

THIS PRELIMINARY OFFERING CIRCULAR AND THE INFORMATION CONTAINED HEREIN ARE SUBJECT TO COMPLETION AND AMENDMENT IN A FINAL OFFERING CIRCULAR. Under no circumstances shall this Preliminary Offering Circular constitute an offer to sell or the solicitation of any offer to buy, and there shall not be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

In the opinion of Bond Counsel, under existing law, assuming renewal of each respective Lease through the final Lease Term for that Lease and continuing compliance with certain covenants and the accuracy of certain representations, (i) interest on the Series 2018 Certificates with respect to such Lease is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals; however, interest on the Series 2018 Certificates is included in the adjusted current earnings of corporations subject to the federal corporate alternative minimum tax for tax years beginning prior to January 1, 2018, and (ii) interest on the Series 2018 Certificates, and any profit made on the sale, exchange or other disposition of the Series 2018 Certificates, are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangible tax, the tax levied on the basis of total equity capital of financial institutions, and the net worth base of the corporate franchise tax. Interest on the Series 2018 Certificates may be subject to certain federal taxes imposed only on certain corporations, including the imposition of the corporate alternative minimum tax on a portion of that interest. (For a more complete discussion of tax aspects, including the consequences of nonrenewal of a Lease, see **Tax Matters**.)

\$100,205,000*

CERTIFICATES OF PARTICIPATION, SERIES 2018

Consisting of

<p>\$73,140,000* Certificates of Participation, Series 2018 Evidencing Proportionate Interests of the Owners Thereof in Base Rent To Be Paid By the Secretary of State of the State of Ohio (Voting System Acquisition Project)</p>	<p>\$27,065,000* Certificates of Participation, Series 2018 Evidencing Proportionate Interests of the Owners Thereof in Base Rent To Be Paid By the State of Ohio Department of Administrative Services (Enterprise Data Center Solutions Project)</p>
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Dated: Date of Initial Delivery

Due: As shown on inside cover

The Certificates. The Series 2018 Certificates evidence respective proportionate interests in Base Rent to be paid by the Secretary of State of the State of Ohio (the Secretary of State) and the Department of Administrative Services of the State of Ohio (DAS) pursuant to separate Master Lease-Purchase Agreements and supplements thereto, between State of Ohio Leasing Corporation, Inc. (Corporation), as lessor, and the Secretary of State and DAS, as applicable, as Lessee, to be delivered pursuant to separate Trust Agreements, as supplemented, between the Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee (Trustee). The Corporation will assign, or has assigned, without recourse, all of its rights under the Leases (except Unassigned Rights) to the Trustee pursuant to the respective Trust Agreements. Capitalized terms used on this cover have the meanings given herein.

The Project. The proceeds of the respective series of the Series 2018 Certificates will be used to finance two projects comprised of (i) the acquisition and implementation of voting systems, including, but not limited to, voting machines, marking devices, automatic tabulating equipment, and direct record electronic voting machines and associated allowable expenditures and (ii) the continued acquisition, installation and implementation of hardware and software that will expand and improve the cloud computing environment of the State and support upgrades to enterprise shared solutions known as Enterprise Data Center Solutions (EDCS).

Subject to Appropriation. The initial term of each Lease ends on June 30, 2019. The Secretary of State and DAS each may renew their respective Leases for successive two-year terms, each ending on June 30 of an odd-numbered year, except the final Lease term, which ends on September 1, 2028 for both the VSA Lease and the EDCS Lease. The obligations of the Secretary of State and DAS to pay Base Rent and any other obligations of the Secretary of State and DAS under the respective Leases after the current Lease term are subject to and dependent upon biennial renewal of the respective Leases by the Secretary of State and DAS and biennial appropriations being made by the General Assembly of the State of Ohio for that purpose. In the event no such appropriation is made for a Lease, the respective Lease will terminate at the end of the then current Lease term. There can be no assurance that the respective Projects can be sold or that proceeds from any such sale of the respective Projects will be sufficient to pay principal and interest with respect to the respective outstanding Series 2018 Certificates. **The obligation of the Secretary of State and DAS to pay Base Rent does not constitute a debt of the Secretary of State, DAS or the State of Ohio within the meaning of any constitutional or statutory limitation. Certificate payments will be made solely from amounts derived under the respective Lease, including payments of Base Rent, and amounts from time to time on deposit under the terms of the respective Trust Agreement. See Investors' Risks herein.**

Book-Entry Only. The Series 2018 Certificates will be initially issued only as fully registered securities, one for each maturity of each series, issuable under a book-entry system, registered initially in the name of The Depository Trust Company (DTC) or its nominee. There will be no distribution of Series 2018 Certificates to the ultimate purchasers. The Series 2018 Certificates in certificated form as such will not be transferable or exchangeable, except for transfer to another nominee of DTC or as otherwise described in this Offering Circular. See **Appendix B**.

Payment. Principal will be payable to the registered owner (DTC) upon presentation and surrender at the designated corporate trust office of the Trustee, and interest will be transmitted by the Trustee on each interest payment date (March 1 and September 1 of each year, commencing March 1, 2019) to DTC as the registered owner as of the 15th day of the calendar month preceding that interest payment date.

Prior Redemption: The Series 2018 Certificates are not subject to optional redemption prior to maturity. The Series 2018 Certificates are subject to special redemption prior to maturity. The successful bidder may identify consecutive maturities of the Certificates bearing interest at the same rates as one or more term certificates being subject to mandatory sinking fund redemption at a price of par plus interest accrued to the redemption date. See **The Series 2018 Certificates of Participation – Prior Redemption**.

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

Each of the Series 2018 Certificates are offered when, as and if issued and accepted by the Original Purchaser, subject to the opinion on certain legal matters relating to their issuance by Bricker & Eckler LLP, Bond Counsel, and certain other conditions. Certain legal matters will be passed upon for the Corporation by Squire Patton Boggs (US) LLP, and by Dinsmore & Shohl LLP, Disclosure Counsel.

Sale Procedure: The Series 2018 Certificates are offered for sale via *electronic bid* pursuant to the respective Official Notice of Sale (See **Exhibits B-1 and B-2**) until 10:30 a.m. EST for the VSA Certificates and 10:45 a.m. EST for the EDCS Certificates, as shown in the respective Official Notices of Sale on Wednesday, November 14, 2018.

This Offering Circular has been prepared by the Secretary of State and DAS in connection with the original offering for sale of the Series 2018 Certificates. This Offering Circular is "deemed final" by the Secretary of State and DAS as of November 6, 2018 for purposes of, and except for certain omissions as permitted by Rule 15c2-12(b)(1), and is subject to completion, amendment, or supplementation in the final Offering Circular.

The Series 2018 Certificates are expected to be available in definitive form for delivery through DTC on or about December 13, 2018.

The date of this Offering Circular is _____, 2018, and the information speaks only as of that date.

* Preliminary; subject to change.

CERTIFICATES OF PARTICIPATION, SERIES 2018

Consisting of

**\$73,140,000* Certificates of Participation, Series 2018
Evidencing Proportionate Interests of the Owners Thereof in Base Rent To Be Paid By the
Secretary of State of the State of Ohio
(Voting System Acquisition Project)**

**MATURITY SCHEDULE
DUE ON SEPTEMBER 1**

Year	Par Amount*	Interest Rate	Yield	Price	CUSIP^(a) No.
2019	\$6,725,000	%	%	%	
2020	6,025,000				
2021	6,325,000				
2022	6,640,000				
2023	6,975,000				
2024	7,320,000				
2025	7,685,000				
2026	8,070,000				
2027	8,475,000				
2028	8,900,000				

**\$27,065,000* Certificates of Participation, Series 2018
Evidencing Proportionate Interests of the Owners Thereof in Base Rent To Be Paid By the
State of Ohio Department of Administrative Services
(Enterprise Data Center Solutions Project)**

**MATURITY SCHEDULE
DUE ON SEPTEMBER 1**

Year	Par Amount*	Interest Rate	Yield	Price	CUSIP^(a) No.
2019	\$2,490,000	%	%	%	
2020	2,230,000				
2021	2,340,000				
2022	2,455,000				
2023	2,580,000				
2024	2,710,000				
2025	2,845,000				
2026	2,985,000				
2027	3,135,000				
2028	3,295,000				

^(a) Copyright, American Bankers Association; see **Regarding This Offering Circular**.

* Preliminary, subject to change.

REGARDING THIS OFFERING CIRCULAR

This Offering Circular does not constitute an offering of any security other than the original offering of the Series 2018 Certificates identified on the cover. No dealer, broker, sales or other person, other than the Director of the Office of Budget and Management of the State of Ohio, has been authorized by the Secretary of State or DAS to give any information or to make any representation other than as contained in this Offering Circular. Any other information or representation should not be relied upon as having been given or authorized by the Secretary of State, DAS or the State. This Offering Circular does not constitute an offer to sell or the solicitation of an offer to buy, and there shall be no sale of the Series 2018 Certificates by any person, in any jurisdiction in which it is unlawful to make that offer, solicitation or sale.

Upon issuance, the Series 2018 Certificates will not be registered by the Secretary of State or DAS 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 will have, at the request of the Secretary of State or DAS, passed upon the accuracy or adequacy of this Offering Circular or approved or disapproved the Series 2018 Certificates for sale.

This Offering Circular contains statements that the Secretary of State and DAS believe 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 Secretary of State and DAS 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 Secretary of State and DAS undertake no obligation, and do not plan, to issue any updates or revisions to any of the forward-looking statements in this Offering Circular.

The information and expressions of opinion in this Offering Circular are subject to change without notice. Neither the delivery of this Offering Circular nor any sale made hereunder shall create, under any circumstances, any implication that there has been no change in the affairs of the Secretary of State, DAS or the State since its date.

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

CUSIP (Copyright, American Bankers Association) data appearing on the Cover of this Offering Circular are assigned by CUSIP Global Services, which is managed on behalf of the American Bankers Association by S&P Global Market Intelligence, a division of S&P Global Inc., an independent company not affiliated with the State, the Secretary of State, DAS or the Corporation and are included solely for the convenience of the holders of the Series 2018 Certificates. The State, the Secretary of State, DAS and the Corporation are not responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Series 2018 Certificates or Cover or as indicated above. These CUSIP numbers may also be subject to change after the issuance of the Series 2018 Certificates.

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TABLE OF CONTENTS

SELECTED SUMMARY STATEMENT 1

INTRODUCTION 1

THE SERIES 2018 CERTIFICATES OF PARTICIPATION 2

General; Book-Entry System 2

Prior Redemption 2

SOURCE OF PAYMENT FOR THE SERIES 2018 CERTIFICATES 4

BASE RENT SCHEDULE 5

SECURITY FOR THE SERIES 2018 CERTIFICATES 6

General 6

Nonappropriation 6

Limitations on Remedies 7

Additional Certificates 7

Defeasance 8

INVESTORS' RISKS 8

Risks Associated with Nonappropriation of Lease Payments 8

Risks Associated with Acquisition and Installation of the Projects 8

Risks Associated with Enforceability of Remedies 9

SOURCES AND USES OF FUNDS 9

THE PROJECTS 9

THE DEPARTMENT OF ADMINISTRATIVE SERVICES 10

THE SECRETARY OF STATE OF THE STATE OF OHIO 10

THE CORPORATION 11

DESCRIPTION OF DOCUMENTS 11

General; Definitions 11

The Leases 18

The Trust Agreements 23

THE TRUSTEE 28

RATINGS 28

FINANCIAL ADVISER 28

LITIGATION 28

LEGAL MATTERS 29

TAX MATTERS 29

Risk of Future Legislative Changes and/or Court Decisions 31

Original Issue Discount and Original Issue Premium 31

CONTINUING DISCLOSURE AGREEMENTS 32

CONCLUDING STATEMENT 34

APPENDIX A - INFORMATION CONCERNING THE STATE OF OHIO A-1

Fiscal Matters A-1

General A-1

Accounts and Controls; Financial Reports A-2

Recent Receipts and Disbursements A-4

Summary of Governmental and Proprietary Funds – Cash Receipts and Cash Disbursements A-4

Summary of GRF Cash Basis Activity A-5

Recent and Current Finances A-6

Introductory Information A-6

Recent Biennia A-6

Current Biennium A-17

Cash Flow A-19

State Debt A-19

General A-19

Variable Rate Debt A-22

Constitutional Limitation on Annual Debt Service A-22

Annual Debt Service Requirements on State Obligations Paid from the GRF A-24

Annual Debt Service Requirements on State Obligations Paid from Non-GRF Revenues A-25

Recent Debt Authorizations A-27

Economy and Employment A-29

Population A-31

Agricultural and Resources Bases A-31

State Employees and Collective Bargaining Agreements A-32

Retirement Systems A-32

Tax Levels and Tax Bases A-41

Sales and Use Tax A-41

Personal Income Tax A-41

Property Tax A-43

Schools and Municipalities A-44

Schools A-44

Municipalities A-46

APPENDIX B - BOOK-ENTRY SYSTEM; DTC B-1

EXHIBIT A - PROPOSED TEXT OF LEGAL OPINION OF BOND COUNSEL

VSA Certificates Exhibit A-1

EDCS Certificates Exhibit A-2

EXHIBIT B – NOTICES OF SALE

VSA Notice of Sale Exhibit B-1

EDCS Notice of Sale Exhibit B-2

SELECTED SUMMARY STATEMENT

\$100,205,000*

CERTIFICATES OF PARTICIPATION, SERIES 2018

Consisting of

**\$73,140,000* Certificates of Participation, Series 2018
Evidencing Proportionate Interests of the Owners Thereof in Base Rent To Be Paid By the
Secretary of State of the State of Ohio
(Voting System Acquisition Project)
and
\$27,065,000* Certificates of Participation, Series 2018
Evidencing Proportionate Interests of the Owners Thereof in Base Rent To Be Paid By the
State of Ohio Department of Administrative Services
(Enterprise Data Center Solutions Project)**

The following summary supplements certain of the information on the Cover and summarizes selected other information in this Offering Circular relating to the Series 2018 Certificates. It is not intended as a substitute for the more detailed discussions in this Offering Circular, to which reference should be made.

TRUSTEE. The Bank of New York Mellon Trust Company, N.A. is the Trustee and the issuer of the Series 2018 Certificates.

CORPORATION. State of Ohio Leasing Corporation, Inc., an Ohio nonprofit corporation, is the lessor under each Lease.

