

ONE NEW ISSUE

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 Series 2023 Bonds is excluded from gross income for federal income tax purposes under 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, and (ii) the Series 2023 Bonds, the transfer thereof, and the income therefrom, including any profit made on the sale thereof, are free from taxation within the State of Ohio. Interest on the Series 2023 Bonds may be subject to certain federal taxes imposed only on certain corporations. See "TAX MATTERS" herein.

OFFICIAL STATEMENT \$52,865,000 STATE OF OHIO (TREASURER OF STATE)

Capital Facilities Lease-Appropriation Bonds, Series 2023A (Transportation Building Fund Projects)

Dated: Date of Initial Delivery

Due: On April 1 in the years shown below

The Series 2023 Bonds: The \$52,865,000 State of Ohio (Treasurer of State) Capital Facilities Lease-Appropriation Bonds, Series 2023A (Transportation Building Fund Projects) (the "Series 2023 Bonds") will be issued for the purpose of paying Costs of Capital Facilities to be leased to the Department of Transportation (the "DOT"). (See THE SERIES 2023 BONDS)

Security and Sources of Payment: The Series 2023 Bonds are special obligations of the State, issued by the State Treasurer of Ohio (the "Treasurer"), and are payable solely from Pledged Receipts, principally rental payments under a lease between the Ohio Public Facilities Commission (the "OPFC") and the DOT, and a supplemental lease thereto relating to the Series 2023 Bonds. The obligations of the DOT to make the rental payments are subject to and dependent upon biennial appropriations being made for such purposes by the General Assembly. The failure of the General Assembly to so appropriate moneys to the DOT will result in termination of the Lease. The Series 2023 Bonds do not represent or constitute a debt of the Treasurer, the DOT, the OPFC or the State of Ohio or any political subdivision thereof, or a pledge of the faith and credit of the Treasurer, the DOT, the OPFC or the State of Ohio or any political subdivision thereof. The Holders and Beneficial Owners of the Series 2023 Bonds shall have no right to have excises or taxes levied by the General Assembly for the payment of Bond Service Charges on the Series 2023 Bonds. (See THE BONDS GENERALLY – Security)

Payment: Principal and interest will be payable to the Registered Owner (initially, The Depository Trust Company or its nominee ("DTC")), the principal on presentation and surrender to the Trustee for the Series 2023 Bonds, being U.S. Bank Trust Company, National Association, and interest transmitted on each Interest Payment Date. The Interest Payment Dates for the Series 2023 Bonds are April 1 and October 1, beginning October 1, 2023. (See **THE SERIES 2023 BONDS**)

Prior Redemption: The Series 2023 Bonds maturing on and after April 1, 2034 are subject to redemption prior to maturity at the option of the Treasurer, either in whole or in part (as selected by the Treasurer and in integral multiples of \$5,000), on any date on or after April 1, 2033. (See **THE SERIES 2023 BONDS –Prior Redemption**)

Form and Denomination; Book-Entry: The Series 2023 Bonds will be initially issued only as fully registered bonds under a book-entry only method in denominations of \$5,000 or any multiple of \$5,000 in excess thereof. DTC, New York, New York, is the Securities Depository. There will be no distribution of bond certificates to others. (See APPENDIX C –BOOK-ENTRY SYSTEM; DTC)

PRINCIPAL MATURITY SCHEDULE

April 1		Interest			April 1		Interest		
Maturity	Principal	Rate	Yield	CUSIP*	Maturity	Principal	Rate	Yield	CUSIP*
2024	\$2,705,000	5.000%	2.95%	67759HPV0	2032	\$3,600,000	5.000%	2.600%	67759HQD9
2025	2,560,000	5.000	2.680	67759HPW8	2033	3,780,000	5.000	2.650	67759HQE7
2026	2,690,000	5.000	2.600	67759HPX6	2034	3,970,000	5.000	2.710°	67759HQF4
2027	2,820,000	5.000	2.530	67759HPY4	2035	4,170,000	5.000	2.850°	67759HQG2
2028	2,965,000	5.000	2.510	67759HPZ1	2036	4,380,000	5.000	3.040°	67759HQH0
2029	3,110,000	5.000	2.520	67759HQA5	2037	4,595,000	5.000	3.170°	67759HQJ6
2030	3,265,000	5.000	2.520	67759HQB3	2038	4,825,000	5.000	3.290°	67759HQK3
2031	3,430,000	5.000	2.550	67759HQC1					

^C Yield to call date April 1, 2033.

This Cover 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. Capitalized terms used on this Cover and elsewhere herein and not otherwise defined have the meanings given to them in APPENDIX B – GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE.

The Series 2023 Bonds are offered when, as and if issued by the Treasurer and accepted by the Underwriters, subject to the opinion on certain legal matters relating to their issuance by Tucker Ellis LLP, Bond Counsel, and certain other conditions. Certain legal matters will be passed upon for the Underwriters by their counsel Brennan, Manna & Diamond, LLC. Certain legal matters will be passed upon for the Treasurer by his counsel, the Attorney General of Ohio, Dave Yost, and by Dinsmore & Shohl LLP, which is serving as Issuer and Disclosure Counsel to the Treasurer. The Series 2023 Bonds are expected to be available in definitive form for delivery through DTC on or about May 9, 2023.

HUNTINGTON CAPITAL MARKETS

ACADEMY SECURITIES, INC.

JANNEY MONTGOMERY SCOTT LLC

RAYMOND JAMES & ASSOCIATES, INC.

The date of this Official Statement is April 25, 2023, and the information speaks only as of that date.

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See inside regarding copyright.

REGARDING THIS OFFICIAL STATEMENT

This Official Statement does not constitute an offering of any security other than the original offering of the Series 2023 Bonds of the State of Ohio (the "State") identified on the Cover. No person has been authorized by the Treasurer, the DOT, the OPFC, the State or the Underwriters 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 Treasurer, the DOT, the OPFC, the State or the Underwriters. 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 Series 2023 Bonds by any person, in any jurisdiction in which it is unlawful to make such offer, solicitation or sale.

Upon issuance, the Series 2023 Bonds will not be registered by the Treasurer, the DOT, the OPFC or 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 Treasurer, the DOT and the Ohio Office of Budget and Management, will have passed upon the accuracy or adequacy of this Official Statement or approved the Series 2023 Bonds for sale. In making an investment decision, investors must rely on their own examination of the terms of the offering, including the merits and risks involved.

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 Treasurer, the DOT, the OPFC or the State since its date.

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 for the purpose 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. The Trustee has not reviewed this Official Statement and makes no representations as to the information contained in this Official Statement

This Official Statement, including its Appendices and Exhibits, contains statements that the State or the Treasurer 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 Treasurer 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 Treasurer undertake no obligation, and do not plan, to issue any updates or revisions to any of the forward-looking statements in this Official Statement. In addition, there has been no attempt to assess the forward-looking impact of COVID-19 on the State and the outlook for the State, as discussed in APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO – FISCAL MATTERS – Outbreak of COVID-19.

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 guarantee the accuracy or completeness of such information.

In connection with this offering, the Underwriters may over allot or effect transactions that stabilize or maintain the market price of the Series 2023 Bonds at a level above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time.

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TABLE OF CONTENTS

SUMMARY STATEMENTi	APPENDIX A – INFORMATION CONCERNIN	[G
GENERAL INTRODUCTORY STATEMENT1	THE STATE OF OHIO	A-
Rental Payments and Bond Service Charges1	Fiscal Matters	
	General	
THE SERIES 2023 BONDS2	Accounts and Controls; Financial Reports	
General2	Recent Receipts and Disbursements	
Registration, Payment and Transfer2	Summary of Governmental and Proprietary	7
Payments of Bond Service Charges on the	Funds – Cash Receipts and Cash	A .
Series 2023 Bonds	Disbursements	
Optional Redemption2	Summary of GRF Cash Basis Activity Recent and Current Finances	
Notice and Procedure for Redemption3	Introductory Information	
Selection of Series 2023 Bonds to be Redeemed3	Recent Biennia	
Sources and Uses of Bond Proceeds4	Current Biennium	
	Outbreak of COVID-19	
THE BONDS GENERALLY4	Cash Flow	
Constitutional and Statutory Authorization4	State Debt	A-1
Additional Bonds4	General	
Security4	Variable Rate Debt	
Rental Payments and Related Budget Requirements.5	Interest Rate Swaps	A-18
	Constitutional Limitation on Annual Debt	
THE PROJECTS5	Service	A-18
DEPARTMENT OF TRANSPORTATION6	Annual Debt Service Requirements on State	A 20
TRANSPORTATION BUILDING FUND6	Obligations Paid from the GRF Annual Debt Service Requirements on State	A-20
OHIO PUBLIC FACILITIES COMMISSION6	Obligations Paid from Non-GRF Revenues	
THE TRUST AGREEMENT7	Debt Authorizations	
	Economy and Employment	
THE LEASE7	Population	
TAX MATTERS8	Agricultural and Resources Bases	A-28
General8	State Employees and Collective Bargaining Agreements	۸ 29
Risk of Future Legislative Changes and/or Court	Retirement Systems	
Decisions9	Retirement Contributions	A-30
Original Issue Premium9	Pension Benefits	
_	Other Post-Employment Benefits	
LITIGATION10	Tax Levels and Tax Bases	A-3′
LEGAL OPINIONS10	Sales and Use Tax	A-3′
RATINGS10	Personal Income Tax	
	Commercial Activity Tax	
UNDERWRITING10	Property Tax	
MUNICIPAL ADVISOR11	Schools and Municipalities	
TRANSCRIPT AND CLOSING CERTIFICATES11	Schools	
CONTINUING DISCLOSURE AGREEMENT11	Municipalities	
	APPENDIX B GLOSSARY AND SUMMARIES	
ELIGIBILITY FOR INVESTMENT AND AS PUBLIC MONEYS SECURITY	OF THE TRUST AGREEMENT AND THE LEA	ASEB-
	APPENDIX C BOOK-ENTRY SYSTEM; DTC	
CONCLUDING STATEMENT14	EXHIBIT A PROPOSED TEXT OF BOND	
	COUNSEL LEGAL OPINIONEx	hibit A-



SUMMARY STATEMENT

The following summary statement supplements certain of the information on the Cover and summarizes selected other information in this Official Statement relating to the Series 2023 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, by the State Treasurer of Ohio.

AUTHORIZATION. The Series 2023 Bonds are issued pursuant to Section 2i of Article VIII of the Constitution of the State, Chapter 154 of the Revised Code, the General Bond Order, the Trust Agreement, the Lease and the Series 2023A Order, providing for the issuance and sale of the Series 2023 Bonds.

SECURITY AND SOURCES OF PAYMENT. The Series 2023 Bonds are special obligations of the State, issued by the Treasurer, payable solely from the Pledged Receipts. Holders and Beneficial Owners have no right to have excises or taxes levied by the General Assembly for payment of the Series 2023 Bonds. The Series 2023 Bonds (and any other Obligations issued) are secured by the Trust Agreement. Principal, interest and any premium on the Series 2023 Bonds are payable from and secured by a pledge of payments received in the Bond Service Fund for the Series 2023 Bonds from rentals and other revenues and receipts under the Lease. There are no receipts from the Projects pledged to pay Bond Service Charges on the Series 2023 Bonds. The Projects are not mortgaged to pay, and otherwise are not security for, the Series 2023 Bonds.

All moneys received by the Treasurer under the Lease, excepting the portion of those moneys to be credited to the Administrative Service Fund, shall be deposited to the Bond Service Fund for the Series 2023 Bonds and allocated to the Bond Service Account and Special Funds and Accounts as provided by the Lease. The obligations of the DOT to make rental payments under the Lease are subject to and dependent upon biennial appropriations being made by the General Assembly for such purpose. Those appropriations may not be made for a period longer than the fiscal biennium, which initially ends June 30, 2023 but which thereafter is a two-year period ending on June 30 of each odd-numbered year. The failure of the General Assembly to appropriate moneys to the DOT will result in termination of the Lease. The Series 2023 Bonds do not represent or constitute a debt of the Treasurer, the DOT, the OPFC or the State or of any political subdivision thereof, or a pledge of the faith and credit of the Treasurer, the DOT, the OPFC or the State or of any political subdivision thereof.

Certain financial and other information concerning the State is contained in APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO, which is attached hereto and should be reviewed carefully because rental payments under the Lease are paid with moneys appropriated by the General Assembly for such purposes. Historically, the General Assembly has appropriated monies to pay debt service on these Obligations from the State's motor fuel tax and other highway user receipts that are constitutionally restricted in use to highway related purposes. (See APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO – STATE DEBT – General, APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO – STATE DEBT – Constitutional Limitation on Annual Debt Service, and APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO – FISCAL MATTERS – Recent Receipts and Disbursements)

PURPOSE OF BONDS. The Series 2023 Bonds are being issued for the purpose of paying (i) Costs of Capital Facilities to be leased to the DOT, and (ii) costs incidental to the issuance and sale of the Series 2023 Bonds.

PRIOR REDEMPTION. The Series 2023 Bonds maturing on or before April 1, 2033 are not subject to redemption prior to maturity. The Series 2023 Bonds maturing on and after April 1, 2034 are subject to redemption prior to maturity at the option of the Treasurer, either in whole or in part (as selected by the Treasurer and in integral multiples of \$5,000), on any date on or after April 1, 2033 at 100% of the principal amount redeemed plus interest accrued to the redemption date. (See **THE SERIES 2023 BONDS –Prior Redemption**)

FORM AND MANNER OF MAKING PAYMENTS. The Series 2023 Bonds will be originally issued only as fully registered bonds, one for each respective maturity bearing 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"). The Series 2023 Bonds will be initially issued in denominations of \$5,000 or any multiple of \$5,000 in excess thereof. There will be no distribution of Series 2023 Bonds to the ultimate purchasers. The Series 2023 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 C – BOOK-ENTRY SYSTEM; DTC)

Principal and interest will be payable to the Holder (initially, DTC or its nominee). Principal will be payable on presentation and surrender to the Trustee. Interest will be transmitted by the Trustee on each Interest Payment Date to the Holder as of the 15th day of the month preceding the Interest Payment Date (the "Regular Record Date"). The Interest Payment Dates for the Series 2023 Bonds are April 1 and October 1, beginning October 1, 2023. (See **THE SERIES 2023 BONDS**)

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 Series 2023 Bonds is excluded from gross income for federal income tax purposes under 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, and (ii) the Series 2023 Bonds, the transfer thereof, and the income therefrom, including any profit made on the sale thereof, are free from taxation within the State of Ohio. Interest on the Series 2023 Bonds may be subject to certain federal taxes imposed only on certain corporations.

For a more complete discussion of the tax aspects of the Series 2023 Bonds, see TAX MATTERS herein.

TRUSTEE AND BOND REGISTRAR. U.S. Bank Trust Company, National Association is the Trustee and the Bond Registrar for the Series 2023 Bonds.

BOND COUNSEL. Tucker Ellis LLP.

ISSUER AND DISCLOSURE COUNSEL. Dinsmore & Shohl LLP.

MUNICIPAL ADVISOR. Acacia Financial Group, Inc.

UNDERWRITERS. Huntington Securities, Inc., Academy Securities, Inc., Janney Montgomery Scott LLC, and Raymond James & Associates, Inc. (collectively, the "Underwriters"). The Series 2023 Bonds have been purchased by the Underwriters at a purchase price of \$60,223,202.68. (See **UNDERWRITING**)

Questions regarding this Official Statement or the Series 2023 Bonds should be directed to the Director of the Office of Debt Management, State of Ohio, Treasurer of State, 30 East Broad Street, 9th Floor, Columbus, Ohio 43215-3414, telephone (614) 466-7752. For additional information concerning the Treasurer and the Treasurer's bond programs, visit www.ohiotreasurerbonds.com. 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 State Treasurer of Ohio (the "Treasurer") to provide certain information in connection with the original issuance and sale of the \$52,865,000 State of Ohio (Treasurer of State) Capital Facilities Lease-Appropriation Bonds, Series 2023A (Transportation Building Fund Projects) (the "Series 2023 Bonds"). The Series 2023 Bonds are being issued pursuant to Section 2i of Article VIII of the Ohio Constitution under powers granted to the Treasurer by Chapter 154 of the Revised Code as the issuing authority in all matters relating to the issuance of special obligation bonds for the financing of Capital Facilities, as that term is defined in Sections 154.01 and 154.24 of the Revised Code, for housing branches and agencies of state government.

Capitalized terms not otherwise defined in the text of this Official Statement shall have the meanings given to them in APPENDIX B – GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE.

The Series 2023 Bonds are issued pursuant to a Trust Agreement dated as of January 1, 2015 (the "Original Trust Agreement") and the Series 2023A Supplemental Trust Agreement thereto dated as of May 1, 2023 (the "Series 2023A Supplemental Trust Agreement"), each between the State, acting by and through the Treasurer, and U.S. Bank Trust Company, National Association, as Trustee (the "Trustee"). The Original Trust Agreement as amended and supplemented, including as supplemented by the Series 2023A Supplemental Trust Agreement, is referred to as the "Trust Agreement." The Series 2023 Bonds are authorized by the General Bond Order issued by the Treasurer on January 13, 2015 (the "General Bond Order") and Series Order No. 1-23 issued by the Treasurer on April 25, 2023 (the "Series 2023A Order").

Proceeds from the sale of the Series 2023 Bonds will be used for the purpose of paying (i) Costs of Capital Facilities to be leased to the Department of Transportation (the "DOT") by the OPFC, and (ii) costs incidental to the issuance and sale of the Series 2023 Bonds. (See **THE SERIES 2023 BONDS - Sources and Uses of Bond Proceeds**)

The OPFC will lease the Capital Facilities to the DOT pursuant to the terms of a Lease Agreement dated as of January 1, 2015 (the "Original Lease Agreement") and a Series 2023A Supplemental Lease Agreement thereto dated as of May 1, 2023 (the "Series 2023A Supplemental Lease"), each between the OPFC and the DOT. The Original Lease Agreement as amended and supplemented, including as supplemented by the Series 2023A Supplemental Lease, is referred to as the "Lease." The term of the Lease expires June 30, 2023, and is renewable for successive terms not to exceed two years upon appropriation by the General Assembly to the DOT of the amounts required for rental payments for each successive term.

Rental Payments and Bond Service Charges

The aforementioned Lease requires rental payments from the DOT sufficient to pay (i) the Bond Service Charges on the Series 2023 Bonds and any other Obligations issued under the Trust Agreement, (ii) certain administrative costs of the Treasurer and (iii) any rebate amount or other related payments to maintain the exclusion from gross income for federal income tax purposes of the interest on the Series 2023 Bonds pursuant to Section 148(f) of the Code, if necessary. The rental payments from the DOT constituting Basic Rent for the Lease are assigned by the OPFC to the Treasurer, are paid directly to the Treasurer, are pledged by the State pursuant to the Trust Agreement for the payment of Bond Service Charges on the Series 2023 Bonds and are required to be deposited to the Bond Service Fund pursuant to the Trust Agreement. (See APPENDIX B – GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE)

The obligations of the DOT to make rental payments and to perform other obligations involving expenditures under the Lease are subject to and dependent upon biennial appropriations to the DOT being made by the General Assembly for such purpose. If the General Assembly fails to appropriate moneys to renew the Lease, the Lease will terminate. Under the Lease, the OPFC has waived all rights it may have to recover possession of the Projects in the event of the termination of the Lease. If the General Assembly fails to appropriate moneys to renew the Lease, the OPFC does not have the remedies generally available to lessors upon default under or termination of a lease and the OPFC, the Treasurer and the Trustee may have no practical remedy to ensure that moneys are available for the payment of Bond Service Charges on the Series 2023 Bonds. (See APPENDIX B – GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE)

Based upon the projected Bond Service Charges on the Series 2023 Bonds and the Treasurer's estimated administrative expenses for the biennium ending June 30, 2023, the amounts currently appropriated by the General Assembly for the rental payments to be paid by the DOT to the Treasurer under the Lease, together with existing moneys on deposit in the Bond Service Fund, will be sufficient to pay the Bond Service Charges, together with such sums, if any, as shall be necessary to pay certain administrative expenses of the Treasurer (for example, Trustee fees) for such biennium, including any amounts due as Additional Rent under the Lease. There is <u>no</u> Required Reserve for the Series 2023 Bonds.

This Official Statement contains brief descriptions of the Series 2023 Bonds, the security for the Series 2023 Bonds, the Treasurer, the DOT, the OPFC, the Projects, the Lease and the Trust Agreement. Certain financial and other information concerning the State is contained in APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO hereto and should be reviewed carefully because rental payments under the Lease are paid with moneys appropriated by the General Assembly for such purposes. Historically, the General Assembly has appropriated monies to pay debt service on these Obligations from the State's motor fuel tax and other highway user receipts that are constitutionally restricted in use to highway related purposes. (See APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO – STATE DEBT – General, APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO – STATE DEBT – Constitutional Limitation on Annual Debt Service, and APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO – FISCAL MATTERS – Recent Receipts and Disbursements)

All financial and other data included herein have been provided by the Treasurer, the DOT or the State, except that which is attributed to other sources. The summaries of the documents described herein do not purport to be comprehensive or definitive and are qualified in their entirety by reference to such documents. Copies of the Lease and the Trust Agreement may be obtained from the Treasurer and the Trustee and, during the initial offering period, from the Underwriters.

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.

THE SERIES 2023 BONDS

General

The Series 2023 Bonds will be issued pursuant to the constitutional and statutory authorities described herein and the General Bond Order and the Series 2023A Order issued by the Treasurer. The Series 2023 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 360-day year of twelve 30-day months.

The Series 2023 Bonds are issued under the Trust Agreement and are payable from appropriations by the General Assembly for rental payments under the Lease.

Registration, Payment and Transfer

The Series 2023 Bonds will be issued and issuable only as one fully registered bond for each maturity bearing the same interest rate in the name of Cede & Co., as nominee for The Depository Trust Company ("DTC"), New York, New York, as Holder of all the Series 2023 Bonds. The fully registered Series 2023 Bonds will be retained and immobilized in the custody of DTC. For discussion of the book-entry system and DTC, see **APPENDIX C – BOOK-ENTRY SYSTEM**; **DTC**. DTC (or any successor Securities Depository), or its nominee, for all purposes under the Trust Agreement will be considered to be the sole Holder of the Series 2023 Bonds. The Series 2023 Bonds will be initially issued in denominations of \$5,000 or any multiple of \$5,000 in excess thereof.

