requires employees hired on or after April 1, 1986, to participate in the Medicare program, with matching employer and employee contributions, each now 1.45 percent of the wage base. Otherwise, state employees covered by a state retirement system are not currently covered under the federal Social Security Act. Congress has from time to time considered legislation relating to public sector retirement funds and to other aspects of public employee retirement.

Funding for the retirement systems is provided by a combination of public employer and employee contributions based on percentages of each employee's compensation, with the employees' contributions being deducted from their paychecks. Employee contribution percentages are either established in state law or by the retirement system board, subject to a maximum contribution amount established in state law. Except for employee contributions for PERS law enforcement and public safety personnel, the current contribution percentages for each system (set forth in the following table under **Pension Benefits**) reflect the maximums permitted under state law.

In 1968, the Ohio General Assembly created the Ohio Retirement Study Council (ORSC) to oversee the state's five public retirement systems and to advise and inform the legislature on all matters relating to the benefits, funding, investment, and administration of those systems. The ORSC consists of nine voting members: three members of the House appointed by the Speaker; three members of the Senate appointed by the President; and three members appointed by the Governor (one representing the State, one representing local governments, and the third representing public education institutions). The five executive directors of the retirement systems also serve as nonvoting members of the ORSC.

Under state law, each retirement system's board is required to establish a period of not more than thirty years to amortize its unfunded actuarial accrued pension liability (UAAL). If in any year the period required to amortize that UAAL exceeds thirty years, the board must prepare and submit to the ORSC and the

applicable committees in the Ohio General Assembly a plan to reduce that amortization period to not more than thirty years. Based on their most recent reporting years reflected in the table below under **Pension Benefits**, all of the retirement systems meet the 30-year funding requirement, with the number of years to fully amortize UAAL at 11.5 years for STRS, 16 years for PERS, 24 years for HPRS, 22 years for SERS, and 29 years for OP&F. Prior to the 2012 pension reform acts described below, the board of each of the five retirement systems had approved and submitted to the ORSC and the Ohio General Assembly a plan to reduce or maintain its amortization period at not more than thirty years. Pursuant to this continuing requirement, the OP&F board increased (effective January 1, 2014) contributions to its pension fund by reducing from 2.85 percent to 0.5 percent the amount of employer contributions directed to health care and redirecting the 2.35 percent difference to pensions. Likewise, the STRS board increased (effective July 1, 2014) contributions to its pension fund by redirecting to pensions the 1.0 percent of employer contributions previously directed to healthcare. The HPRS board also increased (effective January 1, 2018) contributions to its pension fund by reducing from 4.0 percent to 3.5 percent the amount of employer contributions directed to its health care fund.

After extensive review, the General Assembly enacted, and the Governor signed into law effective January 7, 2013, five pension reform acts to implement with modifications plans previously submitted by the five retirement systems to reduce or maintain their UAAL periods to not more than thirty years. The reform act for PERS made changes including increasing the years of service and eligibility age necessary to retire with full benefits, increasing from three to five the number of years used in determining “final average salary” for purposes of calculating retirement benefits, reducing the post-retirement cost of living adjustment, and increasing the minimum salary threshold required to earn full-time service credit for public employee eligibility to participate in the system. The other reform acts made similar changes to STRS, SERS, OP&F, and HPRS, and enacted phased increases in the employee contribution rate for STRS (from 10 percent to a maximum of 14 percent in July 2016) and OP&F (from 10 percent to a maximum of 12.25 percent in July 2015). The HPRS board was authorized to increase employee contributions up to a maximum of 14 percent from 10 percent beginning in July 2013, and it has implemented this authorization by increasing the employee contribution rate to 11.5 percent for 2014, 12.5 percent for 2015 to 2017, and 14.0 percent for 2018 and thereafter. Except for PERS, the reform acts also authorize each retirement system’s board to adjust certain pension benefits levels within limits without General Assembly approval. Under this authority, the post-retirement cost of living adjustment for retirees was eliminated by the STRS board (from 2.0 percent to 0.0 percent beginning July 1, 2017) and reduced by the HPRS board (phased down from 3.0 percent to 1.25 percent beginning January 1, 2015). In March 2022, the STRS Retirement Board unanimously approved a one-time cost of living adjustment of 3 percent and resolved to review future cost of living benefit payments during 2023. As reflected above, these reform acts did not change the requirement that each system establish a period of not more than thirty years to amortize its pension UAAL and prepare and submit to the ORSC and the Ohio General Assembly a plan to reduce that amortization period if it exceeds thirty years.

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Retirement Contributions

The State makes its employer contributions based on a percent of salary for each State employee that is an active member of a state retirement system. Currently, just over 95 percent of state employees are members of PERS, about 2.7 percent are in HPRS and less than 1.0 percent are in STRS. The following table summarizes state employer and employee contributions to those retirement systems with state employee members (\$ in millions):

State Fiscal Year	PERS Employer\Employee		STRS Employer\Employee		HPRS Employer\Employee		Total Employer\Employee
	Amount	Percent of Salary ^(a)	Amount	Percent of Salary	Amount	Percent of Salary	Contributions
2019	\$433.0/\$304.6	14.0/10.0	\$6.0/\$6.0	14.0/14.0	\$31.7/\$14.9	26.5/14.0	\$470.6/\$325.1
2020	440.6/314.7	14.0/10.0	6.1/6.1	14.0/14.0	32.8/16.3	26.5/14.0	479.5/337.1
2021	447.9/319.9	14.0/10.0	6.3/6.3	14.0/14.0	32.1/17.0	26.5/14.0	486.3/343.2
2022	460.0/328.6	14.0/10.0	6.5/6.5	14.0/14.0	30.6/16.2	26.5/14.0	497.1/351.2
2023	480.8/343.4	14.0/10.0	6.6/6.6	14.0/14.0	32.4/16.5	26.5/13.0	519.5/366.3

(a) Reflects PERS state and local contribution rates only. PERS law enforcement employer/employee contribution rate is 18.1/13.0 percent and public safety is 18.1/12.0 percent.

Source: Contributions based on percent of payroll expenses from State of Ohio accounting system records.

The State also has funded and continues to fund a subsidy to the OP&F system to pay for survivor benefits provided in law and not otherwise funded. The aggregate subsidies were \$70.7 million in the 2022-2023 biennium and are appropriated at \$71.8 million in the 2024-2025 biennium. All state employer contributions are subject to appropriation in each state budget and are included in the appropriations for each department or agency's personnel costs.

