

THREE NEW ISSUES

In the opinion of Bond Counsel, under existing law, (i) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals, and (ii) interest on, and any profit made on the sale, exchange or other disposition of, the Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. Interest on the Bonds may be subject to certain federal taxes imposed only on certain corporations. (See TAX MATTERS herein.)

OFFICIAL STATEMENT \$435,080,000 STATE OF OHIO GENERAL OBLIGATION BONDS

\$176,485,000 Common Schools General Obligation Refunding Bonds, Series 2023A \$201,670,000 Infrastructure Improvement General Obligation Refunding Bonds, Series 2023A \$56,925,000 Conservation Projects General Obligation Refunding Bonds, Series 2023A

Dated: Date of Initial Delivery

Due: As shown on inside cover

The Bonds: The Common Schools General Obligation Refunding Bonds, Series 2023A (the Common Schools Bonds) are general obligations of the State of Ohio (the State) issued by the Ohio Public Facilities Commission (the Commission) to refund bonds previously issued for the purpose of paying costs of capital facilities for a system of common schools throughout the State. The Infrastructure Improvement General Obligation Refunding Bonds, Series 2023A (the Infrastructure Bonds) are general obligations of the State issued by the Commission to refund bonds previously issued to finance or assist in the financing of the cost of public infrastructure capital improvement projects of local subdivisions. The Conservation Projects General Obligation Refunding Bonds, Series 2023A (the Conservation Projects Bonds) are general obligations of the State issued by the Commission to refund bonds previously issued for the purpose of paying costs of projects for conservation purposes. The Common Schools Bonds, Infrastructure Bonds and Conservation Projects Bonds are collectively referred to herein as the "Bonds".

Security: The Bonds are general obligations of the State. *The full faith and credit, revenue and taxing power of the State (with exceptions stated herein) are pledged to the payment of Debt Service on the Bonds.* (See **THE BONDS GENERALLY – Sources of Payment**.)

Book-Entry Only: The Bonds will be issued in the denomination of \$5,000 or in whole multiples of \$5,000 and will be initially issued only as fully-registered bonds, one for each maturity of a series with the same interest rate, issuable under a book-entry system, registered initially in the name of The Depository Trust Company or its nominee (DTC). There will be no distribution of the Bonds to the ultimate purchasers. The Bonds in certificated form as such will not be transferable or exchangeable, except for transfer to another nominee of DTC or as otherwise described in this Official Statement. (See **Appendix B**.)

Payment: (See **MATURITY SCHEDULE** on inside cover.) Principal and interest on the Bonds will be payable to the registered owner (DTC), principal on presentation and surrender at the office of the Bond Registrar (initially, the Treasurer of State of Ohio) and interest transmitted on each interest payment date (March 15 and September 15, beginning March 15, 2024 for the Common Schools Bonds and March 1 and September 1, beginning March 1, 2024 for the Infrastructure Bonds and the Conservation Projects Bonds), by the Bond Registrar to DTC as the registered owner as of the 15th day preceding that interest payment date.

Prior Redemption: The Bonds are subject to prior redemption at the option of the Commission as set forth herein. (See **THE BONDS – Prior Redemption**.)

This cover page includes certain information for quick reference only. It is not a summary of the bond issue. Investors should read the entire Official Statement to obtain information as a basis for making informed investment judgments.

The Bonds are offered when, as and if issued by the Commission and accepted by the Underwriters, subject to the opinions on certain legal matters relating to their issuance by Ice Miller LLP, Bond Counsel, and certain other conditions. Certain legal matters will be passed upon for the Underwriters by their counsel Dinsmore & Shohl LLP. Certain legal matters will be passed upon for the Commission by Squire Patton Boggs (US) LLP, which is also serving as Issuer and Disclosure Counsel to the Commission. The Bonds are expected to be available in definitive form for delivery through DTC on or about December 21, 2023.

Loop Capital Markets Janney Montgomery Scott PNC Capital Markets RBC Capital Markets KeyBanc Capital Markets Stifel

The date of this Official Statement is December 12, 2023, and the information speaks only as of that date.

MATURITY SCHEDULE

\$176,485,000 STATE OF OHIO Common Schools General Obligation Refunding Bonds, Series 2023A

Due Date	Par	Interest			CUSIP© ^(a)	Due Date	Par	Interest			CUSIP© ^(a)
<u>March 15</u>	<u>Amount</u>	Rate	Yield	Price	<u>No. 677523</u>	<u>March 15</u>	<u>Amount</u>	Rate	Yield	Price	<u>No. 677523</u>
2024	\$1,365,000	4.000%	2.970%	100.231	FU1	2032	\$15,730,000	5.000%	2.660%	117.196	GA4
2027	12,330,000	5.000	2.670	107.167	FV9	2033	16,520,000	5.000	2.640	119.222	GB2
2028	12,940,000	5.000	2.620	109.474	FW7	2034	17,345,000	5.000	2.650	119.131*	GC0
2029	13,590,000	5.000	2.610	111.616	FX5	2035	18,210,000	5.000	2.740	118.322^{*}	GD8
2030	14,270,000	5.000	2.620	113.601	FY3	2036	19,120,000	5.000	2.860	117.253*	GE6
2031	14,985,000	5.000	2.640	115.443	FZ0	2037	20,080,000	5.000	2.990	116.108^{*}	GF3

\$201,670,000 STATE OF OHIO Infrastructure Improvement General Obligation Refunding Bonds, Series 2023A

Due Date September 1	Par Amount	Interest <u>Rate</u>	<u>Yield</u>	Price	CUSIP© ^(a) No. 677523	Due Date September 1	Par Amount	Interest <u>Rate</u>	Yield	<u>Price</u>	CUSIP© ^(a) No. 677523
2025	\$12,290,000	4.000%	2.840%	101.902	GG1	2032	\$16,740,000	5.000%	2.660%	118.053	GP1
2026	12,710,000	4.000	2.730	103.274	GH9	2033	17,590,000	5.000	2.640	120.065	GQ9
2027	13,185,000	4.000	2.650	104.718	GJ5	2034	18,480,000	5.000	2.690	119.593**	GR7
2028	13,790,000	5.000	2.620	110.444	GK2	2035	19,415,000	5.000	2.790	118.654**	GS5
2029	14,500,000	5.000	2.610	112.566	GL0	2036	20,395,000	5.000	2.900	117.632**	GT3
2030	15,240,000	5.000	2.620	114.523	GM8	2037	11,320,000	5.000	2.990	116.803**	GU0
2031	16,015,000	5.000	2.640	116.332	GN6						

\$56,925,000 STATE OF OHIO Conservation Projects General Obligation Refunding Bonds, Series 2023A

Due Date	Par	Interest			CUSIP© ^(a)	Due Date	Par	Interest			CUSIP© ^(a)
March 1	<u>Amount</u>	Rate	Yield	Price	<u>No. 677523</u>	March 1	<u>Amount</u>	Rate	Yield	Price	No. 677523
2024	\$520,000	4.000%	2.970%	100.192	GV8	2029	\$7,155,000	5.000%	2.610%	111.535	HA3
2025	6,015,000	4.000	2.860	101.325	GW6	2030	7,515,000	5.000	2.620	113.523	HB1
2026	6,240,000	4.000	2.770	102.598	GX4	2031	7,885,000	5.000	2.640	115.368	HC9
2027	6,490,000	5.000	2.670	107.085	GY2	2032	8,285,000	5.000	2.660	117.123	HD7
2028	6,820,000	5.000	2.620	109.391	GZ9						

^{*} Priced to the call date of March 15, 2033.

^{**} Priced to the call date of September 1, 2033.

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REGARDING THIS OFFICIAL STATEMENT

This Official Statement does not constitute an offering of any security other than the original offering of the Bonds of the State of Ohio identified on the Cover. No dealer, broker, sales or other person has been authorized by the State or the Commission to give any information or to make any representation other than that contained in this Official Statement, and if given or made such other information or representation must not be relied upon as having been given or authorized by the State or the Commission. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, and there shall be no sale of the Bonds by any person, in any jurisdiction in which it is unlawful to make such offer, solicitation or sale.

Upon issuance, the Bonds will not be registered by the State under the Securities Act of 1933, as amended, or any state securities law, and will not be listed on any stock or other securities exchange. Neither the Securities and Exchange Commission nor any other federal, state or other governmental entity or agency, except the Commission, will have, at the request of the State or the Commission, passed upon the accuracy or adequacy of this Official Statement or approved or disapproved the Bonds for sale.

This Official Statement contains statements that the State or the Commission believes may be "forward-looking statements." Words such as "plan," "estimate," "project," "budget," "anticipate," "expect," "intend," "believe" and similar terms are intended to identify forward-looking statements. The achievement of results or other expectations expressed or implied by such forward-looking statements involve known and unknown risks, uncertainties and other factors that are difficult to predict, may be beyond the control of the State or the Commission and could cause actual results, performance or achievements to be materially different from any results, performance or achievements expressed or implied by such forward-looking statements. The State and the Commission undertake no obligation, and do not plan, to issue any updates or revisions to any of the forward-looking statements in this Official Statement.

The information and expressions of opinion in this Official Statement are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder, under any circumstances, shall create any implication that there has been no change in the affairs of the State since its date. The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of their respective responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guaranty the accuracy or completeness of such information.

The information approved and provided by the State in this Official Statement is the information relating to the particular subjects provided by the State or State agencies for the purpose of this Official Statement. Reliance should not be placed on any other information publicly provided, in any format including electronic, by any State agency for other purposes, including general information provided to the public or to portions of the public.

In connection with this offering, the Underwriters may overallot or effect transactions that stabilize or maintain the market price of the Bonds at a level above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time. The Underwriters may offer and sell the Bonds to certain dealers and dealer banks and banks acting as agent at prices lower than the public offering price stated on the Cover, which public offering price may be changed from time to time by the Underwriters.

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EXHIBIT A – TEXT OF LEGAL OPINIONS

Common Schools Bonds	Exhibit A-1
Infrastructure Bonds	Exhibit A-2
Conservation Projects Bonds	Exhibit A-3

SELECTED SUMMARY STATEMENT

\$176,485,000	\$201,670,000	\$56,925,000
Common Schools	Infrastructure Improvement	Conservation Projects
General Obligation Refunding Bonds,	General Obligation Refunding Bonds,	General Obligation Refunding Bonds,
Series 2023A	Series 2023A	Series 2023A

The following summary supplements certain of the information on the Cover and summarizes selected other information in this Official Statement relating to the Bonds. It is not intended as a substitute for the more detailed discussions in this Official Statement to which reference should be made.

ISSUER. The State of Ohio (the State), acting by and through the Ohio Public Facilities Commission (the Commission). The Commission is a body politic and corporate constituting an agency and instrumentality of the State. Its members are five State executive officials holding elective office and the appointed Director of Budget and Management.

AUTHORIZATION. The Common Schools Bonds are authorized by Section 2n of the Article VIII of the Ohio Constitution and Chapter 151 of the Ohio Revised Code, the Infrastructure Bonds are authorized by Sections 2p and 2s of Article VIII of the Ohio Constitution and Chapter 151 of the Ohio Revised Code, and the Conservation Projects Bonds are authorized by Sections 2o and 2q of Article VIII of the Ohio Constitution and Chapter 151 of the Ohio Constitution and Chapter 151 of the Ohio Revised Code, and the Conservation Projects Bonds are authorized by Sections 2o and 2q of Article VIII of the Ohio Constitution and Chapter 151 of the Ohio Revised Code (collectively, the Act).

PURPOSE OF BONDS. The Common Schools Bonds are issued to refund bonds previously issued for the purpose of paying costs of capital facilities for a system of common schools throughout the State. The Infrastructure Bonds are issued to refund bonds previously issued to finance or assist in the financing of the cost of public infrastructure capital improvement projects of local subdivisions. The Conservation Projects Bonds are issued to refund bonds previously issued for the purpose of paying costs of projects for conservation purposes.

SECURITY AND SOURCES OF PAYMENT. The Bonds are general obligations of the State. The full faith and credit, revenue and taxing power of the State are pledged to the payment of Debt Service. Excluded from that pledge are highway user receipts and net state lottery proceeds. (See THE BONDS GENERALLY– Sources of Payment.)

PRIOR REDEMPTION. The Common Schools Bonds maturing on and after March 15, 2034 and the Infrastructure Bonds maturing on and after September 1, 2034 are subject to prior redemption at the option of the Commission in whole or in part at par plus accrued interest on any date on or after March 15, 2033 for the Common Schools Bonds and September 1, 2033 for the Infrastructure Bonds. The Conservation Projects Bonds are not subject to redemption at the option of the Commission prior to their stated maturities. (See **THE BONDS – Prior Redemption**.)