Payments of Bond Service Charges on the Series 2023 Bonds

The principal of the Series 2023 Bonds will be payable to the Holder (initially DTC, or its nominee) upon presentation and surrender of the Series 2023 Bonds at the designated corporate trust office of the Trustee as Paying Agent for the Series 2023 Bonds. The Series 2023 Bonds will bear interest on their unpaid principal amounts payable on each Interest Payment Date to the Holder (initially DTC, or its nominee) at the address shown on the Bond Register as of the close of business on the 15th day of the calendar month next preceding such Interest Payment Date (the "Regular Record Date"); provided that, so long as the Series 2023 Bonds remain in book-entry form, the Trustee for the Series 2023 Bonds will make any payment of Bond Service Charges by wire transfer of funds on each Interest Payment Date. The Interest Payment Dates for the Series 2023 Bonds are April 1 and October 1, beginning October 1, 2023.

Optional Redemption

The Series 2023 Bonds maturing on or before April 1, 2033 are <u>not</u> subject to redemption prior to maturity. The Series 2023 Bonds maturing on and after April 1, 2034 are subject to redemption prior to maturity at the option of the Treasurer, either in whole or in part (as selected by the Treasurer and in integral multiples of \$5,000), on any date on or after April 1, 2033 at 100% of the principal amount redeemed plus interest accrued to the redemption date.

Notice and Procedure for Redemption

Notice of call for any redemption of any Series 2023 Bonds subject to optional redemption identifying the Series 2023 Bonds or portions thereof to be redeemed, the date fixed for redemption and the places where the amounts due upon that redemption are payable, will be given by the Trustee, on behalf of the Treasurer, by mailing a copy of the redemption notice no less than 30 days prior to the date fixed for redemption to the Holders of the Series 2023 Bonds to be redeemed as shown on the Bond Register for those Series 2023 Bonds who are shown as Holders at the close of business on the 15th day preceding such mailing, at the address then appearing on the Bond Register; provided that failure to receive notice, or any defect in that notice as to any Series 2023 Bond will not affect the validity of the proceedings for the redemption of any other Series 2023 Bond. So long as the Series 2023 Bonds remain in book-entry form, the Trustee will send the notice for those Series 2023 Bonds to the Securities Depository, currently DTC, or its nominee. Any failure of the Securities Depository to notify any Direct or Indirect Participant, or of any Direct or Indirect Participant to notify the Beneficial Owner of any such notice, will not affect the validity of the redemption of the Series 2023 Bonds.

Selection of Series 2023 Bonds to be Redeemed

If fewer than all of the Series 2023 Bonds are to be called for redemption at one time, the Treasurer will determine the maturities of the Series 2023 Bonds to be redeemed. If fewer than all of the Series 2023 Bonds of a single maturity bearing the same interest rate are to be redeemed, the selection of the Series 2023 Bonds to be redeemed, or portions thereof in amounts of \$5,000 or any integral multiple thereof, will, so long as the Series 2023 Bonds remain in book-entry form, be made by the Securities Depository and its participants. If the Series 2023 Bonds are not then in a book-entry form and if less than all of the Series 2023 Bonds of a single maturity bearing the same interest rate are to be redeemed, the selection of the Series 2023 Bonds or portions thereof in amounts of \$5,000 or in an integral multiple thereof to be redeemed, will be made by the Treasurer in any manner in which the Treasurer shall determine.

For so long as the Series 2023 Bonds are registered in book-entry form and the Securities Depository or its nominee is the sole Registered Owner of the Series 2023 Bonds, the Bond Registrar will give notice of redemption only to the Securities Depository, currently DTC or its nominee, as Registered Owner. The allocation and the selection of the book-entry interests of Series 2023 Bonds to be redeemed, and the notice thereof from the Securities Depository, currently DTC or its nominee, will be by and is the sole responsibility of DTC and its Direct Participants and those working through those Direct Participants.

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Sources and Uses of Bond Proceeds

The proceeds of the Series 2023 Bonds will be applied for the following uses and purposes:

Sources of Funds:	
Par Amount	\$52,865,000.00
Premium	7,590,283.40
Total Sources	<u>\$60,455,283.40</u>
<u>Uses of Funds</u> :	
Deposit to Improvement Fund ¹	\$60,000,000.00
Financing Costs ²	455,283.40
Total Uses	\$60,455,283.40

- ¹ Referred to as the "Transportation Building Fund" herein.
- ² Includes underwriters' discount, certain legal fees, printing costs and other costs of issuance.

A portion of the premium, if any, received by the Treasurer from the sale of the Series 2023 Bonds will be used to pay costs of issuance of the Series 2023 Bonds and will be deposited in the Administrative Service Fund. As and to the extent provided in the Act and the Series 2023A Order, on the date of delivery of the Series 2023 Bonds, certain proceeds received by the Treasurer from the sale of the Series 2023 Bonds will be deposited in the Transportation Building Fund to pay Costs of Capital Facilities.

THE BONDS GENERALLY

Constitutional and Statutory Authorization

The Series 2023 Bonds are authorized under Section 2i of Article VIII of the Ohio Constitution. This constitutional amendment, adopted in November 1968, authorized the issuance of State special obligation bonds or notes for the purpose of paying the Costs of Capital Facilities for housing branches and agencies of state government. Chapter 154 of the Revised Code (the "Act") implements the bond issuing aspects of that constitutional provision. The "issuing authority" for the Series 2023 Bonds is the Treasurer. The Treasurer is part of the executive department of the State and is a key officer of the State elected to office for a four-year term.

Additional Bonds

The Treasurer has the authority to issue Obligations, including the Series 2023 Bonds and any subsequent Additional Bonds under the Trust Agreement, for the purpose of paying Costs of Capital Facilities in an amount not exceeding the amount authorized by the General Assembly (See APPENDIX A – INFORMATION CONCERNING THE STATE OF OHIO – STATE DEBT – Constitutional Limitation on Annual Debt Service) or for the purpose of refunding one or more series or one or more maturities within a series of Obligations previously issued under the Trust Agreement. Any Additional Bonds will be payable from the Pledged Receipts under the Trust Agreement, on a parity basis with the Series 2023 Bonds and any other Obligations outstanding under the Trust Agreement. (See APPENDIX B – GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE)

Security

The Series 2023 Bonds are special obligations of the State issued by the Treasurer under and pursuant to the Trust Agreement. The Series 2023 Bonds are payable solely from and, together with any Additional Bonds and any other Obligations outstanding under the Trust Agreement, are equally and ratably secured by a pledge of the Pledged Receipts. See **Rental Payments and Related Budget Requirements** below.

The Series 2023 Bonds are payable from appropriations by the General Assembly for rental payments under the Lease.

The Series 2023 Bonds will be entitled only to the security afforded by the Pledged Receipts under the Trust Agreement on a parity basis with Additional Bonds and any other Obligations issued under the Trust Agreement. Neither the financed Projects nor any interest therein is pledged or mortgaged as security for the Series 2023 Bonds, nor will the OPFC, the Trustee or the Treasurer have the right to take possession of or operate the Projects upon a default under, or termination of, the Lease. (See APPENDIX B – GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE)

The proceeds of the Series 2023 Bonds deposited in the Transportation Building Fund maintained in the custody of the Treasurer are not held by the Trustee under the Trust Agreement. Funds in the Transportation Building Fund are not pledged as security for the Series 2023 Bonds or any other bonds issued by the Treasurer. (See **TRANSPORTATION BUILDING FUND**)

Rental Payments and Related Budget Requirements

The Lease requires payment of Basic Rent in an amount at least equal to: (i) Bond Service Charges on all outstanding Obligations issued under the Trust Agreement (whether due as scheduled, as a result of a call for redemption or as a result of an acceleration of principal and interest on such Obligations); and (ii) such sums, if any, as shall be necessary to maintain any applicable Required Reserve in the Bond Service Reserve Account (no Required Reserve is provided for or required with respect to the Series 2023 Bonds or any Obligations previously issued under the Trust Agreement). The Lease also requires payment of Additional Rent in an amount equal to certain administrative fees, expenses and obligations other than Bond Service Charges incurred by the Treasurer and amounts sufficient to pay any rebate amount or other related payments to maintain the exclusion from gross income for federal income tax purposes of the interest on the Series 2023 Bonds pursuant to Section 148(f) of the Code, to the extent not available from other sources.

The Lease requires the OPFC (by and through the Treasurer) to periodically prepare and submit to the DOT reports estimating the rental payments to be due thereunder, taking into account existing monies on deposit in the Bond Service Fund, which reports must be confirmed by the Director of the State's Office of Budget and Management. The obligation of the DOT to make rental payments pursuant to the Lease is expressly made subject to the appropriation of moneys by the General Assembly for such purpose. Under the Ohio Constitution, an appropriation may not be made beyond the fiscal biennium. The term of the Lease expires no later than the end of each State fiscal biennium (currently June 30 of each odd-numbered year, e.g., June 30, 2023), unless the General Assembly has appropriated funds for the purpose of paying the rents and other sums payable thereunder for the next succeeding State fiscal biennium. The term of the Lease will be renewed for an additional term not exceeding two years (commencing on the first day of the new State fiscal biennium) upon such appropriations becoming effective on or prior to the beginning of each State fiscal biennium (currently July 1 of each odd-numbered year, e.g., July 1, 2023). The present obligation of the DOT to make rental payments under the Lease will continue, so long as the Lease is renewed, until all Obligations issued under the Trust Agreement have been paid. So long as the Lease remains in effect, the obligation of the DOT to make its rental payments thereunder in amounts sufficient to pay the Bond Service Charges and for other purposes set forth above is absolute and unconditional, subject only to the availability of moneys appropriated for such purpose. In the Lease, the DOT has agreed to submit budget requests in accordance with applicable laws in amounts sufficient to pay rental payments under the Lease.

The obligation of the DOT to make rental payments under the Lease is subject to and dependent upon biennial appropriations for the DOT being made by the General Assembly for such purpose. As noted above, the General Assembly may not, under the provisions of the Ohio Constitution, make appropriations for a period longer than two years. While the Treasurer and the OPFC expect that the General Assembly will, for each State fiscal biennium, continue to appropriate amounts to the DOT sufficient to meet its rental payment obligations to the OPFC under the Lease consistent with the State budget, the General Assembly is not under a legal obligation to make appropriations in accordance with such State budgets for future State fiscal biennia. Accordingly, none of the Treasurer, the OPFC or the DOT can make any assurance that appropriations will be made. THE SERIES 2023 BONDS ARE SPECIAL OBLIGATIONS OF THE STATE ISSUED BY THE TREASURER PAYABLE SOLELY FROM THE PLEDGED RECEIPTS UNDER THE TRUST AGREEMENT. THE SERIES 2023 BONDS DO NOT REPRESENT OR CONSTITUTE A DEBT OF THE STATE, THE TREASURER, THE DOT, THE OPFC OR ANY POLITICAL SUBDIVISION OF THE STATE, NOR A PLEDGE OF THE FAITH AND CREDIT OF THE STATE, THE TREASURER, THE DOT, THE OPFC OR ANY POLITICAL SUBDIVISION OF THE STATE. THE HOLDERS AND BENEFICIAL OWNERS OF THE SERIES 2023 BONDS WILL HAVE NO RIGHT TO HAVE EXCISES OR TAXES LEVIED BY THE GENERAL ASSEMBLY FOR THE PAYMENT OF THE BOND SERVICE CHARGES ON THE SERIES 2023 BONDS. (See APPENDIX B - GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE)

THE PROJECTS

The Projects financed with proceeds from the Series 2023 Bonds include a portion of the costs of various Capital Facilities of the DOT as provided in the General Assembly appropriation acts. These capital improvements consist of acquiring, constructing, reconstructing, rehabilitating, remodeling, renovating, enlarging, improving, altering, equipping and furnishing such facilities, including the sites therefor.

DEPARTMENT OF TRANSPORTATION

The Department of Transportation (the "DOT") was established on September 29, 1972, by the General Assembly through the expansion of the responsibilities of the former Ohio Department of Highways to include all modes of transportation. Over the past four decades, as its modal responsibilities have increased, the DOT has added organizational units responsible for administering federal and State programs relating to aviation and public transportation. The DOT is responsible for planning, designing, constructing, maintaining and rehabilitating the State's highway system, administering federal funds used by local jurisdictions in constructing and maintaining their local roads and bridges, and administering both federal and State funds which provide grants for aviation, bridges, public transportation and waterway facilities and programs throughout the State.

The DOT is one of the largest agencies of State government, with approximately 4,900 employees. The DOT consists of a central headquarters office, located in Columbus, Ohio and 12 District Offices located throughout the State. The Director of Transportation is appointed by the Governor.

The DOT is a highly decentralized organization, with most highway-related functions performed in its 12 geographic districts. Approximately 85 percent of the DOT's employees are located in the 12 district, 88 county and 100 outpost facilities throughout the State. The districts perform planning, design, construction, engineering, material testing, and maintenance functions for the DOT. The 12 districts are each headed by a District Deputy Director, who reports to the Director of Transportation.

The DOT's Central Office contains the offices and divisions which provide technical and administrative support to the districts for both highway and modal programs. The organization of the Central Office consists of the Transportation Policy and Chief Engineer Divisions, the Business and Human Resources Divisions, the Field Operations Divisions, and the Director of Transportation's administrative support staff. These divisions and their respective offices develop policies and procedures, provide technical support and monitor the districts for compliance with established procedures. All construction contracts are advertised and awarded by the Central Office.

The State has the eighth largest highway network in the country, with approximately 123,000 miles of roadway, of which approximately 19,200 miles are under the DOT's jurisdiction. The DOT is responsible for and/or is involved in a wide variety of programs and projects relating to aviation, bicycling, highways, public transportation and waterways. The DOT's annual budget for all programs is approximately \$3.5 billion. Major funding sources for the DOT's highway program include state motor fuel taxes and fees and Title 23 Moneys received from the United States Department of Transportation. Major funding sources for the DOT's modal programs include State General Revenue Fund moneys and Title 23 Moneys.

TRANSPORTATION BUILDING FUND

The Transportation Building Fund was created by the General Assembly in the State treasury as a separate account in the custody of the Treasurer. A portion of the proceeds from the sale of the Series 2023 Bonds will be deposited in the Transportation Building Fund. (See **THE SERIES 2023 BONDS – Sources and Uses of Bond Proceeds**) Moneys in the Transportation Building Fund are applied and disbursed for the payment or reimbursement of Costs of Capital Facilities incurred for and in connection with the Projects and are invested and reinvested in accordance with law and in accordance with procedures therefor established by the Treasurer, the DOT and the Director of Budget and Management. Any investment income or moneys in the Transportation Building Fund shall be credited to that fund, but may be transferred to the Administrative Service Fund to pay any rebate amount, or to pay an amount in lieu of or in addition to any rebate amount to be paid to the United States of America to maintain the exclusion from gross income for federal income tax purposes of interest on bonds, including the Series 2023 Bonds pursuant to Section 148(f) of the Code.

Moneys on deposit in the Transportation Building Fund are <u>not</u> pledged to the payment of Bond Service Charges on the Series 2023 Bonds or any other Obligations issued by the Treasurer.

OHIO PUBLIC FACILITIES COMMISSION

The Ohio Public Facilities Commission (the "OPFC") 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), Treasurer of State (Robert Cole 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 run to January 2027. Commission members may, at Commission meetings, act through appointed designees.

THE TRUST AGREEMENT

The Trust Agreement provides for a pledge of the Pledged Receipts (primarily the Basic Rent payable under the Lease) by the State to the Trustee, for the benefit of Holders of the Obligations issued under the Trust Agreement, including the Series 2023 Bonds. All outstanding Obligations issued under the Trust Agreement are equally and ratably secured, without distinction by reason of series designation, number, date of authorization, issuance, sale, execution or delivery, or issue date or of maturity, by the pledge of the Pledged Receipts to the extent provided in, and except as otherwise permitted by, the General Bond Order.

Nothing in the Act, the General Bond Order, the Trust Agreement or other Bond Proceedings gives the holders of Obligations, and they do not have, the right to have the General Assembly levy any excises or taxes for the payment of Bond Service Charges; each Obligation bears on its face a statement to that effect and to the effect that the right of Bondholders to the payment of Bond Service Charges is limited to payment from the Pledged Receipts, the Bond Service Account, and any other source of moneys as provided in the General Bond Order and in the Series 2023A Order. However, nothing in the Trust Agreement or in other Bond Proceedings shall be deemed to prohibit the Treasurer or the State, of the Treasurer's or the State's own volition, from using to the extent lawfully authorized to do so any other resources for the fulfillment of the terms, conditions or obligations of the Bond Proceedings and the Obligations.

The Trust Agreement is an essential document for the security of the Series 2023 Bonds and should be read in its entirety. For additional information and a document summary of the Trust Agreement, see **APPENDIX B – GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE**. Copies of the Trust Agreement and the Lease are available upon request from the Office of Debt Management, Treasurer of State, 30 East Broad Street, 9th Floor, Columbus, Ohio 43215 (telephone (614) 466-7752).

THE LEASE

The Act provides that the OPFC may lease any Capital Facilities to, and make or provide for other agreements with respect to the use or purchase of such Capital Facilities with, the DOT and, with its approval, any governmental agency having authority under law to operate such Capital Facilities. The OPFC and the DOT have previously entered into the Lease and will enter into the Series 2023A Supplemental Lease in connection with the Projects to be financed with proceeds of the Series 2023 Bonds and the issuance of the Series 2023 Bonds. An additional supplemental lease agreement will be entered into in connection with each issue of Additional Bonds under the Trust Agreement identifying the Projects to be financed or refinanced and providing for the related rentals.

The agreement of the DOT to make rental payments pursuant to the Lease, and to perform other obligations involving expenditures thereunder, at the times and in the amounts provided for in the Lease, is effective and binding upon the DOT only when and to the extent that funds have been appropriated by the General Assembly and are available for that purpose. Under the Ohio Constitution, an appropriation may not be made beyond the fiscal biennium, and the Lease may be renewed only for two-year periods. Under the terms of the Lease, a failure by the General Assembly to appropriate moneys at least equal to Bond Service Charges for the Lease, amounts the OPFC estimates are necessary for Additional Rent under the Lease, and other sums payable under the Lease for the next State fiscal biennium would result in the termination of the Lease at the end of the two-year term then in effect. The Lease will, however, be fully reinstated, as if it had never been terminated, provided (a) all overdue installments, if any, of interest on outstanding Obligations, all principal of all Obligations then outstanding which have become due and payable otherwise than by acceleration, if any, in accordance with the terms of the Trust Agreement, and all other sums then payable under or pursuant to the Trust Agreement (except the principal of and the interest on such Obligations which by such acceleration shall have become due and payable) shall have been paid, and such acceleration, if any, shall have been duly rescinded and annulled, and (b) the General Assembly shall have appropriated funds to enable the DOT to pay or provide for the payment of the amounts to be paid under the Lease, then in such event the Lease shall be fully reinstated, as if it had never been terminated.

Under the provisions of the Ohio Constitution, appropriations by the General Assembly may not be made for a period longer than the fiscal biennium, which begins July 1 and ends June 30 in each odd-numbered year. While the Treasurer and the OPFC expect that for each State fiscal biennium the General Assembly will appropriate amounts to the DOT estimated to be sufficient to meet payments under the Lease consistent with the State budget, the General Assembly is not under a legal obligation to make such appropriations to the DOT. Accordingly, none of the Treasurer, the OPFC or the DOT can make any assurance that appropriations will be made. Section 2i of Article VIII of the Ohio Constitution and the Act provide that the

owners and Holders of the Series 2023 Bonds are not given the right to have excises or taxes levied by the General Assembly for the payment of principal or interest thereon.

The Lease is an essential document for the security of the Series 2023 Bonds and should be read in its entirety. For additional information and a document summary of the Lease, see **APPENDIX B – GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE**. Copies of the Lease are available upon request from the Office of Debt Management, Treasurer of State, 30 East Broad Street, 9th Floor, Columbus, Ohio 43215 (telephone (614) 466-7752).

TAX MATTERS

General

In the opinion of Tucker Ellis LLP, Bond Counsel to the Treasurer, under existing law (i) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the Series 2023 Bonds is excluded from gross income for federal income tax purposes under 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) the Series 2023 Bonds, the transfer thereof, and the income therefrom, including any profit made on the sale thereof, are free from taxation within the State of Ohio. Interest on the Series 2023 Bonds may be subject to certain federal taxes imposed only on certain corporations, and certain taxpayers may have other federal tax consequences as a result of owning the Series 2023 Bonds. Bond Counsel will express no opinion as to any other tax consequences regarding the Series 2023 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 State contained in the transcript of proceedings and that are intended to evidence and assure the foregoing, including that the Series 2023 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 the State's certifications and representations or the continuing compliance with the State's covenants.

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 Series 2023 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, including provisions for the rebate of certain investment earnings to the federal government, require future or continued compliance after issuance of the obligations. Noncompliance with these requirements by the State may cause the interest on the Series 2023 Bonds to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2023 Bonds. The State has covenanted to take the actions required of it for the interest on the Series 2023 Bonds to be and to remain excludable 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 Series 2023 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 Series 2023 Bonds or the market value of the Series 2023 Bonds.

Interest on the Series 2023 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) for tax years beginning after December 31, 2022, 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 Series 2023 Bonds. Bond Counsel will express no opinion regarding those consequences.

Payments of interest on tax-exempt obligations, including the Series 2023 Bonds, are generally subject to IRS Form 1099-INT information reporting requirements. If a Series 2023 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 Series 2023 Bonds ends with the issuance of the Series 2023 Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the State or the owners of the Series 2023 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 Series 2023 Bonds, under current IRS procedures, the IRS will treat the State as the taxpayer and the beneficial owners of the Series 2023 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 Series 2023 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 Series 2023 Bonds.

Prospective purchasers of the Series 2023 Bonds upon their original issuance at prices other than the respective prices indicated on the Cover, and prospective purchasers of the Series 2023 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 Series 2023 Bonds. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the Series 2023 Bonds will not have an adverse effect on the tax status of interest or other income on the Series 2023 Bonds or the market value or marketability of the Series 2023 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 Series 2023 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 Series 2023 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 Series 2023 Bonds for federal income tax purposes for all or certain taxpayers. In all such events, the market value of the Series 2023 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

The Series 2023 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 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) 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 properly amortizable in any period with respect to the Premium Bonds, as to 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 Series 2023 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 Series 2023 Bonds.

The Treasurer, the DOT, the OPFC and the State are parties to various legal proceedings seeking damages or injunctive relief, which are generally incidental to their respective operations, but unrelated to the security for the Series 2023 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 Series 2023 Bonds or the security for the Series 2023 Bonds.

LEGAL OPINIONS

Legal matters incident to the issuance of the Series 2023 Bonds and with regard to the tax-exempt status of the interest thereon (see **TAX MATTERS**) are subject to the approving legal opinion of Tucker Ellis LLP, Bond Counsel. The signed legal opinion for the Series 2023 Bonds dated as of, and premised on the transcript of proceedings examined and law in effect on, the date of original delivery of the Series 2023 Bonds, will be delivered to the Underwriters at the time of that original delivery.