LESSEE. The Secretary of State (the Secretary of State) of the State of Ohio (State) is the Lessee for the Series 2018 Certificates issued to finance the VSA Project (VSA Certificates). The Department of Administrative Services (DAS) of the State of Ohio is the Lessee for the Series 2018 Certificates issued to finance the EDCS Project (EDCS Certificates).

AUTHORIZATION. The Secretary of State and DAS each have the authority to acquire the VSA Project and the EDCS Project, respectively, including by lease-purchase which may be fractionalized under Section 133.01(N) of the Ohio Revised Code. The VSA Certificates are authorized by Section 4 of Amended Substitute Senate Bill 135 of the 132nd General Assembly of the State (the VSA Act). The EDCS Certificates are authorized by Section 701.10 of House Bill 529 of the 132nd General Assembly of the State and Chapter 125 of the Ohio Revised Code (collectively, the EDCS Act).

PURPOSE OF CERTIFICATES. The proceeds of the respective series of the Series 2018 Certificates will be used to finance the VSA Project comprised of the acquisition and implementation of voting systems, including, but not limited to, voting machines, marking devices, automatic tabulating equipment, and direct record electronic voting machines and associated allowable expenditures (the VSA Project), and the EDCS Project, comprised of the continued acquisition, installation and implementation of hardware and software that will expand and improve the cloud computing environment of the State and support upgrades to enterprise shared solutions known as Enterprise Data Center Solutions (EDCS) (the EDCS Project and, together with the VSA Project, the Project or Projects).

SECURITY AND SOURCES OF PAYMENT. Each Series 2018 Certificate evidences a proportionate interest in Base Rent to be paid by the Secretary of State or DAS to the Trustee under the respective Lease and the assignment thereof in the respective Trust Agreement.

* Preliminary, subject to change.

The obligations of the Secretary of State and DAS to make lease payments under the respective Leases are subject to and dependent on biennial renewal of those Leases by the Secretary of State and DAS, as applicable, and biennial appropriations by the General Assembly sufficient to pay lease payments. Under the Ohio Constitution, those appropriations may not be made for more than a two-year period. Failure of the General Assembly to appropriate moneys to the Secretary of State or DAS will result in termination of the respective Lease as of the end of the then current Lease term.

The obligations of the Secretary of State and DAS to pay lease payments does not constitute a debt of the Secretary of State, DAS or the State of Ohio. The Series 2018 Certificates do not represent or constitute a debt of the Secretary of State, DAS or the State of Ohio or of any political subdivision thereof, or a pledge of the faith and credit of the State, any political subdivision thereof, the Secretary of State or DAS.

PRIOR REDEMPTION. The Series 2018 Certificates are not subject to optional redemption. The Series 2018 Certificates are subject to special redemption prior to maturity. See **The Series 2018 Certificates of Participation – Prior Redemption.**

FORM AND MANNER OF MAKING PAYMENTS. The Series 2018 Certificates will be originally issued only as fully registered certificates, one for each maturity, under a book-entry only method, and registered initially in the name of Cede & Co., a nominee for The Depository Trust Company, New York, New York (DTC). There will be no distribution of Series 2018 Certificates to the ultimate purchasers. The Series 2018 Certificates in book-entry form will not be transferable or exchangeable, except for transfer to another nominee of DTC or as otherwise described in this Offering Circular. The Series 2018 Certificates will be issued in the denominations of \$5,000 or any integral multiple of \$5,000.

Principal and interest will be payable to the registered owner (initially, Cede & Co., as nominee of DTC). Principal will be payable on presentation and surrender at the designated corporate trust office of the Paying Agent (initially, The Bank of New York Mellon Trust Company, N.A., New Albany, Ohio). Interest will be transmitted on each interest payment date (March 1 and September 1, beginning March 1, 2019) to the registered owner as of the fifteenth day of the calendar month preceding the interest payment date.

TAX MATTERS. In the opinion of Bond Counsel, under existing law, assuming continuing compliance with certain covenants and the accuracy of certain representations:

- interest on the Series 2018 Certificates is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals, however, interest on the Series 2018 Certificates is included in the adjusted current earnings of corporations subject to the federal corporate alternative minimum tax for tax years beginning prior to January 1, 2018; and
- interest on the Series 2018 Certificates, and any profit made on the sale, exchange or other disposition of, the Series 2018 Certificates, are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangible tax, the tax levied on the basis of total equity capital of financial institutions, and the net worth base of the corporate franchise tax.

Interest on the Series 2018 Certificates may be subject to certain federal taxes imposed on certain corporations, including the corporate alternative minimum tax on a portion of that interest.

TRUSTEE. The Bank of New York Mellon Trust Company, N.A.

BOND COUNSEL. Bricker & Eckler LLP.

CORPORATION COUNSEL. Squire Patton Boggs (US) LLP.

DISCLOSURE COUNSEL. Dinsmore & Shohl LLP.

FINANCIAL ADVISER. H. J. Umbaugh and Associates, LLP.

ORIGINAL PURCHASER. The VSA Certificates have been purchased by _____ (the VSA Original Purchaser) at a price of \$_____, and the EDCS Certificates have been purchased by _____ (the EDCS Original Purchaser) at a price of \$_____, all in accordance with the respective Official Notices of Sale.

Questions regarding this Offering Circular or the Series 2018 Certificates should be directed to Larry Scurlock, Office of Budget and Management, 30 East Broad Street, 34th Floor, Columbus, Ohio 43215-3457, telephone (614) 466-4034.

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INTRODUCTION

This Offering Circular has been prepared in connection with the original issuance and sale of the Series 2018 Certificates of Participation identified on the cover (Series 2018 Certificates) consisting of the series to be issued to finance the VSA Project (VSA Certificates), and the series to be issued to finance the EDCS Project (EDCS Certificates).

The VSA Certificates evidence the proportionate interests of the Registered Owners thereof in Base Rent to be paid by the Secretary of State of the State of Ohio (the Secretary of State), for the lease of certain personal property comprised of the acquisition and implementation of voting systems, including, but not limited to, voting machines, marking devices, automatic tabulating equipment, and direct record electronic voting machines and associated allowable expenditures (the VSA Project) pursuant to the Master Lease-Purchase Agreement dated as of December 1, 2018, between the Corporation, as lessor, and the Secretary of State, as lessee, as supplemented by Supplemental Lease No. 1-18 dated as of December 1, 2018 (collectively, VSA Lease). The Corporation's rights as lessor, except for Unassigned Rights, will be assigned without recourse to The Bank of New York Mellon Trust Company, N.A., as Trustee (Trustee) under the Trust Agreement dated as of December 1, 2018 (VSA Master Trust Agreement), between the Corporation and the Trustee, pursuant to the Trust Agreement, as supplemented by the First Supplemental Trust Agreement thereto dated as of December 1, 2018 (VSA Supplemental Trust Agreement). See **Description of Documents**.

The EDCS Certificates evidence the proportionate interests of the Registered Owners thereof in Base Rent to be paid by the Department of Administrative Services of the State of Ohio (DAS), for the lease of certain personal property comprised of the continued acquisition, installation and implementation of hardware and software that will expand and improve the cloud computing environment of the State and support upgrades to enterprise shared solutions known as Enterprise Data Center Solutions (EDCS), for use by the DAS (the EDCS Project) pursuant to a Master Lease-Purchase Agreement dated as of October 1, 2014, between DAS, as lessee, and the Corporation, as lessor, as supplemented by Supplemental Lease No. 1-14 dated as of October 1, 2014, Supplemental Lease No. 2-16 dated as of November 1, 2016, and by Supplemental Lease No. 3-18 dated as of December 1, 2018 (collectively, the EDCS Lease, and collectively with VSA Lease, the Leases). The Corporation's rights as lessor, except for Unassigned Rights, have been assigned without recourse to Trustee under the Trust Agreement dated as of October 1, 2014 (EDCS Trust Agreement and, collectively with VSA Trust Agreement, the Trust Agreements), between the Corporation and the Trustee, pursuant to the Trust Agreement, as supplemented by the First Supplemental Trust Agreement dated as of October 1, 2014, the Second Supplemental Trust Agreement dated as of November 1, 2016, and the Third Supplemental Trust Agreement thereto dated as of December 1, 2018 (the EDCS Supplemental Trust Agreement). See **Description of Documents**.

All financial and other information presented in this Offering Circular has been provided by the State from its records, except for information expressly attributed to other sources and except for certain information on the Cover and in **Appendix B**. The presentation of information, including tables of receipts from taxes and other sources, is intended to show recent historical information. It is not intended to indicate future or continuing trends in the financial or other positions of the State. No representation is made that past experience, as might be shown by that financial and other information, will necessarily continue in the future. Also see **Regarding This Offering Circular**.

This Offering Circular should be considered in its entirety and no one subject should be considered less important than another by reason of location in the text. Reference should be made to the laws, reports or documents referred to for more complete information regarding their contents.

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

As used in this Offering Circular:

"Beneficial Owner" means the owner of a book-entry interest in the Series 2018 Certificates, as defined in **Appendix B**.

"Cover" or "cover" means the cover page and the inside cover of this Offering Circular.

"DAS" means the Department of Administrative Services of the State of Ohio.

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

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

"Fiscal Year" means a State Fiscal Year, currently the 12-month period from July 1 to June 30, and reference to a particular Fiscal Year (such as "Fiscal Year 2019") means the Fiscal Year ending on June 30 of that year.

"Lessee" means, as applicable, the Secretary of State or DAS.

"OBM" means the Office of Budget and Management of the State.

"Revised Code" means the Ohio Revised Code.

"Secretary of State" means the Secretary of State of the State of Ohio.

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

Certain other capitalized terms used and not otherwise defined in this Offering Circular have the meanings given to such terms under the heading Description of Documents – General; Definitions.

THE SERIES 2018 CERTIFICATES OF PARTICIPATION

General; Book-Entry System

The Series 2018 Certificates will be dated as of the date of their initial delivery, will mature in the amounts and on the dates, will bear interest payable on March 1 and September 1 of each year, commencing March 1, 2019, at the rates and will be payable at the place and in the manner, described on the Cover of this Offering Circular, under this heading and in **Appendix B**. The Series 2018 Certificates will be issued in the denominations of \$5,000 or any integral multiple of \$5,000.

The Series 2018 Certificates will be delivered in book-entry-only form and, when issued, registered in the name of The Depository Trust Company (DTC), New York, New York, or its nominee Cede & Co., which will act as securities depository for the Series 2018 Certificates. For discussion of the book-entry system and DTC and the replacement of Series 2018 Certificates in the event that the book-entry system is discontinued, see **Appendix B**.

Principal and interest will be payable to the registered owner (DTC). Principal will be payable on presentation and surrender at the designated office of the Trustee. Interest will be transmitted on each interest payment date (March 1 and September 1, beginning March 1, 2019), by the Trustee to DTC as the registered owner as of the 15th day preceding that interest payment date.

Prior Redemption

No Optional Redemption

The Series 2018 Certificates are not subject to optional redemption.

Special Redemption

In the event a Lease is terminated because the General Assembly does not appropriate sufficient money to pay Lease Payments under that Lease for any immediately succeeding Renewal Term, or the Secretary of State or DAS, as applicable defaults under that Lease, all of the Outstanding Certificates secured by that Lease, including the respective Series 2018 Certificates, are subject to special redemption by the Trustee at any time for which the required notice may be given, in whole, at a price equal to 100% of the principal amount thereof, plus accrued interest to the redemption date, from any available funds.

Selection of Series 2018 Certificates and Book-Entry Interests to be Redeemed

If less than all of an outstanding Series 2018 Certificate of one maturity of a series under a book-entry system is to be called for redemption (in the amount of \$5,000 or any whole multiple thereof), the Trustee will give notice of redemption only to DTC as registered owner. The selection of the book-entry interests in that Series 2018 Certificate to be redeemed is discussed below under Notice of Redemption; Effect.

If certificates are issued to the ultimate owners, and if fewer than all of the Series 2018 Certificates of a single maturity and series are to be redeemed, the selection of Series 2018 Certificates (or portions of Series 2018 Certificates in the amount of \$5,000 or any whole multiple) to be redeemed will be made by lot in a manner determined by the Trustee.

In the case of a partial redemption when Series 2018 Certificates of denominations greater than \$5,000 are then outstanding, each \$5,000 unit of principal will be treated as if it were a separate Series 2018 Certificate of the denomination of \$5,000.

Term Certificates and Mandatory Redemption Option

Each bidder will have the option to designate in its bid consecutive maturities of the Series 2018 Certificates bearing interest at the same rates as one or more term certificates subject to prior mandatory sinking fund redemption at a price of par plus interest accrued to the redemption date. Any of those maturities for which no such written designation is made by the successful bidder will mature serially. See the Official Notice of Sale attached hereto as **Exhibit B** for more information. Term certificates purchased for cancellation may be credited against the applicable mandatory redemption requirement for the term certificates of the corresponding maturity and series.

Notice of Redemption; Effect

The Trustee is to cause notice of the call for redemption, identifying the Series 2018 Certificates of a series or portions of Series 2018 Certificates of that series to be redeemed, to be sent at least 30 days prior to the redemption date by first class mail to the registered owners of such Series 2018 Certificates at the addresses of such registered owners as they then appear on the books of registry. Any failure to receive notice by mailing, or any defect in that notice, will not affect the validity of the proceedings for the redemption of any Series 2018 Certificate. A notice of redemption for the VSA Certificates or portions thereof may state that any redemption is conditional on funds being deposited with the Trustee on or before the redemption date sufficient to pay the redemption price on that redemption date and failure to make such deposit on or before the redemption date shall not be an Event of Default under the VSA Trust Agreement.

On the date designated for redemption, and unless a conditional notice of redemption has been given with respect to the VSA Certificates, the Series 2018 Certificates or portions of Series 2018 Certificates of that series called for redemption shall become due and payable. If the Trustee then holds sufficient moneys for payment of principal, interest and any premium payable on that redemption date, interest on each Series 2018 Certificate (or portion of a Series 2018 Certificate of that series) so called for redemption will cease to accrue on that date.

So long as all Series 2018 Certificates of a series are held under a book-entry system by a securities depository (such as DTC), notice of redemption will be sent by the Trustee only to the depository or its nominee.