FORM AND MANNER OF MAKING PAYMENTS. The Bonds will be issued in the denomination of \$5,000 or in whole multiples of \$5,000 and will be originally issued only as fully-registered bonds, one for each maturity of a series with the same interest rate, under a book-entry only method, and registered initially in the name of The Depository Trust Company, New York, New York, or its nominee (DTC). There will be no distribution of Bonds to the ultimate purchasers. The Bonds in book-entry form will not be transferable or exchangeable, except for transfer to another nominee of DTC or as otherwise described in this Official Statement. (See **Appendix B**.)

Principal and interest on the Bonds will be payable to the registered owner (DTC), principal on presentation and surrender at the office of the Bond Registrar (initially, the Treasurer of State of Ohio) and interest transmitted on each interest payment date (March 15 and September 15, beginning March 15, 2024 for the Common Schools Bonds and March 1 and September 1, beginning March 1, 2024 for the Infrastructure Bonds and the Conservation Projects Bonds), by the Bond Registrar to DTC as the registered owner as of the 15th day preceding that interest payment date.

TAX MATTERS. In the opinion of Bond Counsel, under existing law, (i) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals, and (ii) interest on, and any profit made on the sale, exchange or other disposition of, the Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. Interest on the Bonds may be subject to certain federal taxes imposed only on certain corporations. (See **TAX MATTERS**.)

BOND REGISTRAR. Treasurer of State of Ohio, Columbus, Ohio.

BOND COUNSEL. Ice Miller LLP.

ISSUER AND DISCLOSURE COUNSEL. Squire Patton Boggs (US) LLP.

FINANCIAL ADVISER. PFM Financial Advisors LLC.

UNDERWRITERS. Loop Capital Markets LLC, as representative of the Underwriters shown on the Cover. See **UNDERWRITING** for information on the purchase price of each series of the Bonds.

UNDERWRITERS' COUNSEL. Dinsmore & Shohl LLP.

Questions regarding this Official Statement or the Bonds should be directed to Debt Management, Office of Budget and Management, via email at debtmanagement@obm.ohio.gov, 30 East Broad Street, 34th Floor, Columbus, Ohio 43215-3457. For additional information concerning the State of Ohio's bond issuances, visit obm.ohio.gov/bonds-andinvestors. The information contained on that website is not incorporated as part of this Official Statement.

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GENERAL INTRODUCTORY STATEMENT

This Official Statement has been prepared by the Ohio Public Facilities Commission to provide certain information in connection with the original issuance and sale of:

- \$176,485,000 Common Schools General Obligation Refunding Bonds, Series 2023A (the Common Schools Bonds),
- \$201,670,000 Infrastructure Improvement General Obligation Refunding Bonds, Series 2023A (the Infrastructure Bonds), and
- \$56,925,000 Conservation Projects General Obligation Refunding Bonds, Series 2023A (the Conservation Projects Bonds).

The Infrastructure Bonds, the Conservation Projects Bonds and the Common Schools Bonds are collectively referred to herein as the "Bonds".

The Bonds are secured by a pledge of the full faith and credit, revenue and taxing power of the State (with stated exceptions described herein in THE BONDS GENERALLY – Sources of Payment), on parity with other State general obligation bonds. The Common Schools Bonds are issued to refund bonds previously issued for the purpose of paying costs of capital facilities for a system of common schools throughout the State (see OHIO FACILITIES CONSTRUCTION COMMISSION). The Infrastructure Bonds are issued to refund bonds previously issued to finance or assist in the financing of the cost of public infrastructure capital improvement projects of local subdivisions (see PUBLIC INFRASTRUCTURE PROGRAM). The Conservation Projects Bonds are issued to refund bonds previously issued for the purpose of paying costs of projects for conservation purposes (see CLEAN OHIO CONSERVATION PROGRAM).

All financial and other information presented in this Official Statement has been provided by the State from its records, except for information expressly attributed to other sources and except for certain information on the Cover and under **UNDERWRITING** and in **Appendix B**. The presentation of information, including tables of receipts from taxes and other sources, is intended to show 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 that financial and other information, will necessarily continue in the future. Also see **REGARDING THIS OFFICIAL STATEMENT.**

References to provisions of Ohio law or of the Ohio Constitution are to those provisions now in effect. Those provisions may from time to time be amended, repealed or supplemented.

As used in this Official Statement:

"Act" means Section 2n (for the Common Schools Bonds), Sections 2p and 2s of Article VIII of the Ohio Constitution (for the Infrastructure Bonds) and Sections 2o and 2q (for the Conservation Projects Bonds), and Chapter 151 of the Ohio Revised Code.

"Beneficial Owner" means the owner of a book-entry interest in the Bonds, as defined in Appendix B.

"Commission" means the Ohio Public Facilities Commission.

"Cover" means the cover page and the inside cover pages of this Official Statement.

"Debt Service" means principal (including mandatory redemption payments, if any) of and interest and any redemption premium payable on the obligations referred to.

"Direct Participant" means a participant in the DTC system, as described in Appendix B.

"Fiscal Year" means a State Fiscal Year, currently the 12-month period from July 1 to June 30, and reference to a particular Fiscal Year (such as "Fiscal Year 2024") means the Fiscal Year ending on June 30 of that year.

"General Bond Resolution" means, (i) for the Common Schools Bonds, Resolution No. 2000-11 adopted by the Commission on December 20, 2000, as amended by Commission Resolutions No. 2009-7 adopted on May 20, 2009, No. 2011-11 adopted on June 8, 2011, and No. 2012-10 adopted on March 21, 2012, (ii) for the Infrastructure Bonds, Resolution No. 2005-13 adopted by the Commission on October 14, 2005, as amended by Commission Resolutions No. 2008-5 adopted on October 9, 2008, No. 2009-8 adopted on May 20, 2009, No. 2011-1 adopted on February 9, 2011, No. 2012-10 adopted on March 21, 2012, and No. 2014-7 adopted on September 4, 2014, and (iii) for the Conservation Projects Bonds, Resolution No. 2009-12 adopted by the Commission on December 13, 2001, as amended by Commission Resolutions No. 2009-15 adopted on September 23, 2009, No. 2011-2 adopted on February 9, 2011, and No. 2012-10 adopted on March 21, 2012, each as the same may from time to time be further amended, supplemented or superseded.

"Revised Code" means the Ohio Revised Code.

"Series Resolution" means, (i) for the Common Schools Bonds, Resolution No. 2023-2, (ii) for the Infrastructure Bonds, Resolution No. 2023-3, and (iii) for the Conservation Projects Bonds, Resolution No. 2023-4, each adopted by the Commission on November 30, 2023.

"State" or "Ohio" means the State of Ohio.

"Underwriters" mean the underwriters of the Bonds shown on the Cover.

THE BONDS

General; Book-Entry System

The Bonds will be issued pursuant to the constitutional and statutory authorities described herein and the General Bond Resolutions and Series Resolutions adopted by the Commission. The Bonds are issuable in the form and denominations, and will be dated and mature, as described in this Official Statement. Interest will be computed on the basis of a 12-month, 360-day year.

The Treasurer of State of Ohio (the Treasurer), as Bond Registrar, will keep all books and records necessary for registration, exchange and transfer of the Bonds.

The Bonds will be issued in the denomination of \$5,000 or in whole multiples of \$5,000 and will be delivered in book-entry-only form and, when issued, registered in the name of The Depository Trust Company (DTC), New York, New York, or its nominee Cede & Co., which will act as securities depository for the Bonds. For discussion of the book-entry system and DTC and the replacement of the Bonds in the event that the book-entry system is discontinued (see **Appendix B**).

Principal and interest on the Bonds will be payable to the registered owner (DTC), principal on presentation and surrender at the office of the Bond Registrar (initially, the Treasurer of State of Ohio) and interest transmitted on each interest payment date (March 15 and September 15, beginning March 15, 2024 for the Common Schools Bonds and March 1 and September 1, beginning March 1, 2024 for the Infrastructure Bonds and the Conservation Projects Bonds) by the Bond Registrar to DTC as the registered owner as of the 15th day preceding that interest payment date.

Prior Redemption

Prior Optional Redemption of Common Schools Bonds and Infrastructure Bonds

The Common Schools Bonds maturing on and after March 15, 2034 and the Infrastructure Bonds maturing on and after September 1, 2034 (collectively, the "Callable Bonds") are subject to redemption at the option of the Commission prior to their stated maturities in whole or in part (if in part, by lot) on any date on or after March 15, 2033 for the Common Schools Bonds and September 1, 2033 for the Infrastructure Bonds at a redemption price equal to 100% of the principal amount redeemed plus accrued interest to the date fixed for redemption.

Selection of Callable Bonds to be Redeemed. If fewer than all outstanding Callable Bonds are called for optional redemption at one time, the maturity or maturities of those bonds to be called will be selected by, and in a manner determined by, the Commission.

If less than all of an outstanding Callable Bond of one maturity and interest rate of a series under a book-entry system is to be called for redemption, the Bond Registrar will give notice of redemption only to DTC as registered owner. The selection of the book-entry interests in that Bond to be redeemed, and notice of call to the owners of those interests called, is the sole responsibility of DTC and its Direct Participants and those working through those Direct Participants.

If Callable Bond certificates are issued to the ultimate owner, and if fewer than all of those Callable Bonds of a single maturity and interest rate of a series are to be redeemed, the selection of those Callable Bonds (or portions of Callable Bonds, in amounts of \$5,000 or any whole multiples of \$5,000) to be redeemed will be made by lot in a manner determined by the Treasurer as Bond Registrar.

If there is to be a partial redemption by lot when Callable Bonds of denominations greater than \$5,000 are then outstanding, each \$5,000 unit of principal will be treated by the Bond Registrar as if it were a separate bond of the denomination of \$5,000.

No Prior Optional Redemption of Conservation Projects Bonds

The Conservation Projects Bonds are <u>not</u> subject to redemption at the option of the Commission prior to their stated maturities.

Notice of Redemption; Effect

The Bond Registrar is to cause notice of redemption, identifying the Bonds or portions of those Bonds to be redeemed, to be sent by first-class mail at least 30 days prior to the redemption date. Notice is to be sent to the registered owner (initially, DTC) of each Bond to be redeemed at the address shown on the register on the 15th day preceding that mailing. Any defect in the notice or any failure to receive notice by mail as to any of the Bonds will not affect the validity of any proceedings for the redemption of any other of the Bonds.

If the Bonds are redeemed and on the redemption date moneys for that redemption are held in the respective Bond Service Fund (as hereinafter defined) or by the paying agent so as to be available for redemption, then on that redemption date those Bonds redeemed will be due and payable, and from and after that redemption date the redeemed Bonds (or portions of the Bonds) will cease to bear interest and those Bonds (or portions of those Bonds) will not be deemed to be outstanding under the Bond proceedings.

So long as all the Bonds are held under a book-entry system by a securities depository (such as DTC) the redemption notice will be sent by the Bond Registrar to the depository or its nominee. Selection of book-entry interests in those Bonds redeemed, and giving notice of the redemption to the owners of those interests redeemed, is the sole responsibility of the depository and of its Direct Participants and those working through those Direct Participants. Any failure of the depository to advise any Direct Participant or of any Direct Participant or any person acting through a Direct Participant to notify the Beneficial Owners, of any such notice and its content or effect will not affect the validity of any proceedings for the redemption of any of the Bonds. See THE BONDS - General; Book Entry System and Appendix B.

THE BONDS GENERALLY

Constitutional and Statutory Authorization

The Common Schools Bonds are one issue in a continuing series of State of Ohio Common Schools General Obligation Bonds under Section 2n of Article VIII of the Ohio Constitution (approved by the voters in 1999) authorizing the issuance of general obligation bonds or notes to pay costs of capital facilities for a system of common schools throughout the State. The Infrastructure Bonds are one issue in a continuing series of State of Ohio Infrastructure Improvement General Obligation Bonds under Sections 2p and 2s of Article VIII (approved by the voters in 2005 and 2014, respectively) of the Ohio Constitution authorizing the issuance of State general obligation bonds or notes for the purpose of financing or assisting in the financing of the cost of public infrastructure capital improvement projects of local subdivisions of the State. The Conservation Projects Bonds are one issue in a continuing series of State of Ohio Conservation Projects General Obligation Bonds under Sections 2o and 2q (approved by the voters in 2000 and 2008, respectively) of Article VIII of the Ohio Constitution authorizing the issuance of general obligations of the State for the purpose of paying costs of conservation projects. See **STATE DEBT** in **Appendix A**. Chapter 151 of the Revised Code implements the State bond issuing aspects of those constitutional provisions.

Sources of Payment

The Bonds are general obligations of the State. The full faith and credit, revenue and taxing power of the State are pledged to the timely payment of Debt Service. Excluded from that pledge are highway user receipts (fees, excises and license taxes relating to the registration, operation or use of vehicles on the public highways or to fuels used for propelling such vehicles) and net State lottery proceeds. Payment of Debt Service is not dependent on, subject to, or related in any manner to the progress on or the completion of or operation of any funded facilities or projects.