The proposed text of Bond Counsel's legal opinion is set forth as **EXHIBIT A** hereto. The legal opinion to be delivered may vary from that text if necessary to reflect facts and law on the date of delivery. The opinion will speak only as of its 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 opinion concerning any of the matters referred to in the opinion subsequent to its date.

Certain legal matters will be passed upon for the Treasurer by his counsel, Dave Yost, Attorney General of Ohio, and by Dinsmore & Shohl LLP, which is serving as Issuer Counsel and Disclosure Counsel to the Treasurer. Certain legal matters also will be passed upon for the DOT by the Attorney General of Ohio. Certain legal matters will be passed upon for the Underwriters by Brennan, Manna & Diamond, LLC.

RATINGS

In response to the Treasurer's application, the Series 2023 Bonds have been rated AA+ (outlook stable) by Fitch Ratings ("Fitch"), Aa2 (outlook positive) by Moody's Investors Service, Inc. ("Moody's") and AA (stable outlook) by S&P Global Ratings, a division of S&P Global Inc. ("S&P").

The ratings in effect from time to time reflect only the views of the particular rating organization. The explanation of its views of its rating's meaning and significance may be obtained from the respective rating agency. The State and the Treasurer furnished to each rating agency certain information and materials, some of which may not be included in this Official Statement, relating to the Series 2023 Bonds and other obligations, the State, the Treasurer and the DOT. 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 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 Series 2023 Bonds.

UNDERWRITING

Huntington Securities, Inc., as an Underwriter and as representative of the other Underwriters identified on the Cover, has agreed, subject to certain conditions, to purchase the Series 2023 Bonds from the Treasurer at a price of \$60,223,202.68 (consisting of the par amount thereof, plus original issue premium (\$7,590,283.40) and less underwriters' discount (\$232,080.72)).

The Underwriters are obligated to purchase all of the Series 2023 Bonds if any Series 2023 Bonds are purchased. The Underwriters may offer the Series 2023 Bonds to certain dealers (including dealers depositing the Series 2023 Bonds into unit

investment trusts, certain of which may be sponsored or managed by one or more of the Underwriters) at prices different from 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:

Huntington Capital Markets is a trade name under which securities and investment banking products and services of Huntington Bancshares Incorporated and its subsidiaries, including Huntington Securities, Inc. ("HSI"), are marketed. Municipal sales, trading and underwriting services are provided through HSI, which is a broker-dealer registered with the Securities and Exchange Commission.

MUNICIPAL ADVISOR

Acacia Financial Group, Inc. (the "Municipal Advisor") is serving as the municipal advisor to the Treasurer in connection with the issuance and sale of the Series 2023 Bonds. The Municipal Advisor 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. The Municipal Advisor 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

Upon delivery of the Series 2023 Bonds, a complete transcript of proceedings and no-litigation certificate (as described above) will be delivered by the Treasurer to the Underwriters. At that time, the Treasurer will 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" for purposes of Securities and Exchange Commission (SEC) Rule 15c2-12(b).

CONTINUING DISCLOSURE AGREEMENT

The Treasurer and the Ohio Office of Budget and Management, each on behalf of the State (the "Obligated Person"), have agreed, for the benefit of the Holders and Beneficial Owners of the Series 2023 Bonds, in accordance with SEC Rule 15c2-12 (the "Rule"), to provide or cause to be provided such financial information and operating data (the "Annual Information"), audited financial statements and notices, in such manner, as may be required for purposes of paragraph (b)(5)(i) of the Rule (the "Continuing Disclosure Agreement").

The Treasurer and the Ohio Office of Budget and Management on the State's behalf, 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 2023) 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 Treasurer 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 Annual Comprehensive Financial Report, and subsequent final official statements.
- When and if available, audited general purpose financial statements of the State for each Fiscal Year. The Treasurer 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 Report.
- Notice of the occurrence of any of the following events, within the meaning of the Rule, with respect to the Series 2023 Bonds within 10 business days of its occurrence:
 - 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 Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Series 2023 Bonds, or other material events affecting the tax status of the Series 2023 Bonds
- modifications to rights of Series 2023 Bond holders, <u>if material</u>
- Series 2023 Bond calls, if material, and tender offers
- defeasances
- release, substitution, or sale of property securing repayment of the Series 2023 Bonds, if material
- rating changes
- bankruptcy, insolvency, receivership or similar event of the Obligated Person
- the consummation of a merger, consolidation, or acquisition involving the 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, 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 the name of a trustee, if material
- incurrence of a Financial Obligation of the Obligated Person, <u>if material</u>, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Obligated Person, any of which affect security holders, if material
- default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Obligated Person, any of which reflect financial difficulties
- Notice of the failure to provide the Annual Information within the specified time.
- Notice of any material 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 Agreement.

There are no debt service reserves, or credit enhancements or credit or liquidity providers, for the Series 2023 Bonds, or any property (except the Bond Service Fund) securing repayment for the Series 2023 Bonds.

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

- To achieve 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 Obligated Person.

Any such amendment or waiver will not be effective unless the 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 Series 2023 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 Treasurer shall have received either:

- A written opinion of bond or other qualified independent special counsel selected by the Treasurer that the amendment or waiver would not materially impair the interest of holders or Beneficial Owners of the Series 2023 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 Series 2023 Bonds.

The Continuing Disclosure Agreement will be solely for the benefit of the holders and beneficial owners of the Series 2023 Bonds including holders of book-entry interests in them. The right to enforce the provisions of the 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 Series 2023 Bonds in accordance with the Rule, the State has entered into a Disclosure Dissemination Agent Agreement (the "Disclosure Dissemination Agreement") for the benefit of the holders of the Series 2023 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 the Disclosure Dissemination Agreement is limited to the extent the State has provided that information to the Disclosure Dissemination Agent as required by that Disclosure Dissemination 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 Disclosure Dissemination Agreement or duty or obligation to review or verify any information contained within any disclosure or notices provided to it by the State, and the Disclosure Dissemination Agent shall not be deemed to be acting in any fiduciary capacity for the State, the holders of the Series 2023 Bonds or any other party. The Disclosure Dissemination Agent has no responsibility for any failure to report to the Disclosure Dissemination Agent any event requiring disclosure or a duty to determine the materiality thereof, or to determine or liability for failing to determine whether the State has complied with the Continuing Disclosure Agreement, and the Disclosure Dissemination Agent may conclusively rely upon certification of the State at all times.

The performance by the Treasurer or the Ohio Office of Budget and Management acting for the State, as the only Obligated Person with respect to the Series 2023 Bonds, of the Continuing Disclosure Agreement will be subject to the biennial appropriation by the General Assembly of moneys for that purpose.

The Continuing Disclosure Agreement will remain in effect only for such period that the Series 2023 Bonds are outstanding in accordance with their terms and the State remains an Obligated Person with respect to the Series 2023 Bonds within the meaning of the Rule.

During the past five years the State has complied in all material respects with its continuing disclosure agreements under the Rule relating to the State's special obligation bonds, the debt service on which is subject to biennial appropriations by the General Assembly.

On August 30, 2018, Moody's upgraded the ratings of the State of Ohio (Ohio Centric Student Loan Program) Student Loan Senior Revenue Bonds, Series 2006A, State of Ohio Student Loan Senior Revenue Bonds, Series 2002A-2 (Ohio Centric Student Loan Program) and State of Ohio Student Loan Senior Revenue Bonds, Series 2001A (Ohio Centric Student Loan Program) that were issued by the Treasurer. A material event notice regarding these rating changes was filed on July 16, 2019 together with a notice of failure to file such material event notice.

The State's Annual Information Filing for Fiscal Year 2019 filed on September 26, 2019 with the MSRB through its 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 State's 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.

ELIGIBILITY FOR INVESTMENT AND AS PUBLIC MONEYS SECURITY

Provided 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, under the Act the Series 2023 Bonds are lawful investments for banks, societies for savings,

savings and loan associations, deposit guarantee associations, 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 special funds of political subdivisions and taxing districts of the State, the commissioners of the sinking fund of the State, the administrator of workers' compensation, and State retirement systems (teachers, public employees, school employees and police and fire).

The Act also provides that the Series 2023 Bonds are acceptable under Ohio law as security for the repayment of the deposit of public moneys.

Owners of book-entry interests in the Series 2023 Bonds should make their own determination as to such matters as the legality of investment in or the ability to pledge book-entry interests.

CONCLUDING STATEMENT

All quotations in this Official Statement from, and summaries and explanations of, the Ohio Constitution, the Revised Code, the Trust Agreement, the Lease, the General Bond Order and the Series 2023A Order do not purport to be complete. Reference is made to the pertinent provisions of the Ohio Constitution, the Revised Code and those documents for all complete statements of their provisions. Copies of the Trust Agreement, the Lease, the General Bond Order and the Series 2023A Order are available upon request from the Office of Debt Management, Treasurer of State, 30 East Broad Street, 9th Floor, Columbus, Ohio 43215 (telephone (614) 466-7752).

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 State, the Treasurer and the DOT from official and other sources and is believed by the State, the Treasurer and the DOT to be reliable, but information other than that obtained from State official records has not been independently confirmed or verified by the State or the Treasurer and its accuracy is not guaranteed.

This Official Statement is not to be construed as a contract or agreement between the State or the Treasurer and the Underwriters or subsequent owners of the Series 2023 Bonds or of book-entry interests in them.

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This Official Statement has been prepared, approved, executed and delivered by the Treasurer in his official capacity on behalf of the State.

STATE OF OHIO

By: /s/ Robert Cole Sprague

Robert Cole Sprague

State Treasurer of Ohio



APPENDIX A

INFORMATION CONCERNING THE STATE OF OHIO

The following discusses certain matters relating to general State of Ohio (the "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.

Owners of the Series 2023 Bonds have no right to have taxes or excises levied by the General Assembly to pay Bond Service Charges.

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, 2021, and ends June 30, 2023). 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 2022-2023 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).

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, 2022, with an unobligated GRF fund balance (after year-end transfers) of \$5.663 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 8.5 percent of the GRF revenue for the preceding fiscal year (this amount was 5 percent for FY 2016 and prior years). The BSF balance as of February 6, 2023 is \$3.46 billion, which equals 8.5 percent of FY 2022 GRF revenue. Recent fiscal year-end BSF balances and their percent of GRF revenue for that fiscal year were:

Fiscal Year-Ending	BSF Balance ^(a)	Percent of GRF Revenue
2018	\$2,691,554,000	8.3%
2019	2,691,554,000	8.0
2020	2,691,554,000	8.0
2021	2,691,554,000	6.8
2022	2,706,165,000 ^(b)	6.7

- (a) Reflects balance after year-end transfer into BSF; actual cash transfers into the BSF occur early in the following fiscal year.
- (b) 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.

The Revised Code provides that if the Governor ascertains that the available revenue receipts and balances for the GRF or other funds for the then current fiscal year will in all probability be less than the appropriations for that fiscal year, the Governor shall issue such orders to state agencies as will prevent their expenditures and incurred obligations from exceeding those revenue receipts and balances. The Governor implemented this directive in FY 2020 and FY 2021 to reduce GRF expenditures by approximately \$775 million and \$390 million, respectively, in reaction to and anticipation of further impacts of the COVID-19 pandemic (see **Outbreak of COVID-19** below for more detail). This directive has been implemented historically as needed.

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.

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

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

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

Recent Receipts and Disbursements

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

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SUMMARY STATEMENT GOVERNMENTAL AND PROPRIETARY APPROPRIATED FUNDS (\$ in Millions)

Cash Receipts						
Source of Receipts	Fiscal Year					
Taxes	2018	2019	2020	2021	2022	
Personal Income ^(a)	\$8,796.1	\$9,313.5	\$8,285.0	\$10,662.8	\$11,247.0	
Sales and Use ^(b)	10,616.2	11,053.3	11,160.5	12,639.1	13,611.1	
Financial Institutions Tax	201.1	202.4	214.9	226.4	202.8	
Commercial Activity Tax	1,805.5	1,932.0	1,979.9	1,972.6	2,366.9	
Gasoline ^(c)	1,802.8	1,846.0	2,400.1	2,481.3	2,571.4	
Public Utilities and Kilowatt Hour	826.5	889.5	841.8	791.8	876.6	
Cigarette ^(d)	939.8	918.2	913	926.9	884.6	
Foreign Insurance	299.4	325.8	332.5	351.8	357.0	
Highway Use	34.8	37.4	44.4	45.3	55.3	
Estate ^(e)	0.2	0.2	0.1	0.1	0.1	
Alcoholic Beverages	56.8	57.5	54.8	63.7	59.7	
Liquor Gallonage	48.1	50.3	53.4	57.6	57.9	
Domestic Insurance Franchise	283.4	281.3	308.4	314.9	318.8	
Other ^(f)	106.8	110.7	106	189.5	199.3	
Total Taxes	25,817.5	27,018.0	26,694.8	30,723.8	32,807.9	
Licenses, Permits and Fees	3,946.6	4,065.1	4,320.2	4,804.9	5,189.5	
Sales, Services and Charges	1,636.9	1,665.3	1,671.3	1,902.8	1,958.3	
Federal Government(g)	23,014.9	23,663.7	29,220.6	34,047.2	38,300.7	
Other ^(h)	6,113.3	6,513.2	6,279.1	8,239.9	9,676.3	
Proceeds from Sale of Bonds and Notes	2,202.7	1,042.0	1,393.1	1,552.6	553.1	
Total Cash Receipts	\$62,731.9	\$63,967.4	\$69,579.0	\$81,271.2	\$88,485.7	

- (a) The State has incrementally reduced personal income tax rates commencing calendar year 2013 (see FISCAL MATTERS Recent and Current Finances Recent Biennia 2016-2017, 2018-2019, 2020-2021, and Current Biennium and TAX LEVELS AND TAX BASES Personal Income Tax).
- (b) FY 2018 decline was due to replacing 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 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).
- (d) 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).
- (e) Eliminated effective January 1, 2013; receipts in all years reflect delayed filings or payments.
- (f) Includes residual payments under the corporate franchise tax for FY 2022.
- (g) 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).
- (h) Largest components consist of various reimbursements, loan repayments, unclaimed funds, and investment income. Totals may not foot due to rounding.

Cash Disbursements							
Source of Receipts			Fiscal Year				
General Fund	2018 2019 2020 2021 2022						
General Revenue Fund	\$31,727.3	\$32,677.6	\$33,104.0	\$35,630.0	\$35,760.3		
General Services Fund	5,884.3	5,564.1	5,806.7	6,638.8	7,339.8		
Special Revenue Fund(i)	21,947.0	22,088.3	24,297.8	29,873.7	37,020.4		
Capital Projects Fund ^(j)	671.7	794.8	733.5	456.3	445.8		
Debt Service Fund ^(k)	1,155.0	1,243.1	1,288.7	1,052.5	1,288.8		
Enterprise Fund ⁽¹⁾	812.9	735.3	1,000.4	1,000.4	814.0		
Total Cash Disbursements	\$62,198.1	\$63,103.2	\$66,231.1	\$74,651.7	\$82,669.0		

- (i) Includes local government support disbursements.
- (j) Includes amounts disbursed from proceeds of special obligation bonds and highway general obligation bonds.
- (k) Includes the several bond retirement funds for general obligation bonds secured by a pledge of taxes and excises.
- (l) 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)

Figoal	Vear
FISCA	ı year

	2018	2019	2020	2021	2022
Beginning Cash Balance	\$557.1	\$1,221.0	\$1,538.0	\$1,270.2	\$4,721.5

Cash Receipts

Taxes			•		
Personal Income ^(a)	8,411.0	8,910.2	7,881.3	10,201.3	10,752.2
Sales and Use ^(b)	10,148.2	10,573.4	10,685.8	12,190.6	13,029.6
Financial Institutions Tax	201.1	202.4	214.9	226.4	202.8
Commercial Activity Tax	1,522.8	1,629.5	1,671.7	1,666.8	1,995.5
Public Utilities and Kilowatt Hour	531.1	562.7	532.6	492.9	516.8
Cigarette ^(c)	939.8	918.2	913.0	926.9	884.6
Domestic Insurance	278.4	276.0	303.0	309.7	312.6
Foreign Insurance	276.5	296.3	305.1	324.4	328.4
Other ^(d)	114.3	120.8	115.8	127.8	130.1
Total Taxes	22,423.2	23,489.6	22,623.0	26,466.9	28,152.5
Federal Government	9,469.9	9,763.9	10,482.0	12,727.2	11,897.3
Licenses, Permits and Fees	59.2	64.2	66.6	88.4	99.2
Investment Income	64.2	114.4	131.4	57	52.8
Other	266.1	87.6	121.4	108.9	401.2
Total Cash Receipts	32,282.6	33,519.7	33,424.6	39,448.3	40,603.1

Cash Disbursements

				*	
Primary, Secondary and Other Education ^(e)	8,063.6	8,214.4	7,929.0	7,954.2	8,298.4
Higher Education	2,304.8	2,292.6	2,282.3	2,368.5	2,417.6
Public Assistance and Medicaid	14,482.5	15,052.8	15,471.8	18,094.4	17,079.3
Health and Human Services	1,251.8	1,272.0	1,344.0	1,381.3	1,519.9
Justice and Public Protection	2,130.4	2,222.5	2,386.0	2,387.0	2,652.8
General Government ^(f)	347.9	391.3	440.4	421.8	499.4
Property Tax Reimbursements(g)	1,802.4	1,801.2	1,800.6	1,806.1	1,818.2
Debt Service	1,343.9	1,430.8	1,449.9	1,216.8	1,474.8
Total Cash Disbursements	31,727.30	32,677.6	33,104.0	35,630.0	35,760.3

Cash Transfers

Transfers-in ^(h)	188.6	247.9	81.0	97.8	57.1
Transfers-out ⁽ⁱ⁾	(80.0)	(773.0)	(669.5)	(465.0)	(3,074.3)
Ending Cash Balance	\$1,221.0	\$1,538.0	\$1,270.2	\$4,721.5	\$6,547.0

- (a) The State has incrementally reduced personal income tax rates commencing calendar year 2013 (see FISCAL MATTERS Recent and Current Finances Recent Biennia 2016-2017, 2018-2019, 2020-2021, 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).
- (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 2017 to FY 2022 include transfers of \$10.0 million, \$46.2 million, \$66.0 million, \$66.0 million, \$65.9, and \$28.9 million respectively, from the Petroleum Activity Tax Public Highways Fund; and FY 2017 and FY 2019 include transfers of \$163.3 million and \$119.7 million from School District and Local Government Property Tax Replacement Funds, respectively.
- (i) FY 2017 and FY 2019 include transfers of \$29.5 million and \$657.5 million to the BSF, respectively; FY 2017 through 2019 and 2022 include transfers of \$150.0 million, \$41.8 million, \$49.3 million, and \$1.2 billion to the Health and Human Services Fund, respectively; FY 2019 includes a transfer of \$30.0 million to the Medicaid Local Sales Tax Transition Fund; and FY 2020, 2021, and 2022 include transfers of \$275.0 million, \$400.0 million, and \$500.0 million to the Student Wellness and Success Fund, respectively. Fiscal Year 2022 included transfers of \$350.0 million, \$230.0 million, and \$150.0 million to the Brownfield Remediation, Building Demolition and Site Revitalization, and Ohio Residential Broadband Expansion Grant Funds, respectively.

Totals may not foot due to rounding.

Recent and Current Finances

Introductory Information

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

The GRF ending cash and fund balances for FY 2022 were \$6.547 billion and \$5.663 billion, respectively, with none of that ending fund balance transferred pursuant to statutory designations leaving a balance of \$5.663 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 ^(c)	6,547,037,876	5,663,497,686	5,663,497,686

- (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.
- (c) Reflects the balances as of June 30, 2022, the end of the first fiscal year of the biennium.

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 2022-2023 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

2016-2017

2016-2017 Biennial Budget and Appropriations. The 2016-2017 Biennial Appropriations Act was passed by the General Assembly and signed (with selective vetoes) by the Governor on June 30, 2015. Reflecting a focus on

job creation, and based on a conservative economic forecast, the Act provided for total GRF biennial appropriations of approximately \$71.2 billion reflecting a 14.9 percent increase over the 2014-2015 GRF biennial appropriations. Those appropriations were based upon estimated total expected GRF revenue of \$34.9 billion in FY 2016, which excluded the \$393.0 million carried-forward from FY 2015 (reflecting a 10.8 percent increase over FY 2015 revenue), and \$36.5 billion in FY 2017 (reflecting a 4.6 percent increase over expected FY 2016 revenues). Total estimated GRF revenues across the 2016-2017 biennium reflected a 17.5 percent increase from 2014-2015 GRF biennial revenues.

GRF major program categories (excluding debt service) reflected the following increases:

- *Medicaid* 21.8 percent in FY 2016 appropriations over FY 2015 expenditures (driven in large part to the shift in funding to the GRF from non-GRF sources beginning in FY 2016 for the Medicaid expansion population), and 5.1 percent for FY 2017 appropriations over FY 2016 appropriations.
- *Elementary and Secondary Education* 5.0 percent for FY 2016 appropriations over FY 2015 expenditures, and 4.2 percent for FY 2017 appropriations over FY 2016 appropriations.
- *Higher Education* 4.5 percent for FY 2016 appropriations over FY 2015 expenditures, and 3.3 percent for FY 2017 appropriations over FY 2016 appropriations.
- *Mental Health and Developmental Disabilities* 9.1 percent for FY 2016 appropriations over FY 2015 expenditures, and 7.3 percent for FY 2017 appropriations over FY 2016 appropriations.
- *Corrections and Youth Services* 4.8 percent for FY 2016 appropriations over FY 2015 expenditures, and 3.0 percent for FY 2017 appropriations over FY 2016 appropriations.
- The Act also modified the school funding formula to distribute new resources to districts with less capacity to raise revenues locally (see SCHOOLS AND MUNICIPALITIES Schools) and froze tuition and fees for two- and four-year higher education institutions.

The Executive Budget, the 2016-2017 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 2016-2017 Biennial Appropriations Act reflected the following tax reductions and related adjustments, resulting in an estimated net reduction in GRF revenues relative to prior law of \$869.0 million in FY 2016 and \$952.0 million in FY 2017:

- An across-the-board 6.3 percent reduction in state personal income tax rates in calendar year 2015.
- Continuation of the 75 percent exemption on the first \$250,000 of business net income for small businesses in tax year 2015 (previously increased on a temporary basis for tax year 2014) and completely exempting the first \$250,000 of business net income in tax year 2016 and beyond.
- Beginning in tax year 2015, replaced the multi-bracket tax system for small businesses with a low flat
 rate of 3 percent on the amount of business net income. Legislation subsequently passed by the General
 Assembly clarified this provision and was estimated by OBM to reduce GRF revenues in FY 2016 by
 up to \$81 million.
- Beginning in tax year 2015, limited certain retirement income credits to taxpayers whose individual or joint adjusted gross income is less than \$100,000 (this exemption was previously available to all taxpayers aged 65 years and older).
- Increased the cigarette tax from \$1.25 per pack (of 20 cigarettes) to \$1.60 per pack, effective July 1, 2015.