Selection of book-entry interests in the Series 2018 Certificates called, and notice of the call to the owners of those interests called of that series, is the responsibility of the depository and its participants and indirect participants. Any failure of the depository to advise any participant or of any participant or any indirect participant to notify the beneficial owners, of any such notice and its content or effect will not affect the validity of any proceedings for the redemption of any Series 2018 Certificates or portion of Series 2018 Certificates of that series. See **The Series 2018 Certificates of Participation – General; Book-Entry System**.

SOURCE OF PAYMENT FOR THE SERIES 2018 CERTIFICATES

Each Series 2018 Certificate evidences a respective proportionate right to, and is payable from, on a parity with all other Certificates issued under the applicable Trust Agreement, Revenues received under that applicable Trust Agreement, which consist of (a) Base Rent under the related Lease, (b) all other money received or to be received by the Trustee under that Lease (other than fees in payment or reimbursement of ordinary or extraordinary fees and expenses of the Trustee as trustee, registrar or paying agent), including without limitation, all income or other money realized by the Trustee from the lease, sale or other disposition of the Project or Projects financed by that Lease, (c) any money in the respective Certificate Fund (including the respective Lease Payment Account, the respective Capitalized Interest Account and the respective Redemption Account), and (d) all income and profit from the investment of the foregoing money; provided, however, that any investment income required under the Code to be rebated to the United States will not be, and will not be deemed to be, Revenues, and the Certificate Holders will have no claim or interest in that income (collectively, the Revenues). Each Lease requires Lease Payments including (i) Base Rent payable substantially concurrently with and in amounts that related Certificate Payments are due and (ii) Additional Rent in amounts sufficient to pay Trustee fees and all other enumerated expenses under the respective Lease.

The Leases provide that the obligation of the Secretary of State and DAS, as applicable, to pay their respective Lease Payments during a Lease Term is absolute and unconditional, subject to and dependent upon biennial appropriations by the State to pay Lease Payments. During each Lease Term, Lease Payments are payable without any right of set-off or counterclaim regardless of any contingencies. See **Security for the Series 2018 Certificates – Nonappropriation**. The obligations of the Secretary of State and DAS, as applicable, to pay the respective Lease Payments during each Lease Term will continue until all respective Lease Payments and all other amounts due under the respective Leases have been paid, unless sooner terminated in accordance with the provisions of the respective Leases. See **Investors' Risks – Risks Associated with Nonappropriation of Lease Payments**.

The payments of Base Rent evidenced by the Series 2018 Certificates cannot be accelerated under the Leases or the Trust Agreements.

The renewal of the Leases beyond each Lease Term and the obligation of the Secretary of State and DAS to pay Lease Payments are subject to and dependent upon biennial renewal of the respective Lease and biennial appropriations by the General Assembly sufficient to pay Lease Payments. The respective obligations of the Secretary of State and DAS to pay Lease Payments do not constitute a debt of the Secretary of State, DAS or the State within the meaning of any constitutional or statutory limitation. The Series 2018 Certificates do not represent or constitute a debt of the Secretary of State, DAS or the State or of any political subdivision thereof, or a pledge of the faith and credit of the State, any political subdivision thereof, the Secretary of State or DAS. Payments with respect to the Series 2018 Certificates will be made solely from amounts derived under the terms of the Leases, including the Lease Payments, and amounts from time to time on deposit under the terms of the Trust Agreements.

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If the Leases are renewed biennially for each Lease Term, the Leases require that Base Rent be paid on the following dates and in the following amounts and the Trust Agreements provide that such amounts be deposited in the respective Certificate Funds and applied on a semiannual basis to pay amounts when due with respect to the Series 2018 Certificates and all other Certificates.

BASE RENT SCHEDULE

<u>Payment Date</u>	<u>Existing VSA Base Rent</u>	<u>New VSA Base Rent</u>	<u>Total VSA Base Rent</u>	<u>Existing EDCS Base Rent</u>	<u>New EDCS Base Rent</u>	<u>Total EDCS Base Rent</u>
March 1, 2019	-			\$ 1,096,375		
September 1, 2019	-			6,601,375		
March 1, 2020	-			958,750		
September 1, 2020	-			6,743,750		
March 1, 2021	-			814,125		
September 1, 2021	-			6,899,125		
March 1, 2022	-			662,000		
September 1, 2022	-			7,057,000		
March 1, 2023	-			502,125		
September 1, 2023	-			7,222,125		
March 1, 2024	-			334,125		
September 1, 2024	-			7,404,125		
March 1, 2025	-			157,375		
September 1, 2025	-			3,227,375		
March 1, 2026	-			80,625		
September 1, 2026	-			3,305,625		
March 1, 2027	-			-		
September 1, 2027	-			-		
March 1, 2028	-			-		
September 1, 2028	-			-		
Total	-			\$53,066,000		

SECURITY FOR THE SERIES 2018 CERTIFICATES

General

Each Series 2018 Certificate evidences a respective proportionate interest in Base Rent to be paid by the Secretary of State or DAS to the Trustee under the respective Lease and the assignment thereof in the respective Trust Agreement. See **The Series 2018 Certificates of Participation – General Provisions** herein.

The renewal of a Lease beyond a Lease Term and the Secretary of State's and DAS's obligation to pay their respective Lease Payments and any other obligations of the Secretary of State and DAS under the respective Lease are subject to and dependent upon biennial appropriations by the General Assembly to make Lease Payments and to pay such other obligations. Currently, each fiscal biennium (Biennium) of the State begins on July 1 of an odd-numbered year (the first "Fiscal Year" of such Biennium) and ends on June 30 of the second Fiscal Year of such Biennium. *Under the Ohio Constitution, an appropriation may not be made for more than a Biennium and, accordingly, the obligations of the Secretary of State and DAS to make payments of Base Rent and Additional Rent are only for each Biennium as appropriations are made. The Leases require that all amounts needed for payments of Base Rent, and to the extent determinable, all amounts due as Additional Rent, be included in the estimated budgets of the Secretary of State and DAS for the State budget estimates prepared by the OBM Director and submitted to the Governor and the State budget submitted by the Governor to the General Assembly.* If the General Assembly does not make an appropriation of money sufficient to pay Lease Payments in any succeeding Lease Term with respect to the applicable Lease, that Lease will terminate, subject to reinstatement as herein described, and the Secretary of State and DAS are required to return possession of the applicable Project or Projects to the Trustee and to transfer any money in the applicable Project Fund to the Trustee for deposit in the respective Lease Payment Account, all in accordance with and subject to the terms of the respective Lease and the respective Trust Agreement. In that event, the Trustee would be entitled to exercise all available remedies.

The money and investments held by the Trustee under the respective Trust Agreements are irrevocably held in trust for the benefit of the respective Certificate Holders, the Secretary of State and DAS, as their interests appear, and for the purposes specified in the respective Trust Agreements. Such money, and any income or interest earned thereon, will be expended only as provided in the Trust Agreements and will not be subject to levy or attachment by lien by or for the benefit of any creditor of the Trustee, the Secretary of State, DAS or any Certificate Holder.

Under the terms of the respective Leases, the Secretary of State and DAS are each obligated during each Lease Term to pay on each Lease Payment Date during the current Lease Term an amount equal to the respective aggregate Base Rent payable on that Lease Payment Date. The Base Rent due on each Lease Payment Date equals the corresponding Certificate Payments on the Series 2018 Certificates becoming payable on the ensuing payment date. The initial terms of the Supplemental Leases for the VSA Certificates and the EDCS Certificates commence as of the date of initial delivery of the Series 2018 Certificates and will end on June 30, 2019, the end of the current Biennium, subject to renewal for a subsequent Renewal Term (each a Biennium, except the final Renewal Term, which ends September 1, 2028 for both the VSA Lease and the EDCS Lease) in accordance with the provisions of the respective Leases.

Nonappropriation

The Leases provide that the renewal of the Leases and the obligations of the Secretary of State and DAS, as applicable, to make Lease Payments are subject to biennial appropriation by the General Assembly. That obligation is a current expense of the Secretary of State and DAS, payable exclusively from appropriated money, and is not an indebtedness of the Secretary of State, DAS or the State. If the General Assembly fails to appropriate money to pay Lease Payments on the applicable Lease, then the Secretary of State and DAS are relieved of any subsequent obligation under that applicable Lease. The Secretary of State and DAS agree in their respective Leases to use best efforts to budget sufficient appropriated money to pay Lease Payments, but the Leases acknowledge that appropriations with respect to the Secretary of State and DAS are a legislative action performed by the General Assembly.

If, prior to the beginning of any Renewal Term, sufficient funds have not been appropriated for the purpose of paying the Lease Payments on the applicable Lease scheduled to be paid during that ensuing Renewal Term in

accordance with that Lease, that Lease will terminate on such last day of the then current respective Lease Term; provided, however, that if by August 15 of the next Fiscal Year Appropriations are made that would have caused that Lease to have continued in effect if the Appropriations had been made prior to the date of termination, then that Lease will be reinstated and deemed renewed as of the day following the date of such termination. See **Description of Documents – The Leases**.

In the event one or both of the Leases are terminated due to nonappropriation without reinstatement, the Secretary of State or DAS, as applicable, is under no obligation to make any future Lease Payments under the terminated Lease or Leases. Under those circumstances the Trustee will have all legal and equitable rights and remedies to take possession of the applicable Project or Projects (subject to appropriate indemnification of the Trustee by Certificate Holders), and the Secretary of State and DAS, as applicable, agree to peaceably surrender possession of the Project or Projects, as applicable, to the Trustee not later than August 15 of the Fiscal Year immediately following such termination. In addition, the Trustee is required to transfer any remaining money in the respective Project Fund to the respective Lease Payment Account. In such event the Certificates will be subject to special redemption as described under **The Series 2018 Certificates of Participation – Prior Redemption – Special Redemption**. See **Investors' Risks – Risks Associated with Nonappropriation of Lease Payments and – Risks Associated with Acquisition and Installation of the Projects**.

Limitations on Remedies

The enforceability of the Leases and the Trust Agreements is subject to bankruptcy laws and other laws affecting creditors' rights and to the exercise of judicial discretion. The Project is and additional Projects will be designed as (i) the acquisition and implementation of the VSA Project and/or (ii) improvements and upgrades to the EDCS Project. Because of such design, the nature of the Project and the delays inherent in obtaining judicial remedies, it should not be assumed that the remedies available to the Trustee could be accomplished rapidly or that the proceeds of the sale or other disposition of the Project or the respective portion thereof by the Trustee would be adequate to provide for payment of all principal and interest with respect to the related Certificates outstanding at that time. Any delays in the ability of the Trustee to obtain possession of a Project or the respective portion thereof could result in delays in the payment of any amounts available for principal and interest with respect to the related Certificates.

No assurance is given that the proceeds of any disposition of the Project or Projects by the Trustee, together with any moneys then remaining in the respective Certificate Fund, the respective Project Fund or otherwise under the Trust Agreements and securing the related Series 2018 Certificates, will be sufficient to pay all principal of and accrued interest on the related Series 2018 Certificates outstanding at the time.

Before taking certain actions under the documents relating to the Certificates, the Trustee may require that a satisfactory indemnity or indemnity bond or other assurance be furnished to it by the Certificate Holders of the respective Certificates for the reimbursement of all expenses that it may incur and to protect it against all liability by reason of any action so taken, except liability that is adjudicated to have resulted from its negligence or willful misconduct. The Trustee may take action without that indemnity, and in that case, all of the Trustee's expenses pursuant to the respective Trust Agreements will be reimbursable as provided in the related Leases.

In addition, upon the occurrence and continuance of an Event of Default, the Trustee may use any amounts available in the respective Certificate Fund to preserve and protect the Projects and the rights of the Certificate Holders and to pay expenses that it may incur in carrying out its responsibilities under the documents relating to those Certificates.

Additional Certificates

So long as the applicable Lease remains in effect, the Secretary of State and DAS may enter into Supplemental Leases and direct the Trustee to sign and deliver Additional Certificates pursuant to the respective Supplemental Trust Agreements from time to time to provide funds to pay the costs of refunding outstanding Certificates or to pay costs of the respective Project or additional Projects as the Secretary of State and DAS deem necessary or desirable; provided, however, that if an Event of Default under the respective Trust Agreement or an

event of nonappropriation under the related Lease has occurred and is continuing, no additional Certificates will be signed and delivered by the Trustee under that Trust Agreement.

Defeasance

The Series 2018 Certificates are subject to defeasance and may be paid or provided for with money or specified investment securities provided by the Secretary of State or DAS, as applicable, in connection with the refunding of those applicable Series 2018 Certificates. See **Description of Documents – The Trust Agreements**.

INVESTORS' RISKS

This discussion of risk factors is not, is not intended to be, and cannot be exhaustive; see also **Security for the Series 2018 Certificates – Nonappropriation** and **– Limitations on Remedies and Tax Matters**.

Risks Associated with Nonappropriation of Lease Payments

As set forth under **Source of Payment for the Series 2018 Certificates**, the Series 2018 Certificates of each series are payable solely from Lease Payments under the respective Lease. Under the Leases, the obligation of the Secretary of State or DAS, as applicable, to make the respective Lease Payments during a Lease Term and to renew the Lease Term are subject to and dependent upon biennial appropriations by the General Assembly sufficient to pay those Lease Payments. While the Secretary of State and DAS are required under the respective Leases to include in their budget requests to the Director of OBM, for purposes of the biennial budget requests to the General Assembly, sufficient money for the Secretary of State or DAS, as applicable, to make the respective Lease Payments, there is no assurance that the General Assembly will approve such budget appropriations. The failure of the General Assembly to make biennial appropriations for Lease Payments under a Lease would cause that Lease to terminate as of the end of its current respective Lease Term, requiring the Secretary of State or DAS, as applicable, to return the Project or Projects to the Trustee and the Trustee to transfer any money in the respective Project Fund to the respective Lease Payment Account. If a Lease were to terminate, the only sources of payment for the Series 2018 Certificates secured by that Lease and the related Trust Agreement would be (i) money in the respective Certificate Fund, to the extent available for such payments under the related Trust Agreement, and (ii) rent or proceeds of sale received by the Trustee from lease or sale of the related Project or Projects, regardless of whether such Project or Projects have been completed. See **Risks Associated with Acquisition and Installation of the Project**. There is no assurance that the Trustee could replace the Secretary of State or DAS, as applicable, with a lessee or purchaser who would provide funds sufficient to pay the remaining amount of principal of and interest due on the Certificates to be paid from Lease Payments under that Lease.