See **FISCAL MATTERS** in **Appendix A** for a discussion of State revenues, including the revenues excluded from the pledge. Some aspects of the committed State receipts are as follows:

- 50% of State income tax receipts must be returned to the political subdivision in which the receipts originate.
- The State currently does not levy any ad valorem taxes on real or tangible personal property. In any case, the Constitution has long limited the amount of the aggregate of those ad valorem property tax levies for all purposes (without an approving vote of the electors or municipal charter provisions) to 1% of a particular property's true value in money.
- Certain revenues and receipts of the State and State agencies are subject to prior pledges to State revenue and revenue-type financings.

The State has covenanted, in the Act, that the State and its applicable officers and agencies, including the General Assembly, shall, so long as the Bonds are outstanding in accordance with their terms, maintain statutory authority for and cause to be levied, collected and applied sufficient excises, taxes and revenues of the State so that the revenues will be sufficient to pay Debt Service when due, to establish and maintain any reserves and other requirements, and to pay

financing costs, all as provided for in the Bond proceedings. The Act expressly provides for the repeal and reduction of particular fees, excises or taxes, and the levy of any new or increased fees, excises or taxes, and the substitution of resources, to pay Debt Service. The rights of bondholders to such revenues are on parity with the rights of holders of other General Obligation Bonds and General Obligation Refunding Bonds of the State previously issued or to be issued.

The Common Schools Capital Facilities Bond Service Fund, the State Capital Improvements Bond Service Fund and the Conservation Projects Bond Service Fund (each a Bond Service Fund) are each created by the Act as a trust fund pledged to the payment of Debt Service on the respective Bonds. A sufficient amount of revenues of the State are committed and, without necessity for further appropriation, shall be paid to the applicable Bond Service Fund to pay Debt Service on the Bonds when due. The Act requires the Commission, by July 15 of each Fiscal Year, to certify or cause to be certified to the Director of Budget and Management (the Director) the total amount of moneys required during that Fiscal Year to meet in full all Debt Service on outstanding obligations, including the Bonds, and any related financing costs payable from the applicable Bond Service Fund (not from the proceeds of refunding obligations), and the Director is required to transfer from the General Revenue Fund to each Bond Service Fund, without necessity of appropriations by the General Assembly, the amount so certified for the payment of Debt Service, costs of any credit enhancement facilities, and other financing costs set forth in that certification. Under the Bond proceedings, the Commission is also to make supplemental certifications to the Director for each Debt Service payment date and as may be requested by the Director. If on the 10th calendar day prior to their due date, moneys to the credit of the Bond Service Fund are insufficient to meet in full all payments of Debt Service on that due date, no later than the 8th day before that Debt Service payment date the Director is to transfer to the Bond Service Fund from committed State receipts sufficient revenues to pay that Debt Service when due.

Moneys to the credit of the Bond Service Fund may be invested in one or more of the following:

- Notes, bonds or other direct obligations of the United States or of any agency or instrumentality of the United States, or in no-front-end-load money market mutual funds consisting exclusively of those obligations, or in repurchase agreements (including those issued by any fiduciary) secured by those obligations, or in collective investment funds consisting exclusively of those obligations.
- Obligations of the State or any political subdivision of the State.
- Certificates of deposit of any national bank located in Ohio and any State bank subject to inspection by the State superintendent of financial institutions.
- The Treasurer's pooled investment program.

The income from those investments is to be credited to the Bond Service Fund.

STATE DEBT under **Appendix A** generally describes other bonds of the State outstanding or currently authorized that are general obligations of the State or that are other direct State obligations payable from general State sources, including appropriated lease rental payments.

Defeasance

The Bonds will be deemed to have been paid or caused to be paid (including particular Bonds being refunded) and no longer deemed outstanding if there is held in trust, by the Bond Registrar or the Bond Registrar's agent, for and irrevocably committed to that purpose either of, or a combination of, the following: moneys or direct obligations of or obligations guaranteed as to payment of principal and interest by the United States or senior debt obligations of the U.S. government-sponsored enterprises rated on the date of purchase in the highest category for short-term or long-term debt as applicable, by any two nationally recognized rating organizations, verified by an independent public accounting firm of national reputation (or equivalent expert) to be of such maturities and interest payment dates and to bear such interest or other investment income as will be, without further investment or reinvestment of either the principal of or the interest earnings or other investment earnings from those obligations (likewise to be held in trust and committed, except as described below) sufficient for the payment at and to maturity of all Debt Service.

Any moneys held in cash may be invested only in direct obligations of the United States and obligations guaranteed as to principal and interest by the United States or senior debt obligations of U.S. government-sponsored enterprises, the maturities or redemption (at the holder's option) dates of which will coincide as nearly as practicable with, but will not be later than, the times at which those moneys will be required for those payment purposes.

Any income or interest earned by those investments, to the extent not required for those payment purposes, may be transferred to the Bond Service Fund or the State's General Revenue Fund (GRF).

Non-presentment

If a Bond is not presented for payment when due or an interest payment check is uncashed, and if moneys for the purpose of paying and sufficient to pay that amount have been made available, all liability of the State to the holder for the payment will cease and be completely discharged. A separate special subaccount in the applicable Bond Service Fund is to hold that money, without liability for interest on it, for the benefit of the registered owner of that Bond, who thereafter will be restricted exclusively to that money for any claim of whatever nature with respect to that Bond. The Bond Registrar is to keep a record of the amounts with respect to the Bonds so deposited in that subaccount.

Plan of Financing and Application of Proceeds

The following maturities of outstanding bonds will be refunded with the proceeds of the Common Schools Bonds:

Series	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
2017A	03/15/2027	5.000%	\$14,090,000	03/15/2024	100.0%
2017A	03/15/2028	5.000	14,790,000	03/15/2024	100.0
2017A	03/15/2029	5.000	15,530,000	03/15/2024	100.0
2017A	03/15/2030	5.000	16,310,000	03/15/2024	100.0
2017A	03/15/2031	5.000	17,125,000	03/15/2024	100.0
2017A	03/15/2032	5.000	17,980,000	03/15/2024	100.0
2017A	03/15/2033	5.000	18,880,000	03/15/2024	100.0
2017A	03/15/2034	5.000	19,825,000	03/15/2024	100.0
2017A	03/15/2035	5.000	20,815,000	03/15/2024	100.0
2017A	03/15/2036	5.000	21,855,000	03/15/2024	100.0
2017A	03/15/2037	5.000	22,950,000	03/15/2024	100.0

The following maturities of outstanding bonds will be refunded with the proceeds of the Infrastructure Bonds:

Series	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
2016B	09/01/2025	4.000%	\$7,035,000	03/01/2024	100.0%
2016B	09/01/2026	4.000	7,245,000	03/01/2024	100.0
2016B	09/01/2027	3.000	7,460,000	03/01/2024	100.0
2016B	09/01/2028	3.000	7,685,000	03/01/2024	100.0
2016B	09/01/2029	3.000	7,915,000	03/01/2024	100.0
2016B	09/01/2030	3.000	8,155,000	03/01/2024	100.0
2016B	09/01/2031	3.000	8,400,000	03/01/2024	100.0
2016B	09/01/2032	5.000	8,650,000	03/01/2024	100.0
2016B	09/01/2033	5.000	9,085,000	03/01/2024	100.0
2016B	09/01/2034	5.000	9,540,000	03/01/2024	100.0
2016B	09/01/2035	5.000	10,015,000	03/01/2024	100.0
2016B	09/01/2036	5.000	10,515,000	03/01/2024	100.0
2017A	09/01/2025	3.000	7,445,000	03/01/2024	100.0
2017A	09/01/2026	3.000	7,670,000	03/01/2024	100.0
2017A	09/01/2027	3.000	7,905,000	03/01/2024	100.0
2017A	09/01/2028	3.000	8,145,000	03/01/2024	100.0
2017A	09/01/2029	5.000	8,480,000	03/01/2024	100.0
2017A	09/01/2030	5.000	8,915,000	03/01/2024	100.0
2017A	09/01/2031	5.000	9,370,000	03/01/2024	100.0
2017A	09/01/2032	5.000	9,850,000	03/01/2024	100.0
2017A	09/01/2033	5.000	10,355,000	03/01/2024	100.0
2017A	09/01/2034	5.000	10,885,000	03/01/2024	100.0
2017A	09/01/2035	5.000	11,445,000	03/01/2024	100.0
2017A	09/01/2036	5.000	12,030,000	03/01/2024	100.0
2017A	09/01/2037	5.000	12,650,000	03/01/2024	100.0

The following maturities of outstanding bonds will be refunded with the proceeds of the Conservation Projects Bonds:

Series	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
2017A	03/01/2025	4.000%	\$3,220,000	03/01/2024	100.0%
2017A	03/01/2026	4.000	3,345,000	03/01/2024	100.0
2017A	03/01/2027	5.000	3,480,000	03/01/2024	100.0
2017A	03/01/2028	5.000	3,655,000	03/01/2024	100.0
2017A	03/01/2029	5.000	3,840,000	03/01/2024	100.0
2017A	03/01/2030	5.000	4,030,000	03/01/2024	100.0
2017A	03/01/2031	5.000	4,230,000	03/01/2024	100.0
2017A	03/01/2032	5.000	4,445,000	03/01/2024	100.0
2018A	03/01/2025	4.000	3,355,000	03/01/2024	100.0
2018A	03/01/2026	4.000	3,475,000	03/01/2024	100.0
2018A	03/01/2027	5.000	3,610,000	03/01/2024	100.0
2018A	03/01/2028	5.000	3,795,000	03/01/2024	100.0
2018A	03/01/2029	5.000	3,980,000	03/01/2024	100.0
2018A	03/01/2030	5.000	4,180,000	03/01/2024	100.0
2018A	03/01/2031	5.000	4,390,000	03/01/2024	100.0
2018A	03/01/2032	5.000	4,610,000	03/01/2024	100.0

On the date of delivery and payment, proceeds of each series of the Bonds will be used to purchase eligible securities (the Defeasance Obligations) to be held in trust by The Huntington National Bank (the Treasurer's agent for the purpose) to provide for payment of principal of and interest on the related Refunded Bonds through their above-indicated redemption date, as applicable. The mathematical accuracy of the computations of the adequacy of the maturing principal and interest earned on the Defeasance Obligations to be purchased to provide for the payment of the principal due and to be due on the Refunded Bonds will be verified by Causey Demgen & Moore P.C.

Upon the purchase and deposit of the Defeasance Obligations and receipt of the verification report, the Refunded Bonds will be deemed to have been paid and will no longer be considered outstanding debt of the State.

OHIO FACILITIES CONSTRUCTION COMMISSION

The Ohio Facilities Construction Commission (OFCC) is a body corporate and politic, constituting an agency and instrumentality of the State and performing essential functions of the State. The OFCC is responsible for administering the provision of State financial assistance to local school districts for the acquisition and construction of classroom facilities.

The OFCC is comprised of seven members, three of whom are voting members and four of whom are non-voting members. The voting members are the Director of Budget and Management, the Director of Administrative Services and an administrative department head appointed by the Governor, or their designees. The four non-voting members are two current members of the Senate appointed by the President of the Senate and two current members of the House of Representatives appointed by the Speaker of the House.

A chair and vice-chair are elected from among its voting members at the OFCC's first meeting each year. The voting members of the OFCC for 2023 are:

Kimberly Murnieks	Director of Budget and Management (Chair)
Kathleen Madden	Director of Administrative Services (Vice-Chair)
Mary Mertz	Director of Department of Natural Resources

The two non-voting members of the OFCC from the Ohio Senate for 2023 are Sen. Shane Wilkin and Sen. Catherine Ingram. The two non-voting members from the House of Representatives for 2023 are Rep. Melanie Miller and Rep. Jessica Miranda. The OFCC appoints an executive director to manage its programs. The executive director is assisted by a staff of approximately 108 employees.

The programs administered by the OFCC provide funds to pay costs of acquiring and improving capital facilities for use by qualifying public school districts for primary and secondary education purposes. Principal among these programs is the Classroom Facilities Assistance Program (CFAP) under which the OFCC provides assistance after performing onsite assessments of classroom facilities' needs. Each school district receiving assistance under CFAP must pay a portion of the total project cost, generally calculated based upon the district's wealth ranking at the time the project is approved. Proposed projects must be approved by the OFCC based on the needs of the school district for additional classroom facilities, the number and cost of classroom facilities to be included in a project, the amount the school district can provide from available funds or by the issuance of its bonds, and the remaining amount to be supplied by the State. The proposed project must also conform to sound educational practice and be in keeping with the orderly process of school district reorganization and consolidation, and actual or projected enrollment in each facility to be included in the project must be at least 350 pupils. Exceptions may be authorized by OFCC only in districts where topography, scarcity of population, or other factors make larger schools impracticable.