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Pension Benefits

The following table summarizes state and local membership and financial data for each of the retirement systems for the most recent year reported by the system (\$ in millions):

Valuation as of:	PERS 12/31/22	STRS 06/30/22	SERS ^(a) 06/30/22	OP&F 12/31/21	HPRS 12/31/21
Active Members	287,741	174,036	155,063	29,384	1,454
Retirees and Beneficiaries	220,245	156,225	81,151	30,560	1,807
Employer/Employee Contributions (percent of Salary) ^(c)	14.0/10.0 ^(d)	14.0/14.0	14.0/10.0	^(e)	26.5/14.0
Active Member Payroll	\$16,500.8	\$13,624.9	\$3,994.7	\$2,443.6	\$111.6
Market Value of Assets (MVA) ^(f)	\$93,151.2	\$83,034.2	\$16,962.7	\$18,776.9	\$1,000.3
Actuarial Value of Assets (AVA) ^(g)	\$102,851.7	\$85,141.8	\$16,641.0	\$17,095.8	\$894.4
Actuarial Accrued Liability (AAL) ^(h)	\$122,463.0	\$105,264.3	\$21,981.5	\$24,517.6	\$1,233.5
Funding Ratio (AVA to AAL percent, MVA to AAL percent)	84.0(76.1)	80.9(78.9)	75.7(77.2)	69.7(76.6)	72.5(81.1)
Unfunded Actuarial Accrued Liability (UAAL)	\$19,611.3	\$20,122.5	\$5,340.5	\$7,421.7	\$339.1
UAAL to Active Member Payroll Percent	118.8	147.7	133.7	303.7	303.9
UAAL Funding Period (years) ⁽ⁱ⁾	16	11.5	22	29	24

(a) SERS information excludes Medicare Part B reimbursement which is considered a post-employment healthcare benefit reported in accordance with GASB Statement 43 for all data except MVA.

(b) OP&F deferred retirement option plan balances are included in MVA, AVA, and AAL.

(c) For PERS and SERS, the maximum employer and employee contribution rates under law are 14.0 percent and 10.0 percent. For STRS and HPRS, the maximum employer and employee contributions rates are 14.0/14.0 percent and 26.5/14.0 percent, respectively. Each system's board annually determines the portion of the employer contribution, if any, that is directed to fund post-employment health care benefits.

(d) PERS state employer/employee contribution rate is 14.0/10.0 percent, local is 14.0/10.0 percent, law enforcement is 18.1/13.0 percent, and public safety is 18.1/12.0 percent. PERS state and local employer and employee contribution rates increased to their current statutory maximum of 14.0 percent and 10.0 percent, respectively, in calendar year 2008.

(e) OP&F employer and employee contribution rates increased to their current statutory maximum of 19.5/12.25 percent for police and 24.0/12.25 percent for fire in July 2015.

(f) Defined contribution plan assets are generally excluded for PERS and included for STRS.

(g) Recognizes assumed investment returns fully each year (6.9 percent for PERS, 7.2 percent HPRS, 7.45 percent for STRS, 7.0 percent for SERS, and 8.0 percent for OP&F). Differences between actual and assumed investment returns, subject to each system's market corridor limitation, are phased-in over a closed four-year period.

(h) Reflects an individual entry age normal actuarial cost method.

(i) UAAL funding period is calculated based on a closed period as a level percent of payroll, except for the portion of PERS members who participate in the member directed plan which uses a closed period as a level dollar of payroll.

Sources: Retirement systems' Annual Comprehensive Financial Reports and annual actuarial valuations.

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The following table summarizes financial and funding information for each of the retirement systems for the past five years as reported by the system (\$ in millions):

Retirement System Valuation Year-End	Actuarial Value of Assets (AVA) ^(a)	Actuarial Accrued Liability (AAL) ^(b)	Unfunded Actuarial Accrued Liability (UAAL)	Funding Ratio (AVA to AAL)	Market Value of Assets (MVA) ^(c)	Funding Ratio (MVA to AAL)	Active Member Payroll	UAAL Percent of Active Member Payroll
PERS								
12/31/22	\$102,851.7	\$122,463.0	\$19,611.3	84.0%	\$93,151.2	76.1%	\$16,500.8	118.8%
12/31/21	99,710.2	118,517.0	18,806.8	84.1	110,210.9	93.0	15,463.7	121.6
12/31/20*	93,969.1	115,241.5	21,272.4	81.5	98,852.8	85.8	14,998.1	141.8
12/31/19	88,571.7	111,371.3	22,799.6	79.5	91,814.5	82.4	14,987.6	152.1
12/31/18	84,287.0	108,704.6	24,417.6	77.5	81,427.3	74.9	14,391.1	169.7
STRS								
06/30/22	\$85,141.8	\$105,264.3	\$20,122.5	80.9%	\$83,034.2	78.9%	\$13,624.9	147.7%
06/30/21	83,761.4	104,591.4	20,830.0	80.1	91,805.5	87.8	12,929.8	161.1
06/30/20	76,357.7	98,672.3	22,314.6	77.4	74,475.8	75.5	12,671.2	176.1
06/30/19	74,411.8	97,840.9	23,429.1	76.1	75,726.5	77.4	12,296.8	190.5
06/30/18	73,115.4	96,904.1	23,788.7	75.5	74,916.3	77.3	11,923.7	199.5
SERS^(d)								
06/30/22	\$16,641.0	\$21,981.5	\$5,340.5	75.7%	\$16,962.7	77.2%	\$3,994.7	133.7%
06/30/21	15,809.0	21,138.4	5,329.4	74.8	17,840.0	84.4	3,622.1	147.1
06/30/20	14,838.0	20,640.5	5,802.5	71.9	14,419.6	69.9	3,477.6	166.9
06/30/19	14,293.0	20,129.8	5,836.8	71.0	14,544.1	72.2	3,462.5	168.6
06/30/18	13,848.0	19,598.1	5,750.6	70.7	14,270.5	72.8	3,332.4	172.6
OP&F^(e)								
12/31/21	\$17,095.8	\$24,517.6	\$7,421.7	69.7%	\$18,776.9	76.6%	\$2,443.6	303.7%
12/31/20	16,112.1	22,628.6	6,516.5	71.2	16,411.1	72.5	2,381.8	273.6
12/31/19	15,360.1	22,044.3	6,684.2	69.7	15,636.6	70.9	2,313.6	288.9
12/31/18	14,753.2	21,264.7	6,511.5	69.4	13,941.1	65.6	2,218.0	293.6
12/31/17	14,594.6	20,887.2	6,292.7	69.9	14,963.6	71.6	2,209.3	284.8
HPRS								
12/31/21	\$894.4	\$1,233.5	\$339.1	72.5%	\$1,000.3	81.1%	\$111.6	303.9%
12/31/20	844.7	1,203.9	359.1	70.2	907.4	75.4	118.0	304.3
12/31/19	796.3	1,173.2	376.9	67.9	817.9	67.9	118.4	318.3
12/31/18	769.1	1,158.2	389.1	66.4	715.5	66.4	116.0	335.4
12/31/17	774.7	1,153.6	378.9	67.2	786.4	68.2	112.7	336.2

- (a) Recognizes the assumed long-term investment return fully for each particular year. Differences between actual and assumed investment returns, subject to each system's market corridor limitation, are phased-in over a closed four-year period.
- (b) Reflects an individual entry age actuarial cost method.
- (c) Defined contribution plan assets are excluded for PERS, except for annuitized defined contribution assets, and included for STRS.
- (d) Excludes Medicare Part B reimbursement which is considered a post-employment health care benefit reported in accordance with GASB 43 for all data except MVA.
- (e) OP&F deferred retirement option plan balances are included in AVA, AAL, and MVA.
* Reflects revised actuarial assumptions based on change in discount rate from 7.2 percent to 6.9 percent.
- Sources: Retirement systems' Annual Comprehensive Financial Reports and annual actuarial valuations.