A termination of a Lease would allow the Trustee to redeem the applicable Certificates under the special redemption provisions of the correlating Trust Agreement. The Trustee, however, has no obligation under the Trust Agreements to call for a special redemption of the Certificates. Certificate Holders have no right to accelerate the maturities of the Certificates in the event of a nonrenewal of a Lease Term due to nonappropriation of funds for Lease Payments by the General Assembly. Certificate Holders, therefore, might be left without an adequate remedy in such an event. Moreover, Bond Counsel is expressing no opinion as to the treatment for federal income tax purposes or for Ohio state and local income tax purposes of money received by Holders of a series of Series 2018 Certificates following a termination of the respective Lease as a consequence of an event of nonappropriation. Each Certificate Holder should carefully examine the tax implications of such an event. See **Tax Matters**.

Risks Associated with Acquisition and Installation of the Projects

Completion of acquisition and installation of a Project may be impacted by the inability to obtain materials, labor shortages, strikes and other causes beyond the State's control. Any increased costs relating to such items could adversely impact the ability of the Secretary of State and DAS, as applicable, to complete that Project as planned. See **The Projects**.

Risks Associated with Enforceability of Remedies

Enforcement of remedies under the documents relating to the Certificates may be limited or restricted by laws relating to bankruptcy, insolvency, reorganization, moratorium on rights of creditors and by application of general principles of equity. The Projects consist primarily of either (i) the acquisition and implementation of voting systems, and (ii) software and hardware which will be designed, customized, installed and implemented as portions of, or improvements and upgrades to, the EDCS Project. Due to (i) the nature of the VSA Project as a voting machine system for the electorate of the State, and (ii) the customization of the EDCS Project for the State's purposes and the nature of the Project as improvements and upgrades to existing and future State-specific systems, each Project may have limited or no value to another user, therefore the amount which might be available to the Trustee from a disposition of a Project or a portion thereof is unlikely to be sufficient to pay all principal of and interest on the related Certificates at the time of any default thereon. The enforceability of the liens under the Trust Agreements and the Leases may be subject to the rights of other parties in certain instances. Examples of possible limitations include (i) statutory liens, (ii) rights arising in favor of the United States of America or any agency thereof, (iii) present or future prohibitions against assignment, (iv) constructive trusts, equitable liens or other rights impressed or conferred by any state or federal court in exercise of its equitable jurisdiction, (v) claims that might arise with respect to certain property if appropriate financing or continuation statements are not filed in accordance with the Ohio Uniform Commercial Code (UCC) from time to time in effect or as a result of the UCC not providing for perfection of a security interest in those elements of Revenues that can be perfected under the UCC only by taking possession of such collateral, and (vi) federal bankruptcy laws, including, without limitation, those relating to payments made after and within 90 days prior to any institution of bankruptcy proceedings by or against the obligor.

SOURCES AND USES OF FUNDS

Proceeds received from the sale and delivery of the Series 2018 Certificates will be applied as follows:

SOURCES OF FUNDS:	VSA	EDCS	Total
	Certificates	Certificates	
Par Amount of Series 2018 Certificates* [Net Original Issue Discount/Premium]	\$73,140,000.00	\$27,065,000.00	\$100,205,000.00
Total Source of Funds			
USES OF FUNDS:			
Deposit to Project Fund ^(a)			
Deposit to Certificate Fund ^(b)			
Costs of Issuance ^(c)			
Total Use of Funds			

^(a) To pay costs of the respective Projects.

^(b) To pay capitalized interest through March 1, 2019.

^(c) Costs of issuance including, but not limited to, underwriter's discount, financial adviser fees, legal fees, rating agency fees, and additional proceeds.

THE PROJECTS

The proceeds of the VSA Certificates will be used to pay the costs of the VSA Project, comprised of the acquisition and implementation of voting systems, including, but not limited to, voting machines, marking devices, automatic tabulating equipment, and direct record electronic voting machines and associated allowable expenditures,

* Preliminary; subject to change.

as authorized by the VSA Act. The proceeds of the EDCS Certificates will be used to pay the costs of the EDCS Project, comprised of the continued acquisition, installation and implementation of hardware and software that will expand and improve the cloud computing environment of the State and support upgrades to enterprise shared solutions known as Enterprise Data Center Solutions, as authorized by the EDCS Act.

The VSA Project will establish and implement a program to facilitate the acquisition and funding of new voting systems for Ohio counties. Pursuant to the VSA Act, Ohio counties will be allocated funds from proceeds of the VSA Certificates based upon the number of registered voters in that county as of July 1, 2017. The Secretary of State and each board of county commissioners will enter into an agreement concerning selection and acquisition of such voting systems. Each agreement shall (i) identify the selection and breakdown of the total costs of the voting machines and associated allowable expenditures (being servers and software, delivery, installation, configuration and testing, and warranties and software licenses, but does not include costs associated with training, operating, servicing, maintaining or insurance, which will be the responsibility of the Ohio county under such agreement); (ii) provide for possession of such voting system by each Ohio county; and (iii) provide for covenants as to operation, servicing, maintenance and insurance by each Ohio county. Each Ohio county will enter into the necessary contracts or agreements with the selected vendor and shall be responsible for allowable voting system costs that exceed that Ohio county's allocated funding amount. No monies, if any, received by the Secretary of State or the State from any Ohio county for such purpose are pledged to the repayment of the VSA Certificates.

The EDCS project is designed to reduce infrastructure complexity and increase the use of enterprise applications and solutions by implementing the expansion of the State's private cloud build-out, the upgrade of the Ohio Business Gateway, the replacement of data center computing equipment, and the implementation or expansion of enterprise platforms and modules for functions such as grants management, digital identity and access management, and data analytics.

THE DEPARTMENT OF ADMINISTRATIVE SERVICES

DAS was created by the enactment of Section 121.02 of the Ohio Revised Code. DAS is an agency of the State performing essential functions of the State. The Director of DAS is Robert Blair.

THE SECRETARY OF STATE OF THE STATE OF OHIO

The current Secretary of State is Jon Husted. The Secretary of State is elected on a quadrennial basis, the current term ending in January 2019. As Ohio's chief elections officer, the Secretary of State oversees the elections process and appoints the members of boards of elections in each of Ohio's 88 counties. The Secretary of State supervises the administration of election laws; reviews statewide initiative and referendum petitions; chairs the Ohio Ballot Board, which approves ballot language for statewide issues; canvasses votes for all elective state offices and issues; investigates election fraud and irregularities; and trains election officials, and works with counties to train poll workers. The Elections Division of the Secretary of State's Office also compiles and maintains election statistics and other election-related records.

In addition, the Secretary of State (i) collects campaign finance compliance reports, (ii) is a member of the Ohio Apportionment Board, which meets every 10 years following the decennial census to redraw boundaries for each of the 99 Ohio House and 33 Ohio Senate districts to reflect population changes, (iii) grants authority to do business in the State including collecting filings of articles of incorporation for Ohio business entities and licenses to out-of-state corporations seeking to do business in Ohio, approves amendments to filed documents, mergers, consolidations and dissolutions, registers trademarks, trade names, service marks and fictitious names, as well as keeping a registry of business names, names and addresses of statutory agents, incorporators' names, corporations' charter numbers, dates of incorporation, and the number of authorized shares per corporation, (iv) acts as a record keeping and filing office for authentication of documents for use overseas, as well as keeping all laws passed by the Ohio General Assembly, municipal charters, administrative rules adopted by agencies, and executive orders issued by the Governor, (v) licenses ministers for the purpose of solemnizing marriages in Ohio, and (vi) maintains records of all registered notaries in Ohio.

THE CORPORATION

The Articles of Incorporation of State of Ohio Leasing Corporation, Inc. (the Corporation) were filed with the Secretary of State of the State of Ohio in May of 2005 and amended in May of 2008. The Corporation was incorporated as a nonprofit corporation under the laws of the State of Ohio.

The Corporation has agreed to enter, or has entered, into the Leases with the Secretary of State and DAS to facilitate the financing of the respective Projects. The Corporation has assigned without recourse all of its rights and interests under the Leases (other than Unassigned Rights) to the Trustee for the benefit of the Holders of the related Certificates. The Corporation is not liable for the payment of Base Rent or Additional Rent, and the Certificate Holders have no right to look to the Corporation for any payments of the Certificates or for any other payments. In addition, the Corporation has no control over the expenditure of the proceeds of the Certificates.

DESCRIPTION OF DOCUMENTS

General; Definitions

The following descriptions of provisions of the documents are only brief outlines of some of the provisions thereof, and do not purport to summarize or describe all of the provisions thereof. Reference is made to the Leases and the Trust Agreements relating to the Certificates. The following terms are used in the documents and have the meanings given below unless the context clearly requires otherwise.

"**Act**" means, with respect to VSA Certificates or VSA Project, the VSA Act, and, with respect to EDCS Certificates or EDCS Project, the EDCS Act.

"**Additional Certificates**" means Certificates that may be signed and delivered subsequent to the issuance of the Series 2018 Certificates pursuant to the respective Trust Agreement.

"**Additional Rent**" means payments of Additional Rent as described under **Description of Documents – The Leases**.

"**Appropriation**" means an authorization granted by the General Assembly of the State to make expenditures and to incur obligations for specific purposes.

"**Assignment**" means the assignment of a Lease in the respective Trust Agreement assigning to the Trustee all rights and interest of the Corporation under that Lease (other than Unassigned Rights).

"**Authorized Denomination**" means the denomination of \$5,000 or any integral multiple thereof.

"**Authorized Officer**" means, as to the Corporation, any officer or employee of the Corporation authorized under the circumstances to perform the particular act or sign the particular document, as to the Secretary of State, means the Secretary of State, or any person the Secretary of State has designated in writing, as to DAS, means the Director of the Department of Administrative Services, or any person the Director of the Department of Administrative Services has designated in writing and, as to OBM, means the OBM Director, or any person the OBM Director has designated in writing.

"**Base Rent**" means the payments, including the principal and interest components of those payments, specified in the Leases and set forth herein under **Source of Payment for the Series 2018 Certificates**.

"**Biennium**" means each fiscal biennium of the State of Ohio.

"**Bond Counsel**" means an independent attorney or firm of attorneys admitted to practice law before the highest court of the State and nationally recognized as municipal bond counsel.

"Book-entry form" or **"book-entry system"** means, with respect to the Series 2018 Certificates, a form or system, as applicable, under which (i) the ownership of beneficial interests in Series 2018 Certificates and Certificate Payments may be transferred only through a book-entry and (ii) physical Certificates in fully registered form are registered only in the name of a Depository or its nominee as Certificate Holder, with the physical Certificates "immobilized" in the custody of the Depository or its agent. The book-entry system is maintained by and is the responsibility of the Depository and not the Corporation or the Trustee. The book entry is the record that identifies, and records the transfer of the interests of, the owners of beneficial (book-entry) interests in the Series 2018 Certificates.

"Business Day" means any day other than (i) a Saturday or Sunday, (ii) a day on which banking institutions in the City of Columbus, Ohio are authorized by law or executive order to close, (iii) any day on which the Federal Reserve Bank of Cleveland is closed or (iv) a day on which the Depository is closed.

"Certificate Fund" means the respective Certificate Fund established under a Trust Agreement and held by the Trustee for the payment of Certificate Payments.

"Certificate Payments" means, for any period or payable at any time, the principal of and interest and any premium on the Series 2018 Certificates (or all Certificates, as the context permits) for that period or payable at that time (whether on a Payment Date or pursuant to or upon redemption or otherwise), as the case may be.

"Certificates" means, collectively, the certificates issued pursuant to the terms of the applicable Trust Agreement and includes the VSA Certificates, any Additional Certificates that may be issued pursuant to the VSA Trust Agreement, the EDCS Certificates, any Additional Certificates that may be issued pursuant to the terms of the EDCS Trust Agreement and certificates previously issued pursuant to the terms of the EDCS Trust Agreement.

"Certified/Certification" means the certification by the OBM Director that there is a balance in the appropriation, not already obligated to pay existing obligations, sufficient to meet the obligations of the State under a particular contract, agreement or other obligation.

"Closing Date" means the date of delivery of the Series 2018 Certificates to the Original Purchaser against payment therefor.

"Code" means the Internal Revenue Code of 1986, as amended from time to time; references to the Code and sections thereof include relevant applicable regulations and temporary regulations thereunder and any successor provisions to those sections, regulations or temporary regulations.

"Corporation" means State of Ohio Leasing Corporation, Inc., and any successors thereto, as lessor under the Lease.

"Counsel" means an attorney or a firm of attorneys admitted to practice law before the highest court of the State.

"Defeasance Obligations" means:

(a) direct obligations of or obligations guaranteed as to payment of principal and interest by the United States, or senior debt obligations of U.S. government-sponsored enterprises (including, but not limited to, the Federal Home Loan Bank, Federal Home Loan Mortgage Corporation, Federal National Mortgage Association and the Federal Farm Credit Bank) rated on the date of purchase in the highest category for short-term or long-term debt, as applicable, by any two nationally recognized rating services (Government Obligations); and

(b) evidences of ownership of proportionate interests in future interest and principal payments on Government Obligations held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has the right to proceed directly and individually

against the obligor and the underlying Government Obligations are not available to any person claiming through the custodian or to whom the custodian may be obligated.

"Depository" means The Depository Trust Company (a limited purpose trust company), New York, New York, until any successor Depository shall have become such pursuant to the applicable provisions of the Trust Agreement and, thereafter, "Depository" shall mean the successor Depository. Any Depository shall be a 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 of beneficial interests in Certificates or Certificate Payments, and to effect transfer of Certificates, in a book-entry form.

"EDCS Act" means Section 701.10 of House Bill Number 529 of the 132nd General Assembly of the State and Chapter 125 of the Ohio Revised Code.

"EDCS Certificates" means the \$27,065,000* Certificates of Participation, Series 2018 Evidencing Proportionate Interests of the Owners Thereof in Base Rent to be paid by the State of Ohio Department of Administrative Services (Enterprise Data Center Solutions Project), issued December __, 2018 pursuant to the EDCS Trust Agreement.

"EDCS Lease" means Master Lease-Purchase Agreement dated as of October 1, 2014, between the Corporation and DAS, as amended or supplemented from time to time.