The 2016-2017 Biennial Appropriations Act also reflected:

• The resumption of the phase-out of reimbursements to local governments and school districts in connection with the elimination of the tangible personal property tax, resulting in an increased share (estimated at \$428.7 million in FY 2016 and \$445.3 million in FY 2017) of the commercial activity tax being deposited into the GRF (see TAX LEVELS AND TAX BASES – Property Tax).

• The continuing phase-out of reimbursements to local governments and school districts for electric power generation deregulation and natural gas deregulation resulting in an increased share (estimated at \$56.3 million in FY 2016 and \$56.0 million in FY 2017) of the kilowatt-hour tax being reallocated to the GRF.

The 2016-2017 Biennial Appropriations Act also created a health and human services fund to pay for public health programs or services and authorized the OBM Director to transfer from the GRF \$150 million in FY 2017 into the fund, which amount is in addition to the \$50 million transferred from the GRF at the end of FY 2015 into the fund

In July 2016, OBM revised the FY 2017 GRF revenue forecast to reflect updated economic assumptions, actual FY 2016 revenue performance, and tax law adjustments enacted by General Assembly after adoption of the 2016-2017 Biennial Appropriations Act. As part of this revision, OBM reduced the estimated FY 2017 GRF tax revenue forecast by \$282.0 million, a 1.2 percent reduction compared to the original FY 2017 tax revenue forecast. This reduction in forecasted tax revenues was within the personal income and commercial activity taxes. As part of the Governor's Executive Budget proposal for the 2018-2019 fiscal biennium (see 2018-2019 below), and based on tax revenue underperformance, in January 2017, OBM further reduced the estimated FY 2017 GRF tax revenue forecast by \$592.2 million, a 2.7 percent reduction compared to the July 2016 revision. The largest variances (compared to the July 2016 revision) were in the personal income tax (reduced by \$333.9 million or 4.0 percent), the sales and use tax (reduced by \$259.3 million or 2.4 percent), and the commercial activity tax (reduced by \$32.0 million or 2.5 percent).

FY 2017 Financial Results. The State ended FY 2017 with a GRF cash balance of \$557.1 million and an ending fund balance of \$170.9 million that was reserved to maintain the statutory target of one-half of one percent of State FY 2017 GRF revenues as an ending fund balance.

2018-2019

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

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

Fiscal Year 2017 Expenditures	Fiscal Year 2018 Appropriations	Percent Change Over Fiscal Year 2017 Expenditures	Fiscal Year 2019 Appropriations	Percent Change Over Fiscal Year 2018 Appropriations	2018-2019 Biennium Total Appropriations
\$34.5	\$22.2	-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:

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

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**.

		-	`	ŕ	
		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

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

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

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

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

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

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

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

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

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

- An across-the-board 4.0 percent reduction in state personal income tax rates and elimination of the bottom two income tax brackets (effective in tax year 2019), coupled with a freeze on the indexing of the income tax brackets (through tax year 2020). The tax bracket changes eliminated any tax liability for individuals with taxable income less than \$21,750 (see TAX LEVELS AND TAX BASES Personal Income Tax).
- Modified eligibility for various means-tested state personal income tax credits such that high-income taxpayers with little non-business income are not eligible for the tax credits (effective tax year 2019).
- Created two new non-refundable tax credits, one for lead abatement expenses capped at \$5 million annually (effective in tax year 2020) and one for Qualified Opportunity Zone investments that is limited to no more than \$50 million per fiscal biennium (effective in tax year 2019).
- Increased the legal age to purchase tobacco products from 18 to 21 years old and created a tax on the volume of nicotine-containing vapor products (effective October 2019).
- Modified the presumption of a seller having a substantial nexus with Ohio in accordance with *South Dakota v. Wayfair, Inc.* for purposes of collecting the sales and use tax on retail sales through "marketplace facilitators" (effective October 2019).
- Temporarily increased the percent of GRF tax revenues deposited into the local government fund from 1.66 percent to 1.68 percent in each of FY 2020 and FY 2021.
- Temporarily increased the percent of GRF tax revenues deposited into the public library fund from 1.66 percent to 1.70 percent in each of FY 2020 and FY 2021.

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

FY 2021 Financial Results: The State ended FY 2021 with GRF cash and fund balances of \$4.72 billion and \$4.03 billion, respectively. As authorized in the 2022-2023 Biennial Appropriations Act, the entire fund balance was carried forward into FY 2022, including \$197.7 million reserved to maintain the statutory target of one-half of one percent of FY 2021 GRF revenues as an ending fund balance, and \$1.2 billion transferred to the Health and Human Services Fund, \$132.0 million transferred to the H2Ohio Fund, \$100.0 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.

Current Biennium

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

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

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

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

- *Medicaid* FY 2022 appropriations decreased 11.7 percent over FY 2021 expenditures, and FY 2023 appropriations increased 26.1 percent over FY 2022 appropriations.
- *Elementary and Secondary Education* including transfers from the GRF in support of student wellness and success, FY 2022 appropriations increased 5.8 percent over FY 2021 expenditures, and FY 2023 appropriations increased 2.0 percent over FY 2022 appropriations.
- *Higher Education* FY 2022 appropriations increased 2.7 percent over FY 2021 expenditures, and FY 2023 appropriations increased 0.1 percent over FY 2022 appropriations.

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

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

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

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

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

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

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

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

Fiscal Year 2022 ended the fiscal year with a positive GRF fund balance. OBM is currently projecting a positive GRF fund balance at the end of FY 2023. 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 (including pending litigation) and prepares a Monthly Financial Report, the most recent of which is accessible at https://obm.ohio.gov/areas-of-interest/budget-and-planning/06 monthly-financial-reports/06 monthly-financial-reports.

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.

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 on March 11, 2020. 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. In addition, the Governor (and the General Assembly as

discussed below) took certain actions to mitigate the economic effect of the COVID-19 outbreak on the State's financial position by reducing non-essential expenditures including implementing various state employment related freezes, restricting new contracting by state agencies, and ordering reductions in expenditures of state agencies for the remainder of FY 2020 and FY 2021.

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 \$36.0 billion, approximately \$2.43 billion less than originally estimated. This estimated shortfall was \$200 million less than the reserve held in the BSF as stated above. Those projections did not include any offset for savings the State realized from additional budgetary responses, such as those described below or the temporary 6.2 percentage-point increase in Federal Medical Assistance Percentages (Federal revenue receipts), which are used in determining the number of Federal payments to the State for medical services.

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. Such measures included a continuation of employment related freezes as authorized by the 133rd General Assembly in Amended Substitute House Bill 481 (HB 481) and instituting mandatory cost savings programs for exempt employees for FY 2021 (which reduced wages of exempt employees by approximately 3.8 percent and salaries of cabinet directors by approximately 4.0 percent). 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, in accordance with Section 37 of HB 481.

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. As Ohio's business climate and marketplace rebounded quickly, this action freed employers from the unemployment debt burden caused by the pandemic. Repaying this loan relieved Ohio businesses from experiencing large increases in their federal unemployment payroll taxes in subsequent years.

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.

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 \$48.1 million in FY 2023 and the total GRF-supported principal amount outstanding is \$200.8 million as of April 25, 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, and \$8.8 million in FY 2023. Total outstanding principal on the credit-collateralized bonds after the February 15, 2023, payment date is \$64.26 million with the highest annual debt service payment due on the outstanding credit-collateralized bonds occurring in FY 2024 in the amount of approximately \$16.9 million. Proceeds of the Ohio Capital Fund bonds fund investments in venture capital funds to promote investment in seed and earlystage 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 \$725.0 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 2022 was \$26.2 million, with availability payments estimated to increase modestly each year from \$26.8 million in FY 2023 to a maximum payment of \$39.2 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 \$386,225,000 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	51,280,000	Common Schools, 2006B/C	Weekly	6/15/2026
10/26/2016	61,170,000	DRC Prison Facilities, 2016B/C	Weekly	10/1/2036
8/7/2019	45,000,000	DRC Prison Facilities, 2019C	Weekly	10/1/2039
8/12/2020	57,000,000	Parks & Recreation Facilities, 2020B	Weekly	12/1/2040
4/21/2021	57,000,000	DRC Prison Facilities, 2021B	Weekly	10/1/2040
1/5/2022	75,000,000	Parks & Recreation Facilities, 2022B	Weekly	12/1/2041

Interest Rate Swaps

As part of its debt management, the State is also party to the following floating-to-fixed interest rate swap agreements with a total notional amount currently outstanding of \$91,055,000:

Outstanding Notional Amount	Related Bond Series	State Pays	State Receives	Counterparty	Effective Date	Termination Date
\$14,225,000	Common Schools 2003D	3.414%	LIBORª	JP Morgan/ Wells Fargo	9/14/2007	3/15/2024
25,550,000	Common Schools 2005A/B	3.102%	SIFMA ^b	JP Morgan	3/15/2007	3/15/2025
51,280,000	Common Schools 2006B/C	3.202%	LIBORª	US Bank/ RBC	6/15/2006	6/15/2026

- (a) Variable interest rate based on a percentage of one-month London Inter-Bank Offered Rate (LIBOR) plus a fixed increment.
- (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 Series 2023 Bonds. The General Assembly has appropriated sufficient moneys to meet debt service requirements for the current biennium (ending June 30, 2023) on all the obligations included in this and the accompanying tables.

	Authorized by General Assembly	Issued ^(a)	Outstanding ^(b)
Obligations Payable from the GRF			
General Obligations			
Coal Development ^(c)	\$262,000,000	\$254,000,000	\$18,340,000
Infrastructure ^{(d)(e)}	5,200,000,000	4,694,726,136	1,813,080,000
Natural Resources(f)	521,000,000	484,620,000	93,900,000
Common School Facilities ^(e)	6,515,100,000	5,611,200,000	2,085,130,000
Higher Education Facilities	5,255,000,000	4,374,445,000	1,916,850,000
Conservation ^(g)	900,000,000	682,625,000	282,260,000
Research & Development ^(h)	1,200,000,000	971,000,000	196,260,000
Site Development	150,000,000	150,000,000	0
Veterans Compensation ⁽ⁱ⁾	200,000,000	83,910,000	10,520,000
	_	Total:	\$6,381,720,000

Special Obligations			
DAS Facilities	\$2,320,800,000	\$2,069,900,000	\$450,610,000
DRC Prison Facilities ^(e)	3,073,000,000	2,346,500,000	465,740,000
DYS Facilities	529,800,000	400,000,000	83,055,000
Cultural & Sports Facilities	839,000,000	740,475,000	157,910,000
Mental Health Facilities	2,075,700,000	1,817,085,000	235,890,000
Parks & Recreation Facilities ^(e)	1,590,400,000	1,089,000,000	561,170,000
		Total:	\$1,954,375,000

Obligations Payable from Non-GRF Sources ^(j)				
Highway User Receipts				
G.O. Highway ^(k)	\$3,797,000,000	\$3,462,760,000	\$852,540,000	
ODOT Facilities	385,000,000	379,455,000	164,675,000	
		Total:	\$1,017,215,000	

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

- (a) Excludes refunding bonds; includes bonds refunded; reflects payments of amounts due as of April 25, 2023.
- (b) Excludes refunded bonds; includes refunding bonds; reflects payments of amounts due as of April 25, 2023.
- (c) Not more than \$100,000,000 may be outstanding at any time.
- (d) Not more than \$5,625,000,000 may be issued with the annual issuance currently limited to no more than \$175,000,000 in each fiscal year beginning in FY 2018 through FY 2022 and \$200,000,000 in each fiscal year beginning in FY 2023 through FY 2027, plus any obligations unissued from previous fiscal years.
- (e) Includes adjustable-rate bonds.
- (f) Not more than \$50,000,000 may be issued in any fiscal year and not more than \$200,000,000 may be outstanding at any time.
- (g) Not more than \$50,000,000 may be issued in any fiscal year plus any obligations unissued from previous fiscal years and not more than \$400,000,000 may be outstanding at any time.
- (h) Not more than \$1,200,000,000 may be issued with the annual issuance now limited to no more than \$175,000,000 in any fiscal year plus any obligations unissued from previous fiscal years.
- Constitutional authorization was self-implementing and did not require further General Assembly authorization. No more new obligations may be issued under this authorization.
- (j) See discussion above of "availability payments" under ODOTs first public-private agreement, which payments are expected to be made from biennial appropriations of non-GRF funds available to ODOT and remaining after the payment of debt service on highway general obligations, special obligations and GARVEE bonds shown above.
- (k) Not more than \$220,000,000 may be issued in any Fiscal Year plus any amount unissued from previous fiscal years, and not more than \$1,200,000,000 may be outstanding at any time.
- (1) Debt service on these "GARVEE" bonds is paid from federal transportation grants apportioned to the State (Title 23 of the U.S. Code).

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

Annual Debt Service Requirements on State Obligations Paid from the GRF

	General Obligations		Special Obligations			Total GRF Debt Service ^(f)			
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)
2023	\$680,545,901	\$316,679,892	\$154,887,266	\$86,542,461	\$108,897,376	\$159,679,750	\$1,114,565,000	\$392,667,645	\$1,507,232,645
2024	617,286,746	230,563,233	124,921,966	64,878,203	69,701,519	158,888,794	910,490,000	355,750,459	1,266,240,459
2025	571,262,708	231,050,466	102,525,070	65,105,947	65,065,886	152,401,831	872,450,000	314,961,908	1,187,411,908
2026	466,018,037	196,369,718	96,437,795	42,436,383	41,582,233	135,937,050	700,330,000	278,451,216	978,781,216
2027	375,626,556	194,064,558	78,141,866	42,486,022	41,709,043	126,417,375	610,885,000	247,560,420	858,445,420
2028	343,243,167	177,026,033	76,059,836	42,750,237	41,658,626	120,031,769	580,975,000	219,794,667	800,769,667
2029	335,843,693	166,422,771	54,484,393	42,603,532	37,977,833	109,680,156	554,455,000	192,557,377	747,012,377
2030	348,963,167	152,840,426	39,220,125	38,276,891	35,113,531	105,163,844	552,415,000	167,162,983	719,577,983
2031	357,314,715	152,666,130	38,136,775	35,532,388	35,126,087	93,115,750	569,125,000	142,766,846	711,891,846
2032	309,385,760	129,642,036	28,751,850	35,855,752	29,799,318	59,567,969	473,180,000	119,822,684	593,002,684
2033	268,550,009	122,442,148	19,250,200	33,441,741	29,719,457	40,257,895	413,270,000	100,391,449	513,661,449
2034	250,687,874	122,431,420	15,876,450	29,779,898	29,986,498	27,321,690	392,395,000	83,688,830	476,083,830
2035	226,845,442	98,818,332	7,213,500	29,784,086	26,821,351	27,317,506	348,815,000	67,985,217	416,800,217
2036	202,652,500	98,794,082	-	23,809,672	26,841,095	27,324,252	326,860,000	52,561,601	379,421,601
2037	155,414,400	86,917,400	-	23,807,402	26,763,053	27,314,386	282,265,000	37,951,641	320,216,641
2038	108,538,050	75,660,700	-	18,172,625	21,444,191	27,320,658	225,905,000	25,231,224	251,136,224
2039	62,131,900	62,209,375	-	18,171,375	13,718,631	27,315,302	168,180,000	15,366,583	183,546,583
2040	37,330,100	37,022,250	-	12,680,750	13,715,298	16,694,910	108,530,000	8,913,308	117,443,308
2041	37,332,050	25,026,500	-	6,216,000	6,582,275	16,694,014	87,520,000	4,330,839	91,850,839
2042	-	14,106,750	-	-	-	8,678,601	21,985,000	800,351	22,785,351
							\$9,314,595,000	\$2,828,717,251	\$12,143,312,251

⁽a) Consists of common schools and higher education general obligation bonds.

⁽b) Includes estimated debt service on adjustable-rate bonds at an assumed rate of 3 percent.

⁽c) Includes natural resources, coal development, conservation, research and development, site development and veterans' compensation general obligation bonds.

⁽d) Includes lease-rental bonds for mental health, parks and recreation, cultural and sports facilities, and facilities for the Department of Youth Services.

⁽e) Excludes refunded bonds; includes refunding bonds; as of April 25, 2023.

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, including the Series 2023 Bonds:

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

	Hig	Highway User Receipts			
FY	Highway G.O.	ODOT/DPS Facilities ^(a)	Total ^(b)	Federal Transportation Grants ^(c)	
2023	\$158,077,550	\$16,526,250	\$174,603,800	\$135,413,495	
2024	154,552,727	21,589,740	176,142,467	144,335,453	
2025	135,896,145	21,592,000	157,488,145	143,598,705	
2026	105,788,550	21,590,000	127,378,550	108,638,875	
2027	102,438,300	21,588,000	124,026,300	108,640,875	
2028	99,042,550	21,589,250	120,631,800	108,640,000	
2029	81,880,550	21,586,750	103,467,300	108,645,000	
2030	62,247,000	21,583,750	83,830,750	84,547,000	
2031	59,675,500	13,443,250	73,118,750	43,259,125	
2032	41,909,250	13,445,000	55,354,250	43,263,000	
2033	40,103,000	13,445,000	53,548,000	22,874,500	
2034	24,671,750	5,067,000	29,738,750	12,672,000	
2035	11,071,750	5,068,500	16,140,250	12,669,000	
2036	6,000,500	5,070,000	11,070,500	-	
2037	5,727,750	5,066,000	10,793,750	-	

⁽a) Lease rental payments are paid from highway user receipts for these Ohio Department of Transportation and Department of Public Safety facilities.

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 April 25, 2023, including the Series 2023 Bonds:

	Obligations Payable from the GRF			Non-GRF Obligations
Year	Education ^(a)	Other GO ^(b)	Special Obligations ^(c)	Highway User Receipts ^(d)
2023	\$3,899,115,000	\$2,356,880,000	\$1,944,035,000	\$914,715,000
2028	2,203,190,000	1,251,450,000	1,070,260,000	376,805,000
2033	943,745,000	551,075,000	467,635,000	65,375,000
2038	126,720,000	126,445,000	133,050,000	-

⁽a) Includes bonds for common school and higher education capital facilities.

⁽b) As of April 25, 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.

⁽b) Includes natural resources, coal development, infrastructure improvement, conservation, research and development, site development and veterans' compensation general obligation bonds.

⁽c) Includes lease-rental bonds for various state capital facilities.

⁽d) Includes general obligations for highways and lease-rental bonds for ODOT and DPS facilities.

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
1980	\$1,991,915,000	\$184	1.86%
1990	3,707,055,058	342	1.83
2000	6,308,680,025	556	1.94
2010	8,586,655,636	744	2.03
2018	9,746,900,000	834	1.73
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	777 ^(a)	1.38 ^(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
1980	\$187,478,382	\$4,835,670,223	3.88%	0.18%
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*	24,108,466,000**	2.95	0.17
2018	1,338,395,923	33,642,813,000	3.98	0.24
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*	40,723,295,400	2.89	0.19
2022	1,435,175,069	41,894,141,300	3.43	0.21 ^(b)

⁽a) Based on July 2021 Census estimate.

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 April 25, 2023, GRF cash transfers in the amounts of \$493,750,000 for General Obligation programs and \$280,000,000 for Special Obligation programs have occurred. However, additional State borrowing for capital and other purposes may continue to be needed in the future.

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

General Obligation

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

⁽b) Based on preliminary 2021 personal income data.

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.

^{**} Excludes federal funds from ARRA.

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.
- O 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.
- O 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.
- O 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 stateassisted institutions of higher education. The amendment also provides for the 5 percent direct obligation debt service cap described above.

- o 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.
- O 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.
- o 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).
- o 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's manufacturing sector is advanced and diverse. 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 2021 economic output, as measured by gross state product (GSP), totaled \$736.5 billion, 3.20 percent of the national GDP and seventh largest among the states. The State ranks fourth within the manufacturing sector (\$117.9 billion) and fifth in durable goods (\$61.6 billion). As a percent of Ohio's 2021 GSP, 16.0 percent was attributable to manufacturing, with 21.4 percent attributable to the goods-producing sectors and 33.3 percent to the business services sectors, including finance, insurance, and real estate. Ohio is the ninth largest exporting state with 2021 merchandise exports totaling \$50.7 billion. The State's leading export products are machinery (including electrical machinery), motor vehicles (including parts), aircraft/spacecraft, and plastics, which together accounted for 53.1 percent 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 2019. 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 87.6 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.

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

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

^{*} Data prior to 1990 in these categories were classified as a single "Services" category under the 1987 Standard Industrial Classification (SIC) system. All data in table reflects the current North American Industry Classification System (NAICS). Totals may not foot due to rounding.

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

Distribution of Nonfarm Payroll Jobs by Industry Type (%)

	1990		2000		2010		2020		2021	
	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
Construction	3.9	4.8	4.4	5.1	3.4	4.2	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
Trade, Transportation & Public Utilities	19.7	20.7	19.8	19.9	18.8	18.9	19.1	18.7	19.2	19.0
Financial Activities	5.2	6.0	5.4	5.9	5.5	5.9	5.8	6.1	5.7	6.0
Professional & Business Services	9.3	9.9	11.5	12.6	12.5	12.8	13.2	14.2	13.4	14.5
Educational & Health Services	11.0	10.1	12.1	11.6	16.7	15.3	17.0	16.3	16.7	16.2
Leisure & Hospitality	8.2	8.5	8.6	9.0	9.4	10.0	8.9	9.4	9.4	9.6
Information & Other Services	5.7	6.3	5.9	6.7	5.6	6.2	4.8	5.7	4.9	5.7
Government	14.8	16.8	14.0	15.7	15.6	17.3	14.4	15.4	14.0	15.1

^{*} 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. The distribution percentages are as calculated by OBM.

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

Average Monthly Unemployment Rates (Seasonally Adjusted)

Year	Ohio	U.S.
1980	8.4%	7.1%
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 January	4.1	4.0
February	4.0	3.8
March	3.9	3.6
April	3.9	3.6
May	3.9	3.6
June	3.9	3.6
July	4.0	3.5
August	4.1	3.7
September	4.1	3.5
October	4.2	3.7
November	4.1	3.6
December	4.1	3.5
2023 January	4.0	3.4
February	3.9	3.6
March	3.8*	3.5

* 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

Boldface indicates headquartered in Ohio.

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

POPULATION

Ohio's 2020* decennial census population of 11,693,217 indicated a 1.4 percent population growth over 2010 and ranked Ohio seventh among the states in population. The following tables show selected census figures:

Ohio Population — Total and by Age Group

Year	Total	Rank Among States	Decennial Growth Rate	0-19 Years	20-64 Years	65 and over
1970	10,652,017	6	9.7%	4,124,400	5,539,600	993,500
1980	10,797,630	6	1.4	3,502,900	6,125,200	1,169,500
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	11,790,587	7	2.2	2,932,396	6,802,395	2,055,796

^{*} July 2022 Census population estimate is 11,780,017.