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GASB Statements No. 67 & 68. GASB Statement No. 67 replaced prior accounting standards for reporting pension plan information beginning in FY 2014. Under this accounting standard, the reporting of unfunded actuarial accrued liability (UAAL) has been replaced by the net pension liability/net pension asset (NPL/NPA). The NPL/NPA represents the excess of the total pension liability over fiduciary net position. The components of the NPL/NPA and the sensitivity of the NPL/NPA to changes in the single discount rate for each of the retirement systems for the most recent year are as follows (\$ in millions):

Valuation as of:	PERS ^(a) 12/31/22	STRS 06/30/22	SERS 06/30/22	OP&F 12/31/21	HPRS 12/31/21
Total Pension Liability ^{(b)(c)}	\$122,447.6	\$105,264.3	\$22,371.5	\$25,024.3 ^(e)	\$1,314.9 ^(f)
Fiduciary Net Position ^(d)	\$93,151.2	\$83,034.2	\$16,962.7	\$18,776.9	\$1,000.3
Net Pension Liability/Net Pension Asset (NPL/NPA)	\$29,296.4	\$22,230.1	\$5,408.8	\$6,247.4	\$314.6
Fiduciary Net Position as a Percentage of Total Pension Liability	76.1%	78.9%	75.8%	75.0%	76.0%
NPL/NPA Calculated With 1 Percent Decrease in Discount Rate	\$44,122.0	\$33,581.6	\$7,961.5	\$9,264.8	\$463.5
NPL/NPA Calculated With 1 Percent Increase in Discount Rate	\$16,969.0	\$12,630.3	\$3,258.2	\$3,734.7	\$189.8

- (a) For PERS, figures reflect the traditional plan, the defined benefit portion of the combined plan, and the defined benefit annuities portion of the member-directed plan.
- (b) Reflects a single discount rate of 6.9 percent for PERS, 7.00 percent for STRS and SERS, and 7.50 percent for OP&F. The projection of cash flows used to determine the discount rate assumed that employee and employer contributions are made at the actuarially determined rates under state law. Based on those assumptions, the fiduciary net position was projected to be available to make all projected future benefit payments. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine total pension liability. Also reflects an individual entry age actuarial cost method.
- (c) For HPRS, the fiduciary net position was not projected to be sufficient to make all projected future benefit payments and, therefore, a blended discount rate of 7.25 percent was used. The blended discount rate represents the long-term expected rate of return for the funded benefit payments and a tax-exempt, high-quality municipal bond rate for the unfunded benefit payment.
- (d) Based on the market value of assets.
- (e) Total pension liability was determined by an actuarial valuation as of 01/01/20 and updated with roll-forward procedures to 12/31/20.
- (f) Total pension liability was determined by an actuarial valuation as of 12/31/20 and updated with roll-forward procedures to 12/31/21.
- Sources: Retirement systems' Annual Comprehensive Financial Reports, annual reports, and annual actuarial valuations.

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GASB Statement No. 68 replaced prior accounting standards for state and local governments reporting of pension plan information beginning in FY 2015. This accounting standard requires employers and non-employer contributing entities to report a proportionate share of their NPL/NPA in their financial statements. Employers determine their proportionate share of NPL/NPA by comparing their current year contributions to the plan to current year contributions to the plan made by all employers and non-employer entities, based on information provided to them by their retirement system(s). The State's proportionate share of the NPL/NPA and the sensitivity of the NPL/NPA to changes in the single discount rate for PERS, STRS and HPRS for the most recent year are as follows (\$ in millions):

Valuation as of:	PERS ^(a) 12/31/22	STRS 06/30/22	HPRS 12/31/21
Total Pension Liability ^(b)	\$122,447.6	\$105,264.3	\$1,314.9 ^(d)
Fiduciary Net Position ^(c)	\$93,151.2	\$83,034.2	\$1,000.3
Net Pension Liability/Net Pension Asset (NPL/NPA)	\$29,296.4	\$22,230.1	\$314.6
State Proportionate Share of Net Pension Liability (PSL)	\$1,760.6	\$79.2	\$314.6
PSL as a Percentage of NPL/NPA	7.8%	0.36%	100.0%
PSL Calculated With 1 Percent Decrease in Discount Rate	\$4,790.8	\$119.7	\$463.5
PSL Calculated With 1 Percent Increase in Discount Rate	(\$571.1)	\$45.0	\$189.8

- (a) For PERS, figures reflect the traditional plan, the defined benefit portion of the combined plan, and the defined benefit annuities portion of the member-directed plan.
(b) Reflects a single discount rate of 6.9 percent for PERS, 7.0 percent for STRS, and 7.25 percent for HPRS.
(c) Based on the market value of assets.
(d) Total pension liability determined by actuarial valuation as of 12/31/19 and updated with roll-forward procedures to 12/31/20.
Sources: State of Ohio FY 2022 Annual Comprehensive Financial Report and retirement systems' Annual Comprehensive Financial Reports, and annual actuarial valuations.

Other Post-Employment Benefits

Each of the State's public retirement systems also offer post-employment health care benefits to its members. Contributions to and benefits under these health care programs are not vested and, as reflected by the recent actions of the OP&F and STRS boards described above, are subject to future adjustment by their respective boards. In this regard, PERS adopted, beginning in 2004, a series of health care preservation plans to adjust benefits and contributions by employers, employees, and retirees. In 2017, STRS implemented benefit adjustments that when coupled with strong investment returns and positive claims experience had a positive effect on its health care program. In 2019, OP&F replaced its health care plan with a new stipend-based health care model that also had a positive effect on its health care program. On January 15, 2020, the PERS board of trustees modified the discretionary health care program. Changes included replacing the group health care program for non-Medicare retirees with a monthly allowance to select a health care plan with the assistance of a vendor consultant. These changes are the same as those made to the Medicare program in 2015. Other changes include reducing the allowance provided to Medicare retirees from a base of \$450 per month to \$350 per month. Non-Medicare retirees' allowance was initially established at \$1,200 base level per month. The actual allowance for all retirees will be determined based upon the age and years of service of the retiree. Other changes included modifications to the eligibility criteria for future retirees beginning in 2022. Effective July 1, 2023, OPERS increased the portion of the 14% employer contribution rate allocated to health care funding from 0.0% to 2.0% for the Combined Plan only.

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The following table presents a summary of assets and actuarial accrued liabilities for post-employment healthcare benefits for each of the State's public retirement systems (\$ in millions):

Valuation as of:	PERS 12/31/21	STRS 06/30/22	SERS 06/30/22	OP&F ^(a) 12/31/18	HPRS 12/31/21
Value of Assets ^(b)	\$12,712.9	\$4,570.0	\$611.6	n/a	\$130.1
Actuarial Accrued Liability (AAL) ^(c)	\$11,037.0	\$1,980.7	\$1,348.3	n/a	\$229.2
Unfunded Actuarial Accrued Liability (UAAL) ^(d)	(\$1,675.9)	(\$2,589.3)	\$736.7	n/a	\$122.9
Funding Ratio (Assets to AAL Percent)	115.2%	230.7%	45.4%	n/a	56.8%
Employer Contribution (Percent of Salary) ^(e)	0.0%	0.0%	0.0% ^(f)	0.5%	0.0%

(a) OP&F is no longer reporting unfunded actuarial accrued liabilities under prior accounting standards. See GASB Statement No. 74 table below for information on the reporting of post-employment benefit plans other than pension plans.