"EDCS Project" means the continued acquisition, installation and implementation of hardware and software that will expand and improve the cloud computing environment of the State and support upgrades to enterprise shared solutions known as Enterprise Data Center Solutions (EDCS), as authorized by the EDCS Act.

"EDCS Supplemental Lease" means the Supplemental Lease No. 3-18 dated as of December 1, 2018 between DAS and the Corporation.

"EDCS Supplemental Trust Agreement" means the Third Supplemental Trust Agreement dated as of December 1, 2018 between Corporation and the Trustee relating to the EDCS Certificates.

"EDCS Trust Agreement" means the Trust Agreement, dated as of October 1, 2014, between the Trustee and the Corporation, as amended or supplemented from time to time.

"Eligible Investments" means, to the extent permitted by law:

(a) cash (insured at all times by the Federal Deposit Insurance Corporation or otherwise collateralized with obligations described immediately hereafter), or direct obligations of (including obligations issued or held in book-entry form on the books of) the Department of the Treasury of the United States of America;

(b) obligations of any of the following federal agencies which obligations represent the full faith and credit of the United States of America, including (1) the Farm Credit System Financial Assistance Corporation, (2) the Rural Economic Community Development Administration (formerly the Farmers Home Administration), (3) the General Services Administration, (4) the United States Maritime Administration, (5) the Government National Mortgage Association (GNMA), (6) the United States Department of Housing and Urban Development (PHAs) and (7) the Federal Housing Administration;

(c) direct obligations of any of the following federal agencies which obligations are not fully guaranteed by the full faith and credit of the United States of America: (1) senior debt obligations rated "Aaa" by Moody's issued by the Federal National Mortgage Association (FNMA) or the Federal Home Loan Mortgage Corporation (FHLMC), (2) obligations of the Resolution Funding Corporation (REFCORP), (3) senior debt obligations of the Federal Home Loan Bank System, (4) senior debt

* Preliminary, subject to change.

obligations of the Student Loan Marketing Association (SLMA) and (5) senior debt obligations of other government-sponsored agencies approved by each Insurer;

(d) United States dollar denominated deposit accounts, demand deposits, including interest bearing money market accounts, federal funds, trust deposits and bankers' acceptances with domestic commercial banks (including the Trustee or any of its affiliates) which have a rating on their short term certificates of deposit on the date of purchase of "Prime-1" or "A3" or better by Moody's or "A-1+" or better by S&P and maturing no more than 360 days after the date of purchase. (Ratings on holding companies are not considered as the rating of the bank.);

(e) commercial paper which is rated at the time of purchase "P-1" by Moody's or "A- +" or better by S&P and which matures not more than 270 days after the date of purchase;

(f) pre-refunded Municipal Obligations, defined as any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state which are not callable at the option of the obligor prior to maturity or as to which irrevocable instructions have been given by the obligor to call on the date specified in the notice; and

(1) which are rated, based on an irrevocable escrow account or fund (the escrow), in the highest rating category of Moody's or S&P or any successors thereto; or

(2) (i) which are fully secured as to principal and interest and redemption premium, if any, by an escrow consisting only of cash or obligations described in (a)(i) above, which escrow may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate, and (ii) which escrow is sufficient, as verified by a nationally recognized independent certified public accountant, to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this paragraph on the maturity date or dates specified in the irrevocable instructions referred to above, as appropriate;

(g) general obligations of states or municipalities which are rated at the time of purchase by Moody's or S&P in one of the two highest long-term rating categories assigned by such agencies;

(h) money market mutual funds registered under the Federal Investment Company Act of 1940, whose shares are registered under the Federal Securities Act of 1933, and having a rating at the time of purchase by S&P of "AAAm- G", "AAA- m" or "AA- m" or if rated by Moody's, rated "Aaa", "Aa1" or "Aa2", including, without limitation, so long as they otherwise qualify, the JPMorgan Funds or any other mutual fund for which the Trustee or an affiliate of the Trustee serves as investment manager, administrator, shareholder servicing agent, and/or custodian or subcustodian, notwithstanding that (1) the Trustee or an affiliate of the Trustee receives fees from such funds for services rendered, (2) the Trustee charges and collects fees for services rendered pursuant to the Trust Agreements, which fees are separate from the fees received from such funds, and (3) services performed for such funds and pursuant to the Trust Agreements may at times duplicate those provided to such funds by the Trustee or its affiliates; and

(i) so long as approved by each Insurer of a series of Certificates identified in a supplemental trust agreement relating thereto, investments in the State of Ohio Local Agency Investment Pool (S.T.A.R. Ohio) created and maintained pursuant to Section 135.45 of the Ohio Revised Code, provided S.T.A.R. Ohio maintains the highest letter or numerical rating provided by at least one nationally recognized rating service. The Trustee would not be required to divest funds during the initial 180 days following the Treasurer's receipt of notice that S.T.A.R. Ohio is not in compliance with the rating requirements;

(j) other forms of investments (including repurchase agreements) approved in writing by each Insurer of a series of Certificates identified in the supplemental trust agreements relating thereto.

Investments or deposits in certificates of deposit or investment contracts shall not be made without complying with Treasury Regulations Section 1.148-5(d)(6)(ii) and (iii), respectively, or with any successor provisions thereto or other similar applicable provisions. In determining whether the rating assigned by Moody's to an investment complies with the rating categories provided in this definition, the rating category shall be determined without regard to any numerical or plus or minus modifier, unless otherwise expressly provided in this definition.

"Event of Default" means an Event of Default under a Lease or Trust Agreement, as applicable. See **The Leases – Defaults and Remedies and Trust Agreements – Events of Default**.

"Extraordinary Services" and **"Extraordinary Expenses"** mean all services rendered and all reasonable fees and expenses properly incurred by the Trustee, as such and as Registrar and Paying Agent, under each of the Trust Agreements, including without limitation any claims, losses, damages, penalties and reasonable attorneys' fees and expenses incurred by Trustee thereunder, subject to the provisions of the applicable Trust Agreement, other than Ordinary Services and Ordinary Expenses.

"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, as to be evidenced for purposes of the Trust Agreements by a certificate of an Authorized Officer of OBM filed with the Trustee, such other consecutive 12-month period as may hereafter be established as the fiscal year of the State for budgeting, appropriations and accounting purposes.

"Holder", "Holder of a Certificate" or "Certificate Holder" means the Person in whose name a Certificate is registered on the Register.

"Initial Term" means, as to the VSA Supplemental Lease, the period from the date of initial delivery of the VSA Certificates to June 30, 2019, and as to the EDCS Supplemental Lease, the period from the date of initial delivery of the EDCS Certificates to June 30, 2019, inclusive.

"Insurer" means any Insurer defined in a Supplemental Trust Agreement in connection with a series of Certificates.

"Interest Payment Date" or "Interest Payment Dates" means, with respect to the Series 2018 Certificates, March 1 and September 1 of each year during which Series 2018 Certificates are outstanding, commencing March 1, 2019, and with respect to other Certificates, the dates for payment of interest thereon.

"Interest Rate for Advances" means one percent (1%) above the highest rate quoted as the "Prime Rate" in the column entitled "Money Rates" published in The Wall Street Journal on the day payment is due (or if such due date falls on a weekend or holiday, the immediately preceding Business Day).

"Lease" or "Leases" means, collectively, the VSA Lease and the EDCS Lease, as each is amended or supplemented from time to time.

"Lease Payment Account" means the Lease Payment Account of a Certificate Fund.

"Lease Payment Date" means each February 15 and August 15 during a Lease Term, commencing February 15, 2019.

"Lease Payments" means, for each Lease Term, the sum of the Base Rent due during such Lease Term plus any Additional Rent for which funds have been appropriated, being the total lease payment obligation of the Secretary of State or DAS, as applicable, for such Lease Term.

"Lease Term" means, individually and not collectively, the Initial Term for any series of Certificates, each Renewal Term, and any other renewal term during which the terms and conditions of the Leases are in force.

"OBM" means the Office of Budget and Management of the State.

"Ordinary Services" and **"Ordinary Expenses"** mean those services normally rendered, and those fees, advances, counsel fees and other expenses normally incurred, by a trustee, registrar or paying agent under instruments similar to the Trust Agreements.

"Original Purchaser" means, collectively, _____ for the VSA Certificates and _____ for the EDCS Certificates.

"Outstanding Certificates", **"Certificates outstanding"** or **"outstanding"** as applied to Certificates means, as of the applicable date, all Certificates that have been signed and delivered, or which are being delivered by the Trustee under the Trust Agreements, except:

- (a) Certificates cancelled or retained in safekeeping upon surrender, exchange or transfer, or cancelled because of payment or redemption on or prior to that date;
- (b) Certificates, or the portion thereof, for the payment, redemption or purchase for cancellation of which sufficient money has been deposited and credited with the Trustee on or prior to that date for that purpose (whether upon or prior to the maturity date of those Certificates);
- (c) Certificates, or the portion thereof, that are deemed to have been paid and discharged or caused to have been paid and discharged pursuant to the provisions of a Trust Agreement; and
- (d) Certificates in lieu of which others have been signed and delivered under the Trust Agreements.

"Paying Agent" means the Trustee acting in that capacity.

"Payment Date" means an Interest Payment Date and/or a Principal Payment Date.

"Person", or words importing "persons", mean firms, associations, partnerships (including without limitation, general and limited partnerships), joint ventures, societies, estates, trusts, corporations, public or governmental bodies, other legal entities and natural persons.

"Principal Payment Date" means, with respect to the Series 2018 Certificates, September 1 of each year commencing September 1, 2019 and ending September 1, 2028, and any other date on which principal of the Series 2018 Certificates is due and payable whether at maturity or pursuant to redemption, and with respect to other Certificates, the dates for payment of principal, including at maturity or pursuant to redemption.

"Project" or **"Projects"** means (i) the VSA Project and (ii) the EDCS Project, the Project Costs of which have been or are to be paid from moneys derived from Certificates issued pursuant to the related Trust Agreement and deposited in the respective Project Fund, and for the payment of which Project Costs the General Assembly has authorized the Secretary of State and DAS, as applicable, to enter into lease-purchase arrangements relating thereto which lease-purchase arrangements may be fractionalized under Section 133.01(N) of the Ohio Revised Code. "Project" includes any portion of such system the part of Project Costs of which, respectively, are financed by the Series 2018 Certificates and described in the Leases.

"Project Costs" means the portion of the costs of the Project financed from the Series 2018 Certificates and the costs of issuance thereof.

"Project Fund" means the respective Project Fund established under a Trust Agreement and held by the Trustee to contain proceeds from the issuance of Certificates pending disbursement.

"Redemption Account" means the Redemption Account within a Certificate Fund.

"Register" means the books kept and maintained by the Registrar for registration and transfer of Certificates pursuant to the Trust Agreements.

"Registrar" means the Trustee acting in that capacity, as a transfer agent registered in accordance with Section 17A(c) of the Securities Exchange Act of 1934.

"Regular Record Date" means, with respect to any Series 2018 Certificate, the 15th day of the calendar month next preceding an Interest Payment Date applicable to that Series 2018 Certificate.

"Renewal Term" means, individually and not collectively, the renewal terms designated in the Leases. See **The Leases – Lease Term; Renewals; Termination**.

"Revenues" means (a) the Base Rent, (b) all other money received or to be received by the Trustee under the respective Leases, other than amounts received in payment for fees, charges and expenses of the Trustee under the Trust Agreements but including without limitation, all income or other money realized from the lease, sale or other disposition of the respective Projects, (c) any money and investments in the respective Certificate Fund (including the Lease Payment Account, the Capitalized Interest Account and the Redemption Account), and (d) all income and profit from the investment of the foregoing money; provided, however, that any investment income required under the Code to be rebated to the United States shall not, and shall not be, Revenues and the holders of Certificates shall have no claim or interest in that income.

"Series 2018 Certificates" means, collectively, the VSA Certificates and the EDCS Certificates.

"Series 2018 Supplemental Leases" means, collectively, the VSA Supplemental Lease and the EDCS Supplemental Lease.

"Special Funds" or **"Special Funds and Accounts"** means each respective Project Fund and Certificate Fund and accounts in these Funds to the extent pertaining to the Certificates, and any other funds or accounts, established under or identified in a Supplemental Trust Agreement for a particular series, or more than one series of Certificates.

"Special Record Date" means, with respect to any Series 2018 Certificate, the date established by the Trustee in connection with the payment of overdue interest on that Series 2018 Certificate pursuant to the Trust Agreements.

"State" means the State of Ohio.

"Subject to Appropriation and Certification" means subject to the General Assembly's making Appropriation and Certification pursuant to the Leases.

"Supplemental Lease" means any one or more Supplemental Leases, as the same may be amended, modified or supplemented, entered into pursuant to the respective Lease and Trust Agreement.

"Supplemental Trust Agreement" means any one or more supplemental trust agreements, as the same may be amended, modified or supplemented, entered into pursuant to the respective Trust Agreement.

"Tax Opinion" means the opinion of Bond Counsel selected by the Trustee to the effect that the action or event referred to will not result in the interest payable on the Certificates becoming subject to federal income taxation.

"Termination Date" means September 1, 2028 for both the VSA Lease and the EDCS Lease and means with respect to any Lease Term the date on which the Lease terminates in accordance with the provisions of the applicable Lease. See **The Leases – Lease Term; Renewals; Termination**.

"Trust Agreements" means collectively the VSA Trust Agreement and the EDCS Trust Agreement, and unless the context indicates otherwise, includes all Supplemental Trust Agreements.

"Trustee" means The Bank of New York Mellon Trust Company, N.A., as Trustee, or any successor Trustee.

"Unassigned Rights" means the rights of the Corporation under certain provisions of the Lease for the payment of the Corporation's costs and expenses.

"VSA Act" means Amended Substitute Senate Bill Number 135 of the 132nd General Assembly of the State.

"VSA Certificates" means the \$73,140,000* Certificates of Participation, Series 2018 Evidencing Proportionate Interests of the Owners Thereof in Base Rent To Be Paid By the Secretary of State of the State of Ohio (Voting System Acquisition Project), issued December __, 2018 pursuant to the VSA Trust Agreement.

"VSA Lease" means the Master Lease-Purchase Agreement dated as of December 1, 2018 between the Corporation and the Secretary of State, as amended or supplemented from time to time.

"VSA Project" means the acquisition and implementation of voting systems, including, but not limited to, voting machines, marking devices, automatic tabulating equipment, and direct record electronic voting machines and associated allowable expenditures, as authorized by the VSA Act.