Source: U.S. Census Bureau Web Site, Metropolitan Area Population Estimates v.2021

Population of Ohio Metropolitan Areas(a)

	1970	1980	1990	2000	2010	2020	2021
Cleveland	2,063,729	1,898,825	2,202,069 ^(b)	2,250,871 ^(b)	2,077,240 ^(b)	2,085,357 ^(b)	2,075,662 ^(b)
Cincinnati	1,106,821	1,100,983	1,526,092 ^(c)	1,646,395 ^(c)	2,130,151 ^(d)	2,257,667 ⁽ⁱ⁾	2,259,935 ⁽ⁱ⁾
Columbus	1,017,847	1,093,316	1,345,450 ^(e)	1,540,157 ^(e)	1,836,536 ^(e)	2,141,042 ^(e)	2,151,017 ^(e)
Dayton	852,531	830,070	951,270 ^(f)	950,558 ^(f)	979,835 ^(f)	813,475 ^(j)	813,516 ^(j)
Akron	679,239	660,328	657,575	694,960	703,200	701,305	700,015
Toledo	643,443	656,940	614,128	618,203	651,429	645,819	644,217
Youngstown-Warren	537,124	531,350	600,895 ^(g)	594,746 ^(g)	565,773 ^(g)	539,686 ^(g)	538,069 ^(g)
Canton-Massillon	393,789	404,421	394,106	406,934	404,422	401,046	400,525
Lorain-Elyria	256,843	274,909	(b)	(b)	(b)	(b)	(b)
Hamilton-Middletown	226,207	258,787	291,479	332,807	(d)	(d)	(d)
Lima	210,074	218,244	154,340	155,084	106,331	102,059	101,670
Mansfield	129,997	131,205	174,007 ^(g)	175,818 ^(g)	124,475	124,840	125,195
Steubenville	96,193	91,564	142,523 ^(h)	132,008 ^(h)	124,454 ^(h)	116,595 ^(h)	115,585 ^(h)

- (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.
- (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.2021

AGRICULTURAL AND RESOURCES BASES

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

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

STATE EMPLOYEES AND COLLECTIVE BARGAINING AGREEMENTS

Since 1985, the number of regular state employees (excluding employees who are not paid by state warrant such as state university employees) has ranged from a low of 48,838 in March 2022, to a high of 68,573 in 1994. The State engages in collective bargaining with five employee unions representing 14 bargaining units, and generally operates under three-year agreements. The State's current collective bargaining agreements expire between February 28, 2024 and June 30, 2024.

RETIREMENT SYSTEMS

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

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

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

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

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

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

Under state law, each retirement system's board is required to establish a period of not more than thirty years to amortize its unfunded actuarial accrued pension liability (UAAL). If in any year the period required to amortize that UAAL exceeds thirty years, the board must prepare and submit to the ORSC and the applicable committees in the Ohio General Assembly a plan to reduce that amortization period to not more than thirty years. Based on their most recent reporting years reflected in the table below under **Pension Benefits**, all of the retirement systems meet the 30-year funding requirement, with the number of years to fully amortize UAAL at 11.5 years

for STRS, 16 years for PERS, 24 years for HPRS, 22 years for SERS, and 29 years for OP&F. Prior to the 2012 pension reform acts described below, the board of each of the five retirement systems had approved and submitted to the ORSC and the Ohio General Assembly a plan to reduce or maintain its amortization period at not more than thirty years. Pursuant to this continuing requirement, the OP&F board increased (effective January 1, 2014) contributions to its pension fund by reducing from 2.85 percent to 0.5 percent the amount of employer contributions directed to health care and redirecting the 2.35 percent difference to pensions. Likewise, he 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):

State		RS Employee	STRS Employer\Employee		HPRS Employer\Employee		Total Employer\ Employee
Fiscal Year	Amount	Percent of Salary ^(a)	Amount	Percent of Salary	Amount	Percent of Salary	Contributions
2018	\$421.5/\$296.7	14.0%/10.0%	\$5.9/\$5.9	14.0%/14.0%	\$30.1/\$14.6	26.5%/12.5%	\$458.3/\$316.8
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

⁽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 \$69.7 million in the 2020-2021 biennium and are appropriated at \$70.7 million in the 2022-2023 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):

	PERS(a)	STRS	SERS	OP&F	HPRS
Valuation as of:	12/31/21	06/30/22	06/30/22	12/31/21	12/31/21
Active Members	280,490	174,036	155,063	29,384	1,454
Retirees and Beneficiaries	218,706	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	\$15,463.7	\$13,624.9	\$3,994.7	\$2,443.6	\$111.6
Market Value of Assets (MVA) ^(f)	\$110,210.9	\$83,034.2	\$16,962.7	\$18,776.9	\$1,000.3
Actuarial Value of Assets (AVA)(g)	\$99,710.2	\$85,141.8	\$16,641.0	\$17,095.8	\$894.4
Actuarial Accrued Liability (AAL) ^(h)	\$118,517.0	\$105,264.3	\$21,981.5	\$24,517.6	\$1,233.5
Funding Ratio (AVA to AAL percent, (MVA to AAL					
percent))	84.1(93.0)	80.9(78.9)	75.7(77.2)	69.7(76.6)	72.5(81.1)
Unfunded Actuarial Accrued Liability (UAAL)	\$18,806.8	\$20,122.5	\$5,340.5	\$7,421.7	\$339.1
UAAL to Active Member Payroll Percent	121.6	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 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):

			Unfunded					UAAL
Retirement	Actuarial	Actuarial	Actuarial	Funding	Market	Funding		Percent
System	Value of	Accrued	Accrued	Ratio	Value of	Ratio	Active	of Active
Valuation	Assets	Liability	Liability	(AVA to	Assets	(MVA to	Member	Member
Year-End	$(AVA)^{(a)}$	$(AAL)^{(b)}$	(UAAL)	AAL)	(MVA) ^(c)	AAL)	Payroll	Payroll
PERS	***	****			****			
12/31/21	\$99,710.2	\$118,517.0	\$18,806.8	84.1%	\$110,210.8	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
12/31/17**	83,292.2	106,090.0	22,797.8	78.5	87,104.9	82.1	14,058.0	162.2
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.

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

⁽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.

^{**} Reflects revised actuarial assumptions based on change in discount rate from 7.5 percent to 7.2 percent.

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:	12/31/21	06/30/22	06/30/22	12/31/21	12/31/21
Total Pension Liability ^{(b)(c)}	\$118,499.1	\$105,264.3	\$22,371.5	\$25,024.3 ^(e)	\$1,314.9 ^(f)
Fiduciary Net Position ^(d)	\$110,210.9	\$83,034.2	\$16,962.7	\$18,776.9	\$1,000.3
Net Pension Liability/Net Pension Asset (NPL/NPA)	\$8,288.2	\$22,230.1	\$5,408.8	\$6,247.4	\$314.6
Fiduciary Net Position as a Percentage of Total Pension					
Liability	93.0%	78.9%	75.8%	75.0%	76.0%
NPL/NPA Calculated With 1 Percent Decrease in					
Discount Rate	\$22,629.2	\$33,581.6	\$7,961.5	\$9,264.8	\$463.5
NPL/NPA Calculated With 1 Percent Increase in					
Discount Rate	(\$3,639.5)	\$12,630.8	\$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 project 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 non-employer contributing entities to report a proportionate share of their NPL/NPA in their financial statements. Employers determine their proportionate share of NPL/NPA by comparing their current year contributions to the plan to current year contributions to the plan made by all employers and non-employer entities, based on information provided to them by their retirement system(s). The State's proportionate share of the NPL/NPA and the sensitivity of the NPL/NPA to changes in the single discount rate for PERS, STRS and HPRS for the most recent year are as follows (\$ in millions):

	PERS ^(a)	STRS	HPRS
Valuation as of:	12/31/21	06/30/22	12/31/21
Total Pension Liability ^(b)	\$118,499.1	\$105,264.3	\$1,314.9 ^(d)
Fiduciary Net Position ^(c)	\$110,210.9	\$83,034.2	\$1,000.3
Net Pension Liability/Net Pension Asset (NPL/NPA)	\$8,288.2	\$22,230.1	\$314.6
State Proportionate Share of Net Pension Liability (PSL)	\$3,106.9	\$46.5	\$314.6
PSL as a Percentage of NPL/NPA	21.4%	0.36%	100.0%
PSL Calculated With 1 Percent Decrease in Discount Rate	\$5,995.9	\$87.1	\$463.5
PSL Calculated With 1 Percent Increase in Discount Rate	\$706.3	\$12.2	\$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 was determined by an actuarial valuation as of 12/31/19 and updated with roll-forward procedures to 12/31/20. Sources: State of Ohio FY 2021 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.

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)	\$12,385.8	\$4,570.0	\$611.6	n/a	\$130.1
Actuarial Accrued Liability (AAL) ^(c)	\$11,215.5	\$1,980.7	\$1,348.3	n/a	\$229.2
Unfunded Actuarial Accrued Liability (UAAL) ^(d)	(\$1,170.3)	(\$2,589.3)	\$736.7	n/a	\$122.9
Funding Ratio (Assets to AAL Percent)	110.4%	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 6.0 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). For fiscal years 2016 and prior, financial reporting of health care plans is in compliance with GASB Statement 43 - Financial Reporting for Post-Employment Benefit Plans Other than Pension Plans.

Retirement		Actuarial	Unfunded	E 1'	Employer
System Valuation Year-	Value of	Accrued Liability	Actuarial Accrued	Funding Ratio (Assets	Contribution (Percent of
End	Assets ^(a)	(AAL) ^(b)	Liability	to AAL)	Salary) (c)(d)
PERS ^(f)	113500	(TITE)	Liability	toring	Salary)
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
12/31/17	12,021.4	18,393.0	6,372.0	65.4	1.0
STRS				•	
06/30/22	\$4,570.0	\$1,980.7	(\$2,589.3)	230.7%	0.0%
06/30/21	4,929.7	2,821.3	(2,108.4)	174.7	0.0
06/30/20	3,897.3	2,139.8	(1,757.5)	182.1	0.0
06/30/19	3,872.2	2,215.9	(1,656.2)	174.7	0.0
SERS					
06/30/22	\$611.6	\$1,348.3	\$736.7	45.4%	0.0%
06/30/21	600.3	1,289.4	689.1	46.6	0.0
06/30/20	482.6	1,796.5	1,313.9	26.9	0.0
06/30/19	463.8	2,198.7	1,734.9	21.1	0.5
OP&F(e)					
12/31/17	\$901.7	\$5,487.8	\$4,586.2	16.4%	0.5%
12/31/16	929.4	5,166.6	4,237.2	18.0	0.5
12/31/15	1,031.9	5,399.6	4,367.6	19.1	0.5
12/31/14	1,053.5	5,244.6	4,191.0	20.1	0.5
HPRS					
12/31/21	\$130.1	\$229.2	\$112.9	56.8%	0.0%
12/31/20	118.6	285.3	174.6	41.6	0.0
12/31/19	111.0	303.3	195.3	36.6	0.0
12/31/18	109.5	262.0	152.5	41.8	3.5

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

Sources: Retirement systems' annual actuarial valuations.

GASB Statements No. 74 & 75. GASB Statement No. 74 replaced prior accounting standards for reporting postemployment 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:	12/31/21	06/30/22	06/30/22	12/31/21	12/31/21
Total OPEB Liability ^{(a)(b)}	\$11,093.1	\$1,980.7	\$2,015.6	\$2,062.8 ^(e)	\$510.8 ^(d)
Fiduciary Net Position ^(c)	\$14,225.3	\$4,570.0	\$611.6	\$966.7	\$130.1
Net OPEB Liability (NOL)	(\$3,132.2)	(\$2,589.3)	\$1,404.0	\$1,096.1	\$380.7
Fiduciary Net Position as a Percentage of					
Total OPEB Liability	128.2%	230.7%	30.3%	46.9%	25.5%
NOL Calculated With 1 Percent Decrease in	(\$1,842.2)	(\$2,393.8)	\$1,743.8	\$1,377.8	\$486.8
Discount Rate					
NOL Calculated With 1 Percent Increase in	(\$4,202.5)	(\$2,756.8)	\$1,123.7	\$864.5	\$299.5
Discount Rate					
NOL Calculated With 1 Percent Decrease in Cost					
Trend Rate	(\$3,166.0)	(\$2,685.8)	\$1,082.7	n/a	\$288.0
NOL Calculated With 1 Percent Increase in Cost					_
Trend Rate	(\$3,092.0)	(\$2,467.6)	\$1,823.6	n/a	\$505.3

- (a) For PERS, a single discount rate of 6.0 percent was used. For SERS and HPRS, the fiduciary net position was <u>not</u> projected to be sufficient to make all projected future benefit payments and, therefore, blended discount rates of 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 12/31/20 and updated with roll-forward procedures to 12/31/21.
- (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:	12/31/21	06/30/22	12/31/21
Total OPEB Liability ^(a)	\$11,093.1	\$1,980.7 ^(d)	\$510.8 ^(c)
Fiduciary Net Position ^(b)	\$14,225.3	\$4,570.0	\$130.1
Net OPEB Liability (NOL)	(\$3,132.2)	(\$2,589.3)	\$380.7
State Proportionate Share of Net OPEB Liability (PSL)	(\$378.5)	(\$7.7)	\$380.7
PSL as a Percentage of NOL	21.2%	0.4%	100.0%
PSL Calculated With 1 Percent Decrease in Discount Rate	(\$94.1)	(\$6.5)	\$486.8
PSL Calculated With 1 Percent Increase in Discount Rate	(\$612.4)	(\$8.7)	\$299.5
PSL Calculated With 1 Percent Decrease in Cost Trend Rate	(\$387.8)	(\$8.6)	\$288.0
PSL Calculated With 1 Percent Increase in Cost Trend Rate	(\$368.2)	(\$6.5)	\$505.3

- (a) For PERS, a single discount rate of 6.0 percent was used. The fiduciary net position was not projected to be available to make all projected future benefit payments and, therefore, 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 12/31/20 and updated with roll-forward procedures to 12/31/21.
- (d) Total OPEB liability was determined by an actuarial valuation as of 06/30/22.

Sources: State of Ohio FY 2021 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 38th in state taxes per capita in 2021 and it ranked 31st in combined state and local taxes in 2019, 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 were reduced by 8.5 percent in calendar year 2013, 1.5 percent in calendar year 2014, 6.3 percent in calendar year 2015 (see FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2016-2017) and 4.0 percent in calendar year 2019 (see FISCAL MATTERS - Recent Biennia - 2020-2021). Beginning 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 is now the highest Ohio tax rate was reduced by 9.6 percent from its previous level. The various reduction percentages listed above represent incremental changes from the preceding rates; when compared to the rates in effect during calendar year 2012, the rates imposed as of calendar year 2021 are 21 percent lower except for the new top rate which is 27 percent lower. 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 (see FISCAL MATTERS - Recent and Current Finances - Recent Biennia - 2016-2017). 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 2021 personal income tax rates range from \$355.16 plus 2.765 percent on income more than \$25,000 but less than \$45,250, with increasing bracketed base rates and percentages up to a maximum on income over \$110,650 of \$3,123.05 plus 3.99 percent on the amount over \$110,650. This is no tax liability if taxable income is \$25,000 or below.

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.

Personal Income (\$ in Billions)

				Ohio Percent	
		U. S	Ohio	of U.S.	State Rank*
1970	Total	\$855.1	\$44.1	5.2%	5
	per capita	4,196	4,136	98.6	18
1980	Total	2,307.0	107.0	4.6	6
	per capita	10,153	9,909	97.6	25
1990	Total	4,890.5	202.8	4.1	7
1990	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
2010	per capita	40,546	36,663	90.4	32
2016	Total	16,115.6	525.1	3.3	8
2010	per capita	45,127	49,883	90.5	29
2017	Total	16,820.3	544.8	3.2	8
2017	per capita	46,710	51,731	90.3	29
2018	Total	17,813.0	569.7	3.2	8
2016	per capita	54,526	48,793	89.5	31
2019	Total	18,542.3	586.8	3.2	8
2019	per capita	56,490	50,199	88.9	31
2020	Total	19,679.7	623.2	3.2	8
2020	per capita	59,729	53,296	89.2	31
2021	Total	21,056.6	665.4	3.2	8
2021	per capita	63,444	56,483	84.9	32

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

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.
1980	\$39.01	\$979.25	4.0%
1990	66.95	1,914.04	3.5
2000	117.72	3,213.82	3.6
2010	133.44	4,170.78	3.2
2016	166.34	5,417.16	3.1
2017	170.40	5,620.10	3.0
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

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

^{*} Excludes District of Columbia.

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** – 2016-2017, and 2018-2019).

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.

			Percent of	
		Assessed Value ^(a)	True Value ^(b)	Taxes Charged
	Real ^(c)	\$56,457,842,607	27.1%	\$2,343,384,488 ^(e)
1980	Tangible ^(d)	15,649,200,844	39.2	765,047,826
	Public Utility ^(c)	8,670,052,613	83.3	411,321,235
	Real ^(c)	93,857,482,000	35.0	4,593,147,000 ^(e)
1990	Tangible ^(d)	18,473,055,000	28.0	1,149,643,000
	Public Utility ^(c)	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)	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)	10,096,712,600 ^(g)	52.9	747,237,219
	Real ^(c)	238,100,197,518	35.0	16,170,309,495 ^(e)
2016	Tangible ^(d)	-0-	-0- ^(b)	-0-
	Public Utility ^(c)	15,962,565,444 ^(g)	56.8	1,271,855,503
	Real ^(c)	247,070,913,220	35.0	16,591,449,814 ^(e)
2017	Tangible ^(d)	-0-	-0- ^(b)	-0-
	Public Utility ^(c)	16,700,657,510 ^{(g)(h)}	58.7	1,347,897,157
	Real ^(c)	255,789,561,245	35.0	17,060,795,040 ^(e)
2018	Tangible ^(d)	-0-	-0- ^(b)	-0-
	Public Utility ^(c)	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)	-0-	-0- ^(b)	-0-
	Public Utility ^(c)	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)	-0-	-0- ^(b)	-0-
	Public Utility ^(c)	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)	-0-	-0- ^(b)	-0-
	Public Utility ^(c)	28,165,092,620 ^{(g)(h)}	65.00	2,166,453,013

- (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 (see FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2016-2017).

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 \$398.5 million in FY 2020, \$374.6 million in FY 2021, and \$354.7 million in FY 2022.

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 \$3.58 billion for the 2016-2017 biennium, \$3.60 billion for the 2018-2019 biennium, and \$3.60 billion for the 2020-2021 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 208 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:

- 2012-2013 \$16.6 billion (a 2.3 percent decrease over the previous biennium).
- 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).

The appropriations for school funding for the 2022-2023 biennium are \$23.0 billion (a 4.9 percent increase from the previous biennium), representing an increase of 2.9 percent in FY 2022 over FY 2021 and an increase of 1.9 percent in FY 2023 over FY 2022.

The amount of lottery profits transferred to the LPEF totaled \$1.04 billion in FY 2017, \$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, and is currently estimated to be \$1.26 billion in FY 2023. 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 2014-2015 Biennial Appropriations Act enacted a new funding formula for the distribution of state funding to school districts based on a per pupil amount. This per pupil formula is like the "Building Blocks" school funding formula in place through FY 2009 until its replacement with the "Evidence Based Model" for the 2010-2011 biennium. The Evidence Based Model was repealed in July 2011 and a temporary formula was put in place for the 2012-2013 biennium that allocated funding to each school district based on the per pupil funding it received for FY 2011, adjusted by its share of a statewide per pupil adjustment amount that was indexed by the district's relative tax valuation per pupil.

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 perpupil 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 implements a new funding formula known as the Fair School Funding Plan. The new formula establishes 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 will have a unique base cost amount which replaces the prior Opportunity Grant amount of \$6,020 per pupil. The new formula revises categorical funding and implements 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 will be directly funded in FY 2022 and FY 2023. Instead of a Gain Cap, most components of the formula will be subject to a general phase-in percentage of 16.67 percent in FY 2022 and 33.33 percent in FY 2023. The Act also provides for additional payments to support school bus purchases, community school facilities, and quality community schools.

Municipalities

Ohio has a mixture of urban and rural population, with approximately three-quarters urban. There are 932 incorporated cities and villages (municipalities with populations under 5,000) in the State. Six cities have populations of more than 100,000 and 15 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.



APPENDIX B

GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE

Glossary

When used in this Official Statement, the following terms shall have the meanings set forth below. The definitions set forth below are qualified in their entirety by reference to the Trust Agreement and the Lease, copies of which are available from the Treasurer and the Trustee and, during the underwriting period, the Underwriters. Use of the singular includes plural and use of the plural includes singular, where applicable.

"Acquisition Premium" means the amortizable bond premium which is issued on Premium Bonds.

"Act" means Chapter 154 of the Revised Code, together with the provisions of any act or resolution of the General Assembly authorizing or limiting the issuance of, or otherwise pertaining to Obligations, as the same may be amended, modified, revised, supplemented or superseded from time to time.

"Additional Bonds" means additional Obligations issued pursuant to the Trust Agreement after the first issuance of Obligations pursuant to the Trust Agreement.

"Additional Rent" means rentals paid by the DOT to the Treasurer under the Lease in amounts at least adequate to provide for the purposes of the Administrative Service Fund.

"Administrative Service Fund" means the Administrative Service Fund established by the Treasurer in the custody of the Treasurer for the payment of those administrative expenses of the Treasurer identified in the General Bond Order.

"Annual Information" means such financial information provided or caused to be provided by the Treasurer as may be required under the Rule.

"Authenticating Agent" means the Trustee and any other bank, trust company or other person designated as an Authenticating Agent for a series of Obligations by or in accordance with the Trust Agreement, which shall be a transfer agent registered in accordance with Section 17A(c) of the Securities Exchange Act of 1934, as amended.

"Authorized Officer" means any person duly authorized to perform the particular acts or sign the particular documents on behalf of the State or other indicated Person or official. In the case of the Treasurer, it means any officer or employee of the Treasurer authorized by, or pursuant to, a designation or order of the Treasurer to perform the particular act or sign the particular document, and if there is no such authorization means the Treasurer.

"Basic Rent" means rentals paid by the DOT directly to the Treasurer under the Lease in amounts at least adequate to (i) meet the Bond Service Charges on the Obligations, and (ii) establish and maintain any Required Reserve.

"Beneficial Owner" or "beneficial owner" means the owner of a book-entry interest in a Series 2023 Bond held by a Securities Depository in book-entry form.