(b) For PERS and HPRS, investment returns are recognized fully each year with the differences between actual and assumed investment returns (assumed at 5.22 percent for PERS and 7.25 percent for HPRS), subject to each system's market corridor limitation, phased-in over a closed four-year period. For STRS and SERS, reflects market value. For PERS, includes assets for member-directed plan participants.

(c) Reflects an individual entry age normal actuarial cost method.

(d) UAAL is calculated based on an open period as a level percent of payroll.

(e) Each system's board annually determines the portion of the employer contribution, if any, that is directed to fund post-employment health care benefits. See discussion above for recent adjustments by OP&F, STRS, and HPRS boards to employer contribution directed to fund health care benefits.

(f) SERS also collects a health care surcharge from employers for employees who earn less than an actuarially determined minimum compensation amount. This amount is in addition to the amount allocated to health care from the employer contributions.

Sources: Retirement systems' Annual Comprehensive Financial Reports, and annual actuarial valuations.

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The following table presents a summary of assets and actuarial accrued liabilities for post-employment healthcare benefits for the past four years for each of the State's public retirement systems (\$ in millions).

Retirement System Valuation Year-End	Value of Assets ^(a)	Actuarial Accrued Liability (AAL) ^(b)	Unfunded Actuarial Accrued Liability	Funding Ratio (Assets to AAL)	Employer Contribution (Percent of Salary) ^{(c)(d)}
PERS^{(f)(g)}					
12/31/21	\$12,712.9	\$11,037.0	(\$1,675.9)	115.2%	0.0%
12/31/20	12,385.8	11,215.5	(1,170.3)	110.4	0.0
12/31/19	11,942.5	11,461.7	(480.8)	104.2	0.0
12/31/18	11,646.9	17,848.7	6,201.8	65.3	0.0
STRS					
06/30/22	\$4,570.0	\$1,980.7	(\$2,589.3)	230.7%	0.0%
06/30/21	4,929.7	2,821.3	(2,108.4)	174.7	0.0
06/30/20	3,897.3	2,139.8	(1,757.5)	182.1	0.0
06/30/19	3,872.2	2,215.9	(1,656.2)	174.7	0.0
SERS					
06/30/22	\$611.6	\$1,348.3	\$736.7	45.4%	0.0%
06/30/21	600.3	1,289.4	689.1	46.6	0.0
06/30/20	482.6	1,796.5	1,313.9	26.9	0.0
06/30/19	463.8	2,198.7	1,734.9	21.1	0.5
OP&F^(e)					
12/31/17	\$901.7	\$5,487.8	\$4,586.2	16.4%	0.5%
12/31/16	929.4	5,166.6	4,237.2	18.0	0.5
12/31/15	1,031.9	5,399.6	4,367.6	19.1	0.5
12/31/14	1,053.5	5,244.6	4,191.0	20.1	0.5
HPRS					
12/31/21	\$130.1	\$229.2	\$112.9	56.8%	0.0%
12/31/20	118.6	285.3	174.6	41.6	0.0
12/31/19	111.0	303.3	195.3	36.6	0.0
12/31/18	109.5	262.0	152.5	41.8	3.5

- (a) For PERS & HPRS, recognizes investment returns fully each year (PERS at 5 percent in 2016, 6.5 percent in 2017, to current 6.0 percent starting in 2018, HPRS assumed at 5 percent) with the differences between actual and assumed investment returns, subject to each system's market corridor limitation, phased-in over a closed four-year period. For STRS, SERS and OP&F, reflects market value.
- (b) Reflects an individual entry age normal actuarial cost method.
- (c) Each system's board annually determines the portion of the employer contribution, if any, that is directed to fund post-employment health care benefits.
- (d) SERS also collects a health care surcharge from employers for employees who earn less than an actuarially determined minimum compensation amount. This amount is in addition to the amount allocated to health care from the employer contributions.
- (e) OP&F is no longer reporting unfunded actuarial accrued liabilities under prior accounting standards. See GASB Statement No. 74 table below for information on the reporting of post-employment benefit plans other than pension plans.
- (f) PERS is instituting several adjustments to Medicare and non-Medicare retirees effective January 1, 2022, related to HRA allowances, dependent benefits, and re-employed retirees leading to a significant reduction in actuarial liability beginning in the valuation period ending December 31, 2019.
- (g) Effective 7/1/2022, the employer contribution to healthcare for the OPERS Combined Plan was raised to 2.0%, the Traditional Pension Plan employer contribution remained at 0.0%.
- Sources: Retirement systems' annual actuarial valuations.

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GASB Statements No. 74 & 75. GASB Statement No. 74 replaced prior accounting standards for reporting post-employment benefit plans other than pension plans (OPEB) beginning in FY 2017. Under this accounting standard, the reporting of unfunded actuarial accrued liability has been replaced by the net OPEB liability (NOL). The NOL represents the excess of the total OPEB liability over fiduciary net position. The components of the NOL and the sensitivity of the NOL to changes in the single discount rate for those retirement systems that have reported information for the most recent year are as follows (\$ in millions):

Valuation as of:	PERS 12/31/22	STRS 06/30/22	SERS 06/30/22	OP&F ^(a) 12/31/21	HPRS 12/31/21
Total OPEB Liability ^{(a)(b)}	\$12,095.8 ^(d)	\$1,980.7	\$2,015.6	\$2,062.8 ^(e)	\$510.8 ^(d)
Fiduciary Net Position ^(c)	\$11,465.3	\$4,570.0	\$611.6	\$966.7	\$130.1
Net OPEB Liability (NOL)	\$630.5	(\$2,589.3)	\$1,404.0	\$1,096.1	\$380.7
Fiduciary Net Position as a Percentage of Total OPEB Liability	94.8%	230.7%	30.3%	46.9%	25.5%
NOL Calculated With 1 Percent Decrease in Discount Rate	\$2,145.7	(\$2,393.8)	\$1,743.8	\$1,377.8	\$486.8
NOL Calculated With 1 Percent Increase in Discount Rate	(\$620.5)	(\$2,756.8)	\$1,129.7	\$864.5	\$299.5
NOL Calculated With 1 Percent Decrease in Cost Trend Rate	\$590.9	(\$2,685.8)	\$1,082.7	n/a	\$288.0
NOL Calculated With 1 Percent Increase in Cost Trend Rate	\$675.5	(\$2,467.6)	\$1,823.6	n/a	\$505.3

- (a) For PERS, SERS and HPRS, the fiduciary net position was not projected to be sufficient to make all projected future benefit payments and, therefore, single or blended discount rates of 5.22 percent, 4.08 percent, and 3.36 percent, respectively, were used. The blended discount rates represent the long-term expected rate of return for the funded benefit payments and a tax-exempt, high-quality municipal bond rate for the unfunded benefit payment. For STRS, the fiduciary net position was projected to be sufficient to make all projected future benefit payments and, therefore, a discount rate of 7.00 percent, representing the long-term expected rate of return on assets, was used. For OP&F, the fiduciary net position was projected to be available to make projected future benefit payments until 2031 and, therefore, a single discount rate of 2.84 percent, representing a tax-exempt, high quality municipal bond rate, was used. After 2031, benefit payments will be funded on a pay-as-you go basis.
- (b) For all retirement systems, reflects an individual entry age normal actuarial cost method as a level percent of payroll.
- (c) Based on the market value of assets.
- (d) Total OPEB liability was determined by an actuarial valuation as of 12/31/21 and updated with roll-forward procedures to 12/31/22.
- (e) Total OPEB liability was determined by an actuarial valuation as of 01/01/20 and updated with roll-forward procedures to 12/31/20.