"VSA Supplemental Lease" means Supplemental Lease No. 1-18 dated as of December 1, 2018 between the Secretary of State and the Corporation.

"VSA Supplemental Trust Agreement" means the First Supplemental Trust Agreement dated as of December 1, 2018 between Corporation and the Trustee, supplementing the VSA Trust Agreement relating to the VSA Certificates.

"VSA Trust Agreement" means the Trust Agreement, dated as of December 1, 2018, between the Trustee and the Corporation, as amended or supplemented from time to time.

The Leases

General

The VSA Lease will be entered into between the Corporation as lessor and the Secretary of State as lessee. The EDCS Lease has been entered into between the Corporation as lessor and DAS as lessee. Each respective Lease contains the terms and conditions under which the applicable Projects will be leased to the Secretary of State or DAS, as applicable, for the respective Lease Term. The Secretary of State will finance the acquisition of the VSA Project by lease-purchase pursuant to the terms of the VSA Lease. DAS will finance the acquisition of the EDCS Project by lease-purchase pursuant to the terms of the EDCS Lease. The Corporation, by the Trust Agreements, will assign (in the case of VSA) and has assigned (in the case of EDCS) to the Trustee all its rights and interest in and to the respective Leases (other than Unassigned Rights) and the respective Projects.

Lease Term; Renewals; Termination

The Initial Term of the Series 2018 Supplemental Leases commences as of the date of initial delivery of the Series 2018 Certificates and will expire on June 30, 2019, subject to renewal as provided under the Leases. The Leases may be renewed under the provisions of the Leases for consecutive Renewal Terms, each commencing on July 1 of the first Fiscal Year of a fiscal biennium and terminating on June 30 of the second Fiscal Year of a fiscal biennium, except that the final Renewal Term will terminate on September 1, 2028 for both the VSA Lease, and the EDCS Lease. The Leases may be renewed in accordance with the following:

* Preliminary; subject to change.

(a) In order to exercise its right of renewal for a Renewal Term, the Secretary of State or DAS, as applicable, will proceed as follows:

On or prior to July 10 of the first Fiscal Year of the new Renewal Term, the Secretary of State and DAS shall each determine that the General Assembly has in its biennial operating budget appropriated sufficient funds to enable it to pay all its respective Lease Payments due during that Renewal Term and shall determine that the General Assembly has affirmatively included in the respective biennial operating budget for the Secretary of State and DAS, a line item or line items, as applicable, supporting that Appropriation of funds for paying such Lease Payments. Neither the Secretary of State nor DAS will be deemed to have exercised its right of renewal under a Lease if the General Assembly has appropriated insufficient funds to pay all of the Lease Payments under the respective Lease due during the applicable Renewal Term. Such Appropriation will constitute the exercise by the Secretary of State or DAS, as applicable, of its right to renew the respective Lease and the respective Lease or Leases shall be renewed for the full Renewal Term of the fiscal biennium for which the Appropriation or Appropriations were made. As evidence of the exercise by the Secretary of State or DAS, as applicable, of its renewal of the respective Leases for a Renewal Term, the Secretary of State and DAS, will on or prior to August 15 of that Fiscal Year deliver, or cause to be delivered, to the Corporation and the Trustee (i) a certified copy of the appropriation legislation, and (ii) a statement of the OBM Director certifying that the General Assembly has appropriated sufficient funds to enable the Secretary of State or DAS, as applicable, to pay the respective Lease Payments due during the applicable Renewal Term.

(b) If a Lease Term terminates without a renewal of the corresponding Lease for a succeeding Renewal Term pursuant to paragraph (a) above and if by August 15 of the Fiscal Year immediately following the Termination Date the General Assembly appropriates sufficient funds to enable the Secretary of State or DAS, as applicable, to pay all the respective Lease Payments due during that fiscal biennium, then such Lease will be reinstated and deemed renewed as of the day following the Termination Date of the preceding Lease Term and any payments of Lease Payments that would have been due and payable had such Lease been renewed on the first day of the Renewal Term will be paid on the date of reinstatement.

(c) The Secretary of State or DAS, as the case may be, will endeavor to give the Corporation and the Trustee 120 days' prior written notice of its intent not to renew a Lease, but failure to do so will not constitute an Event of Default under the applicable Lease and will not impair its right of renewal thereunder.

(d) The Secretary of State and DAS intend and reasonably believe that legally available funds of an amount sufficient to make all Lease Payments during each Lease Term can be appropriated and obtained. In that regard, the Secretary of State and DAS in the respective Leases represent that the Projects and the State's use of the Projects are essential to the efficient operation and the well-being of the State. Further, the Secretary of State and DAS intend to do all things lawfully within their power to obtain and maintain funds from which Lease Payments may be made, including requesting provision for such payments to the extent necessary in each biennial budget and in the appropriation legislation for presentation to the General Assembly. The Secretary of State and DAS presently intend to renew the Leases through the Final Termination Date, although such renewal remains subject to Appropriation by each future General Assembly.

A Lease Term will terminate upon the occurrence of the first of the following events:

(a) the termination of the respective Lease in accordance with the provisions for biennial termination;

(b) the Corporation's election to terminate the respective Lease pursuant to the remedial provisions of the respective Lease upon the occurrence of an Event of Default; or

(c) the payment or deemed payment, by defeasance pursuant to the respective Lease, by the Secretary of State or DAS, as the case may be, of all Lease Payments and all other amounts authorized or required to be paid by the Secretary of State or DAS under the respective Lease.

Base Rent

On or before the Lease Payment Dates during each Lease Term, the Secretary of State and DAS will pay to the Trustee, as assignee of the Corporation, in lawful money of the United States of America, an amount equal to the respective aggregate Base Rent payable on those Lease Payment Dates during that Lease Term, being the principal and interest components of the Base Rent equal to the principal and interest due on the applicable Certificates on the Payment Date that next follows; provided that credit will be given for amounts on deposit in the related Lease Payment Account.

Except as described in the following sentence, the obligation of the Secretary of State and DAS to make Lease Payments and all other amounts required to be paid by the Secretary of State and DAS under their respective Leases and to perform their obligations under the respective Leases will be absolute and unconditional and will not be subject to abatement, set-off, defense, recoupment or counterclaim. The obligations of the Secretary of State and DAS under their respective Leases are Subject to Appropriation and Certification for such purposes. The obligations of the Secretary of State and DAS under their respective Leases, including the obligation to pay Lease Payments in any Lease Term for which the respective Leases are in effect, will constitute a current expense of the Secretary of State, DAS and the State for such Lease Term and will not constitute a general obligation indebtedness of the Secretary of State, DAS or the State within the meaning of the Ohio Constitution and laws of the State.

Base Rent will be payable in immediately available funds to the Trustee, as assignee of the Corporation, at the corporate trust office of the Trustee or at such other place as the Corporation may from time to time designate in writing. The Trustee will apply the amount received first to payment of the interest component of the respective Base Rent payment and second to the payment of the principal component of the respective Base Rent payment. Money in the Lease Payment Account on the Business Day immediately preceding a Lease Payment Date will be credited against the Base Rent due on that Lease Payment Date.

Additional Rent

During each Lease Term, the Secretary of State and DAS will each pay to the Trustee, as assignee of the Corporation, if and whenever applicable, the following amounts as Additional Rent:

- (a) the fees of the Trustee under respective Trust Agreements and Ordinary Expenses and Extraordinary Expenses, as defined in the respective Trust Agreements;
- (b) taxes and other governmental charges as provided under the respective Leases;
- (c) any premium due for insurance as required under the respective Leases; and
- (d) any amounts paid to the Corporation or others under the respective Leases relating to Unassigned Rights.

The obligation of the Secretary of State and DAS to pay Additional Rent in each Lease Term is Subject to Appropriation and Certification. If Appropriations are not made for payment of all or any part of that Additional Rent, the Trustee, as assignee of the Corporation, has the right, but not the obligation, to pay or advance the amount of such Additional Rent. If the Trustee advances any amount of Additional Rent, the Secretary of State or DAS, as applicable, will, Subject to Appropriation and Certification, repay the Trustee with interest and according to the schedule established in its respective Lease. If the Trustee pays or advances such Additional Rent and is repaid (with interest as required) as provided in the respective Leases, the respective Leases will not be deemed terminated as a result of such nonpayment of Additional Rent.

Title

The Corporation will retain title to the Projects during the Lease Term. The Corporation, the Secretary of State and DAS agree that any appropriate documents may be filed or recorded to evidence the parties' respective interests in the Projects and the respective Leases, including the Corporation's security interest in the Projects. The rights and interest of the Corporation in those documents will be assigned to the Trustee.

Alterations and Additions

The Secretary of State and DAS, at their expense but subject to Appropriation, will keep or cause to be kept the Projects in good order and condition (ordinary wear and tear excepted), and make, or cause to be made, all necessary, proper or appropriate repairs, replacements and renewals thereof, ordinary and extraordinary, foreseen and unforeseen. The Corporation has no responsibility for such maintenance or repair. The Corporation agrees, however, that during the Lease Term and for the applicable period of time designated in the respective Leases after termination of the respective Leases, it will not impair the ability of the Secretary of State and DAS to operate or maintain the Projects in sound operating condition.

The Secretary of State and DAS, at their discretion and at their expense or by causing Additional Certificates to be issued, may make any additions, modification or improvements to their respective Projects that each deems necessary or desirable in connection with its use of the applicable Project, provided that the undertaking and completion of such addition, modification and improvement will not cause the aggregate value of the applicable Project to be reduced below the value of the applicable Project immediately prior to the undertaking and completion of any such addition, modification and improvement. All additions, modifications and improvements so made to the applicable Project by the Secretary of State or DAS will become and be deemed to constitute a part of the applicable Project.

Substitutions and Removals

(a) If the Secretary of State or DAS, in its reasonable discretion, determines that any item of personal property constituting a part of the applicable Project has become inadequate, obsolete, worn-out, unsuitable, undesirable, or unnecessary or should be replaced, the Secretary of State or DAS may remove such item, provided that such removal (taking into account any substitutions) will not impair the operative unity of the applicable Project and will not damage the Project, and provided further that the Secretary of State or DAS, as applicable, will:

(1) substitute and install other items of property having an equal or greater utility and value (but not necessarily the same property function in the operation of the applicable Project) as the removed property, which substituted property shall be free from all liens and encumbrances and shall become part of the applicable Project; or

(2) in the case of removal of property without substitution, promptly pay to the Corporation for application as provided in the respective Trust Agreement an amount equal to: (1) if the removed property is sold or scrapped, the proceeds of such sale or the scrap value; (2) if the removed property is used as a trade-in for property not to be included as part of the applicable Project, the trade-in credit received by the Secretary of State or DAS; or (3) in the case of the retention of such removed property by the Secretary of State or DAS for other purposes, the fair market value of such property, as determined by an engineer.

(b) The Secretary of State or DAS, as applicable, shall promptly report to the Corporation each such removal, substitution, sale or other disposition. In addition, the Secretary of State or DAS, as applicable, shall pay to the Corporation such amounts as are required by the provisions of the preceding subsection (a)(2) to be paid to the Corporation promptly after the sale, trade-in or other disposition requiring such payment. However, no such report or payment need be made until the amount to be paid to the Corporation on account of all such sales, trade-ins or other dispositions not previously paid aggregates at least \$1,000,000 in each Fiscal Year.

(c) Notwithstanding any other provisions of the Leases, individual items of personal property included in the applicable Project or Projects that have a value in excess of \$500,000 will not be removed from the applicable Project or Projects in any one Fiscal Year without the Corporation's prior written consent, which consent will not be unreasonably withheld. Personal property valued at less than \$500,000 may be removed from the applicable Project or Projects without the Corporation's consent.

(d) No removal under the applicable Lease will adversely affect the obligation of the Secretary of State and DAS to make Lease Payments.

Insurance

The Secretary of State and DAS agree to keep, or cause them to be kept, their respective Projects continuously insured during each Lease Term in the manner and to the extent DAS deems appropriate in accordance with other practices of the State relating to insurance of State property or facilities.

Risk of Loss

Under the Leases, the Secretary of State assumes all risk of loss or damage to the VSA Project, and DAS assumes all risk of loss of or damage to the EDCS Project. No loss of or damage to, or appropriation by governmental authorities of, or defect in or unfitness or obsolescence of, a Project will relieve the Secretary of State or DAS, as applicable, of the obligation to make Lease Payments during a Lease Term or to perform any other obligation under the respective Leases.

To the extent permitted by law, as between the Corporation and the Secretary of State, and as between the Corporation and DAS, the Secretary of State or DAS, as applicable, will bear the risk of loss for, shall pay directly, and shall defend against any and all claims, liabilities, proceedings, actions, expenses, damages or losses arising under or related to the Projects, including but not limited to, the possession, ownership, lease, use or operation thereof, except that the Secretary of State or DAS, as applicable, shall not bear the risk of loss of, nor pay for, any claims, liabilities, proceedings, actions, expenses, damages or losses that arise directly from events occurring after the Secretary of State or DAS, as applicable, has surrendered possession of the Project or Projects in accordance with the respective Leases or that arise directly from the gross negligence or willful misconduct of the Corporation.

Assignments

Neither the Secretary of State nor DAS may, without the written consent of the Corporation and the Trustee: (i) assign, transfer, pledge, hypothecate or grant any security interest in or otherwise dispose of the respective Leases, or the Projects (without replacement or substitution as provided in the respective Lease) or any interest in the respective Leases or the Projects, or (ii) sublease the Projects or permit them to be operated by anyone other than the Secretary of State, DAS, the employees of the Secretary of State, the employees of DAS, or employees of the State or persons authorized by the Secretary of State or DAS, in connection with the operation and maintenance of the Projects by the Secretary of State and DAS, except for the use and operation of the VSA Project by Ohio counties. See **The Projects**. Except pursuant to the Trust Agreements, the Corporation may not assign or grant a security interest in its interest in the Leases or the Projects without prior written consent of the Secretary of State and DAS.