"Bond" or "Bonds" means any Obligation in the form of a bond, or all of the bonds, or an issue or series of bonds, of the State issued pursuant to the General Bond Order and any Series Order.

"Bondholder" or "holder" or "holder" or "holder of Bonds" or "owner" or any similar term means the person in whose name an Obligation is registered, or the holder or owner of Obligations as may otherwise be prescribed by a Series Order.

"Bond Proceedings" means the General Bond Order, the Trust Agreement, the Series Order and Supplemental Trust Agreement, the Lease, the Supplemental Lease and any other order, resolution, agreement and lease, and amendments of and supplements to the foregoing or any combination of them, authorizing or providing for the terms and conditions applicable to, or providing for the security of, Obligations issued pursuant to the Act.

"Bond Registrar" means the Person that keeps and maintains the Register for the Obligations, which shall be the Trustee except as may otherwise be provided pursuant to the Trust Agreement or a Series Order.

"Bond Service Account" means the Bond Service Account so designated in the Bond Service Fund and created in the General Bond Order.

"Bond Service Charges" means the principal, Mandatory Sinking Fund Requirements, and interest, and redemption premium, if any, required to be paid by the State on the Obligations. In the case of payment of Bond Service Charges by a Person other than the State pursuant to a Credit Enhancement Facility, "Bond Service Charges" means the payment or reimbursement by the State to the provider of that facility of the amount so paid. In determining Bond Service Charges for a Fiscal Year or any other period, Mandatory Sinking Fund Requirements for that Fiscal Year or period shall be taken into account. With respect to Obligations in the form of notes, the amount of Bond Service Charges on those notes shall be deemed to be the Bond Service Charges for the bonds anticipated by those notes as set forth in the Bond Proceedings applicable to those notes pursuant to Section 154.12 of the Revised Code.

"Bond Service Fund" means the transportation facilities bond service trust fund created by the provisions of Revised Code Section 154.24(E) in the custody of the Treasurer but separate and apart from and not a part of the State treasury, including the accounts in it provided for in the General Bond Order.

"Bond Service Reserve Account" means a Bond Service Reserve Account that may be established in a Series Order pursuant to the General Bond Order.

"book-entry form" or "book-entry system" means a form or system under which physical Obligation certificates are issued only to a Securities Depository or its nominee as owner, with the certificated Obligations held by and "immobilized" in the custody of the Securities Depository, and the book-entry system, maintained by and the responsibility of the Securities Depository or others, is the record that identifies and records the transfer of the interests of the owners of book-entry interests in those Obligations.

"book-entry interests" means the interests of the ultimate purchasers of book-entry interests in Obligations issued in book-entry form.

"Capital Facilities" means any capital facilities for the DOT for the financing or refinancing of which the Treasurer is authorized to issue Obligations under the Act.

"Code" means the Internal Revenue Code of 1986, as amended.

"Continuing Disclosure Agreement" means the Continuing Disclosure Agreement of the Treasurer dated as of May 9, 2023 relating to the Series 2023 Bonds.

"Costs of Capital Facilities" or "Project Costs" means costs of Capital Facilities as set forth in the Act, and the financing of those costs, for the payment of which Obligations may be issued under the Act.

"Cover" means the cover page of this Official Statement.

"Credit Enhancement Facility" or "Credit Enhancement Facilities" means letters of credit, lines of credit, stand-by, contingent, or firm securities purchase agreements, insurance, or surety arrangements, guarantees, and other arrangements that provide for direct or contingent payment of debt charges, for security or additional security in the event of nonpayment or default in respect of securities, or for making payment of debt charges to and at the option and on demand of securities holders or at the option of the issuer or upon certain conditions occurring under put or similar arrangements, or for otherwise supporting the credit or liquidity of the securities, and includes credit, reimbursement, marketing, remarketing, indexing, carrying, interest rate hedge, and subrogation agreements, and other agreements and arrangements for payment and reimbursement of the person providing the credit enhancement facility and the security for that payment and reimbursement, or an arrangement to provide, in whole or in part, a Required Reserve.

"DAC" means Digital Assurance Certification, L.L.C.

"Director" means the Director of the State Office of Budget and Management, or the designee of that official for the purpose.

"Disclosure Dissemination Agent" means DAC.

"Disclosure Dissemination Agreement" means the Disclosure Dissemination Agent Agreement entered into by the State with DAC for the benefit of the holders of the Series 2023 Bonds to provide certain continuing disclosure in accordance with the Rule.

"DOT" means the Department of Transportation created by Section 121.02 of the Revised Code.

"DTC" or "Depository" means The Depository Trust Company (a limited purpose trust company), New York, New York, its successors and their assigns.

"Eligible Investments" means

- (i) Direct obligations of the United States of America;
- (ii) Obligations, whether representing principal and interest or either principal or interest, guaranteed as to payment by the United States of America or to the payment of which the faith of the United States of America is pledged;
- (iii) Obligations issued by any agency or instrumentality of the United States of America which are accepted by the Rating Services for refunding purposes generally to result in the particular refunded obligations being assigned the highest rating of the particular Rating Service;
- (iv) General obligations of the State or of any political subdivision of the State that are rated at one of the two highest letter ratings of a Rating Service;
- (v) Certificates of deposit issued by a national bank located in the State or a bank (as defined in Section 1101.01 of the Revised Code) subject to inspection by the State Superintendent of Banks, which bank has a combined capital and surplus of at least \$100,000,000 in dollars of the United States of America and is rated at least "A" (or its equivalent) by the Rating Services, provided that such certificates of deposit (a) do not exceed in the aggregate 10% of the combined capital, surplus and undivided profits of the issuing bank and (b) shall be in the possession of the Treasurer or that office's agents and shall be (A) continuously and fully insured by the Federal Deposit Insurance Corporation or its successors and (B) to the extent not so insured, continuously and fully secured by securities described in clauses (i) through (iii) above which have a market value (exclusive of any accrued interest) at all times at least equal to the principal amount of the certificates of deposit. The bank issuing a certificate of deposit required to be secured as provided in clause (B) above shall furnish the Treasurer with an undertaking that the aggregate market value of all such pledged securities securing each certificate of deposit will at all times be an amount at least equal to the principal amount of that certificate of deposit, and the Treasurer shall be entitled to rely on each such undertaking;
- (vi) Repurchase agreements, for a period not to exceed 30 days, with any institution described in Section 135.143(A)(4)(a) of the Revised Code that is rated at least "A" (or its equivalent) by the Rating Services, and which agreement is fully and continuously collateralized by securities described in clauses (i) through (iii) above based on the market value of those pledged securities;
- (vii) Any no front end load money market fund (including those for which the Trustee or an affiliate performs services for a fee, whether as custodian, transfer agent, investment advisor or otherwise) that is rated at least "A" (or its equivalent) by the Rating Services, consisting exclusively of obligations described in clauses (i) through (iii) above; and
- (viii) The Treasurer's investment pool provided for in Section 135.45 of the Revised Code.

For purposes of clauses (v) and (vi) above the respective pledged securities are to be in the possession of the Treasurer or that officer's agent, and are to be free and clear of all liens or rights of any third party and in which securities the State is to have a first perfected security interest.

"EMMA" means the MSRB's Electronic Municipal Market Access system.

"Event of Default" means an Event of Default as described in this APPENDIX B – GLOSSARY AND SUMMARIES OF THE TRUST AGREEMENT AND THE LEASE - Summary of the Trust Agreement – Events of Default and Remedies.

"Federal Securities" means: (i) direct obligations of, or obligations representing principal and interest, or principal or interest, the full and timely payment of which is guaranteed by, or to the full and timely payment of which is pledged the faith of, the United States of America; (ii) any certificates or other evidences of direct ownership interest in obligations of the character described in clause (i) or in specified portions of those obligations, including, without limitation, portions consisting solely of the principal of or solely of the interest on those obligations; or (iii) obligations of any state of the United States or any political subdivision of any state of the United States carrying the highest rating category of a Rating Agency, the full payment of principal of and interest and any premium on which are provided for by an irrevocable deposit in trust of the Federal Securities described in clause (i) or (ii), to the extent such investments are permitted by applicable law. With respect to Federal Securities described in clause (ii), the underlying obligations must be, as evidenced by a receipt held by the owner, held in safekeeping on behalf of the owner.

"Financial Institution" means any financial institution or institutions, including without limitation any insurance company, providing a Credit Enhancement Facility in connection with one or more series of Obligations outstanding.

"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 a debt obligation or a derivative instrument described in (A) or (B) of this definition. The term "Financial Obligation" shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

"Fiscal Year" means a period of 12 consecutive months commencing on the first day of July of any year and ending on the last day of June of the following year, or, such other consecutive 12-month period as may by law be established as the fiscal year of the State for general fiscal purposes.

"Fitch" means Fitch Ratings.

"General Assembly" means the body in which the legislative power of the State is vested.

"General Bond Order" means the General Bond Order No. 3-15 issued by the Treasurer on January 13, 2015, as it may be amended, supplemented or superseded from time to time in accordance with the provisions of the Trust Agreement.

"General Revenue Fund" means the State's general revenue fund.

"Highway Operating Fund" means the State's highway operating fund, being a fund containing the State's motor fuel tax and other highway user receipts that are constitutionally restricted in use to highway related purposes.

"Improvement Fund" means the Transportation Building Fund created under Section 154.24(F) of the Revised Code.

"Initial Term" means the initial term of the Lease that commenced on January 28, 2015 and ended at twelve o' clock midnight June 30, 2015.

"Interest Payment Date" means the date(s) on which interest on a particular Obligation is due and payable, whether at maturity, prior redemption or otherwise and, for the Series 2023 Bonds, means each April 1 and October 1, commencing October 1, 2023, while the Series 2023 Bonds are outstanding.

"Lease" means the Original Lease Agreement as amended and supplemented from time to time, including as amended and supplemented by the Series 2023A Supplemental Lease, and unless context or use clearly indicates otherwise includes all Supplemental Leases.

"mail" or "mailed" or "mailing" means sending by first-class mail, postage prepaid.

"Mandatory Redemption" or "Mandatory Redemption" or "Mandatory Sinking Fund Redemption" means mandatory prior redemption of Term Bonds pursuant to Mandatory Sinking Fund Requirements.

"Mandatory Sinking Fund Requirements" means amounts required by any Series Order to be deposited to the Bond Service Fund and credited to the Bond Service Account in any Fiscal Year for the purpose, as provided in that Series Order, of retiring, by mandatory prior redemption or other prior retirement, principal maturities of Obligations, which by the terms of the Obligations are due and payable in any subsequent Fiscal Year.

"Moody's" means Moody's Investors Service, Inc.

"MSRB" means the Municipal Securities Rulemaking Board.

"Municipal Advisor" means Acacia Financial Group, Inc.

"Obligated Person" has the meaning given to it in the Rule.

"Obligations" means Bonds, notes, or other evidences of obligation of the State, including any appertaining coupons for interest, issued pursuant to the Act and the Trust Agreement.

"OPFC" means the Ohio Public Facilities Commission, a body corporate and politic, constituting an agency and instrumentality of the State, created by Revised Code Section 151.02.

"Original Lease Agreement" means the Lease Agreement between the OPFC and the DOT, dated as of January 1, 2015.

"Original Purchaser" as to any series of Obligations means the person or persons named in, or in a certificate authorized by, the Series Order as the original purchaser of those Obligations from the State.

"Original Trust Agreement" means the Trust Agreement between the State, acting by and through the Treasurer, and the Trustee, dated as of January 1, 2015, authorized in the General Bond Order.

"Outstanding Bonds" or "Bonds outstanding" or "outstanding" as applied to particular Obligations, to Obligations of any series or to all Obligations, means, as of any date, the Obligations to which the reference applies and which have been authenticated and delivered, or are then being authenticated and delivered, by the Trustee under the Trust Agreement except:

- (i) Obligations or portions of Obligations cancelled on or prior to that date, or delivered to or acquired by or on behalf of the State for cancellation on or prior to that date, by reason of payment or prior redemption;
- (ii) Obligations, or the portion of Obligations, for the payment, redemption or purchase for cancellation of which sufficient moneys have been deposited prior to that date with the Trustee or Paying Agents (whether upon or prior to the maturity or redemption date of those Obligations), or which are deemed to have been paid or caused to be paid, as provided in the Trust Agreement; provided (a) that if those Obligations are to be redeemed prior to their stated maturity, notice of that redemption has been given to each holder of those Obligations or arrangements satisfactory to the Trustee have been made for giving that notice, or waiver of that notice satisfactory in form to the Trustee has been filed with the Trustee, and (b) that if those Obligations are to be purchased for cancellation, a firm offer for sale stating the price has been received and accepted; and
- (iii) Lost, stolen, mutilated or destroyed Obligations in lieu of which others have been authenticated (or payment when due of which is made without replacement) under the Trust Agreement.

"Paying Agents" means the Trustee and any other banks or trust companies, and the Treasurer of State, designated as the paying agencies or places of payment for Obligations by or pursuant to the Series Order, and their successors designated pursuant to the Trust Agreement.

"Person" means any natural person, firm, corporation, limited liability company, partnership (including, without limitation, general and limited partnerships), joint venture, society, estate, trust, public or governmental body or other entity, and any combination of those persons.

"Pledged Receipts" means:

(i) All rentals and other revenues and receipts received pursuant to the Lease, excepting only those portions to be deposited to the Administrative Service Fund as provided in the General Bond Order, and amounts necessary to pay any rebate amount or related amount computed in accordance with Section 148(f) of the Code and the regulations under that Section;

- (ii) All amounts standing to the credit of the Bond Service Fund including the Bond Service Reserve Account (other than sub-accounts in the Bond Service Reserve Account which are limited to a certain series of Obligations);
- (iii) Any gifts, grants, donations and pledges, and receipts from those gifts, grants, donations and pledges, available for payment of applicable Bond Service Charges, but excluding any such amounts which under restrictions imposed as a condition of their receipt are not available for payment of those Bond Service Charges; and
- (iv) Any other "available receipts," as defined in Section 154.24(D) of the Revised Code, which are pledged for the payment of Bond Service Charges by a Series Order.

"Premium Bonds" means any Series 2023 Bonds that are sold to the public at a price greater than the principal amount payable at maturity or earlier call date.

"Principal Payment Date(s)" means the date(s) on which principal is stated to be payable on Obligations at stated maturity or pursuant to Mandatory Sinking Fund Requirements and Mandatory Redemption Obligations and, for the Series 2023 Bonds, as shown on the Cover of the Official Statement.

"Project Costs" means costs of the Projects.

"Projects" means those Capital Facilities, or portions of Capital Facilities, the Project Costs of which have been or are to be financed or refinanced by Obligations, and shall include that undivided portion of any Capital Facilities representing the part of Project Costs financed or refinanced by Obligations.

"Rating Service" means any of Fitch, Moody's or S&P or their successors and assigns. If any of these corporations ceases to act as a securities rating agency, the Treasurer may, with the approval of the Trustee, appoint any nationally recognized securities rating agency as a replacement.

"Register" means the books kept and maintained by the Bond Registrar for the registration, exchange and transfer of Obligations pursuant to the Trust Agreement.

"Registered Obligations" means fully registered obligations registered as to both principal and interest in the name of the owner or holder.

"Registered Owner" means any Person in whose name an Obligation is registered pursuant to the Bond Proceedings.

"Regular Record Date" means the 15th day of the calendar month immediately preceding the month when an Interest Payment Date on the Obligations occurs.

"Renewal Term" means each successive term of the Lease resulting from the exercise by the DOT of its right to renew the term of the Lease to end at twelve o'clock midnight on the last day of the State's fiscal biennium (June 30th of each odd-numbered year) or until the Treasurer shall have paid and retired, or shall have made due and adequate provision for the payment and retirement of, all Obligations issued by the Treasurer.

"Required Reserve" means any reserve for payment of Bond Service Charges on any Obligations, or series or two or more series or part of a series of Obligations, that may be provided for in a Series Order, which Required Reserve may be provided for by deposit of moneys or Eligible Investments in a Special Fund or Account or by a Credit Enhancement Facility or by any combination of the foregoing.

"Revised Code" means the Ohio Revised Code.

"Rule" means U.S. Securities and Exchange Commission Rule 15c2-12.

"S&P" means S&P Global Ratings, a division of S&P Global Inc.

"Securities Depository" means any securities depository that is a clearing agency under federal law operating and maintaining, with its participants or otherwise, a book-entry system to record ownership and effect transfers of book-entry interests in bonds, notes or other evidence of obligations. Securities Depository includes its nominee for the particular purpose.

"Series 2023 Bonds" means the \$52,865,000 State of Ohio (Treasurer of State) Capital Facilities Lease-Appropriation Bonds, Series 2023A (Transportation Building Fund Projects) authorized by the Series 2023A Order.

"Series 2023A Order" means Series Bond Order No. 1-23 issued by the Treasurer on April 25, 2023 providing for the Series 2023 Bonds.

"Series 2023A Payment Account" means the trust fund established by the provisions of the Series 2023A Order in the custody of the Trustee for payment on the Series 2023 Bonds.

"Series 2023A Supplemental Lease" means the Series 2023A Supplemental Lease Agreement dated as of May 1, 2023 between the OPFC and the DOT, amending or supplementing the Lease.

"Series 2023A Supplemental Trust Agreement" means the Series 2023A Supplemental Trust Agreement dated May 1, 2023 between the State, acting by and through the Treasurer, and the Trustee, amending or supplementing the Trust Agreement, and includes the Series 2023A Order set forth in it.

"Series Order" means an order or resolution of the Treasurer authorizing the issuance of Obligations in accordance with the General Bond Order, including the Series 2023A Order, and includes any order, resolution or certificate providing for or evidencing the award and specific terms of Obligations authorized by the Series Order.

"Special Funds" or "Special Funds and Accounts" means the Bond Service Fund and accounts in that Fund to the extent pertaining to the Obligations, and any other funds or accounts, including, without implied limitation, a Bond Service Reserve Account providing a Required Reserve or funds or accounts relating to a Credit Enhancement Facility, permitted by, established under or identified in the Trust Agreement or a Series Order or Supplemental Trust Agreement.

"State" means the State of Ohio.

"Supplemental Lease" means any Supplemental Lease amending or supplementing the Lease as contemplated by the Lease.

"Supplemental Trust Agreement" means any Supplemental Trust Agreement amending or supplementing the Trust Agreement.

"Term Bonds" means those Bonds designated as such and maturing on the date or dates set forth in the Bond Proceedings, bearing interest payable on each Interest Payment Date and subject to Mandatory Redemption pursuant to Mandatory Sinking Fund Requirements.

"Transportation Building Fund" means the transportation building fund created in the State treasury pursuant to Revised Code Section 154.24(F) in the custody of the Treasurer.

"Treasurer" means the State Treasurer of Ohio.

"Trust Agreement" means the Original Trust Agreement, including the General Bond Order set forth in it, as the same may be amended, modified or supplemented, including as amended, modified or supplemented by the Series 2023A Supplemental Trust Agreement, and unless the context indicates otherwise, includes all Supplemental Trust Agreements.

"Trustee" means the Trustee at the time serving under the Trust Agreement, originally U.S. Bank Trust Company, National Association, Columbus, Ohio, successor trustee to U.S. Bank National Association, and any successor Trustee as determined or designated pursuant to the Trust Agreement.

"Underwriters" means, collectively, Huntington Securities, Inc., Academy Securities, Inc., Janney Montgomery Scott LLC, and Raymond James & Associates, Inc.

Summary of the Trust Agreement

General

The following, in addition to information contained above under the heading THE TRUST AGREEMENT, summarizes certain provisions of the Trust Agreement, to which reference to the full document is made for its detailed

provisions. The General Bond Order and the Series 2023A Order authorizing the Series 2023 Bonds are incorporated in their entirety in, and constitute part of, the Trust Agreement and all references in this summary to the Trust Agreement shall, unless specific section references are made, include the General Bond Order and the Series 2023A Order.

So long as the Series 2023 Bonds are immobilized in a book-entry system with a Securities Depository, that Securities Depository or its nominee is for all purposes of the Trust Agreement considered by the Treasurer and the Trustee to be the holder of those Series 2023 Bonds and the book-entry interest owners of the Series 2023 Bonds will not be considered holders of the Series 2023 Bonds and have no rights as holders under the Trust Agreement. (See THE SERIES 2023 BONDS – Registration, Payment and Transfer and APPENDIX C – BOOK-ENTRY SYSTEM; DTC)

Security

The Trust Agreement provides for a pledge of the Pledged Receipts by the State to the Trustee, for the benefit of the holders of the Obligations. Nothing in the Act, the Trust Agreement or other Bond Proceedings gives the holders of the Obligations, and they do not have, the right to have the General Assembly levy any excises or taxes for the payment of Bond Service Charges. (See **THE BONDS GENERALLY – Security**)

Funds and Accounts

The Trust Agreement establishes for the Series 2023 Bonds the following funds and accounts to be held in the custody of the Treasurer, separate and apart from and not a part of the State treasury, and used for specific purposes described below: the Bond Service Fund, which includes the Bond Service Account; and the Administrative Service Fund. The Trust Agreement also establishes a Series 2023A Payment Account to be held by the Trustee and used for the specific purposes described below. In addition, the General Assembly has created the Transportation Building Fund (the "Improvement Fund"), held by the Treasurer, which may include a separate account for each Project and each series of Obligations. The Improvement Fund is not pledged to the payment of Bond Service Charges on the Obligations. In addition, as described below, the Administrative Service Fund is not pledged to the payment of Bond Service Charges on the Obligations.

Bond Service Fund. The Act establishes the bond service fund, designated the "transportation facilities bond service trust fund," in the custody of the Treasurer, separate and apart from and not a part of the State treasury, and provides that all moneys received by or on account of the Treasurer or the OPFC and required by the Bond Proceedings to be deposited, transferred, or credited to the Bond Service Fund, and all other moneys transferred or allocated to or received for the purposes of the Bond Service Fund, shall be deposited with the Treasurer and credited to the Bond Service Fund, subject to the Bond Proceedings, without necessity for any act of appropriation. The Bond Service Fund is a trust fund pledged to the payment of Bond Service Charges on Obligations to the extent provided in the Bond Proceedings and payment of Bond Service Charges from the Bond Service Fund shall be made or provided for by the Treasurer in accordance with the Bond Proceedings without necessity for any act of appropriation. Pursuant to the Act, it is required that all money received by or on account of the OPFC from the DOT under the Lease will be deposited, transferred or credited to the Bond Service Fund, except for Additional Rent which will be deposited, transferred or credited to the Administrative Service Fund. The Treasurer may create accounts within the Bond Service Fund including a Bond Service Account referred to below and one or more payment accounts for the Obligations.