Sources: Retirement systems' Annual Comprehensive Financial Reports and annual reports.

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GASB Statement No. 75 replaced prior accounting standards for state and local governments reporting of postemployment benefit plans other than pensions beginning in FY 2018. This accounting standard requires employers and non-employer contributing entities to report a proportionate share of their NOL in their financial statements. Employers determine their proportionate share of NOL by comparing their current year contributions to the plan to current year contributions to the plan made by all employers and non-employer entities, based on information provided to them by their retirement system(s). The State's proportionate share of the NOL and the sensitivity of the NOL to changes in the single discount rate for PERS, STRS and HPRS for the most recent year are as follows (\$ in millions):

Valuation as of:	PERS 12/31/22	STRS 06/30/22	HPRS 12/31/21
Total OPEB Liability ^(a)	\$12,095.8 ^(c)	\$1,980.7 ^(d)	\$510.8 ^(c)
Fiduciary Net Position ^(b)	\$11,465.3	\$4,570.0	\$130.1
Net OPEB Liability (NOL)	\$630.5	(\$2,589.3)	\$380.7
State Proportionate Share of Net OPEB Liability (PSL)	(\$659.0)	(\$9.2)	\$380.7
PSL as a Percentage of NOL	(104.5%)	0.4%	100.0%
PSL Calculated With 1 Percent Decrease in Discount Rate	(\$387.5)	(\$8.5)	\$486.8
PSL Calculated With 1 Percent Increase in Discount Rate	(\$884.3)	(\$9.5)	\$299.5
PSL Calculated With 1 Percent Decrease in Cost Trend Rate	(\$666.1)	(\$9.6)	\$288.0
PSL Calculated With 1 Percent Increase in Cost Trend Rate	(\$650.5)	(\$8.8)	\$505.3

(a) The fiduciary net position was not projected to be available to make all projected future benefit payments and, therefore, a single discount rate of 5.22 percent for PERS was used and a blended discount rate of 3.42 percent for HPRS was used. The blended discount rate represents the long-term expected rate of return for the funded benefit payments and a tax-exempt, high-quality municipal bond rate for the unfunded benefit payment.

(b) Based on the market value of assets.

(c) Total OPEB liability was determined by an actuarial valuation as of 12/31/21 and updated with roll-forward procedures to 12/31/22.

(d) Total OPEB liability was determined by an actuarial valuation as of 06/30/22.

Sources: State of Ohio FY 2022 Annual Comprehensive Financial Report and retirement systems' Annual Comprehensive Financial Reports and annual reports.

TAX LEVELS AND TAX BASES

The variety of taxes and excises levied by the State is indicated in several tables in this Appendix. According to the Federation of Tax Administrators, citing the U.S. Census Bureau as its source, Ohio ranked 43rd in state taxes per capita in 2022 and it ranked 28th in combined state and local taxes in 2020, the most recent available year for such data. Three major tax bases, personal income (taxed by the State and municipalities and, with voter approval, by certain school districts), retail sales and use (taxed by the State and by counties and several transit authorities), and all taxable real property as well as the tangible personal property of public utilities (taxed by local governments and school districts), are described below. The State also levies a commercial activity tax on business activities as described below.

The State also imposes a tax on the use, distribution, or sale of motor vehicle fuel. This excise tax was raised by 10.5 cents per gallon effective July 1, 2019, to 38.5 cents per gallon of gasoline. At the same time, the rate imposed on diesel fuel was also increased from 28.0 cents per gallon to 47.0 cents per gallon.

Sales and Use Tax

The state sales and use tax rate was increased one-quarter percent from 5.5 percent to 5.75 percent beginning September 1, 2013. Prior to this increase, the rate had been 5.5 percent since July 1, 2005. The sales and use tax are levied uniformly across counties on retail sales of tangible personal property that are not specifically exempt. Retail sales include the rental and storage of tangible personal property, the rental of hotel rooms, and certain specified services including, but not limited to, repair and installation services, data processing, computer, and electronic information services, telecommunication, and certain personal care services.

Counties and transit authorities each are authorized to levy permissive sales and use taxes at rates of 0.25 percent to 1.5 percent in one-twentieth percent increments. The highest potential aggregate of state and permissive local sales taxes is 8.75 percent and the highest currently levied in any county is 8 percent. The State collects the combined state and local tax and returns the local share directly to the counties and transit authorities.

Personal Income Tax

State personal income tax rates apply to federal adjusted gross income plus or minus adjustments and personal exemptions. When compared to the immediately preceding year, personal income tax rates on non-business income were reduced by 8.5 percent in calendar year 2013, 1.5 percent in calendar year 2014, 6.3 percent in calendar year 2015 and 4.0 percent in calendar year 2019 (see **FISCAL MATTERS – Recent Biennia – 2020-2021**). In calendar year 2021, tax rates were reduced by 3.0 percent compared to the rates imposed in calendar year 2020, except that the highest tax bracket (on income exceeding \$221,300) was repealed and what became the highest Ohio tax rate was reduced by 9.6 percent from its previous level and was 16.8 percent lower than the rate previously applied. In calendar year 2023, tax brackets were restructured, and tax rates were reduced, followed by fully phased-in bracket and rate changes in calendar year 2024. During calendar year 2021, there were four rate brackets whose rates ranged from 2.765 percent to 3.99 percent; by 2024, the state personal income tax will have two rate brackets (one consisting of taxable income between \$26,051 and \$100,000, and the other consisting of income above \$100,000), with marginal rates of 2.75 percent and 3.5 percent, respectively. There remains no tax liability if taxable income is \$26,050 or below.

Prior legislation also established a deduction for pass-through entities and sole proprietorships annual business net income of 75 percent in tax years 2014 and 2015, and 100 percent in tax year 2016 and beyond, up to \$250,000 per taxpayer. Previously, personal income tax rates were reduced by 21 percent across five installments (4.2 percent annually in each of the tax years 2005 through 2008, with the final 4.2 percent reduction delayed from tax year 2009 to tax year 2011).

The Ohio Constitution requires 50 percent of state income tax receipts to be returned to the counties in which those receipts originate. There is no constitutional limit on income tax rates.