Defaults and Remedies

The following are Events of Default under each Lease:

(a) The failure of the Secretary of State or DAS, as applicable, to pay any Base Rent payment as it becomes due in accordance with the terms of the respective Lease; or

(b) The failure of the Secretary of State or DAS, as applicable, to perform or observe any other covenant, condition or agreement to be performed or observed by it under the respective Lease, other than the failure to pay Base Rent as it becomes due, if the failure is not cured or steps satisfactory to the

Corporation are not taken to cure the failure within 30 days after written notice of the failure to the Secretary of State or DAS, as applicable, by the Corporation, unless the Corporation agrees to an extension of time to cure.

Notwithstanding the foregoing, if, by reason of Force Majeure, the Secretary of State or DAS, as applicable is unable to perform or observe any agreement, terms or condition of the respective Lease, other than its obligation to make any payment under the respective Lease, the Secretary of State or DAS, as applicable, will not be deemed in default during the continuance of such inability. However, the Secretary of State and DAS are required to promptly give notice to the Corporation of the existence of any event of Force Majeure and to use best efforts to remove the effects thereof; provided that the settlement of strikes or other labor disturbances shall be entirely within the discretion of the Secretary of State and DAS, as applicable.

Upon the occurrence and during the continuance of an Event of Default, the Corporation may, pursuant to the Leases, exercise any one or more of the following remedies:

(a) by 60 days' prior written notice to the Secretary of State or DAS, as applicable, terminate the applicable Lease and direct the Secretary of State or DAS, as applicable, to (and the Secretary of State and DAS each agree that it will), at the expense of the Secretary of State or DAS, as applicable, promptly return possession of the applicable Project or Projects to the Corporation, or, at the Corporation's option, Corporation may enter upon the property where the applicable Projects are located and take immediate possession of and remove any applicable Project or Projects;

(b) upon 60 days' prior written notice to the Secretary of State or DAS, as applicable, sell or lease the applicable Project or Projects for the account of the Secretary of State or DAS, as applicable, pursuant to the terms of the respective Lease, holding the Secretary of State or DAS, as applicable, liable for all applicable Lease Payments and other payments due during the then-current Fiscal Year to the effective date of such sale or lease and for the difference between the purchase price, rental and other amounts paid by the purchaser or lessee pursuant to such sale or lease and the amounts payable during the then-current Fiscal Year by the Secretary of State or DAS under the respective Lease; and

(c) exercise any other right, remedy or privilege that may be available to it under the applicable laws of the State or any other applicable law or proceed by appropriate court action to enforce the terms of the applicable Lease or to recover damages for the breach of the applicable Lease or to rescind the applicable Lease as to the respective Project or Projects.

The payment obligations of the Secretary of State and DAS under the remedies available to the Corporation and pursuant to the Leases are Subject to Appropriation and Certification.

Amendments to Lease

The respective Leases may not be modified, amended, altered or changed except with the written consent of the Secretary of State, DAS and the Corporation, and of the respective Certificate Holders as provided for in the related Trust Agreements, provided, however, that it is expressly anticipated that Supplemental Leases will be entered into with respect to Additional Certificates to be issued and that neither the Corporation nor the Certificate Holders shall have the right to consent to the issuance of such Additional Certificates.

The Trust Agreements

Assignment

In order to secure the payment of the respective Certificates and the performance of the obligations contained in the related Trust Agreements, the Corporation will assign without recourse to the Trustee all its right, title and interest under the respective Lease in and to (i) the Revenues, (ii) that Lease, and (iii) the related Projects, except Unassigned Rights.

Project Fund

The Trust Agreements each establish a Project Fund that is to be maintained by the Trustee. There will be deposited in each respective Project Fund the proceeds received upon the original sale of each series of the respective Certificates, after deposit of accrued interest, if any, in the respective Lease Payment Account and issuance costs in the Costs of Issuance subaccount of the respective Project Fund. Money in the respective Project Fund will be drawn by the Secretary of State or DAS to pay Project Costs. If the applicable Lease is terminated because of nonappropriation, the Trustee is required under the corresponding Trust Agreement to transfer any money in the respective Project Fund for deposit in the related Lease Payment Account.

Certificate Fund

The Trust Agreements each create a Certificate Fund as a separate deposit account in the custody of the Trustee consisting of a Lease Payment Account, a Capitalized Interest Account and a Redemption Account. There will be deposited in each Certificate Fund (and credited, as required by the Trust Agreements or the Leases, to appropriate Accounts therein) amounts from the proceeds of related Certificates constituting capitalized interest thereon, as provided in the applicable Supplemental Trust Agreement, amounts transferred from the Project Fund after the payment of Project Costs pursuant to the respective Trust Agreement and the Lease Payments to be made by the Secretary of State or DAS to the Trustee under the terms of the respective Lease and the respective Trust Agreement. The respective Certificate Fund (and the Accounts therein) and the money and Eligible Investments therein will be used solely and exclusively for the payment of Certificate Payments as they become due, except as otherwise provided in the Trust Agreements. The Trustee will transmit to itself as Paying Agent from money in the respective Certificate Fund, amounts sufficient to make timely payments of Certificate Payments. Certificate Payments will be payable as they become due in the following order, (i) in the first instance from the respective Capitalized Interest Account, to the extent then available for interest on the Certificates, (ii) from the Lease Payments to be made directly by the Secretary of State or DAS to the Trustee pursuant to the terms of the respective Lease and the respective Trust Agreement and to be deposited in the Lease Payment Account in the respective Certificate Fund, (iii) if those Lease Payments are not made or if money then on deposit in the respective Certificate Fund, and available for that purpose is not sufficient to pay the Certificate Payments, from other Revenues to the extent then available, and (iv) from any other source lawfully available to the Trustee, including, without limitation, proceeds from the lease, sale or liquidation of the applicable Project or Projects in accordance with the respective Lease. Payments of Base Rent under the respective Lease, proceeds of insurance, if any, or condemnation and all other money derived from the lease, sale, sublease or other disposition of the applicable Project or Projects, and such other amounts as may be paid to the Trustee as assignee of the Corporation pursuant to the Leases and to the Trust Agreements will be immediately deposited by the Trustee in the respective Lease Payment Account as provided in the Lease.

Investment of Funds

Any money held in the respective Project Fund or the Certificate Fund will, at the direction of the OBM Director or Authorized Officer of OBM, be invested or reinvested by the Trustee in Eligible Investments.

The Secretary of State and DAS, as applicable, have agreed in the respective Leases to restrict the investment, reinvestment and use of the proceeds of the Certificates in such manner and to such extent, if any, as may be necessary, after taking into account reasonable exceptions at the time of issuance of such Certificates, so that they will not constitute arbitrage bonds under federal tax laws. An investment made from money credited to the respective Certificate Fund or the respective Project Fund will constitute part of that respective Fund and such respective Fund will be credited with all proceeds of sale and income from such investment.

Defeasance

When all the Certificate Payments for a particular series have been paid or provision has been made for such payment of all amounts and provision has been made for payment of all amounts due under a corresponding Lease and the related Trust Agreement, then that Trust Agreement (except for certain provisions thereof that need to remain operative, such as those relating to the holding of funds for the benefit of particular Certificate Holders or for the Secretary of State or DAS) will cease, determine and become null and void, and the covenants, agreements and

other obligations of the Trustee thereunder will be released, discharged and satisfied. Thereupon, the Trustee will release that Trust Agreement and sign and deliver to the Corporation and to the Secretary of State or DAS, as applicable, such instruments in writing as will be required to evidence such release and discharge as may be reasonably required by the Corporation, the Secretary of State and DAS. The Trustee will assign and deliver to the Secretary of State or DAS, as applicable, any property in its possession that is, at that time, subject to the lien of that Trust Agreement, except amounts remaining in the respective Certificate Fund that are required pursuant to that Trust Agreement to be held by the Trustee or otherwise for payment of the Certificate Payments on the respective Certificates.

All the outstanding Certificates under a Trust Agreement will be deemed to have been paid and discharged within the meaning of that Trust Agreement if the Trustee has received, in trust for and irrevocably committed thereto, sufficient money or Defeasance Obligations that are certified by an independent public accounting firm to be of such maturities or redemption dates and payment dates and to bear such interest as will, without further investment or reinvestment of either the principal amount thereof or the interest earnings therefrom, be sufficient together with money referred to above, for the payment of all Certificate Payments on the Certificates secured by that Trust Agreement, at their maturity or redemption dates, including all payments, if any, due but not paid as a result of a default in payment. As a condition to such defeasance, a Tax Opinion shall be delivered.

Events of Default

The following are Events of Default under the Trust Agreements:

- (a) Payment of any principal of or interest evidenced by any Certificate issued under that Trust Agreement or any premium thereon is not made when and as that principal or interest becomes due and payable, whether at stated maturity or by redemption;
- (b) The occurrence and continuance of an Event of Default as defined in the related Lease (see **Description of Documents – The Leases – Defaults and Remedies**); or
- (c) The related Lease is not renewed for any Renewal Term as provided for in that Lease.

Remedies

Upon the occurrence and continuance of an Event of Default, the Trustee may pursue any available remedy to enforce the payment of Certificate Payments or the observance and performance of any other covenant, agreement or obligation under the respective Trust Agreement, the related Lease or any other instrument providing security, directly or indirectly, for the respective Certificates; provided, however, that there will be no right under any circumstances to accelerate the maturities of those Certificates or otherwise to declare any Lease Payment not then past due or in default to be immediately due and payable. If, upon the occurrence and continuance of an Event of Default, the Trustee is requested to do so by the Holders of at least 25% in aggregate principal amount of Certificates outstanding under that Trust Agreement, the Trustee will exercise one or more rights and powers conferred by that Trust Agreement as the Trustee, advised by Counsel, deems to be in the interests of the Holders of those Certificates.

No remedy conferred upon or reserved to the Trustee (or to the Certificate Holders) by the Trust Agreements is intended to be exclusive of any other remedy. Each remedy will be cumulative and will be in addition to every other remedy given under the respective Trust Agreement or otherwise to the Trustee or to the related Certificate Holders now or hereafter existing.

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

Right of Certificate Holders to Direct Proceedings

The Holders of a majority in aggregate principal amount of Certificates then outstanding under a Trust Agreement will have the right at any time to direct, by instruments or documents in writing signed and delivered to the Trustee, the method and place of conducting all proceedings to be taken in connection with the enforcement of the terms and conditions of that Trust Agreement or any other proceedings under that Trust Agreement. However, each such direction must be in accordance with the provisions of law and that Trust Agreement, and the Trustee must be indemnified to its satisfaction and the Trustee may take any other action that it deems to be proper and that is not inconsistent with the direction.

Rights and Remedies of Certificate Holders

The Holder of any Certificate will not have any right to institute any suit, action or proceeding for the enforcement of the respective Trust Agreement, for the execution of any trust under that Trust Agreement or for the exercise of any other remedy under that Trust Agreement, unless (i) an Event of Default under that Trust Agreement has occurred and is continuing, of which the Trustee has been notified or is deemed to have notice, (ii) the Holders of not less than 25% in aggregate principal amount of Certificates then outstanding under that Trust Agreement have made written request to the Trustee and have afforded the Trustee reasonable opportunity to proceed to exercise the remedies, rights and powers provided in that Trust Agreement or to institute such action, suit or proceeding in its own name and have offered to the Trustee indemnity as provided in that Trust Agreement, and (iii) the Trustee thereafter has failed or refused to exercise its remedies, rights and powers under that Trust Agreement or to institute such action, suit or proceeding in its own name.

Waivers of Events of Default

Except as described herein, at any time, the Trustee may waive any Event of Default under a Trust Agreement and its consequences. The Trustee will do so upon the written request of the Holders of (a) at least a majority in aggregate principal amount of all Certificates then outstanding under that Trust Agreement in respect of which an Event of Default in the payment of Certificate Payments exists or (b) at least 25% percent in aggregate principal amount of all Certificates then outstanding under that Trust Agreement, in the case of any other Event of Default under that Trust Agreement.

There will not be so waived, however, any Event of Default described in item (a) of **The Trust Agreements - Events of Default** herein, unless at the time of that waiver payments of all Certificate Payments then due and payable under that Trust Agreement have been made or provision has been made therefor. In the case of the waiver, or in case any suit, action or proceedings taken by the Trustee on account of any Event of Default under a Trust Agreement has been discontinued, abandoned or determined adversely to it, the Trustee and the Holders of Certificates issued under that Trust Agreement will be restored to their former positions and rights under that Trust Agreement. No waiver will extend to any subsequent or other Event of Default or impair any right consequent thereon.

Application of Money

All money received by the Trustee pursuant to any remedial action will be applied first to the payment of the costs and expenses of the proceedings resulting in the collection of the money. The balance of such money will be deposited in the respective Certificate Fund and applied to the payment of principal of, premium, if any, and interest on the related Certificates, in the order of priority set forth in the Trust Agreement.

Supplemental Trust Agreements

The Trustee may enter into supplemental trust agreements, without the consent of or notice to any of the Certificate Holders, for any one or more of the following purposes:

- (a) to cure any ambiguity, inconsistency or formal defect or omission in the Trust Agreements;

(b) to grant to or confer upon the Trustee for the benefit of the respective Certificate Holders additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the Certificate Holders or the Trustee;

(c) to assign additional revenues under the Trust Agreements;

(d) to accept security and instruments and documents of further assurance with respect to the respective Projects;

(e) to add to the covenants, agreements and obligations under the respective Trust Agreements, other covenants, agreements and obligations to be observed for the protection of all or particular Certificate Holders, or to surrender or limit any right, power or authority reserved to or conferred in the Trust Agreement, including the limitation of rights of redemption so that in certain instances Holders of different Series of Certificates issued under the Trust Agreement will be redeemed in some prescribed relation to one another;

(f) to evidence any succession to the Trustee and the assumption by its successor of the covenants, agreements and obligations of the Trustee under the Trust Agreements and the Certificates;

(g) in connection with the issuance of series of Certificates in accordance with the Trust Agreements, including any and all appropriate provisions relating to the issuance of Additional Certificates in other than book-entry form, subject to a Tax Opinion relating to that issuance and registration;

(h) to permit compliance of the Trust Agreements with changes in any applicable federal or state securities or tax laws or regulations subject to a Tax Opinion relating to those amendments; and

(i) to permit the Trustee to comply with any obligations imposed upon it by law;

(j) to specify further the duties and responsibilities of, and to define further the relationship among, the Trustee, the Registrar and the Paying Agent;

(k) the transfer of respective Certificates from one Securities Depository to another, and the succession of Securities Depositories, and the withdrawal of respective Certificates issued to a Securities Depository for holding in a book-entry system and the issuance of replacement registered Certificates to others than a Securities Depository; and

(l) to permit any other amendment that, in the judgment of the Trustee, is not materially to the prejudice of the Trustee or the Certificate Holders.