A CFAP project approval must be accepted by the school district within 120 days, and the district's electors must, within 16 months, approve the issuance of school district bonds for the local portion of the cost or provide alternate equivalent funding as allowed by law. The district's electors must also approve a levy of at least one-half mill to pay the cost of maintaining the classroom facilities included in the project or provide alternate equivalent funding as allowed by law. The oFCC and each school district then enter into a written agreement for the construction and funding of each project.

In addition to CFAP, the OFCC also administers:

• The School Building Expedited Local Partnership Program, under which school districts that are over two years away from eligibility for CFAP assistance may undergo a district-wide facilities assessment and may then make facilities improvements by expending local resources and by applying those expenditures toward meeting the district's portion of the basic project cost when it later becomes eligible for assistance under CFAP.

• The School Building Emergency Assistance Program, for making grants to eligible districts from moneys specifically appropriated to assist in the reconstruction, renovation or repair to classroom facilities made necessary because of damage due to an act of God.

• The Accelerated Urban School Building Assistance Program, created to assist and address the facilities needs of the largest urban school districts that collectively serve approximately 12% of the State's public elementary and secondary student population.

• The Exceptional Needs Program for districts that have exceptional needs for new facilities to protect the student's health and safety. This is the Commission's only needs-based program.

• The Vocational Facilities Assistance Program, for career technical school districts in Ohio. Like CFAP, districts develop a master facility plan for the entire needs of the district, are served in order of wealth, contribute a local share that varies depending on the relative wealth of the district, and are required to set aside maintenance funds.

• The Science, Technology, Engineering and Mathematics (STEM) Assistance Program, to provide classroom facilities for qualifying schools.

• The College-Preparatory Boarding School Assistance Program, to provide classroom facilities for qualifying schools.

• 1:1 School Facilities Option Program, to provide assistance to a district that chooses, in lieu of CFAP or the Vocational Facilities Assistance Program, for one-to-one matching funds up to 10% of the state portion of the basic project cost or \$1,000,000 whichever is greater. A district participating in this program is not eligible for participation in any other program for a period of 20 years after the district enters into an agreement with the commission.

PUBLIC INFRASTRUCTURE PROGRAM

In order to implement Section 2s (and predecessor Sections 2k, 2m and 2p) of Article VIII of the Ohio Constitution, the General Assembly enacted Section 164.02, Revised Code, creating the Ohio Public Works Commission (OPWC). The OPWC is charged with recommending candidates to the Governor for appointment to the position of Director of the OPWC, providing oversight and advice to that Director in the development of policy guidelines for the implementation of the program and reporting to the General Assembly. The OPWC is also responsible for appointing the members of the Ohio Small Government Capital Improvements Commission (the OSGCIC).

The OPWC consists of seven members appointed as follows: two persons are appointed by the Speaker of the House of Representatives; one person is appointed by the Minority Leader of the House of Representatives; two persons are appointed by the President of the Senate; one person is appointed by the Minority Leader of the Senate; and one person from the private sector is appointed alternately by the Speaker of the House of Representatives and the President of the Senate. Additionally, the Directors of the Departments of Transportation, Natural Resources and Development, the Environmental Protection Agency, and the Chairman of the Ohio Water Development Authority are nonvoting, ex-officio members of the OPWC.

The current members of the OPWC, and their terms of office, are as follows:

<u>Member</u>	Term of Office Expires December 31
Kimberly Marshall, Chair	2023
Dean Ringle, P.E., P.S., Vice Chair	2023
J. Howard Elstro	2025
Halle Jones Capers, P.E.	2025
Joy Padgett	2025
Brion Rhodes, P.E., P.S.	2023
Brian M. Zimmerman	2025

Ex Officio Members

Lydia L. Mihalik	Director, Ohio Department of Development
James V. Stewart [*]	Chairman, Ohio Water Development Authority
Jack Marchbanks	Director, Ohio Department of Transportation
Anne Vogel	Director, Ohio Environmental Protection Agency
Mary Mertz	Director, Ohio Department of Natural Resources

Linda S. Bailiff was appointed Director of the OPWC for a term beginning on March 19, 2021 and ending on March 18, 2025 by Governor Mike DeWine.

For the purpose of allocating funds to finance public infrastructure capital improvement projects of local subdivisions, the State is divided into 19 Districts (the Districts) with a District Public Works Integrating Committee (DPWIC) established for each District. Each DPWIC appoints a subcommittee (the Village and Township Subcommittee) of its members to represent the interests of villages and townships with populations of the unincorporated areas of the townships of less than 5,000 persons (Villages and Townships). The DPWICs accept project applications from local subdivisions and select the projects to be submitted to the Director. The Village and Township Subcommittees review and select eligible projects for the Villages and Townships and submit those projects to the Administrator of the OSGCIC. Eligible projects include improvements to roads, bridges, culverts, water supply and wastewater systems, storm water collection systems and solid waste disposal facilities.

Proceeds from new bond issuances are disbursed from the State Capital Improvement Fund for the purpose of providing loans and grants for selected eligible projects. The Revised Code, General Bond Resolution and Series Resolutions adopted by the Commission impose certain restrictions on the amount of such proceeds that may be used for loans, local debt support and credit enhancements, or new or expansion projects, and impose certain other restrictions. Each recipient of funds will be required, in writing, to agree:

- 1. To use Ohio products, materials, services and labor to the extent practicable.
- 2. As to a grant for repair or replacement of existing infrastructure, that such grant does not exceed 90% of the estimated total cost of the Capital Improvement Project.
- 3. As to a grant for new or expanded infrastructure, that such grant does not exceed 50% of the estimated cost of the new or expansion elements of the Capital Improvement Project.
- 4. To comply with the minority set-aside requirements listed in Section 164.07(A), Revised Code, to the extent permitted by applicable court decisions.
- 5. To comply with the prevailing wage requirements referenced in Section 164.07(B), Revised Code.
- 6. To use moneys for purposes outlined in the project application.
- 7. To do all things necessary to preserve the tax-exempt status of applicable Infrastructure Improvement General Obligation Bonds.

The OPWC may, if necessary to comply with changes in applicable laws, modify, eliminate or add to the program requirements.

^{*} On October 26, 2023, Mr. Stewart announced his intent to step down as Chairman of the Ohio Water Development Authority (OWDA), effective as of December 14, 2023, at which time the OWDA Board Members will appoint his successor.

CLEAN OHIO CONSERVATION PROGRAM

The Clean Ohio Conservation Program, implemented under constitutional amendments approved by the voters in November 2000 and 2008, is designed to preserve green space, develop recreational trails, and protect farmland through partnerships with Ohio local governments (requiring a 25% local match) and others. Of the bond funding for the Clean Ohio Conservation Program, existing law allocates 75% to preserve green space and 12.5% each to develop recreational trails and protect farmland.

The selection of green space preservation projects is done through 19 Public Works Integrating Committees, in the aggregate encompassing the entire State, each with a Natural Resources Assistance Council to assist in the selection of projects. Those projects may include the protection of habitats for rare, threatened or endangered species; preservation of wetlands, streamside forests, and natural features of Ohio's waterways; and the planting of vegetation to help reduce erosion and fertilizer/pesticide runoff.

The Ohio Department of Natural Resources (ODNR), advised by a Clean Ohio Trail Advisory Board, selects those projects that further develop Ohio's recreational trail system. These trails are to link regional trail systems and urban areas with green spaces allowing bikers, joggers, hikers, horseback riders, and other users a safe place to enjoy the outdoors.

Local governments, park and joint recreation districts, conservancy districts, soil and water conservation districts, and non-profit organizations are eligible to receive grants for green space and recreational trail projects.

The Department of Agriculture, advised by a Farmland Preservation Advisory Board, purchases permanent agricultural easements from landowners who apply through Certified Local Sponsors. Local governments, soil and water conservation districts and nonprofit organizations are eligible to become local sponsors. The agricultural easements ensure that the land will remain in agricultural production for perpetuity. The goal is to build blocks of preserved farmland which in turn support the businesses and services on which farms depend and collectively support Ohio's leading food and agriculture industry.

OHIO PUBLIC FACILITIES COMMISSION

The Commission is a body politic and corporate, constituting an agency and instrumentality of the State and performing essential functions of the State. It is comprised of six members, being the incumbents in the elective offices of Governor (Mike DeWine), Attorney General (Dave Yost), Auditor of State (Keith Faber), Secretary of State (Frank LaRose), and Treasurer of State (Robert Sprague), and the Director of Budget and Management (Kimberly Murnieks), appointed by the Governor with the consent of the Senate, and serving at the pleasure of the Governor. The Governor serves as the Chair, the Treasurer of State as the Treasurer and the Director of Budget and Management as the Secretary of the Commission. The current elective terms of the Governor, Attorney General, Auditor of State, Secretary of State and Treasurer of State run to January 2027. Commission members may, at Commission meetings, act through appointed designees.

TAX MATTERS

In the opinion of Bond Counsel, under existing law: (i) interest on the Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the Code), and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals; and (ii) interest on, and any profit made on the sale, exchange or other disposition of, the Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. Bond Counsel expresses no opinion as to any other tax consequences regarding the Bonds.

The opinion on federal tax matters will be based on and will assume the accuracy of certain representations and certifications, and continuing compliance with certain covenants, of the Commission and the State contained in the transcript of proceedings and that are intended to evidence and assure the foregoing, including that the Bonds are and will remain obligations the interest on which is excluded from gross income for federal income tax purposes. Bond Counsel will not independently verify the accuracy of such certifications and representations or the continuing compliance with the Commission and the State.

The opinion of Bond Counsel is based on current legal authority and covers certain matters not directly addressed by such authority. It represents Bond Counsel's legal judgment as to exclusion of interest on the Bonds from gross income for federal income tax purposes but is not a guaranty of that conclusion. The opinion is not binding on the Internal Revenue Service (IRS) or any court. Bond Counsel expresses no opinion about (i) the effect of future changes in the Code and the applicable regulations under the Code or (ii) the interpretation and the enforcement of the Code or those regulations by the IRS.

The Code prescribes a number of qualifications and conditions for the interest on state and local government obligations to be and to remain excluded from gross income for federal income tax purposes, some of which require future or continued compliance after issuance of the obligations. Noncompliance with these requirements by the Commission and the State may cause loss of such status and result in the interest on the Bonds being included in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds. The Commission and the State have each covenanted to take the actions required of it for the interest on the Bonds to be and to remain excluded from gross income for federal income tax purposes, and not to take any actions that would adversely affect that exclusion. After the date of issuance of the Bonds, Bond Counsel will not undertake to determine (or to so inform any person) whether any actions taken or not taken, or any events occurring or not occurring, or any other matters coming to Bond Counsel's attention, may adversely affect the exclusion from gross income for federal income tax purposes of interest on the Bonds or the market value of the Bonds.

Interest on the Bonds may be subject: (1) to a federal branch profits tax imposed on certain foreign corporations doing business in the United States; (2) to a federal tax imposed on excess net passive income of certain S corporations; and (3) to the alternative minimum tax imposed under Section 55(b) of the Code on "applicable corporations" (within the meaning of Section 59(k) of the Code). Under the Code, the exclusion of interest from gross income for federal income tax purposes may have certain adverse federal income tax consequences on items of income, deduction or credit for certain taxpayers, including financial institutions, certain insurance companies, recipients of Social Security and Railroad Retirement benefits, those that are deemed to incur or continue indebtedness to acquire or carry tax exempt obligations, and individuals otherwise eligible for the earned income tax credit. The applicability and extent of these and other tax consequences will depend upon the particular tax status or other tax items of the owner of the Bonds. Bond Counsel will express no opinion regarding those consequences.

Payments of interest on tax-exempt obligations, including the Bonds, are generally subject to IRS Form 1099-INT information reporting requirements. If a Bond owner is subject to backup withholding under those requirements, then payments of interest will also be subject to backup withholding. Those requirements do not affect the exclusion of such interest from gross income for federal income tax purposes.

Bond Counsel's engagement with respect to the Bonds ends with the issuance of the Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the Commission, the State or the owners of the Bonds regarding the tax status of interest thereon in the event of an audit examination by the IRS. The IRS has a program to audit tax-exempt obligations to determine whether the interest thereon is includible in gross income for federal income tax purposes. If the IRS does audit the Bonds, under current IRS procedures, the IRS will treat the State as the taxpayer and the beneficial owners of the Bonds will have only limited rights, if any, to obtain and participate in judicial review of such audit. Any action of the IRS, including but not limited to selection of the Bonds for audit, or the course or result of such audit, or an audit of other obligations presenting similar tax issues, may affect the market value of the Bonds.