Municipalities, school districts, and joint economic development districts and zones may also levy certain income taxes. Any municipal rate (applying to wages, salaries, and business net income) over 1 percent, and any school district income tax (applying to the state income tax base for individuals and estates), requires voter approval. Most cities and villages levy a municipal income tax. The highest municipal rate in 2020 was 3 percent. A school district income tax is currently approved in 210 districts. Each joint economic development district or zone may also levy an income tax (which like municipal income taxes applies to wages and salaries and business net income) with the rate of that tax limited to the highest income tax rate of a municipal member of the district or zone). Effective July 1, 2005, there may also be proposed for voter approval municipal income taxes to be shared with school districts, but those taxes may not be levied on the income of nonresidents.

Since 1970 the ratio of Ohio to U.S. aggregate personal income has declined, with Ohio's ranking among the states moving from fifth in 1970 to seventh in 1990, and eighth since 2000. This movement, portrayed below, in significant measure reflects "catching up" by several other states and a trend in Ohio toward more service sector employment.

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Personal Income (\$ in Billions)

		U. S	Ohio	Ohio Percent of U.S.	State Rank*
1990	Total	\$4,890.5	\$202.8	4.1%	7
	per capita	19,591	18,669	95.3	21
2000	Total	8,650.3	326.0	3.8	8
	per capita	30,657	28,684	93.6	26
2010	Total	12,542.0	423.1	3.4	8
	per capita	40,546	36,663	90.4	32
2018	Total	17,813.0	569.7	3.2	8
	per capita	54,526	48,793	89.5	31
2019	Total	18,542.3	586.8	3.2	8
	per capita	56,490	50,199	88.9	31
2020	Total	19,679.7	623.2	3.2	8
	per capita	59,729	53,296	89.2	31
2021	Total	21,056.6	665.4	3.2	8
	per capita	63,444	56,483	84.9	32
2022	Total	21,804.8	680.4	3.2	8
	per capita	65,423	57,880	88.5	34

Source: U.S. Department of Commerce, Bureau of Economic Analysis.
Excludes District of Columbia.

The retail sales base is an important indicator of sales and use tax receipts.

Retail Sales (\$ in Billions)

Fiscal Year	Ohio Retail Sales	U.S. Retail Sales	Ohio Percent of U.S.
1990	\$66.95	\$1,914.04	3.5%
2000	117.72	3,213.82	3.6
2010	133.44	4,170.78	3.2
2018	172.82	5,905.83	2.9
2019	180.34	6,084.82	3.0
2020	214.82	6,858.62	3.1
2021	215.13	6,341.42	3.4
2022	234.02	6,835.48	3.4

Source: Calculated by IHS Markit based on data from the U.S. Department of Commerce, Bureau of the Census, and other sources.

Commercial Activity Tax

The State implemented a new commercial activity tax (CAT) on taxable gross receipts in excess of \$1,000,000 from doing business in Ohio phased-in over FY 2006 through FY 2010 until levied at the current rate of 0.26 percent. Beginning calendar year 2014, the State established a variable minimum tax on the CAT for businesses with taxable gross receipts greater than \$1 million. Over the same period, Ohio phased-out its corporate franchise tax in equal annual increments over the 2006 through 2010 tax years, except for application to financial institutions and certain affiliates of insurance companies and financial institutions which was replaced with a new financial institutions tax effective tax year 2014. On December 7, 2012, the Supreme Court of Ohio upheld the application of the CAT to gross receipts from the sales of motor fuels but ordered that the proceeds of the CAT derived from those gross receipts—estimated by OBM at \$100 million annually—could not be applied to non-highway purposes in the future. Under provisions enacted in the Biennial Appropriations Act for the 2014-2015 biennium and other legislation, the State phased-out the CAT on the sale of motor vehicle fuel and replaced it with a “petroleum activity tax” (PAT), computed based on the average price of a gallon of gasoline or diesel fuel. In accordance with the Supreme Court of Ohio’s ruling, PAT receipts are required to be used for highway purposes.

As described below, the receipts from the CAT are directed in part to make compensating payments to school districts and other local taxing units in connection with the phase-out of the tangible personal

property tax in 2006 through 2009. Beginning in FY 2012, the State accelerated the phase-out of compensating payments to school districts and local governments resulting in an increased share of the CAT being deposited into the GRF (see **Property Tax** below and **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2018-2019**).

The share of the CAT revenue credited to the GRF increases in FY 2024. After making required deposits to the CAT administration fund and to the two funds used to issue payments to qualifying local governments and school districts, the GRF now receives all remaining CAT receipts.

Effective in calendar year 2024, the CAT minimum tax is repealed. CAT liability (before credits) will be entirely based upon multiplying the tax rate by taxable gross receipts, and there is no longer a flat-dollar minimum tax. In addition, the amount of annual gross receipts excluded from the CAT will increase from the existing \$1 million level to a \$3 million amount effective January 2024. The exclusion increases to \$6 million in January 2025.

Property Tax

The following table lists, for informational purposes only, the non-exempt real and tangible personal property tax base in the State and taxes levied on that base (on a calendar year basis). Only local taxing subdivisions, and not the State, currently tax the real and tangible personal property included in this table. Reported figures for 2021 show that these property taxes represent 3.10 percent of Ohio personal income.

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		Assessed Value ^(a)	Percent of True Value ^(b)	Taxes Charged
1990	Real ^(c)	\$93,857,482,000	35.0%	\$4,593,147,000 ^(e)
	Tangible ^(d)	18,473,055,000	28.0	1,149,643,000
	Public Utility ^(c)	12,934,191,000	88.6	799,396,000
2000	Real ^(c)	167,857,657,350	35.0	8,697,809,112 ^(e)
	Tangible ^(d)	23,298,302,564	25.0	1,720,740,378
	Public Utility ^(c)	13,635,709,860	67.0	967,674,709
2010	Real ^(c)	238,264,394,249	35.0	14,486,087,962 ^(e)
	Tangible ^(d)	320,961,400	5.0 ^(b)	18,432,832
	Public Utility ^(c)	10,096,712,600 ^(g)	52.9	747,237,219
2018	Real ^(c)	255,789,561,245	35.0	17,060,795,040 ^(e)
	Tangible ^(d)	-	-(b)	-
	Public Utility ^(c)	19,220,171,390 ^{(g)(h)}	60.67	1,533,994,082
2019	Real ^(c)	260,947,879,749	35.0	17,321,071,684 ^(e)
	Tangible ^(d)	-	-(b)	-
	Public Utility ^(c)	25,436,220,050 ^{(g)(h)}	64.69	1,971,197,491
2020	Real ^(c)	279,933,910,561	35.0	18,265,118,632 ^(e)
	Tangible ^(d)	-	-(b)	-
	Public Utility ^(c)	26,794,513,946 ^{(g)(h)}	65.14	2,079,346,945
2021	Real ^(c)	293,266,914,053	35.0	18,456,058,751 ^(e)
	Tangible ^(d)	-	-(b)	-
	Public Utility ^(c)	28,165,092,620 ^{(g)(h)}	65.00	2,166,453,013
2022	Real ^(c)	303,790,908,195 ^{(g)(h)}	35.0	18,941,781,058
	Tangible ^(d)	-	-(b)	-
	Public Utility ^(c)	29,735,371,080 ^{(g)(h)}	65.15	2,323,687,123

(a) Increases in assessed value of "Real" are in part products of reappraisals.