Bond Service Account. The Bond Service Account has been established in the Bond Service Fund. There will be deposited in the Bond Service Account: (i) unless otherwise provided in a Series Order, from the proceeds of the sale of Obligations any amounts representing accrued interest and capitalized interest; (ii) all moneys received by the Treasurer under the Lease, excepting the portion of those moneys to be credited to the Administrative Service Fund; and (iii) any grants, gifts, donations, pledges, and the receipts from such grants, gifts, donations and pledges, received by the Treasurer for the purposes of the Bond Service Account or any Required Reserve (there is no Required Reserve for the Series 2023 Bonds), any moneys to be transferred from the Improvement Fund to the Bond Service Account or any Required Reserve or any Special Fund, except the Administrative Service Fund, and any other moneys transferred or allocated to or received for the purposes of the Bond Service Account or any Required Reserve. The Bond Service Account is pledged to and shall be used except as excess amounts may be transferred pursuant to the General Bond Order, solely for the payment of Bond Service Charges on the Obligations as they fall or become due and payable.

Administrative Service Fund. The Administrative Service Fund will be used to pay (i) regular and special fees and reimbursement of reasonable expenses of the Trustee, Paying Agent, Authenticating Agent, Bond Registrar, depositories, financial advisors, consultants, attorneys, accountants and others providing services with respect to the authorization, sale, issuance, delivery and servicing of the Obligations, including audits, certifications, and reports provided for in the General Bond Order or any Series Order and (ii) the financing charges, costs of Credit Enhancement Facilities, costs of printing, engraving,

advertising, and other expenses in connection with such authorization, sale, issuance, delivery and servicing of the Obligations. Amounts necessary to pay any rebate amount computed in accordance with the requirements of Section 148(f) of the Code and the related regulations, may also be paid by the Treasurer from the Administrative Service Fund. The Administrative Service Fund is not pledged to the payment of Bond Service Charges on the Obligations.

Series 2023A Payment Account. The Series 2023A Payment Account is established in the custody of the Trustee. Moneys for the payment of Bond Service Charges on the Series 2023 Bonds transferred by the Treasurer to the Trustee pursuant to the General Bond Order shall be deposited in the Series 2023A Payment Account. The Trustee shall make all payment of Bond Service Charges on the Series 2023 Bonds with moneys on deposit or credited to the Series 2023A Payment Account.

Other Special Funds and Accounts. If and to the extent required by any loan or grant agreement or other agreement with the United States of America or the State or any other governmental or public agency providing for any financial assistance, guarantee or insurance in connection with the financing of any Project or in connection with the issuance of Obligations, or by any Credit Enhancement Facility, the Treasurer may, pursuant to a Series Order, create Special Funds and Accounts or sub-accounts in the Bond Service Fund and in the Bond Service Account or other accounts, relating to that Project or its financing or the particular Obligations, and make special provisions, among others, that moneys received under that agreement or instrument be restricted to such Special Funds and Accounts or sub-accounts, and for the holding, investing and disposition of any moneys in Special Funds and Accounts or sub-accounts in accordance with that agreement or instrument and for the primary or exclusive benefit of the applicable Obligations, but all only as and to the extent required by that agreement or instrument. If any Special Funds or Accounts or sub-accounts are so restricted, then the amounts in those Special Funds or Accounts or sub-accounts, to the extent so restricted, shall not be considered to be available for Bond Service Charges on other Obligations in determining the sufficiency of or deposits to the Bond Service Account under the provisions of the General Bond Order with respect to the other Obligations.

Investment of Certain Funds

Moneys in the Improvement Fund will be invested in accordance with State law. Moneys held in the Bond Service Account may be invested and reinvested by the Treasurer in any Eligible Investments as provided in the Trust Agreement, provided that investments of moneys in the Bond Service Account shall mature or be redeemable at the option of the holder at the times and in the amounts necessary to provide moneys to meet the payment of Bond Service Charges as they fall due. The Treasurer may from time to time sell such investments and reinvest the proceeds in similarly rated Eligible Investments maturing or redeemable as provided above. Any Eligible Investments may be purchased from the Trustee or its affiliates. Subject to the provisions of the Bond Proceedings, an investment made from moneys credited to the Bond Service Account shall constitute part of the Bond Service Account, and the Bond Service Account shall be credited with all proceeds of sale and income from that investment. Those investments shall be valued at the lesser of face amount or market value. Moneys held in the Administrative Service Fund, until required for payments to be made from the Administrative Service Fund, may also be invested in Eligible Investments upon or pursuant to order of the Treasurer.

Additional Bonds

One or more series of Additional Bonds may be issued under the Trust Agreement to pay Costs of Capital Facilities for the purposes described therein and in the Act, and to refund, advance refund, fund or retire Obligations. Such Additional Bonds shall be authorized by Series Orders as provided in the General Bond Order.

The issuance of Additional Bonds under the Trust Agreement is also subject to the following conditions, among others: (i) the State is not in default, and the authentication and delivery of the Additional Bonds will not result in any default, of any of the State's covenants or obligations under the Trust Agreement; (ii) the aggregate outstanding principal amount of those Additional Bonds and any other Obligations outstanding and issued under the Act, will not exceed in aggregate the amount of those particular Obligations that may be issued or outstanding under the Act; (iii) upon such issuance and delivery, the amount in or of any Required Reserve for any Additional Bonds is not less than that Required Reserve; (iv) other requirements provided in the Trust Agreement for the issuance of Additional Bonds have been met; and (v) the Trustee has received (a) a copy, certified by the Treasurer of the Series Order authorizing the issuance and delivery of those Additional Bonds, adopted in conformity with the General Bond Order; (b) an original executed counterpart of the Supplemental Trust Agreement entered into in connection with the issuance of those Additional Bonds; (c) an original executed counterpart of the Supplemental Lease entered into in connection with the issuance of those Additional Bonds; (d) a request and authorization to the Trustee on behalf of the Treasurer, signed by its Authorized Officer, to authenticate and deliver the Additional Bonds to or on the order of the Original Purchaser identified, and upon payment of an amount specified, in that request and authorization; (e) a certificate of an Authorized Officer confirming that conditions (i) through (iv) above are satisfied; (f) the written opinion of legal counsel retained by the Treasurer, or other legal counsel satisfactory to the Trustee, to the effect that documents submitted to the Trustee in

connection with that request and authorization comply with the requirements of the Trust Agreement, and that all legal conditions precedent to the issuance of those Additional Bonds as provided in the Trust Agreement have been complied with and a written opinion of bond counsel for or designated by the Treasurer, who may also be the legal counsel referred to above, that those Additional Bonds, when duly executed, authenticated and delivered, will be valid and legal special obligations of the State, by the Treasurer, in accordance with their terms and those Additional Bonds, together with all Obligations then outstanding under the Trust Agreement, will be secured by the Trust Agreement; (g) a certificate of an authorized officer of the State confirming that amounts sufficient to support all rentals estimated to be due under the Lease if and to the extent applicable, for the current fiscal biennium have been appropriated to the lessee for the payment of such rentals and that, to the extent that budget requests have been made for the next succeeding fiscal biennium, amounts sufficient to support all rentals estimated to be due under the Lease if and to the extent applicable, for such biennium have been requested; and (h) any items required by the applicable Supplemental Trust Agreement to be filed with the Trustee before such Additional Bonds are initially authenticated and delivered.

Further Covenants

Certain other covenants of the Treasurer contained in the Trust Agreement are as follows:

<u>Payment.</u> The Treasurer covenants in the Trust Agreement to, from the sources provided in the General Bond Order, pay or cause to be paid the Bond Service Charges on each and all Obligations on the dates, at the places and in the manner provided in the General Bond Order, Bond Proceedings and Obligations, according to their true intent and meaning.

Maintenance of Pledge. The Treasurer covenants in the Trust Agreement not to make any pledge or assignment of or create or suffer any lien or encumbrance upon the Pledged Receipts prior to or on a parity with the pledge of the Pledged Receipts, except as and if authorized or permitted under the General Bond Order and the Trust Agreement.

Observance of Covenants. The Treasurer covenants in the Trust Agreement to faithfully observe and perform all agreements, covenants, undertakings, stipulations, and provisions contained in the General Bond Order, the Trust Agreement, any other applicable Series Order, and any and every outstanding Obligation executed, authenticated and delivered under the Trust Agreement.

<u>Duties Binding on All with Authority; Enforcement by Mandamus.</u> The Treasurer has acknowledged that each provision of the Bond Proceedings is binding upon the officer, board, authority, agency, department, or other person or body as may from time to time have the authority under law to take the actions as may be necessary to perform all or any part of the duty required by the provision. The Treasurer also acknowledged that each duty of the Treasurer and the Treasurer's officers and employees is established as a duty of the Treasurer, and of each officer and employee having authority to perform that duty, specifically enjoined by law resulting from an office, trust or station within the meaning of Section 2731.01 of the Revised Code, providing for enforcement by writ of mandamus.

Annual Reports. The Treasurer will, within 90 days after the end of each Fiscal Year, submit to the Trustee, the Governor and to the General Assembly by delivery to the presiding officers of each house of the General Assembly, an annual report by the Treasurer in the form required by Section 154.05 of the Revised Code.

Events of Default and Remedies

Events of Default. The occurrence of any of the following events is declared to be and to constitute an Event of Default under the Trust Agreement:

- Failure to pay any interest on any Obligation, when and as the same shall have become due and payable;
- Failure to pay the principal of or any redemption premium on any Obligation, when and as the same shall have become due and payable, whether at maturity or by acceleration or call for redemption; or
- Failure to perform or observe duly or punctually any other covenant, condition or agreement contained in the Obligations or the Trust Agreement and to be performed by the State, which failure shall have continued for a period of 60 days after written notice of it to the Treasurer given by the Trustee or the holders of not less than 25% in aggregate outstanding principal amount of affected Obligations.

The Trustee shall not be required to take notice, and shall not be deemed to have notice or knowledge, of any Event of Default described in the third bullet above, unless the Trustee is notified specifically of the Event of Default in a written

instrument delivered to it by the Treasurer or by the holders of at least 10% of the aggregate outstanding principal amount of Obligations under the Trust Agreement. In the absence of delivery of a notice satisfying those requirements, the Trustee may assume conclusively that there is no Event of Default as described in the third bullet above.

If an Event of Default occurs, the Trustee shall give written notice to the Treasurer within five business days after having knowledge of that Event of Default, and to the Original Purchasers of each series of Obligations then outstanding under the Trust Agreement, to the Bondholders of those Obligations, and to any other Paying Agent and Authenticating Agent within 90 days after having such knowledge, unless the Event of Default has been remedied or cured before the giving of that notice or, in the case of an Event of Default under the third bullet above, the Trustee in good faith determines that the withholding of that notice is in the interests of the Bondholders.

Remedies. If an Event of Default as described in the first and second bullets above has occurred and is continuing the Trustee shall, and if an Event of Default as described in the third bullet above has occurred and is continuing the Trustee may, and upon the written request of the holders of not less than 25% in aggregate outstanding principal amount of the Obligations shall, proceed in its own name to protect and enforce its rights and the rights of the Bondholders under the Trust Agreement by such of the following remedies as the Trustee, being advised by counsel, shall deem most effective to protect and enforce those rights:

- (i) By mandamus or other suit, action or proceeding at law or in equity enforce all the rights of the Bondholders, including the compelling of the performance of all duties of the Treasurer or governmental agencies under the Bond Proceedings and the enforcement of the payment of the Bond Service Charges;
- (ii) Bring suit upon the Obligations;
- (iii) Enjoin unlawful activities or activities in violation of the rights of the Bondholders under the Trust Agreement;
- (iv) In the case of an Event of Default that is a payment default (described in the first and second bullets above), apply to a court having jurisdiction of the cause to appoint a receiver (which may be the Trustee) to receive and administer the Pledged Receipts, other than those in the custody of the Treasurer, with full power to pay and to provide for payment of Bond Service Charges, and with such powers, subject to the discretion of the court, as are accorded receivers in general equity cases, excluding any power (i) to pledge additional revenues or receipts or other income or moneys of the Treasurer or the State or State agencies to the payment of the Bond Service Charges, and (ii) to take possession, mortgage or cause the sale or otherwise dispose of any Capital Facilities; and
- (v) In the case of an Event of Default that is a payment default (described in the first and second bullet above), by notice in writing to the Treasurer declare the principal of all Obligations then outstanding (if not then due and payable) and any interest accrued on those Obligations to be due and payable immediately, and upon that declaration that principal and interest, shall become and be immediately due and payable.

The provisions of the above subparagraph (v) are subject, however, to the condition that if at any time after principal and interest have been so declared due and payable and prior to the entry of judgment in a court of law or equity for enforcement or the appointment of a receiver under the Trust Agreement all sums payable under the Trust Agreement, except the principal of the Obligations which have not reached their stated maturity dates and which are due and payable solely by reason of such declaration, plus interest (to the extent permitted by law) on any overdue installments of interest at the rate borne by the Obligations in respect of which such Event of Default shall have occurred, shall have been duly paid or provided for by deposit with the Trustee or Paying Agent and all existing defaults thereunder shall have been made good, then and in every such case the payment or provision for payment shall, in and of itself, constitute a waiver of the applicable Event of Default and its consequences and an automatic rescission and annulment of the declaration under the above subparagraph (v). No such waiver, rescission and annulment shall extend to or affect any or impair any rights consequent on a subsequent or other Event of Default.

Enforcement of Rights Under Agreement. Upon the occurrence and continuance of any Event of Default the Trustee may proceed, and upon the written request of the holders of not less than 25% in aggregate outstanding principal amount of the Obligations shall proceed to protect and enforce its rights and the rights of the Bondholders under the Trust Agreement by such suits, actions or special proceedings in equity or at law, either for the specific performance of any covenant or agreement contained in the Trust Agreement or in the aid or execution of any power granted in the Trust Agreement or for the enforcement of any proper legal or equitable remedy, as the Trustee, being advised by counsel, shall deem most effective to protect and enforce those rights.

In the enforcement of any remedy under the Trust Agreement, the Trustee shall be entitled to sue for, enforce payment of and receive any and all amounts then or during any default becoming due and at any time remaining unpaid on account of principal, interest or otherwise under any of the provisions of the Trust Agreement or of the Obligations, with interest on overdue payments at the rate or rates of interest specified or provided for in the Obligations or the Series Order, together with any and all costs and expenses of collection and of all proceedings under the Trust Agreement and under those Obligations, without prejudice to any other right or remedy of the Trustee or of the Bondholders, and to recover and enforce any judgment or decree against the State or the Treasurer, but solely as provided in the Trust Agreement and in the Obligations, for any portion of such amounts remaining unpaid, with interest, costs and expenses, and to collect (but solely from the Pledged Receipts and the Special Funds and Accounts from which the Obligations are payable) in any manner provided by law, the moneys adjudged or decreed to be payable.

The holders of not less than a majority in aggregate outstanding principal amount of the Obligations shall have the right at any time by an instrument or concurrent instruments in writing executed and delivered to the Trustee, to direct the method and place of conducting any and all remedial proceedings under the Trust Agreement. However, (i) that direction shall not be otherwise than in accordance with the provisions of law or of the Trust Agreement, (ii) the Trustee shall be indemnified as provided in the Trust Agreement, and (iii) the Trustee shall have the right to decline to follow any such direction which in its opinion would be unjustly prejudicial to Bondholders not parties to that direction.

No remedy by the terms of the Trust Agreement conferred upon or reserved to the Trustee (or to the holders of the Obligations) is intended to be exclusive of any other remedy, but each and every such remedy shall be cumulative and in addition to any other remedy given to the Trustee or to the holders of the Obligations under the Trust Agreement or now or existing in the future.

No delay or omission to exercise any right or power accruing upon any default or Event of Default shall impair any such right or power or shall be construed to be a waiver of or acquiescence in that default or Event of Default. Every such right and power may be exercised from time to time and as often as may be deemed expedient.

On the occurrence of an Event of Default, neither the Treasurer nor the State nor any governmental agency, nor anyone claiming through or under any of them, shall set up, claim, or seek to take advantage of any laws now in force or in force in the future, in order to prevent or hinder the enforcement of the Trust Agreement, but the Treasurer, for the Treasurer and all who claim through or under the Treasurer, and for the State and for any governmental agency, waives, under the Trust Agreement, to the extent it may lawfully do so, the benefit of all such laws to which they or the State or such governmental agency may be entitled.

Waiver of Events of Default

At any time the Trustee may in its discretion waive any Event of Default under the Trust Agreement and its consequences, and rescind any declaration of accelerated maturity of principal and interest, and shall do so upon the written request of the holders of (i) at least a majority in aggregate outstanding principal amount of all the Obligations in respect of which an Event of Default in the payment of Bond Service Charges has occurred, or (ii) at least 25% in aggregate outstanding principal amount of all Obligations in case of any other Event of Default. However, there may not be so waived any Event of Default that is a payment default (described in the first and second bullets under **Summary of the Trust Agreement – Events of Default and Remedies –** Events of Default above), or any such declaration in connection with such an Event of Default rescinded, unless at the time of that waiver or rescission payments of the amounts as provided under **Summary of the Trust Agreement – Events of Default and Remedies –** Remedies above for waiver and automatic rescission in connection with that acceleration have been made or provided for. In case of any such waiver or rescission, the Treasurer, the Trustee and the Bondholders shall be restored to their respective positions and rights under the Trust Agreement. No such waiver or rescission shall extend to or impair any rights consequent on any subsequent or other Event of Default.

Supplemental Trust Agreements

The State and the Trustee, without the consent of or notice to any of the Bondholders, may enter into agreements supplemental to the Trust Agreement as shall not, in the opinion of the Treasurer and the Trustee, be inconsistent with the terms and provisions of the Trust Agreement for any one or more of the following purposes:

- (i) to cure any ambiguity, inconsistency or formal defect or omission in the Trust Agreement;
- (ii) to grant to or confer upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the Bondholders or the Trustee;

- (iii) to subject additional revenues or receipts to the lien and pledge of the Trust Agreement;
- (iv) to add to the State's covenants and agreements contained in the Trust Agreement other covenants and agreements to be observed after such addition for the protection of all or particular Bondholders, or to surrender or limit any right, power or authority reserved to or conferred upon the State in the Trust Agreement, including the limitation of rights of redemption so that in certain instances Obligations of different series will be redeemed in some prescribed relation to one another;
- (v) to evidence any succession to the Treasurer and the assumption by the successor of the Treasurer's covenants and agreements contained in the Trust Agreement and the Obligations;
- (vi) in connection with the issuance of Obligations in accordance with the Trust Agreement, including any and all appropriate provisions relating to the issuance of Additional Bonds in form other than Registered Obligations;
- (vii) to permit compliance with changes in federal or state securities or tax laws or regulations;
- (viii) to permit the Trustee to comply with any obligations imposed upon it by law;
- (ix) to specify further the duties and responsibilities at and to define further the relationship among, the Trustee and any other Authenticating Agent, Bond Registrar or Paying Agent;
- (x) the transfer of Obligations from one Securities Depository to another, and the succession of Securities Depositories, and the withdrawal of Obligations issued to a Securities Depository for holding in a book-entry system and the issuance of replacement Registered Obligations to others than a Securities Depository;
- (xi) to limit the Eligible Investments of moneys in the Bond Service Account as listed in the Trust Agreement, or to add to that list other Eligible Investments. If there be such a Rating Service at the time, the addition of Eligible Investments must be approved for the purpose by each Rating Service that has at the Treasurer's request assigned a rating to, and at the time maintains a rating on, the outstanding Obligations; and
- (xii) in connection with any other amendment to the Trust Agreement which, in the judgment of the Trustee is not to the prejudice of the Trustee or the holders of outstanding Obligations which that amendment may affect.

The provisions of clauses (vii) and (viii) of the preceding paragraph shall not be deemed to constitute a waiver by the Trustee, the Treasurer or any holder of any right which it may have in the absence of those clauses (vii) and (viii) to contest the application of any change in law to the Trust Agreement or those Obligations.

In addition, subject to the terms, provisions and limitations that follow, and not otherwise, the holders of not less than a majority in aggregate of the outstanding principal amount of the Obligations shall have the right, from time to time, anything contained in the Trust Agreement to the contrary notwithstanding, to consent to and approve the execution by the Treasurer and the Trustee of such other agreement or agreements supplemental to the Trust Agreement as may be deemed necessary and desirable by the Treasurer for the purpose of modifying, altering, adding to or rescinding, in any particular, any of the terms or provisions contained in the Trust Agreement. However, nothing in the Trust Agreement shall permit or be construed as permitting:

- (i) an extension of the maturity of the principal of or the interest on any Obligation, or a reduction in the principal amount of or the rate of interest or redemption premium on any Obligation, or a reduction in the amount or extension of the time of any payment required by any Mandatory Sinking Fund Requirements, without the consent of the holder of each Obligation so affected; or
- (ii) a reduction in the aggregate outstanding principal amount of the Obligations required for consent to such Supplemental Trust Agreement without the consent of the applicable holders of all of the Obligations then outstanding.

Where the consent of the holders of the Obligations is required, procedures are established in the Trust Agreement for notice to those holders and for the execution and filing of the requisite consents. Any consent shall be binding upon the holder of the Obligation giving that consent and upon any subsequent holder of the Obligation and of any Obligation issued in exchange for it, whether or not that subsequent holder has notice of the consent. However, the consent may be revoked by the holder of the Obligation who gave the consent if still the holder, or by a subsequent holder of the Obligation, by filing a written revocation

with the Trustee prior to the date of execution by the Trustee of the Supplemental Trust Agreement. If the holders of the required percentage in aggregate outstanding principal amount of the Obligations have consented to and approved the execution of the Supplemental Trust Agreement as provided in the Trust Agreement, no holder of any Obligation shall have any right to object to the execution of the Supplemental Trust Agreement, or to object to any of the terms and provisions contained in or the operation of the Supplemental Trust Agreement, or in any manner to question the propriety of the execution of the Supplemental Trust Agreement or to enjoin or restrain the Trustee or the Treasurer from executing it or from taking any action pursuant to its provisions.

Defeasance

If the State, by the Treasurer, shall pay or cause to be paid, or there shall otherwise be paid, to the holders of the outstanding Obligations all Bond Service Charges due or to become due thereon, and provision shall also be made for paying all other sums payable under the Trust Agreement by the Treasurer, then and in that event the Trust Agreement shall cease, determine and become null and void, and the covenants, agreements and other obligations of the Treasurer under the Trust Agreement shall be discharged and satisfied. Bond Service Charges due or to become due on the outstanding Obligations shall be deemed to have been so paid or caused to be paid if:

- (i) the Trustee and Paying Agents shall hold, in trust for and irrevocably committed to the payment of Bond Service Charges, sufficient moneys; or
- (ii) the Trustee shall hold, in trust for and irrevocably committed to the payment of Bond Service Charges, non-callable Federal Securities certified by a firm of independent certified public accountants of national reputation 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 amount of or the interest earnings from them, sufficient, together with any moneys referred to in (i) above, for the payment, when due, of all Bond Service Charges to the date or respective dates of maturity or redemption, as the case may be; provided, that if any Obligations are to be redeemed prior to their maturity, notice of that redemption shall have been duly given or irrevocable provision reasonably satisfactory to the Trustee shall have been duly made for the giving of that notice.