Prospective purchasers of the Bonds upon their original issuance at prices other than the respective prices indicated on the Cover, and prospective purchasers of the Bonds at other than their original issuance, should consult their own tax advisors regarding other tax considerations such as the consequences of market discount, as to all of which Bond Counsel expresses no opinion.

Risk of Future Legislative Changes and/or Court Decisions

Legislation affecting tax-exempt obligations is regularly considered by the United States Congress and may also be considered by the State legislature. Court proceedings may also be filed, the outcome of which could modify the tax treatment of obligations such as the Bonds. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the Bonds will not have an adverse effect on the tax status of interest or other income on the Bonds or the market value or marketability of the Bonds. These adverse effects could result, for example, from changes to federal or state income tax rates, changes in the structure of federal or state income taxes (including replacement with another type of tax), or repeal (or reduction in the benefit) of the exclusion of interest on the Bonds from gross income for federal or state income tax purposes for all or certain taxpayers.

For example, federal tax legislation that was enacted on December 22, 2017 reduced corporate tax rates, modified individual tax rates, eliminated many deductions, repealed the corporate alternative minimum tax that was in effect at that time, and eliminated the tax-exempt advance refunding of tax-exempt bonds and tax-advantaged bonds, among other things. Additionally, investors in the Bonds should be aware that future legislative actions might increase, reduce or otherwise change (including retroactively) the financial benefits and the treatment of all or a portion of the interest on the Bonds for federal income tax purposes for all or certain taxpayers. In all such events, the market value of the Bonds may be affected and the ability of holders to sell their Bonds in the secondary market may be reduced.

Investors should consult their own financial and tax advisors to analyze the importance of these risks.

Original Issue Premium

Certain of the Bonds ("Premium Bonds") were offered and sold to the public at a price in excess of their stated redemption price at maturity (the principal amount). That excess constitutes bond premium. For federal income tax purposes, bond premium is amortized over the period to maturity of a Premium Bond, based on the yield to maturity of that Premium Bond (or, in the case of a Premium Bond callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on that Premium Bond), compounded semiannually. No portion of that bond premium is deductible by the owner of a Premium Bond. For purposes of determining the owner's gain or loss on the sale, redemption (including redemption at maturity) or other disposition of a Premium Bond, the owner's tax basis in the Premium Bond is reduced by the amount of bond premium that is amortized during the period of ownership. As a result, an owner may realize taxable gain for federal income tax purposes from the sale or other disposition of a Premium Bond for an amount equal to or less than the amount paid by the owner for that Premium Bond. A purchaser of a Premium Bond in the initial public offering who holds that Premium Bond to maturity (or, in the case of a callable Premium Bond, to its earlier call date that results in the lowest yield on that Premium Bond to maturity (or, in the case of a callable Premium Bond, to its earlier call date that results in the lowest yield on that Premium Bond) will realize no gain or loss upon the retirement of that Premium Bond.

Owners of Premium Bonds should consult their own tax advisors as to the determination for federal income tax purposes of the existence of bond premium, the determination for federal income tax purposes of the amount of bond premium properly amortizable in any period with respect to the Premium Bonds, other federal tax consequences in respect of bond premium, and the treatment of bond premium for purposes of state and local taxes on, or based on, income.

LITIGATION

There is no litigation pending contesting the validity of the Bonds or the proceedings for their authorization, issuance, sale, execution and delivery. A no-litigation certificate to that effect will be delivered to the Underwriters at the time of original delivery of the Bonds.

The State is a party to various legal proceedings seeking damages or injunctive relief and generally incidental to its operations, but unrelated to the Bonds or the security for the Bonds. The ultimate disposition of these proceedings is not presently determinable, but in the opinion of the Ohio Attorney General will not have a material adverse effect on the Bonds or the security for the Bonds.

LEGAL OPINIONS

Legal matters incident to the issuance of the Bonds and with regard to the tax-exempt status of the interest on the Bonds (see **TAX MATTERS**) are subject to the legal opinions of Ice Miller LLP, Bond Counsel. The signed legal opinions dated as of, and premised on the transcript of proceedings examined and law in effect on, the date of original delivery, will be delivered to the Underwriters at the time of that original delivery. The text of the opinions for the Bonds will be printed on or appended to the Bonds.

The proposed text of Bond Counsel's legal opinions is set forth as **Exhibits A-1**, **A-2** and **A-3**. The legal opinions to be delivered may vary from that text if necessary to reflect facts and law on the date of delivery. The opinions will speak only as of their date, and subsequent distribution by recirculation of the Official Statement or otherwise should not create any implication that Bond Counsel has reviewed or expressed any opinions concerning any of the matters referred to in the opinion subsequent to their date.

Certain legal matters will be passed upon for the Commission by its counsel Squire Patton Boggs (US) LLP, which is also serving as Disclosure Counsel to the Commission. Certain legal matters will be passed upon for the Underwriters by Dinsmore & Shohl LLP.

RATINGS

In response to the Commission's application, the Bonds have been rated AAA (stable outlook) by Fitch Ratings (Fitch), Aaa (stable outlook) by Moody's Investors Service (Moody's) and AAA (stable outlook) by S&P Global Ratings (S&P). No application for a rating has been made by the Commission to any other rating service.

The ratings and ratings outlooks in effect from time to time reflect only the views of the particular rating organization. The explanation of its views of the meaning and significance of its rating or outlook may be obtained from the respective rating agency. The Commission furnished to each rating agency certain information and materials, some of which may not be included in this Official Statement, relating to the Bonds and other obligations, the State and the Commission. Generally, rating agencies base their ratings on that information and materials, and on their own investigations, studies and assumptions.

There can be no assurance that the ratings or outlooks assigned will continue for any given time, or that a rating will not be lowered or withdrawn by a rating agency if in its judgment circumstances so warrant. Any downward change in or withdrawal of a rating, or change in rating outlook or other actions of a rating agency, may have an adverse effect on the marketability and market price of the Bonds.

A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time.

UNDERWRITING

Loop Capital Markets LLC, as representative of the Underwriters, has agreed for and on behalf of the Underwriters, subject to certain conditions, to purchase from the Commission:

- The Common Schools Bonds at a price of \$202,814,527.23 (consisting of the par amount plus original issue premium (\$27,014,763.85) and less underwriters' discount (\$685,236.62)).
- The Infrastructure Bonds at a price of \$229,569,477.74 (consisting of the par amount plus original issue premium (\$28,655,234.30) and less underwriters' discount (\$755,756.56)).
- The Conservation Projects Bonds at a price of \$62,539,847.04 (consisting of the par amount plus original issue premium (\$5,815,085.10) and less underwriters' discount (\$200,238.06)).

The Underwriters are obligated to purchase all of the Bonds if any Bonds are purchased. The Underwriters may offer the Bonds to certain dealers (including dealers depositing the Bonds into unit investment trusts, certain of which may be sponsored or managed by one or more of the Underwriters) at prices different than the public offering prices, and may change the public offering prices from time to time.

The Underwriters have provided the following paragraphs for inclusion in this Official Statement:

The Underwriters and their respective affiliates are full-service financial institutions engaged in various activities that may include securities trading, commercial and investment banking, municipal advisory, brokerage, and asset management. In the ordinary course of business, the Underwriters and their respective affiliates may actively trade debt and, if applicable, equity securities (or related derivative securities) and provide financial instruments (which may include bank loans, credit support or interest rate swaps). The Underwriters and their respective affiliates may engage in transactions for their own accounts involving the securities and instruments made the subject of this securities offering or other offering of the State. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and publish independent research views in respect of this securities offering or other offering or other offering or other offerings of the State.

PNC Capital Markets LLC may offer to sell the Bonds to its affiliate, PNC Investments, LLC ("PNCI"). Securities in PNC Capital Markets LLC's inventory for resale to PNCI's customers may include securities such as those to be offered by the Commission.

FINANCIAL ADVISER

PFM Financial Advisors, LLC is serving as the financial adviser to the Commission in connection with the issuance and sale of the Bonds. The financial adviser is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness, or fairness of the information contained in the Official Statement. PFM Financial Advisors, LLC is an independent advisory firm and is not engaged in the business of underwriting, trading or distributing municipal securities or other public securities.

TRANSCRIPT AND CLOSING CERTIFICATES

A complete transcript of proceedings and no-litigation certificate (as described above) for each series of the Bonds will be delivered by the Commission to the Underwriters. At that time, the Director of Budget and Management will also furnish to the Underwriters a certificate relating to the accuracy and completeness of this Official Statement (including matters set forth in or contemplated by it), and to its being a "final official statement" in the Commission's judgment for purposes of SEC Rule 15c2-12(b)(3).

CONTINUING DISCLOSURE AGREEMENTS

The Commission has agreed, for the benefit of the holders and Beneficial Owners of the Bonds, in accordance with SEC Rule 15c2-12 (the Rule), to provide or cause to be provided such financial information and operating data (Annual Information), audited financial statements and notices, in such manner, as may be required for purposes of paragraph (b)(5)(i) of the Rule for each series of Bonds (the Continuing Disclosure Agreements or each a Continuing Disclosure Agreement).

Except as described in this paragraph, the Commission has complied in all material respects with its prior continuing disclosure agreements under the Rule during the past five years. The State's Annual Information Filing for Fiscal Year 2019 filed on September 26, 2019 with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access (EMMA) system inadvertently omitted information relating to the Portsmouth Bypass Project. Notice of such omission and a supplement to the Annual Information Filing for Fiscal Year 2019 containing the information relating to the Portsmouth Bypass Project was filed with EMMA on November 5, 2019. In addition, the Annual Information Filing for Fiscal Year 2019 was not associated with a CUSIP for the Infrastructure Improvement Refunding Bonds, Series 2002A; the Annual Information Filing for Fiscal Year 2019 and supplemental information was linked to this CUSIP on November 5, 2019. The State has put processes in place to ensure full compliance with its continuing disclosure agreements going forward.

It will provide to the Municipal Securities Rulemaking Board (the MSRB) through its Electronic Municipal Market Access (EMMA) system:

- Annual Information for each State Fiscal Year (beginning with Fiscal Year in which the Bonds are delivered to
 the Underwriters in exchange for payment) not later than the 90th day following the end of the Fiscal Year (or,
 if that is not a State business day, the next State business day), consisting of annual financial information and
 operating data of the type included in Appendix A of this Official Statement under the captions FISCAL
 MATTERS, STATE DEBT, STATE EMPLOYEES AND COLLECTIVE BARGAINING
 AGREEMENTS, RETIREMENT SYSTEMS, and TAX LEVELS AND TAX BASES. The Commission
 expects that Annual Information will be provided directly by the State (specifically, by OBM) and may be
 provided in part by cross-reference to other documents, such as the State's Comprehensive Annual Financial
 Report, and subsequent final official statements.
- When and if available, audited general purpose financial statements of the State for each Fiscal Year. The Commission expects that those financial statements will be prepared, that they will be available separately from the Annual Information, and that the accounting principles to be applied in their preparation will, except as may otherwise then be stated, be as described under and by reference in **Appendix A** under **FISCAL MATTERS Accounts and Controls; Financial Reports**.

It will provide to the MSRB through the EMMA system, in a timely manner, notice of:

- The occurrence of any of the following events with respect to the Bonds, within the meaning of the Rule, within 10 business days of the occurrence of the event:
 - principal and interest payment delinquencies
 - non-payment related defaults, if material
 - unscheduled draws on any debt service reserves or on credit enhancements reflecting financial difficulties
 - substitution of credit or liquidity providers, or their failure to perform
 - adverse tax opinions, the issuance by the IRS of proposed or final determinations of taxability, Notice of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax-exempt status of the Bonds
 - modifications to rights of registered owners or Beneficial Owners, if material
 - Bond calls, if material, and tender offers
 - defeasances
 - release, substitution, or sale of property securing repayment of the Bonds, if material
 - bankruptcy, insolvency, receivership or similar event of the obligated person
 - consummation of a merger, consolidation or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, or the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material
 - appointment of a successor or additional trustee or the change of name of a trustee, if material
 - rating changes
 - incurrence of a financial obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the issuer or obligated person, any of which affect Bond holders, if material
 - default, event of acceleration, termination event, modification of terms, or other similar events under the terms of the financial obligation of the obligated person, any of which reflect financial difficulties Note: *"financial obligation"* means a (a) debt obligation, (b) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (c) guarantee of

an obligation or instrument described in either clause (a) or (b). Financial obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

- The failure to provide the Annual Information within the specified time.
- Any change in the accounting principles applied in the preparation of the annual financial statements or in the Fiscal Year, any failure of the General Assembly to appropriate moneys for the purpose of paying costs to be incurred by the State in performing the Continuing Disclosure Agreement for the applicable fiscal period (biennium), and termination of the Continuing Disclosure Agreement.