(b) Regular annual reductions for "Tangible" (except for most public utility tangible) reached 0 percent in 2009; only telecommunication and telephone personal property was taxable in 2009 and 2010.

(c) Includes public utility personal property owned and located within Ohio and railroad real property; excludes public utility real property.

(d) Includes machinery, inventories, fixtures; effective tax year 2007 includes telephone company property. Excludes public utility tangible property. Effective tax year 2009 includes only telephone company property.

(e) Includes the statutory 10 percent rollback (12.5 percent for owner-occupied residences) and elderly/handicapped partial exemption amounts, paid by the State to local taxing entities to compensate for statutory reductions in local tax collections. Effective for tax year 2005 and thereafter, the 10 percent rollback was eliminated for real property used in business, with exceptions for certain property used in farming or for housing. The 12.5 percent rollback for owner-occupied residences was eliminated for new voter-approved tax levies (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2018-2019**).

(f) Beginning in 1990, the true value of most public utility property is based on annual composite allowances that vary according to the type and age of property.

(g) Beginning in 2001, the statutory assessment rate for electric and gas utilities decreased from 88 percent to 25 percent.

(h) The statutory assessment rate for waterworks utilities is 88 percent, except for certain property first subject to taxation in 2017 is 25 percent.

Source: Ohio Department of Taxation.

Effective July 1, 2005, and as reflected in the above table, the tangible personal property tax (TPPT) (including that tax on inventories) was phased out over tax years 2006 through 2009, with that tax eliminated beginning in tax year 2009. The corresponding legislation provided for the State to make replacement distributions to school districts and other local taxing units from revenue generated by the state commercial activity tax (CAT). Distributions are based on the taxable value of tangible personal property as reported in 2004 and property tax levies in effect for 2005. In FY 2012, the State began phasing-out those TPPT replacement payments to schools and local governments. Replacement payments to schools reduced by two percent of each district's total resources in each of FY 2012 and FY 2013 for a total reduction of four percent. Replacement payments to local governments reduced by two percent of total resources for tax years 2011, 2012, and 2013 for a total reduction of six percent. Replacement payments were then frozen in FY 2014 and FY 2015. The phasing out of these replacement payments resumed beginning in FY 2016. Payments to school districts reduced in FY 2016 and FY 2017 by between one percent and two percent of each district's total resources. The variance was based on district wealth levels, with guarantees in both FY

2016 and FY 2017 that no district would fall below 100 percent and 96 percent, respectively, of its FY 2015 total funding level. Replacement payments to other local governments in FY 2016 and thereafter are reduced annually by two percent of their total resources.

Beginning July 2007, the State's homestead exemption program, which takes the form of a credit on local residential real property tax bills, was expanded to allow all senior citizens and disabled Ohioans, regardless of income, to exempt from tax the first \$25,000 of the market value of their home. Previously, eligibility was restricted, and benefits were tiered based on income. Beginning July 1, 2013, eligibility for new applicants is based on income. The total cost of the homestead exemption program was \$374.6 million in FY 2021, \$354.7 million in FY 2022, and \$337.8 million in FY 2023.

Real property tax relief payments by the State to school districts and local subdivisions—consisting of the homestead exemption program, the 10 percent rollback for non-business property, and the 2.5 percent rollback for owner-occupied homes—totaled \$3.60 billion for the 2018-2019 biennium, \$3.60 billion for the 2020-2021 biennium, and \$3.64 billion for the 2022-2023 biennium.

SCHOOLS AND MUNICIPALITIES

Schools

Litigation was commenced in the Ohio courts in 1991 questioning the constitutionality of Ohio's system of school funding and compliance with the constitutional requirement that the State provide a "thorough and efficient system of common schools." On December 11, 2002, the Supreme Court of Ohio, in a 4-3 decision on a motion to reconsider its own decision rendered in September 2001, concluded (as it previously had in its 1997 and 2000 opinions) that the State did not comply with that requirement, even after again noting and crediting significant steps in preceding years.

In its prior decisions, the Supreme Court of Ohio stated as general base threshold requirements that every school district have enough funds to operate, an appropriate number of teachers, sound and safe buildings, and equipment sufficient for all students to be afforded an educational opportunity. With respect to funding sources, the Court concluded in its 1997 and 2000 decisions that property taxes may no longer be the primary means of school funding in Ohio.

On March 4, 2003, the plaintiffs filed with the original trial court a motion to schedule and conduct a conference to address compliance with the orders of the court in that case, the State petitioned the Ohio Supreme Court to issue a writ prohibiting that conference on compliance, and the trial court subsequently petitioned the Ohio Supreme Court for guidance as to the proper course to follow. On May 16, 2003, the Ohio Supreme Court granted that writ and ordered the dismissal of the motion before the trial court. On October 20, 2003, the United States Supreme Court declined to accept the plaintiffs' subsequent petition requesting further review of the case.

In the years following this litigation, the General Assembly has taken steps, including significantly increasing state funding for public schools, as discussed below. In addition, at the November 1999 election, electors approved a constitutional amendment authorizing the issuance of State general obligation debt for school buildings and for higher education facilities (see discussion under **STATE DEBT**). December 2000 legislation also addressed certain mandated programs and reserves, characterized by the plaintiffs and the Court as "unfunded mandates."

Prior to fiscal years 2009 and 2010, Ohio's 613 public school districts and 49 joint vocational school districts received a major portion (but less than 50 percent) of their operating moneys from state subsidy appropriations (the primary portion of which is known as the Foundation Program) distributed in accordance with statutory formulae that consider both local needs and local taxing capacity. The Foundation Program amounts have steadily increased in most recent years, including small aggregate increases even in those fiscal years in which appropriation reductions were imposed.

School districts also rely upon receipts from locally voted taxes. In part because of provisions of some state laws, such as partially limiting the increase (without further vote of the local electorate) in voted property tax collections that would otherwise result from increased assessed valuations, some school districts have experienced varying degrees of difficulty in meeting mandated and discretionary increased costs. Local electorates have largely determined the total moneys available for their schools. Locally elected boards of education and their school administrators are responsible for managing school programs and budgets within statutory requirements.

The State's school subsidy formulas that were used until fiscal year 2009 were structured to encourage both program quality and local taxing effort. Until the late 1970's, although there were some temporary school closings, most local financial difficulties that arose were successfully resolved by the local districts themselves by some combination of voter approval of additional property tax levies, adjustments in program offerings, or other measures. For more than 20 years, requirements of law and levels of state funding have sufficed to prevent school closings for financial reasons, which in any case are prohibited by current law.

Legislation was enacted in 1996 to address school districts in financial straits. It is similar to that for municipal "fiscal emergencies" and "fiscal watch" discussed below under **Municipalities** but is particularly tailored to certain school districts and their then-existing or potential fiscal problems. Newer legislation created a third, more preliminary, category of "fiscal caution". A current listing of school districts in fiscal emergency or watch status can be found on the Auditor of State's website at <http://www.auditor.state.oh.us>.