Non-Presentment of Bonds

If an Obligation is not presented for payment when due in whole or in part, whether at maturity, prior redemption or otherwise, or a check or draft for interest is uncashed, and if moneys for the purpose of paying and sufficient to pay the amount involved have been made available to the Trustee for the benefit of the Bondholder, all liability of the State or the Treasurer to that holder for that payment shall then cease and be discharged completely, and it shall then be the duty of the Paying Agent to hold those moneys in trust, without liability for interest on them, for the exclusive benefit of that holder. Subject to the provisions of the Trust Agreement, that Bondholder (and successive holders of that Obligation) shall, from that time, be restricted exclusively to those moneys for any claim of whatever nature on such holder's part under the Trust Agreement or on or with respect to that amount then due on that Obligation or that check or draft.

Any moneys so held by the Trustee or Paying Agent and remaining unclaimed by the holder (or successive holders) of that Obligation, for a period of three years after the date on which that Obligation became payable as provided above or on which that check or draft was issued, shall be paid to the Treasurer and, from that time, the holder (or successive holders) of that Obligation shall look only to the Treasurer for payment and then only to the amounts so received by the Treasurer without any interest on those amounts, and the Paying Agent and the Trustee shall have no further responsibility with respect to those moneys.

Payments Due on Saturdays, Sundays and Holidays

If any Interest Payment Date or Principal Payment Date (the date of maturity of the principal of any Obligations, or date fixed for redemption of any Obligations) (each referred to below as "the applicable date") is a Saturday or Sunday, or a day on which:

(i) the Trustee is required, or authorized or not prohibited, by law (including without limitation, executive orders) to close and is closed, then payment of interest, principal, and any redemption premium (each referred to as the "payment") need not be made by the Trustee or any Paying Agent on that date, and that payment shall be made on the next succeeding business day on which the Trustee and the Paying Agent are open for business

with the same force and effect as if that payment were made on the applicable date, and no interest shall accrue for the period after that applicable date; or

(ii) a Paying Agent is required, or authorized or not prohibited, by law (including without limitation, executive orders) to close and is closed, then the payment need not be made by that Paying Agent on that date, and the payment shall be made on the next succeeding business day on which that Paying Agent is open for business with the same force and effect as if the payment were made on the applicable date, and no interest shall accrue for the period after that applicable date.

If, however, the Trustee is open for business on the applicable date it shall make any payment with respect to interest on outstanding Obligations and principal of and premium on Obligations presented to it for payment, regardless of whether any other Paying Agent is open for business or closed on that date.

Trustee

The Trustee under the Trust Agreement is U.S. Bank Trust Company, National Association, which is a national banking association organized and existing under and by virtue of the laws of the United States of America and authorized to exercise corporate trust powers in the State. The Trustee accepts the trusts imposed upon it by the Trust Agreement, but only upon the terms and conditions set forth in the Trust Agreement. The Trustee, prior to the occurrence of an Event of Default under the Trust Agreement and after the curing of all Events of Default under the Trust Agreement which may have occurred, undertakes to perform such duties and only such duties as are specifically set forth in the Trust Agreement, and no implied covenants or obligations should be read into the Trust Agreement against the Trustee. If any Event of Default under the Trust Agreement shall have occurred and be continuing, the Trustee shall exercise such of the rights and powers vested in it by the Trust Agreement and shall use the same degree of care as a prudent person would exercise or use in the circumstances in the conduct of such prudent person's own affairs. Before taking action under the provisions of the Trust Agreement related to intervention by the Trustee and default (with the exception of any action required to be taken under the Trust Agreement related to giving notice of an Event of Default), the Trustee may require that a satisfactory indemnity bond be furnished for the reimbursement to it of all reasonable expenses to which it may be put and to protect it against all liability by reason of any action so taken, except liability which is adjudicated to have resulted from its negligence, bad faith or willful misconduct by reason of any action so taken. The permissive right of the Trustee to do things enumerated in the Trust Agreement shall not be construed as a duty and the Trustee shall not be answerable for other than its negligence, bad faith or willful misconduct.

Summary of the Lease

General

Pursuant to the Act, the OPFC may lease Capital Facilities, including a lease of the Capital Facilities to the DOT. Accordingly, the OPFC has entered into the Lease with the DOT. The following, in addition to information contained above under **THE LEASE**, summarizes certain provisions of the Lease, to which reference to the complete document is made for its detailed provisions.

Term of the Lease

The Initial Term of the Lease has been renewed to expire at twelve o'clock midnight the last day of the State's fiscal biennium, currently June 30, 2023. The DOT shall have the right to renew the term of the Lease for successive Renewal Terms until the Treasurer shall have paid and retired, or shall have made due and adequate provision for the payment and retirement of, all Obligations issued by the Treasurer. Subject to any change in the method of determining the State's fiscal biennium, or the length of the last Renewal Term, each Renewal Term shall be for the two year period commencing on the day succeeding the expiration of the preceding term and ending on the last day of any fiscal biennium, currently June 30 of every odd-numbered year, upon the same terms as are contained in the Lease, unless sooner terminated in accordance with the provisions of the Lease and the Trust Agreement. The DOT shall be deemed to have exercised its right to renew the term of the Lease and the Lease shall be renewed, upon the effectiveness, at or prior to the expiration of the Initial Term or the Renewal Term then in effect, of legislation enacted by the General Assembly appropriating sufficient funds to the DOT for the purpose of paying the rentals required by the Lease during the next succeeding Renewal Term.

Rental Payments and Pledges

The Lease requires the DOT to pay Basic Rent directly to the Treasurer in amounts at least adequate to meet the Bond Service Charges on the Obligations and establish and maintain any Required Reserve (there is no Required Reserve for the

Series 2023 Bonds). The Lease also requires the DOT to pay Additional Rent directly to the Treasurer in amounts at least adequate to provide for the purposes of the Administrative Service Fund established under the Trust Agreement. The Act requires that all money received by or on account of the OPFC from the DOT under the Lease be deposited, transferred or credited to the Bond Service Fund, except for Additional Rent which shall be deposited, transferred or credited to the Administrative Service Fund. See **Summary of the Trust Agreement – Funds and Accounts** above. The Lease rental payments, other than those deposited in the Administrative Service Fund, are pledged by the Treasurer pursuant to the Trust Agreement for the payment of Bond Service Charges on the Obligations under the Lease, and the OPFC has assigned those rentals to the Treasurer for the purpose.

The DOT may, at its option, make from time to time prepayments of Basic Rent under the Lease to be used, to the extent allowable pursuant to the Trust Agreement, together with any additional deposit of money of the DOT, for the purchase or redemption of the Obligations. It is specifically acknowledged that Additional Rent to be paid for the purpose of the Administrative Service Fund in connection with the Series 2023 Bonds may include any sums necessary to pay any rebate amount or related payment on the Series 2023 Bonds which are not paid from other sources.

Except as described below under **Summary of the Lease** – **Legislative Appropriations**, the obligation of the DOT to pay Basic Rent and Additional Rent under the Lease shall be absolute and unconditional, and such Basic Rent and Additional Rent shall be payable without any rights of termination, set-off, recoupment, deduction, defense or counterclaim it might have against the OPFC, the Treasurer, the Trustee, or any other Person, and without abatement, suspension, deferment, diminution or reduction for any reason or as the result of any occurrence whatsoever, including without limitation, whether the Projects are ever constructed, installed or made ready for occupancy or are ever used or occupied by the lessee or available for use or occupancy by the lessee, any acts or circumstances that may constitute an eviction or constructive eviction, failure of consideration, failure of title or frustration of purpose, any damage to or destruction of a Project, the taking by condemnation, eminent domain or operation of law of title to or the right of temporary use of all or any part of a Project, or the disposal of all or any part of a Project.

Project Substitutions and Alterations; Other Rights and Duties

In addition to other rights and privileges under the Lease, the DOT shall have the privilege from time to time of substituting furnishings, equipment and related property in connection with the Projects, provided that such substitution shall not impair the character of the Projects as Capital Facilities useful to the DOT. Any such substituted property shall become part of the Projects for purposes of the Lease, and the replaced property shall become the property of the DOT. The DOT shall also have the privilege of removing any portion of the Projects without substitution for such removed portion; provided, however, that the removal of such portion will not impair the usefulness of the Projects to the DOT.

The DOT shall, subject to applicable laws, have the right at any time and from time to time, without liability to the OPFC, to make or cause to be made such changes, alterations and additions, structural or otherwise, to any portion of the Projects, as the DOT shall deem necessary or desirable in connection with its use of the Projects. All alterations, additions and improvements to the Projects shall become a part of the Projects. The DOT has other rights and duties under the Lease including the right to grant licenses and leases on the Projects with certain restrictions and such other rights it may have under applicable laws. Likewise, the DOT shall have the duties to keep the Projects in good repair and order, comply with applicable law, and keep the Projects free of liens.

Insurance

The OPFC is not to, and shall not be required to, expend any money or do any acts or take any steps affecting or with respect to the maintenance, preservation, operation, insurance, repair, restoration, reconstruction or protection of any Project or any part of any Project.

The DOT shall maintain, or cause to be maintained, general liability insurance and property insurance, including if applicable builders' risk insurance, in an amount that, at a minimum, covers the full replacement cost of Projects funded, in whole or in part, by the State. Insurance proceeds are <u>not</u> Pledged Receipts.

Reserved Right of Amendment

Notwithstanding any other provision of the Lease, the OPFC and the DOT reserve the right to modify or amend the Lease, including any Supplemental Lease, in a duly authorized signed writing. However, no modification or amendment shall impair or reduce the minimum rental requirements of the Lease.

Legislative Appropriations

It is the understanding and agreement of the parties that the DOT will pay rentals required by the Lease solely from moneys appropriated by the General Assembly to the DOT for the purpose and not from funds received from any Project, and that the agreement of the DOT to pay those rentals during any period for which appropriations may lawfully be made by the General Assembly is effective and binding upon the DOT only when and to the extent that moneys have been appropriated for that purpose and for that period. Historically, the General Assembly has appropriated lease rental bond payments for the Obligations from the Highway Operating Fund. Under the Ohio Constitution, an appropriation may not be made beyond the fiscal biennium. In addition, the Lease may be renewed only for two-year periods. Accordingly, the DOT is obligated to make rental payments under the Lease only for two-year periods, to the extent moneys have been appropriated and are available.

Annually and on or before the first day of each Fiscal Year, the OPFC will submit, or cause to be submitted, to the DOT a written report, prepared and signed by the Treasurer and confirmed by the Director of the State's Office of Budget and Management on behalf of the OPFC, setting forth the rental to become due (subject to the lawful availability of appropriations for that rental) as of each rental payment date as established under Supplemental Leases during the ensuing three Fiscal Years. Prior to the issuance of any Additional Bonds, and upon any determination of the OPFC that a different amount than last reported will be required, the OPFC shall submit, or cause to be submitted, to the DOT a revised report, prepared, signed and confirmed as provided above, setting forth the updated required amount. Each revised report will from its date supersede the next previous report made. The DOT agrees that it will include in its estimated budget and in its certificates and supplemental certificates, as provided in Section 126.02 of the Revised Code, the amounts, at the dates, and for credit to the Special Funds and Accounts, as shown in the reports by the OPFC provided pursuant to the Lease.

Under the terms of the Lease, a failure by the General Assembly to appropriate moneys at least equal to Basic Rent under the Lease, amounts the Treasurer estimates are necessary for Additional Rent and other sums payable under the Lease for the next State fiscal biennium would result in the termination of the Lease at the end of the two-year term then in effect. The Lease will, however, be fully reinstated, as if it had never been terminated, provided the conditions set forth below under **Summary of the Lease – Reinstatement** are met.

The General Assembly may not make appropriations for a period longer than two years. While the Treasurer expects that, for each State fiscal biennium, the General Assembly will appropriate amounts to the DOT sufficient to make its rental payments to the Treasurer under the Lease consistent with the State budget, the General Assembly is not under a legal obligation to make appropriations in accordance with such State budgets for future State fiscal biennia. Accordingly, none of the Treasurer, the OPFC or the DOT can make any assurance that appropriations will be made. Section 2i of Article VIII of the Ohio Constitution and the Act provide that the Bondholders and book-entry interest owners of the Obligations will have no right to have excises or taxes levied by the General Assembly for the payment of Bond Service Charges on the Obligations.

Remedies

Under the Lease, the OPFC waives, relinquishes and releases any and all rights it may have of re-entry or to take or retake possession of any Project, and covenants and agrees not to exercise any such rights in the event of a failure to make payment of rentals, the occurrence of any other default by the DOT under the Lease, or the termination of the Lease for any reason. Consequently, the OPFC does not have the remedies generally available to lessors upon default under or termination of a lease and the OPFC, the Treasurer and the Trustee may have no practical remedy to ensure that moneys are available for the payment of Bond Service Charges on the Series 2023 Bonds.

Termination

If the DOT fails to exercise its right to renew the term of the Lease for any Renewal Term, the Lease will terminate at the end of the Renewal Term then in effect. The DOT will be deemed to exercise its renewal right upon the effectiveness of legislation enacted by the General Assembly appropriating sufficient funds to the DOT for the purpose of paying rentals under the Lease. In the event of such a termination of the Lease, the obligation of the DOT to make rental payments to provide moneys to pay Bond Service Charges on the Obligations would terminate. The Lease also terminates upon payment in full of all Obligations outstanding under the Trust Agreement and all obligations of the Treasurer to Financial Institutions providing Credit Enhancement Facilities in connection with the Obligations. Under the Act and the Trust Agreement, the Trustee may not take possession of, or operate, or sell the Projects in the event of a failure to pay Basic Rent or Additional Rent under the Lease or upon any termination of the Lease.

Reinstatement

Notwithstanding any termination of the Lease, if (a) all overdue installments, if any, of interest on outstanding Obligations, all principal of all Obligations then outstanding which have become due and payable otherwise than by acceleration, if any, in accordance with the terms of the Trust Agreement, and all other sums (including, without limitation, all obligations of the Treasurer to Financial Institutions) then payable under or pursuant to the Trust Agreement (except the principal of and the interest on such Obligations which by such acceleration shall have become due and payable) shall have been paid, and such acceleration, if any, shall have been duly rescinded and annulled, and (b) the General Assembly shall have appropriated funds to enable the DOT to pay or provide for the payment of the amounts to be paid under the Lease as set forth in the latest revised report delivered pursuant to the Lease (which shall at least equal the amounts of Basic Rent payable) for the Initial Term or Renewal Term to be reinstated and the observation and performance of all covenants and agreements on the part of the DOT to be observed or performed under the Lease, then the Lease shall be fully reinstated, as if it had never been terminated.

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APPENDIX C

BOOK-ENTRY SYSTEM; DTC

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 Book-Entry-Only Issuance," Schedule A to Blanket Issuer Letter of Representations (labeled BLOR 06-2013). As such, the State and the Treasurer believe it to be reliable, but take no responsibility for the accuracy or completeness of that information. It has been adapted to the Series 2023 Bonds (the "Bonds") by substituting "Bonds" for "Securities," "Treasurer" for "Issuer" and "Trustee" for "registrar". See also the additional information following those numbered paragraphs.

- 1. The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the Series 2023 Bonds (the "Bonds"). The Bonds will be issued as fully-registered obligations 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 Bond, in the aggregate principal amount of such issue, and will be deposited with DTC.
- DTC, the world's largest securities depository, is a limited-purpose trust company 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 Bond 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.
- 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 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 Trustee and request that copies of 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 Treasurer 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 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).
- Redemption proceeds, distributions, and dividend payments 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 Treasurer or his agent, on 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 Treasurer or his agent, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Treasurer or his agent, 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 Series 2023 Bonds.)
- 10. DTC may discontinue providing its services as depository with respect to the Bonds at any time by giving reasonable notice to the Treasurer or his agent. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.
- 11. The Treasurer 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 and delivered to DTC.
- 12. The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the Treasurer believes to be reliable, but the Treasurer takes 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 Treasurer and the Trustee 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 Treasurer and the Trustee 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 Treasurer and the Trustee 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 under which others as well as DTC may be considered an owner or holder of the Bonds, see **CONTINUING DISCLOSURE AGREEMENT**), DTC will be and will be considered by the State, the Treasurer and the Trustee 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 will not be or be considered by the State, the Treasurer and the Trustee 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.

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EXHIBIT A

PROPOSED TEXT OF BOND COUNSEL LEGAL OPINION

\$52,865,000 State of Ohio (Treasurer of State) Capital Facilities Lease-Appropriation Bonds, Series 2023A (Transportation Building Fund Projects)

We have examined the transcript of proceedings relating to the issuance by the State Treasurer of Ohio (the "Treasurer"), on behalf of the State of Ohio (the "State"), of the \$52,865,000 State of Ohio (Treasurer of State) Capital Facilities Lease-Appropriation Bonds, Series 2023A (Transportation Building Fund Projects) (the "Series 2023 Bonds"), for the purpose of providing moneys to pay costs of capital facilities to be leased to the Department of Transportation (the "DOT"). The transcript includes conformed or executed counterparts of the Trust Agreement dated as of January 1, 2015 (the "Trust Agreement") between the State, acting by and through the Treasurer, and U.S. Bank Trust Company, National Association, as trustee (the "Trustee"), including in it the General Bond Order No. 3-15 of the Treasurer dated January 13, 2015 (the "General Bond Order"), the Series 2023A Supplemental Trust Agreement dated as of May 1, 2023 (the "Series 2023A Supplemental Trust Agreement") between the State, acting by and through the Treasurer, and the Trustee, including in it the Series Bond Order No. 1-23 of the Treasurer dated April 25, 2023 (the "Series 2023A Order"), the Amended and Restated Lease Agreement dated as of January 1, 2015 (the "Lease Agreement") between the Ohio Public Facilities Commission ("OPFC") and the DOT, and the Series 2023A Supplemental Lease Agreement dated as of May 1, 2023 (the "Series 2023A Supplemental Lease Agreement") between OPFC and the DOT. We have also examined a conformed copy of a signed and authenticated Series 2023 Bond of the first maturity.

The Series 2023 Bonds are issued under and pursuant to Section 2i of Article VIII of the Ohio Constitution, Chapter 154 of the Ohio Revised Code and other authorizations by the Ohio General Assembly (the "General Assembly"), the Trust Agreement and the Series 2023A Supplemental Trust Agreement.

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

- 1. The Series 2023 Bonds are valid and legally binding special obligations of the State in accordance with their terms and provisions; the principal of and interest on the Series 2023 Bonds, together with the principal of and interest on other Obligations (as defined in the Trust Agreement) previously or hereafter issued and outstanding pursuant to the Trust Agreement (collectively with the Series 2023 Bonds, the "Bonds"), are payable from and secured by a pledge of the Bond Service Account in the Bond Service Fund (the "Bond Service Fund") established by and as provided in the Trust Agreement and Section 154.24 of the Ohio Revised Code and the payments received by such Bond Service Account under the Lease Agreement and supplemental agreements to it constitute "Pledged Receipts" as defined in and subject to the provisions of the Trust Agreement. The Series 2023 Bonds are not otherwise secured and the owners of the Series 2023 Bonds are given no right to have any excises or taxes levied by the Ohio General Assembly for the payment of principal or interest.
- 2. The Trust Agreement and the Series 2023A Supplemental Trust Agreement have been duly authorized, executed and delivered by the Treasurer and constitute legal, valid and binding obligations of the State enforceable in accordance with their terms.
- 3. The Lease Agreement and Series 2023A Supplemental Lease Agreement have been duly made and entered into by OPFC and the DOT and are legal and valid contractual obligations of the parties in accordance with their terms; pursuant to the Lease Agreement, the DOT has agreed to pay rentals directly to the Treasurer at least adequate to meet, among other requirements, the principal and interest and any call premium and mandatory sinking fund requirements (the "Bond Service Charges") on all Bonds; pursuant thereto, those rentals are to be paid by the DOT from funds appropriated to the DOT for that purpose by the General Assembly, and the agreement of the DOT to pay those rentals during any two-year period for which appropriations may lawfully be made by the General Assembly is effective and binding upon the DOT only when and to the extent that funds have been appropriated and are available for that purpose and for that period; and the General Assembly is not at any time obligated to make appropriations to pay those rentals.

- 4. The interest on the Series 2023 Bonds is excluded from gross income for federal income tax purposes under 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. The opinion set forth in the preceding sentence is subject to the condition that the Treasurer, the DOT and the State comply with all requirements of the Internal Revenue Code of 1986, as amended, that must be satisfied subsequent to the issuance of the Series 2023 Bonds in order that the interest thereon be, and continue to be, excluded from gross income for federal income tax purposes.
- 5. The Series 2023 Bonds, the transfer thereof, and the income therefrom, including any profit made on the sale thereof, are free from taxation within the State.

We express no other opinion as to the federal or state tax consequences regarding the Series 2023 Bonds.

In giving the opinions contained herein with respect to the treatment of the Series 2023 Bonds under federal tax laws, we have assumed compliance with and the accuracy of, and have relied upon, the covenants, representations and certifications in the Transcript. We have not independently verified the accuracy of those representations and certifications. The accuracy of those representations and certifications, and the compliance with those covenants may be necessary for the interest on the Series 2023 Bonds to be and to remain excluded from gross income for federal income tax purposes. Failure to comply with certain of those covenants subsequent to issuance of the Series 2023 Bonds could cause the interest on the Series 2023 Bonds to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2023 Bonds.

Under the Internal Revenue Code of 1986, as amended, interest on the Series 2023 Bonds may be subject to (i) a branch profits tax imposed on certain foreign corporations doing business in the United States, (ii) a tax imposed on excess net passive income of certain S corporations and (iii) for tax years beginning after December 31, 2022 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).

We have assumed for purposes of this opinion the due authorization, execution and delivery by, and the binding effect upon and enforceability against, the Trustee of the Trust Agreement and the Series 2023A Supplemental Trust Agreement. Please be advised that the rights of the owners of the Series 2023 Bonds and the enforceability of the Series 2023 Bonds, the Trust Agreement, the Series 2023A Supplemental Trust Agreement, the Lease Agreement, and the Series 2023A Supplemental Lease Agreement are limited by bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights generally heretofore or hereafter enacted, general principles of equity, whether considered at law or in equity, governing specific performance, injunctive relief and other equitable remedies, and the exercise of judicial discretion in appropriate cases.

The opinions expressed herein are given as of the date hereof, and we assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention, or any changes in law that may hereafter occur. We bring to your attention the fact that our legal opinions are an expression of our professional judgment and are not a guarantee of a result.

Respectfully submitted,