There are no debt service reserves, or credit enhancements or credit or liquidity providers, for the Bonds, or any property (except the Bond Service Fund) securing their repayment. There is no trustee for the Bonds.

The Commission acknowledges the recent amendments to the Rule that took effect on February 27, 2019. The Continuing Disclosure Agreements have been prepared to comply with the Rule, as amended.

The Commission reserves the right to amend each Continuing Disclosure Agreement, and to obtain the waiver of noncompliance with any provision of such Continuing Disclosure Agreement, as may be necessary or appropriate:

- To achieve its compliance with any applicable federal securities law or rule.
- To cure any ambiguity, inconsistency or formal defect or omission.
- To address any change in circumstances arising from a change in legal requirements, change in law, or change in the identity, nature, or status of the Commission.

Any such amendment or waiver will not be effective unless that Continuing Disclosure Agreement (as amended or taking into account the waiver) would have complied with the requirements of the Rule at the time of the primary offering of the Bonds, after taking into account any applicable amendments to or official interpretations of the Rule, as well as any change in circumstances, and until the Commission shall have received either:

- A written opinion of bond, disclosure or other qualified independent special counsel selected by the Commission that the amendment or waiver would not materially impair the interest of holders or Beneficial Owners of the Bonds; or
- The written consent to the amendment, or waiver, by the holders of at least a majority of the aggregate outstanding principal amount of the Bonds.

Each Continuing Disclosure Agreement, by provisions in the bond proceedings, will be solely for the benefit of the holders and Beneficial Owners of the Bonds including holders of book-entry interests in them. The right to enforce the provisions of a Continuing Disclosure Agreement may be limited to a right of the holders or Beneficial Owners to enforce to the extent permitted by law (by mandamus, or other suit, action or proceedings at law or in equity) the obligations and duties under it.

In order to provide certain continuing disclosure with respect to the Bonds in accordance with the Rule, the State has entered into a Disclosure Dissemination Agent Agreement (Disclosure Dissemination Agreement) for the benefit of the holders of the Bonds with Digital Assurance Certification, L.L.C. (DAC), under which the State has designated DAC as Disclosure Dissemination Agent (Disclosure Dissemination Agent).

The Disclosure Dissemination Agent has only the duties specified in the Disclosure Dissemination Agreement. The Disclosure Dissemination Agent's obligation to deliver the information at the times and with the contents described in that Agreement is limited to the extent the State has provided that information to the Disclosure Dissemination Agent as required by that Agreement. The Disclosure Dissemination Agent has no duty with respect to the content of any disclosures or notice made pursuant to the terms of the Agreement or duty or obligation to review or verify any information in the Annual Report, Audited Financial Statements, notice of Notice Event or Voluntary Report (each as defined in the Agreement), or any other information, disclosure or notices provided to it by the State, and the Disclosure Dissemination Agent has no responsibility for any failure to report to the State a Notice Event or a duty to determine the materiality thereof, or to determine or liability for failing to determine whether the State has complied with the Agreement, and the Disclosure Dissemination Agent may conclusively rely upon certification of the State at all times.

The performance by the State, as the only obligated person with respect to the Bonds, of each Continuing Disclosure Agreement will be subject to the biennial appropriation by the General Assembly of moneys for that purpose.

Each Continuing Disclosure Agreement will remain in effect only for such period that the Bonds are outstanding in accordance with their terms and the State remains an obligated person with respect to the Bonds within the meaning of the Rule.

ELIGIBILITY FOR INVESTMENT AND AS PUBLIC MONEYS SECURITY

To the extent that the matter as to a particular investor is governed by Ohio law, and subject to any applicable limitations under other provisions of Ohio law, the Bonds are lawful investments for banks, savings and loan associations, credit union share guaranty corporations, trust companies, trustees, fiduciaries, insurance companies (including domestic for life and domestic not for life), trustees or other officers having charge of sinking and bond retirement or other funds of the State and its political subdivisions and taxing districts, the Commissioners of the Sinking Fund, the Administrator of Workers' Compensation, and State retirement systems (Teachers, Public Employees, Public School Employees, and Police and Fire), notwithstanding any other provisions of the Revised Code or rules adopted pursuant to those provisions by any State agency with respect to investments by them.

The Act also provides that the Bonds are acceptable under Ohio law as security for the repayment of the deposit of public moneys.

Beneficial Owners of the Bonds should make their own determination as to such matters as the legality of investment in or the pledgeability of book-entry interests.

CONCLUDING STATEMENT

All quotations in this Official Statement from, and summaries and explanations of, the Ohio Constitution, the Revised Code, and the bond proceedings do not purport to be complete. Reference is made to the pertinent provisions of the Constitution, Revised Code and those documents for all complete statements of their provisions. Copies of the bond proceedings are available upon request to the Office of Budget and Management, 30 East Broad Street, 34th Floor, Columbus, Ohio 43215-3457.

To the extent that any statements in this Official Statement involve matters of opinion or estimates (whether or not expressly stated to be such) those statements are made as such and not as representations of fact or certainty. No representation is made that any of those statements will be realized. Information in this Official Statement has been derived by the Commission from official and other sources and is believed by the Commission to be accurate and reliable, but information other than that obtained from State official records has not been independently confirmed or verified by the State or Commission and its accuracy is not guaranteed.

This Official Statement is not to be construed as a contract or agreement between the State or the Commission and the Underwriters or subsequent holders or Beneficial Owners of any of the Bonds.

This Official Statement has been prepared, approved and delivered by the Commission, and signed for and on its behalf and in her official capacity by the official indicated below.

OHIO PUBLIC FACILITIES COMMISSION

By: /s/ Kimberly A. Murnieks Kimberly A. Murnieks Director of Budget and Management, and Secretary of the Commission [THIS PAGE INTENTIONALLY LEFT BLANK]

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.

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				

(\$	in	Millions)

(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.

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.

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.

⁽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.

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

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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(\$ in Millions)						
	Cash Rece	eipts				
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	

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

(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.

(g) Largest components consist of various reimbursements, ioan 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)

	<u>(</u> \$111 19111	10113)			
		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
		C	ash Receipt	S	
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
			n Disbursem	ents	
Primary, Secondary and Other ^(e)	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
			ash Transfei	rs	
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.

Totals may not foot due to rounding.

⁽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.

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 acrossthe-board and targeted spending cuts across most State agencies and programs. The Act provided for the following GRF appropriations:

2	al Year 017 nditures	Fiscal Year 2018	Percent Change Over Fiscal Year 2017 Expenditures	Fiscal Year 2019 Appropriations	Percent Change Over Fiscal Year 2018 Appropriations	2018-2019 Biennium Total Appropriations
\$3	34.5	\$32.2	-6.7%	\$33.3	3.5%	\$65.5

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

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 OKF Kevende 2010-2013 Dienmun (# m binions)								
		Percent Change		Percent Change				
Fiscal Year	Fiscal Year	Over Fiscal Year	Fiscal Year	Over Fiscal Year	2018-2019			
2017 Actual	2018 Est.	2017 Actual	2019 Est.	2018 Est.	Biennium Est.			
Revenue	Revenue	Revenue	Revenue	Revenue	Total Revenue			
\$34.2	\$32.3	-5.5%	\$33.3	3.2%	\$65.6			

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

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)

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

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

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 highincome 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:

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

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

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 GKT Kevende 2022-2025 Dienmun (\$ m bimons)					
		Percent Change Over		Percent Change Over	2022-2023
Fiscal Year 2021 Actual Revenue	Fiscal Year 2022 Est. Revenue	Fiscal Year 2021 Actual Revenue	Fiscal Year 2023 Est. Revenue	Fiscal Year 2022 Est. Revenue	Biennium Total Est. Revenue
\$39.5	\$36.6	-7.5%	\$39.9	9.3%	\$76.6

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

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 nonbusiness 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 nonchartered 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	Fiscal Year	Percent Change Over Fiscal Year	Fiscal Year	Percent Change Over Fiscal Year	2024-2025 Biennium
2023 Expenditures	2024 Appropriations	2023 Expenditures	2025	2024 Appropriations	Total
\$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 percent 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 percent with proceeds dedicated to the school funding formula.
- Personal income tax reductions in the budget will reduce the number of personal income tax brackets. 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 on the balance of the Budget Stabilization Fund to 10 percent of the GRF, allowing the fund to 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 \$165.1 million as of December 12, 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 creditcollateralized 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 \$370,585,000 in outstanding variable rate debt as follows with liquidity provided by the State for all these issues:

			Rate	
Dated Date	Outstanding	Purpose/Series	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	57,590,000	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%	SIFMA⁵	JP Morgan	3/15/2007	3/15/2025
39,220,000	Common Schools 2006B/C	3.202%	SOFRª	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.

The following table presents a current summary of State debt authorizations and the principal that has been issued and is outstanding against those authorizations, including the Bonds. The General Assembly has appropriated sufficient moneys to meet debt service requirements for the current biennium (ending June 30, 2025) 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)}	5,210,000,000	4,694,726,136	1,636,760,000
Natural Resources ^(f)	521,000,000	484,620,000	84,870,000
Common School Facilities ^(e)	6,515,100,000	5,611,200,000	1,863,990,000
Higher Education Facilities	5,255,000,000	4,374,445,000	1,763,225,000
Conservation ^(g)	900,000,000	682,625,000	266,125,000
Research & Development ^(h)	1,200,000,000	971,000,000	153,330,000
Site Development	150,000,000	150,000,000	-
Veterans Compensation ⁽ⁱ⁾	200,000,000	83,910,000	10,520,000
		Total:	\$5,797,160,000

Special Obligations			
DAS Facilities	\$2,320,800,000	\$2,069,900,000	\$416,525,000
DRC Prison Facilities ^(e)	3,073,000,000	2,346,500,000	413,950,000
DYS Facilities	529,800,000	400,000,000	76,280,000
Cultural & Sports Facilities	874,000,000	740,475,000	146,050,000
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	532,760,000
		Total:	\$1.811.115.000

Obligations Payable from Non-GRF Sources ⁽ⁱ⁾					
Highway User Receipts					
G.O. Highway ^(k)	\$4,048,000,000	\$3,579,595,000	\$853,250,000		
ODOT Facilities	385,000,000	379,455,000	164,675,000		
		Total:	\$1,017,925,000		

Federal Transportation Grants					
ODOT GARVEE Highway ^(I)	n/a	\$3,020,280,000	\$780,195,000		
(a) Excludes refunding bonds: includes bonds refunded: reflects payments of amounts due as of December 12, 2023					

; includes bonds retunded; reflects payments of amounts due as of Excludes refunded bonds; includes refunding bonds; reflects payments of amounts due as of December 12, 2023.

(b)

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

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 (d) 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.

Includes adjustable-rate bonds. (e)

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. (f)

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

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 (h) year plus any obligations unissued from previous fiscal years.

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

See discussion above of "availability payments" under ODOTs first public-private agreement, which payments are expected to (i) 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.

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

Debt service on these "GARVEE" bonds is paid from federal transportation grants apportioned to the State (Title 23 of the U.S. (1) Code).

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

	Paid from the GRF								
	G	eneral Obligatio	bligations Special Obligations			IS	Total GRF Debt Service		
FY	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	\$615,639,788	\$227,557,740	\$124,496,538	\$64,878,203	\$69,701,519	\$158,888,794	\$912,375,000	\$348,787,581	\$1,261,162,581
2025	569,978,779	230,968,266	101,714,720	65,105,947	65,065,886	152,401,831	871,890,000	313,345,429	1,185,235,429
2026	464,766,537	194,104,093	95,629,845	42,436,383	41,582,233	135,937,050	697,560,000	276,896,141	974,456,141
2027	372,615,056	191,796,258	77,337,116	42,486,022	41,709,043	126,417,375	606,320,000	246,040,870	852,360,870
2028	340,229,667	174,755,258	75,255,086	42,750,237	41,658,626	120,031,769	576,315,000	218,365,642	794,680,642
2029	332,832,693	164,151,471	53,676,143	42,603,532	37,977,833	109,680,156	549,810,000	191,111,827	740,921,827
2030	345,949,167	150,575,051	38,415,125	38,276,891	35,113,531	105,163,844	547,785,000	165,708,608	713,493,608
2031	354,302,715	150,398,180	37,326,525	35,532,388	35,126,087	93,115,750	564,420,000	141,381,646	705,801,646
2032	306,370,760	127,373,161	27,943,350	35,855,752	29,799,318	59,567,969	468,405,000	118,505,309	586,910,309
2033	265,537,509	120,172,148	19,250,200	33,441,741	29,719,457	40,257,895	409,150,000	99,228,949	508,378,949
2034	247,673,374	120,161,670	15,876,450	29,779,898	29,986,498	27,321,690	388,065,000	82,734,580	470,799,580
2035	223,829,942	96,548,457	7,213,500	29,784,086	26,821,351	27,317,506	344,265,000	67,249,842	411,514,842
2036	199,637,250	96,523,957	-	23,809,672	26,841,095	27,324,252	322,080,000	52,056,226	374,136,226
2037	152,400,900	84,647,150	-	23,807,402	26,763,053	27,314,386	277,245,000	37,687,891	314,932,891
2038	108,538,050	74,297,450	-	18,172,625	21,444,191	27,320,658	224,575,000	25,197,974	249,772,974
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
							\$8,146,475,000	\$2,413,709,598	\$10,560,184,598

Annual Debt Service Requirements on State Obligations

(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, 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.