To broaden the potential local tax revenue base, school districts also may submit, for voter approval, income taxes on the district income of individuals and estates. Many districts have submitted the question of the proposed income tax to their respective electors, and income taxes are currently approved in 210 districts.

Biennial school funding state appropriations from the GRF (including property tax reimbursements) and Lottery Profits Education Fund (LPEF) (but excluding federal and special revenue funds) for recent biennia were:

- 2014-2015 - \$18.3 billion (a 10.5 percent increase over the previous biennium).
- 2016-2017 - \$20.0 billion (a 9.3 percent increase over the previous biennium).
- 2018-2019 - \$20.7 billion (a 3.5 percent increase over the previous biennium).
- 2020-2021 - \$21.9 billion (a 5.7 percent increase over the previous biennium).
- 2022-2023 - \$23.0 billion (a 4.9 percent increase over the previous biennium).

The appropriations for school funding for the 2024-2025 biennium are \$26.7 billion (a 16.1 percent increase from the previous biennium), representing an increase of 13.5 percent in FY 2024 over FY 2023 and an increase of 1.8 percent in FY 2025 over FY 2023.

The amount of lottery profits transferred to the LPEF totaled \$1.17 billion in FY 2018, \$1.15 billion in FY 2019, \$1.13 billion in FY 2020, \$1.36 billion in FY 2021, \$1.41 billion in FY 2022, \$1.46 billion in FY 2023, and is currently estimated to be \$1.42 billion in FY 2024 and \$1.44 billion in FY 2025. Ohio participation in the multi-state lottery commenced in May 2002. A constitutional provision requires that net lottery profits be paid into LPEF be used solely for the support of elementary, secondary, vocational, and special education purposes, including application to debt service on general obligation bonds to finance common school facilities. The 2010-2011 Biennial Appropriations Act also authorized the implementation of video lottery terminals (VLTs) at Ohio's seven horse racing tracks.

The 2016-2017 Biennial Appropriations Act modified certain components of the funding formula to distribute new resources to districts with less capacity to raise revenue through local sources. Under the modified formula, each school district's education aid was based on a per pupil funding amount of \$5,900 in FY 2016 and \$6,000 in FY 2017, multiplied by each school district's "state share index," which used a three-year average of adjusted property valuation per pupil and the median income of that school district to calculate the percentage of the per-pupil amount to be paid by the State and the amount assumed to be contributed by the school district through local sources. The 2016-2017 Biennial Appropriations Act also supplemented transportation funds for low density districts and continued to provide additional funds for students with

exceptional needs, including those with special needs and the disabled, and limited English proficiency, and for economically disadvantaged and gifted students. Funding was also provided based on the number of K-3 students at each school district to help school districts comply with Ohio's 3rd grade reading guarantee. The Act continued funding for the "Straight A Fund" to develop and implement creative and innovative instructional models to inspire learning and student growth.

The 2018-2019 Biennial Appropriations Act maintained all components of the 2016-2017 funding formula with minor modifications. School district's education aid continued to be paid based on a per pupil funding amount (increasing to \$6,010 in FY 2018 and \$6,020 in FY 2019) multiplied by each school district's state share index. The 2018-2019 Biennial Appropriations Act reduced the minimum share of transportation funding to better target school districts with lower capacity to raise revenue locally and increased the multiplier in the formula for computing capacity aid to provide additional aid to low wealth school districts and those with small populations and low property valuation. The Act also modified the calculations for temporary transitional aid and the gain cap to consider changes in student population. Funding also continued for other education initiatives including Early Childhood Education, EdChoice Expansion Scholarships, and the Community Connectors grant program.

The 2020-2021 Biennial Appropriations Act provided each school district with the same amount of core funding and pupil transportation funding as it received under the funding formula for FY 2019, along with other limited payments and adjustments, such as preschool special education payments and catastrophic cost reimbursements. The 2020-2021 Biennial Appropriations Act also provided additional payments to school districts for student wellness and success to provide support for mental health counseling, wraparound supports, mentoring, and after-school programs. The Act also provided for additional payments to qualifying school districts that experienced an increase in enrollment between FY 2016 and FY 2019.

The 2022-2023 Biennial Appropriations Act implemented a new funding formula known as the Fair School Funding Plan. The new formula established a base cost methodology based on student to teacher ratios, minimum staffing levels, and actual costs for schools. Under the new formula, each school district has a unique base cost amount which replaced the prior Opportunity Grant amount of \$6,020 per pupil. The formula revised categorical funding and implemented a new state and local cost share methodology using property and income factors for all districts. Community schools, STEM schools, educational choice scholarship programs, and open enrollment were directly funded. Instead of a Gain Cap, most components of the formula were subject to a general phase-in percentage of 16.67 percent in FY 2022 and 33.33 percent in FY 2023. The Act also provided for additional payments to support school bus purchases, community school facilities, and quality community schools.

The 2024-2025 Biennial Appropriations Act continues the phase-in of the school funding formula enacted in FY 2022. The phase-in percentage will increase to 50 percent in FY 2024 and 66.67 percent in FY 2025. The formula will continue the base cost methodology based on student to teacher ratios, minimum staffing levels, and actual costs for schools. Data for calculating base cost and local capacity will update. Several factors will increase including gifted professional development funding, career awareness funding, and the transportation minimum state share percentage. The minimum state share percentage of base cost will increase from 5 percent to 10 percent. The Act also provides for additional payments to support literacy initiatives, career-technical education programs, community school facilities, quality community and STEM schools, and an equity supplement to brick-and-mortar community schools. The Act also establishes universal eligibility for the EdChoice Expansion Scholarship Program, providing full scholarships for families with income up to 450 percent of the federal poverty level. Families with income above 450 percent will receive partial scholarship amounts with a minimum scholarship of 10 percent.

Municipalities

Ohio has a mixture of urban and rural population, with approximately three-quarters urban. There are 926 incorporated cities and villages (municipalities with populations under 5,000) in the State. Six cities have populations of more than 100,000 and 18 cities exceed 50,000.

A 1979 Act established procedures for identifying and assisting those few cities and villages experiencing defined “fiscal emergencies.” A commission composed of state and local officials, and private sector members experienced in business and finance appointed by the Governor, monitors the fiscal affairs of a municipality facing substantial financial problems. The Act requires the municipality to develop, subject to approval and monitoring by its commission, a financial plan to eliminate deficits and cure any defaults and otherwise remedy fiscal emergency conditions and to take other actions required under its financial plan. It also provides enhanced protection for the municipality’s bonds and notes and, subject to the Act’s stated standards and controls, permits the State to purchase limited amounts of the municipality’s short-term obligations (used only once, in 1980).

The number of distributions to most local governments, including municipalities, from the several state local government revenue assistance funds have been subject to reductions and other adjustments in several of those recent biennia.

The fiscal emergency legislation has been amended to extend its potential application to all Ohio counties and townships. This extension is on an “if and as needed” basis and is not aimed at particularly identified existing fiscal problems of those subdivisions. A current listing of governments in each status can be found on the Auditor of State’s website at <http://www.auditor.state.oh.us>.