Excludes refunded bonds; includes refunding bonds; as of December 12, 2023. (e) Totals may not foot due to rounding.

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

	High	GARVEE		
FY	Highway G.O.	ODOT/DPS Facilities ^(a)	Total ^(b)	Federal Transportation Grants ^(c)
2024	\$154,552,727	\$21,589,740	\$176,142,467	\$144,335,453
2025	151,864,595	21,592,000	173,456,595	143,598,705
2026	119,030,800	21,590,000	140,620,800	108,638,875
2027	115,291,050	21,588,000	136,879,050	108,640,875
2028	111,505,800	21,589,250	133,095,050	108,640,000
2029	93,954,300	21,586,750	115,541,050	108,645,000
2030	73,931,250	21,583,750	95,515,000	84,547,000
2031	70,970,250	13,443,250	84,413,500	43,259,125
2032	52,814,500	13,445,000	66,259,500	43,263,000
2033	50,618,750	13,445,000	64,063,750	22,874,500
2034	34,798,000	5,067,000	39,865,000	12,672,000
2035	20,808,500	5,068,500	25,877,000	12,669,000
2036	15,347,750	5,070,000	20,417,750	-
2037	14,680,500	5,066,000	19,746,500	-
2038	8,563,500	5,066,250	13,629,750	-
2039	8,174,250	-	8,174,250	-

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

(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 December 12, 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 December 12, 2023, including the Bonds:

	Oblig	Non-GRF Obligations		
Year	Education(a)	Other GO(b)	Special Obligations(c)	Highway User Receipts(d)
2024	\$3,428,600,000	\$2,070,945,000	\$1,734,555,000	\$900,170,000
2029	1,941,940,000	1,065,675,000	924,590,000	369,700,000
2034	726,945,000	429,510,000	397,925,000	77,840,000
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, 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.

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 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 December 12, 2023, GRF cash transfers in the amounts of \$954,500,000 for General Obligation programs and \$805,264,476 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 2and 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.

Not Seasonally Aujusted (in 666)						
	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

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

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 (%)

	19	90	20	00	20	10	20	20	20	21	20	22
	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.

Ohio and U.S. unemployment rates have been as follows:
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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		
July	3.3	3.5		
August	3.4	3.8		
September	3.4	3.8		
October	3.6*	3.9		

Average Monthly Unemployment Rates (Seasonally Adjusted)

* Preliminary Source: U.S. Bureau of Labor Statistics.

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								
	Employment							
	Headcount							
Company	(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						

2022

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:

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

Ohio Population — Total and by Age Group

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

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

	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 ^(j)	813,183 ^(j)	812,595 ^(j)			
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	175,818	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)			
Sprinafield	(f)	(f)	(f)	135.879	135.747	134.831			

Population of Ohio Metropolitan Areas^(a)

(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 2022 crop production value of \$9.2 billion ranked ninth among states and represented 3.3 percent of the U.S. total value. Ohio's 2022 livestock production value of \$6.2 billion ranked seventeenth among states and represented 2.4 percent of the U.S. total value. As of 2022, Ohio accounts for 4.2 percent of total U.S. cash receipts for corn and 6.9 percent for soybeans. In 2022, Ohio's agricultural sector output (consisting of crops, livestock, poultry, dairy, services and forestry, and all farm-related income) totaled \$15.4 billion and represented 2.9 percent of the U.S. total value. Ohio farm expenses and purchased inputs (feed, seed, chemicals, fertilizer, livestock, utilities, labor, and machinery) totaled \$9.8 billion. The net farm income on Ohio farms in 2022 was \$6.6 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, 22 years for SERS, 24 years for HPRS, 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.

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):

	PERS Employer\Employee		Employer\Employee Employer\Employee		HPF Employer\B	Total Employer\ Employee	
State Fiscal Year	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.

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 ^(b) 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.

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.

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):

	PERS ^(a)	STRS	SERS	OP&F	HPRS
Valuation as of:	12/31/22	06/30/22	06/30/22	12/31/21	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 <u>not</u> 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.

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 nonemployer 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):

	PERS ^(a)	STRS	HPRS
Valuation as of:	12/31/22	06/30/22	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 percent employer contribution rate allocated to health care funding from 0.0 percent to 2.0 percent for the Combined Plan only.

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):

	PERS	STRS	SERS	OP&F ^(a)	HPRS
Valuation as of:	12/31/21	06/30/22	06/30/22	12/31/18	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.

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)	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 percent, the Traditional Pension Plan employer contribution remained at 0.0 percent. Sources: Retirement systems' annual actuarial valuations.

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):

	PERS	STRS	SERS	OP&F ^(a)	HPRS
Valuation as of:	12/31/22	06/30/22	06/30/22	12/31/21	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 <u>not</u> 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.

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):

	PERS	STRS	HPRS
Valuation as of:	12/31/22	06/30/22	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.

				Ohio Percent	
		U. S	Ohio	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
2000	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
0000	Total	21,804.8	680.4	3.2	8
2022	per capita	65,423	57,880	88.5	34

Personal Income (\$ in Billions)

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.

		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)(f)}	12,934,191,000	88.6	799,396,000
	Real ^(c)	167,857,657,350	35.0	8,697,809,112 ^(e)
2000	Tangible ^(d)	23,298,302,564	25.0	1,720,740,378
	Public Utility ^{(c)(f)}	13,635,709,860	67.0	967,674,709
	Real ^(c)	238,264,394,249	35.0	14,486,087,962 ^(e)
2010	Tangible ^(d)	320,961,400	5.0 ^(b)	18,432,832
	Public Utility ^{(c)(f)}	10,096,712,600 ^(g)	52.9	747,237,219
	Real ^(c)	255,789,561,245	35.0	17,060,795,040 ^(e)
2018	Tangible ^(d)	-	_(b)	-
	Public Utility ^{(c)(f)}	19,220,171,390 ^{(g)(h)}	60.67	1,533,994,082
	Real ^(c)	260,947,879,749	35.0	17,321,071,684 ^(e)
2019	Tangible ^(d)	-	_(b)	-
	Public Utility ^{(c)(f)}	25,436,220,050 ^{(g)(h)}	64.69	1,971,197,491
	Real ^(c)	279,933,910,561	35.0	18,265,118,632 ^(e)
2020	Tangible ^(d)	-	_(b)	-
	Public Utility ^{(c)(f)}	26,794,513,946 ^{(g)(h)}	65.14	2,079,346,945
	Real ^(c)	293,266,914,053	35.0	18,456,058,751 ^(e)
2021	Tangible ^(d)	-	_(b)	-
	Public Utility ^{(c)(f)}	28,165,092,620 ^{(g)(h)}	65.00	2,166,453,013
	Real ^(c)	303,790,908,195 ^{(g)(h)}	35.0	18,941,781,058
2022	Tangible ^(d)	-	_(b)	-
	Public Utility ^{(c)(f)}	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 2024.

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 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.

Book-Entry System; DTC

Book-Entry System

The information set forth in the following numbered paragraphs is based on information provided by The Depository Trust Company in its "Sample Offering Document Language Describing DTC and Book-Entry-Only Issuance" (labeled BLOR 06-2013). As such, the State and the Commission believe it to be reliable, but take no responsibility for the accuracy or completeness of that information. It has been adapted to the Bonds by substituting "Bonds" for "Securities," "Commission" for "Issuer" and "Bond Registrar" for "registrar", and by the addition of the italicized language set forth in the text. See also the additional information following those numbered paragraphs.

1. The Depository Trust Company, New York, NY (DTC), will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond certificate will be issued for each maturity of the Bonds, each in the aggregate principal amount of such maturity *(or portion thereof)*, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company 2. organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com. (This internet site is included for reference only, and the information in this internet site is not incorporated by reference in this Official Statement.)

3. Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

4. To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

5. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults and proposed amendments to the Bond documents. For example, Beneficial Owners of Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the Bond Registrar and request that copies of the notices be provided directly to them.

6. Redemption notices shall be sent to DTC. If less than all of the Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

7. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Commission as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

8. Redemption proceeds, distributions and dividend payments (*debt charges*) on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the Commission or the Bond Registrar, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Bond Registrar, the State or the Commission, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions and dividend payments (*debt charges*) to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Commission or the Bond Registrar, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

9. (*Not Applicable to the Bonds.*)

10. DTC may discontinue providing its services as depository with respect to the Bonds at any time by giving reasonable notice to the Commission or the Bond Registrar. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed (*or otherwise produced*) and delivered.

11. The Commission may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Bond certificates will be

printed (or otherwise produced) and delivered to DTC. (See also Revision of Book-Entry System; Replacement Bonds.)

12. The information above in this section concerning DTC and DTC's book-entry system has been obtained from sources that the State and Commission believe to be reliable, but the State and Commission take no responsibility for the accuracy thereof.

Direct Participants and Indirect Participants may impose service charges on Beneficial Owners in certain cases. Purchasers of book-entry interests should discuss that possibility with their brokers.

The State, the Commission and the Bond Registrar have no role in the purchases, transfers or sales of book-entry interests. The rights of Beneficial Owners to transfer or pledge their interests, and the manner of transferring or pledging those interests, may be subject to applicable state law. Beneficial Owners may want to discuss with their legal advisors the manner of transferring or pledging their book-entry interests.

The State, the Commission and the Bond Registrar have no responsibility or liability for any aspects of the records or notices relating to, or payments made on account of, beneficial ownership, or for maintaining, supervising or reviewing any records relating to that ownership.

The State, the Commission and the Bond Registrar cannot and do not give any assurances that DTC, Direct Participants, Indirect Participants or others will distribute to the Beneficial Owners payments of debt charges on the Bonds made to DTC as the registered owner, or redemption, if any, or other notices, or that they will do so on a timely basis, or that DTC, Direct Participants or Indirect Participants will serve or act in a manner described in this Official Statement.

For all purposes under the Bond proceedings (except the Continuing Disclosure Agreement for each series under which others as well as DTC may be considered an owner or holder of the Bonds, see **Continuing Disclosure Agreements**), DTC will be and will be considered by the State, the Commission and the Bond Registrar to be the owner or holder of the Bonds.

Beneficial Owners will not receive or have the right to receive physical delivery of Bonds, and, except to the extent they may have rights as Beneficial Owners or holders under the Continuing Disclosure Agreement for each series will not be or be considered by the State, the Commission and the Bond Registrar to be, and will not have any rights as, owners or holders of Bonds under the Bond proceedings.

Reference herein to "DTC" includes when applicable any successor securities depository and the nominee of the depository.

Revision of Book-Entry System; Replacement Bonds

The Bond proceedings for each series provide for issuance of fully-registered Bonds (Replacement Bonds) directly to owners of Bonds other than DTC only in the event that DTC (or a successor securities depository) determines not to continue to act as securities depository for the Bonds. Upon occurrence of this event, the Commission may in its discretion attempt to have established a securities depository book-entry relationship with another securities depository. If the Commission does not do so, or is unable to do so, and after the Bond Registrar has made provision for notification of the Beneficial Owners of the Bonds by appropriate notice to DTC, the Commission and the Bond Registrar will authenticate and deliver Replacement Bonds of any one maturity, in authorized denominations, to or at the direction of any persons requesting such issuance, and, if the event is not the result of Commission action or inaction, at the expense (including legal and other costs) of those requesting.

Debt charges on Replacement Bonds will be payable when due without deduction for the services of the Bond Registrar as paying agent. Principal of and any premium on Replacement Bonds

will be payable when due to the registered owner upon presentation and surrender at the designated office of the Bond Registrar. Interest on Replacement Bonds will be payable on the interest payment date by the Bond Registrar by transmittal to the registered owner of record on the Bond Register as of the 15th day preceding the interest payment date. Replacement Bonds will be exchangeable for other Replacement Bonds of authorized denominations, and transferable, at the designated office of the Bond Registrar without charge (except taxes or governmental fees). Exchange or transfer of then-redeemable Replacement Bonds is not required to be made: (i) between the 15th day preceding the mailing of notice of redemption of Replacement Bonds and the date of that mailing, or (ii) of a particular Replacement Bond selected for redemption (in whole or part).

<u>Text of Legal Opinion</u> (Common Schools General Obligation Refunding Bonds, Series 2023A)

We have served as bond counsel to our client the Ohio Public Facilities Commission (the Commission) and not as counsel to any other person in connection with the issuance of \$176,485,000 Common Schools General Obligation Refunding Bonds, Series 2023A (the Series 2023A Bonds), dated the date of this letter. The Series 2023A Bonds are obligations of the State of Ohio (the State), issued by the Commission, for the purpose of refunding certain bonds previously issued for the purpose of paying costs of capital facilities for a system of common schools throughout the State.

The Series 2023A Bonds are issued under and pursuant to Section 2n of Article VIII of the Ohio Constitution and Sections 151.01, 151.02 and 151.03 of the Ohio Revised Code and other authorizations by the Ohio General Assembly (collectively, the Act), and resolutions of the Commission (collectively, the Bond Resolution).

In our capacity as bond counsel, we have examined the transcript of proceedings relating to the issuance of the Series 2023A Bonds, a copy of the signed and authenticated Series 2023A Bond of the first maturity and such other documents, matters and law as we deem necessary to render the opinions set forth in this letter.

Based on that examination and subject to the limitations stated below, we are of the opinion that under existing law:

- 1. The Series 2023A Bonds constitute valid and binding general obligations of the State, and the full faith and credit, revenue and taxing power of the State are pledged to the payment of the principal of and interest on (Debt Service) the Series 2023A Bonds.
- 2. Debt Service on the Series 2023A Bonds and on bonds or other obligations issued or to be issued and outstanding pursuant to the Act (collectively, the Bonds) are payable from and secured by (i) a pledge of the excises, taxes and revenues of the State as provided for in the Bond Resolution (collectively, the Committed State Receipts), and (ii) moneys deposited in the Common Schools Capital Facilities Bond Service Fund created under the Act and further provided for in the Bond Resolution. Fees, excises and license taxes relating to the registration, operation or use of vehicles on the public highways, or to fuels used for propelling such vehicles, and net State lottery proceeds, are not pledged to pay that Debt Service.
- 3. The State is required to charge and collect Committed State Receipts in an amount sufficient to pay when due the Debt Service on the Bonds, and the State has covenanted to maintain statutory authority for and to cause to be levied, collected and applied excises, taxes and revenues so that those Committed State Receipts, including deposits of them to the Common Schools Capital Facilities Bond Service Fund, will be sufficient in time and amount to pay that Debt Service when due and certain other costs (including Debt Service on other State obligations). Provision has been made by law for setting aside each year in the Common Schools Capital

Facilities Bond Service Fund a sufficient amount of the Committed State Receipts, without other or further appropriation, to pay when due the Debt Service on the Bonds.

4. Interest on the Series 2023A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended, and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. Interest on, and any profit made on the sale, exchange or other disposition of, the Series 2023A Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. We express no opinion as to any other tax consequences regarding the Series 2023A Bonds.

The opinions stated above are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. In rendering all such opinions, we assume, without independent verification, and rely upon (i) the accuracy of the factual matters represented, warranted or certified in the proceedings and documents we have examined, and (ii) the due and legal authorization, execution and delivery of those documents by, and the valid, binding and enforceable nature of those documents upon, any parties other than the Commission and the State.

In rendering those opinions with respect to the treatment of the interest on the Series 2023A Bonds under the federal tax laws, we further assume and rely upon compliance with the covenants in the proceedings and documents we have examined, including those of the Commission for itself and the State. Failure to comply with certain of those covenants subsequent to issuance of the Series 2023A Bonds may cause interest on the Series 2023A Bonds to be included in gross income for federal income tax purposes retroactively to their date of issuance.

The rights of the owners of the Series 2023A Bonds and the enforceability of the Series 2023A Bonds are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or transfer, and other laws relating to or affecting the rights and remedies of creditors generally; to the application of equitable principles, whether considered in a proceeding at law or in equity; to the exercise of judicial discretion, and to limitations on legal remedies against public entities.

No opinions other than those expressly stated herein are implied or shall be inferred as a result of anything contained in or omitted from this letter. The opinions expressed in this letter are stated only as of the time of its delivery and we disclaim any obligation to revise or supplement this letter thereafter. Our engagement as bond counsel in connection with the original issuance and delivery of the Series 2023A Bonds is concluded upon delivery of this letter.

Respectfully submitted,

<u>Text of Legal Opinion</u> (Infrastructure Improvement General Obligation Refunding Bonds, Series 2023A)

We have served as bond counsel to our client the Ohio Public Facilities Commission (the Commission) and not as counsel to any other person in connection with the issuance of \$201,670,000 Infrastructure Improvement General Obligation Refunding Bonds, Series 2023A (the Series 2023A Bonds), dated the date of this letter. The Series 2023A Bonds are obligations of the State of Ohio (the State), issued by the Commission, for the purpose of refunding certain bonds previously issued for the purpose of financing or assisting in the financing of the cost of public infrastructure capital improvement projects of local subdivisions.

The Series 2023A Bonds are issued under and pursuant to Sections 2p and 2s of Article VIII of the Ohio Constitution and Sections 151.01, 151.02 and 151.08 of the Ohio Revised Code and other authorizations by the Ohio General Assembly (collectively, the Act), and resolutions of the Commission (collectively, the Bond Resolution).

In our capacity as bond counsel, we have examined the transcript of proceedings relating to the issuance of the Series 2023A Bonds, a copy of the signed and authenticated Series 2023A Bond of the first maturity and such other documents, matters and law as we deem necessary to render the opinions set forth in this letter.

Based on that examination and subject to the limitations stated below, we are of the opinion that under existing law:

- 1. The Series 2023A Bonds constitute valid and binding general obligations of the State, and the full faith and credit, revenue and taxing power of the State are pledged to the payment of the principal of and interest on (Debt Service) the Series 2023A Bonds.
- 2. Debt Service on the Series 2023A Bonds and on bonds or other obligations issued or to be issued and outstanding pursuant to the Act (collectively, the Bonds) are payable from and secured by (i) a pledge of the excises, taxes and revenues of the State as provided for in the Bond Resolution (collectively, the Committed State Receipts), and (ii) moneys deposited in the State Capital Improvements Bond Service Fund created under the Act and further provided for in the Bond Resolution. Fees, excises and license taxes relating to the registration, operation or use of vehicles on the public highways, or to fuels used for propelling such vehicles, and net State lottery proceeds, are not pledged and may not be used to pay that Debt Service.
- 3. The State is required to charge and collect Committed State Receipts in an amount sufficient to pay when due the Debt Service on the Bonds, and the State has covenanted to maintain statutory authority for and to cause to be levied, collected and applied excises, taxes and revenues so that those Committed State Receipts, including deposits of them to the State Capital Improvements Bond Service Fund, will be sufficient in time and amount to pay that Debt Service when due and certain other costs (including Debt Service on other State obligations). Provision has been

made by law for setting aside each year in the State Capital Improvements Bond Service Fund a sufficient amount of the Committed State Receipts, without other or further appropriation, to pay when due the Debt Service on the Bonds.

4. Interest on the Series 2023A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended, and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. Interest on, and any profit made on the sale, exchange or other disposition of, the Series 2023A Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. We express no opinion as to any other tax consequences regarding the Series 2023A Bonds.

The opinions stated above are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. In rendering all such opinions, we assume, without independent verification, and rely upon (i) the accuracy of the factual matters represented, warranted or certified in the proceedings and documents we have examined, and (ii) the due and legal authorization, execution and delivery of those documents by, and the valid, binding and enforceable nature of those documents upon, any parties other than the Commission and the State.

In rendering those opinions with respect to the treatment of the interest on the Series 2023A Bonds under the federal tax laws, we further assume and rely upon compliance with the covenants in the proceedings and documents we have examined, including those of the Commission for itself and the State. Failure to comply with certain of those covenants subsequent to issuance of the Series 2023A Bonds may cause interest on the Series 2023A Bonds to be included in gross income for federal income tax purposes retroactively to their date of issuance.

The rights of the owners of the Series 2023A Bonds and the enforceability of the Series 2023A Bonds are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or transfer, and other laws relating to or affecting the rights and remedies of creditors generally; to the application of equitable principles, whether considered in a proceeding at law or in equity; to the exercise of judicial discretion, and to limitations on legal remedies against public entities.

No opinions other than those expressly stated herein are implied or shall be inferred as a result of anything contained in or omitted from this letter. The opinions expressed in this letter are stated only as of the time of its delivery and we disclaim any obligation to revise or supplement this letter thereafter. Our engagement as bond counsel in connection with the original issuance and delivery of the Series 2023A Bonds is concluded upon delivery of this letter.

Respectfully submitted,

<u>Text of Legal Opinion</u> (Conservation Projects General Obligation Refunding Bonds, Series 2023A)

We have served as bond counsel to our client the Ohio Public Facilities Commission (the Commission) and not as counsel to any other person in connection with the issuance of \$56,925,000 Conservation Projects General Obligation Refunding Bonds, Series 2023A (the Series 2023A Bonds), dated the date of this letter. The Series 2023A Bonds are obligations of the State of Ohio (the State), issued by the Commission, for the purpose of refunding certain bonds previously issued for the purpose of paying costs of projects for conservation purposes.

The Series 2023A Bonds are issued under and pursuant to Sections 20 and 2q of Article VIII of the Ohio Constitution and Sections 151.01, 151.02 and 151.09 of the Ohio Revised Code and other authorizations by the Ohio General Assembly (collectively, the Act), and resolutions of the Commission (collectively, the Bond Resolution).

In our capacity as bond counsel, we have examined the transcript of proceedings relating to the issuance of the Series 2023A Bonds, a copy of the signed and authenticated Series 2023A Bond of the first maturity and such other documents, matters and law as we deem necessary to render the opinions set forth in this letter.

Based on that examination and subject to the limitations stated below, we are of the opinion that under existing law:

- 1. The Series 2023A Bonds constitute valid and binding general obligations of the State, and the full faith and credit, revenue and taxing power of the State are pledged to the payment of the principal of and interest on (Debt Service) the Series 2023A Bonds.
- 2. Debt Service on the Series 2023A Bonds and on bonds or other obligations issued or to be issued and outstanding pursuant to the Act (collectively, the Bonds) are payable from and secured by (i) a pledge of the excises, taxes and revenues of the State as provided for in the Bond Resolution (collectively, the Committed State Receipts), and (ii) moneys deposited in the Conservation Projects Bond Service Fund created under the Act and further provided for in the Bond Resolution. Fees, excises and license taxes relating to the registration, operation or use of vehicles on the public highways, or to fuels used for propelling such vehicles, and net State lottery proceeds, are not pledged and may not be used to pay that Debt Service.
- 3. The State is required to charge and collect Committed State Receipts in an amount sufficient to pay when due the Debt Service on the Bonds, and the State has covenanted to maintain statutory authority for and to cause to be levied, collected and applied excises, taxes and revenues so that those Committed State Receipts, including deposits of them to the Conservation Projects Bond Service Fund, will be sufficient in time and amount to pay that Debt Service when due and certain other costs (including Debt Service on other State obligations). Provision has been made by law for setting aside each year in the Conservation Projects Bond Service Fund a sufficient amount of the Committed State Receipts, without other or further appropriation, to pay when due the Debt Service on the Bonds.

4. Interest on the Series 2023A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended, and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. Interest on, and any profit made on the sale, exchange or other disposition of, the Series 2023A Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. We express no opinion as to any other tax consequences regarding the Series 2023A Bonds.

The opinions stated above are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. In rendering all such opinions, we assume, without independent verification, and rely upon (i) the accuracy of the factual matters represented, warranted or certified in the proceedings and documents we have examined, and (ii) the due and legal authorization, execution and delivery of those documents by, and the valid, binding and enforceable nature of those documents upon, any parties other than the Commission and the State.

In rendering those opinions with respect to the treatment of the interest on the Series 2023A Bonds under the federal tax laws, we further assume and rely upon compliance with the covenants in the proceedings and documents we have examined, including those of the Commission for itself and the State. Failure to comply with certain of those covenants subsequent to issuance of the Series 2023A Bonds may cause interest on the Series 2023A Bonds to be included in gross income for federal income tax purposes retroactively to their date of issuance.

The rights of the owners of the Series 2023A Bonds and the enforceability of the Series 2023A Bonds are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or transfer, and other laws relating to or affecting the rights and remedies of creditors generally; to the application of equitable principles, whether considered in a proceeding at law or in equity; to the exercise of judicial discretion, and to limitations on legal remedies against public entities.

No opinions other than those expressly stated herein are implied or shall be inferred as a result of anything contained in or omitted from this letter. The opinions expressed in this letter are stated only as of the time of its delivery and we disclaim any obligation to revise or supplement this letter thereafter. Our engagement as bond counsel in connection with the original issuance and delivery of the Series 2023A Bonds is concluded upon delivery of this letter.

Respectfully submitted,