Exclusive of supplemental agreements for the purposes above stated, the consent of the Holders of not less than a majority in aggregate principal amount of each series of the Certificates then outstanding under a Trust Agreement will be required to approve any supplemental trust agreement, provided, however, that, except as provided in (i) and (ii) below, for any Certificates for which principal and interest payments are insured by an Insurer, and so long as such Insurer is not in default on its financial guarantee insurance policy, the Insurer shall have the right to give consent on behalf of the Holders of such Certificates and provided further that no supplemental trust agreement may permit: (i) an extension of the maturity of the principal of or the interest on any Certificate, or a reduction in the principal amount of any Certificate, or the rate of interest or premium on any Certificate, or a reduction in the amount or extension of the time of payment required by any mandatory sinking fund requirements of the Trust Agreement, without the consent of the Holder of each Certificate so affected, or (ii) the creation of a privilege or priority of any Certificate over any other Certificate (except to the extent permitted by the applicable Trust Agreement with respect to a required reserve or credit support in connection with the issuance of a particular series of Certificates), or a reduction in the aggregate principal amount of Certificates required for consent to such supplemental trust agreement, without the consent of the Holders of all of the Certificates then outstanding under the Trust Agreement. In addition, the consent of the Secretary of State or DAS, as applicable, to

any supplemental trust agreement that materially adversely affects the Secretary of State or DAS, as applicable, must be obtained before such supplemental trust agreement is effective.

THE TRUSTEE

The Trustee, The Bank of New York Mellon Trust Company, N.A., is a national banking association with a designated corporate trust office in New Albany, Ohio.

The Trustee will, prior to the occurrence of an Event of Default and after the cure of any Events of Default that may have occurred, undertake to perform only such duties as are specifically set forth in the Trust Agreements. At the time of an Event of Default and during its continuation, the Trustee will exercise the rights and powers vested in the Trustee by the respective Trust Agreement and is to use the same degree of care and skill in their exercise as a prudent corporate trustee would exercise or use under the circumstances in the conduct of its own affairs.

RATINGS

The Series 2018 Certificates have been rated "Aa2" (outlook stable) by Moody's Investors Service (Moody's) and "AA" (outlook stable) by S&P Global Ratings, a division of S&P Global Inc. (S&P). No application for a rating has been made by the State to any other rating service.

The ratings and ratings outlooks in effect from time to time reflect only the views of the particular rating organization. The explanation of its views of the meaning and significance of its rating or outlook may be obtained from the respective rating agency. The State furnished to each rating agency certain information and materials, some of which may not be included in this Offering Circular, relating to the Series 2018 Certificates and other obligations, the State, the Secretary of State, and DAS. Generally, rating agencies base their ratings on that information and materials, and on their own investigations, studies and assumptions.

There can be no assurance that the ratings or outlooks assigned will continue for any given time, or that a rating will not be lowered or withdrawn by a rating agency if in its judgment circumstances so warrant. Any downward change in or withdrawal of a rating, or change in rating outlook or other actions of a rating agency, may have an adverse effect on the marketability and market price of the Series 2018 Certificates.

FINANCIAL ADVISER

H. J. Umbaugh and Associates, LLP is serving as the financial adviser to the State in connection with the signing and delivery of the Series 2018 Certificates and 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 Offering Circular. H. J. Umbaugh and Associates, LLP is an independent advisory firm and is not engaged in the business of underwriting, trading or distributing municipal securities or other public securities.

LITIGATION

There is no litigation pending contesting the validity of the Series 2018 Certificates or the proceedings for their signing, sale, and delivery. A no-litigation certificate to that effect will be delivered to the Original Purchaser of each series at the time of initial delivery of the Series 2018 Certificates.

The State is a party to various legal proceedings seeking damages or injunctive relief and generally incidental to its operations, but unrelated to the security for the Series 2018 Certificates. The ultimate disposition of these proceedings is not presently determinable, but in the opinion of the Attorney General of the State of Ohio will not have a material adverse effect on the Series 2018 Certificates or the security for the Series 2018 Certificates.

LEGAL MATTERS

Certain legal matters incident to the signing and delivery of the Series 2018 Certificates and with regard to the tax-exempt status of the interest on the Series 2018 Certificates (see **Tax Matters**) are subject to opinions of Bricker & Eckler LLP, Bond Counsel. The signed opinions of Bond Counsel, substantially in the form attached hereto as **Exhibits A-1 and A-2**, dated and premised on law in effect on the date of original delivery of the Series 2018 Certificates, will be delivered to the Original Purchasers at the time of original delivery.

The text of the opinions to be delivered may vary from the text as set forth in **Exhibits A-1 and A-2** if necessary to reflect facts and law on the date of delivery. The opinions will speak only as of their dates, and subsequent distribution of them by recirculation of the Offering Circular or otherwise shall create no implication that Bond Counsel has reviewed or expresses any opinion concerning any of the matters referred to in the opinions subsequent to their dates.

Certain legal matters will be passed upon for the Corporation by its counsel Squire Patton Boggs (US) LLP, and by Dinsmore & Shohl LLP, Disclosure Counsel. Squire Patton Boggs (US) LLP will assist in the preparation of and advise the Secretary of State and DAS concerning documents for the transcript of proceedings for the Series 2018 Certificates.

Although Disclosure Counsel has participated in the preparation of portions of this Offering Circular, it has not been engaged to confirm or verify, and expresses and will express no opinion as to, the accuracy, completeness or fairness of any statements in this Offering Circular, or in any other reports, financial information, offering or disclosure documents or other information pertaining to the Secretary of State, DAS or the State or the Series 2018 Certificates that may be prepared or made available by the Secretary of State, DAS or the State or others to the purchasers or owners of the Series 2018 Certificates or of book-entry interests in the Series 2018 Certificates or others.

TAX MATTERS

In the opinion of Bond Counsel, under existing law, and assuming renewal of each respective Lease through the final Lease Term for that Lease: (i) interest on the Series 2018 Certificates is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the Code), and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals; however, interest on the Series 2018 Certificates is included in the adjusted current earnings of corporations subject to the federal corporate alternative minimum tax for tax years beginning prior to January 1, 2018, and (ii) interest on the Series 2018 Certificates, and any profit made on the sale, exchange or other disposition of the Series 2018 Certificates, are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax.

Bond Counsel will express no opinion as to the federal income tax treatment of amounts paid to the Owners of the Series 2018 Certificates or Ohio state or local tax treatment of amounts paid to Owners of the Series 2018 Certificates in the event of termination of the respective Lease or Leases by nonappropriation or as to any other tax consequences regarding the Series 2018 Certificates. See **Security for the Series 2018 Certificates – Nonappropriation**.

The opinion on tax matters will be based on and will assume the accuracy of certain representations and certifications, and continuing compliance with certain covenants, of the Secretary of State and DAS contained in the transcripts of proceedings and that are intended to evidence and assure the foregoing, including that the Series 2018 Certificates 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 Secretary of State's and DAS certifications and representations of or the continuing compliance of the Secretary of State and DAS with its covenants.

The opinion of Bond Counsel is based on current legal authority and covers certain matters not directly addressed by that authority. It represents Bond Counsel's legal judgment as to the exclusion of interest on the Series 2018 Certificates 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 will express no opinion as to (i) the effect of future changes in the Code and the applicable regulations under the Code or (ii) the interpretation and the enforcement of the Code or those regulations by the IRS.

The Code prescribes a number of qualifications and conditions for the interest on state and local government obligations to be and to remain excluded from gross income for federal income tax purposes, some of which require future or continued compliance after issuance of the obligations. Noncompliance with these requirements by the Secretary of State or DAS may cause the loss of such status and result in the interest on the applicable of Series 2018 Certificates being included in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2018 Certificates.

The Secretary of State and DAS have covenanted to take all actions that may be required of them for the interest on the Series 2018 Certificates to be and remain excluded from gross income for federal income tax purposes, and not to take any actions that would adversely affect that exclusion. Notwithstanding the foregoing, is the Secretary of State and DAS are not obligated to appropriate funds for subsequent renewal periods, even though the failure to renew the respective Lease or Leases may result in adverse tax consequences to the holders of the Series 2018 Certificates. In particular, should the respective Lease or Leases terminate, and payments thereafter be made on the Series 2018 Certificates from other sources, the interest portion of such payments may be subject to federal income taxation and to certain taxes levied by the State and its political subdivisions. In addition, in the event of termination of the respective Lease or Leases, use of the respective Project in a manner that would cause the related Series 2018 Certificates, if the Project were originally used in such manner, to constitute a "private activity bond" under Section 141 of the Code may prompt the Internal Revenue Service to take the position that the Interest is not excluded from gross income for federal income tax purposes, retroactive to the effective date of that Lease. After the date of issuance of the Series 2018 Certificates, 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 2018 Certificates or the market value of the Series 2018 Certificates.

A portion of the interest on the Series 2018 Certificates earned by certain corporations may be subject to the federal corporate alternative minimum tax. In addition, interest earned on the Series 2018 Certificates may be subject to the federal branch profits tax imposed on certain foreign corporations doing business in the United States and to a federal tax imposed on excess net passive income of certain S corporations. 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 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 2018 Certificates. Bond Counsel will express no opinion regarding such consequences.

Payments of interest on tax-exempt obligations, including the Series 2018 Certificates, are generally subject to IRS Form 1099-INT information reporting requirements. If an owner of the Series 2018 Certificates 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 2018 Certificates ends with the issuance of the Series 2018 Certificates, and, unless separately engaged, Bond Counsel is not obligated to defend the Secretary of State, DAS, the State or the owners of the Series 2018 Certificates regarding the federal 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 2018 Certificates, under current IRS procedures, the IRS will treat the State as the taxpayer and the Beneficial Owners of the Series 2018 Certificates 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 2018

Certificates 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 or marketability of those Series 2018 Certificates.

Prospective purchasers of the Series 2018 Certificates upon their original issuance at prices other than the respective prices indicated on the Cover, and prospective purchasers of the Series 2018 Certificates at other than their original issuance, should consult their own tax advisers 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 2018 Certificates. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the Series 2018 Certificates will not have an adverse effect on the tax status of interest or other income on the Series 2018 Certificates or the market value or marketability of Series 2018 Certificates. 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 2018 Certificates from gross income for federal or state income tax purposes for all or certain taxpayers.

For example, recent federal tax reform reduced corporate tax rates, modified individual tax rates, eliminated and/or reduced many deductions, repealed the federal corporate alternative minimum tax for corporate taxable years beginning on and after January 1, 2018, and eliminated tax-exempt advance refundings for tax-exempt obligations, among other things. These reforms and future reforms may increase, reduce or otherwise change the financial benefits provided to certain owners of state and local government obligations. Additionally, investors in the Series 2018 Certificates should be aware that future legislative actions (including additional federal tax reform) may retroactively change the treatment of all or a portion of the interest on the Series 2018 Certificates for federal income tax purposes for all or certain taxpayers. In such event, the market value of the Series 2018 Certificates may be affected and the ability of holders to sell their Series 2018 Certificates in the secondary market may be reduced. The Series 2018 Certificates are not subject to special mandatory redemption, and the interest rates on the Series 2018 Certificates are not subject to adjustment, in the event of any such change in the tax treatment of interest on the Series 2018 Certificates.

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

Original Issue Discount and Original Issue Premium

Certain of the Series 2018 Certificates ("Discount Certificates") as indicated on the cover of this Official Statement may be offered and sold to the public at an original issue discount ("OID"). OID is the excess of the stated redemption price at maturity (the principal amount) over the "issue price" of a Discount Certificate. The issue price of a Discount Certificate is the initial offering price to the public (other than to bond houses, brokers or similar persons acting in the capacity of underwriters or wholesalers) at which a substantial amount of the Discount Certificates of the same maturity is sold pursuant to that offering. For federal income tax purposes, OID accrues to the owner of a Discount Certificate over the period to maturity based on the constant yield method, compounded semiannually (or over a shorter permitted compounding interval selected by the owner). The portion of OID that accrues during the period of ownership of a Discount Certificate (i) is interest excluded from the owner's gross income for federal income tax purposes to the same extent, and subject to the same considerations discussed above, as other interest on the Series 2018 Certificates, and (ii) is added to the owner's tax basis for purposes of determining gain or loss on the maturity, redemption, prior sale or other disposition of that Discount Certificate. The amount of OID that accrues each year to a corporate owner of a Discount Certificate is taken into account in computing the corporation's liability for federal alternative minimum tax. A purchaser of a Discount Certificate in the initial public offering at the price for that Discount Certificate stated on the Cover who holds that Discount Certificate to maturity will realize no gain or loss upon the retirement of that Discount Certificate.

Certain of the Series 2018 Certificates ("Premium Certificates") as indicated on the inside Cover may be offered and sold to the public at a price in excess of their stated redemption price at maturity (the principal amount).

That excess constitutes certificate premium. For federal income tax purposes, certificate premium is amortized over the period to maturity of a Premium Certificate, based on the yield to maturity of that Premium Certificate (or, in the case of a Premium Certificate 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 Certificate), compounded semiannually. No portion of that certificate premium is deductible by the owner of a Premium Certificate. For purposes of determining the owner's gain or loss on the sale, redemption (including redemption at maturity) or other disposition of a Premium Certificate, the owner's tax basis in the Premium Certificate is reduced by the amount of certificate 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 Certificate for an amount equal to or less than the amount paid by the owner for that Premium Certificate. A purchaser of a Premium Certificate in the initial public offering at the price for that Premium Certificate stated on the Cover who holds that Premium Certificate to maturity (or, in the case of a callable Premium Certificate, to its earlier call date that results in the lowest yield on that Premium Certificate) will realize no gain or loss upon the retirement of that Premium Certificate.

Owners of Discount and Premium Certificates should consult their own tax advisers as to the determination for federal income tax purposes of the amount of OID or certificate premium properly accruable or amortizable in any period with respect to the Discount or Premium Certificates and as to other federal tax consequences and the treatment of OID and certificate premium for purposes of state and local taxes on, or based on, income.

CONTINUING DISCLOSURE AGREEMENTS

The Director of OBM has agreed, for the benefit of the holders and beneficial owners from time to time of the respective Series 2018 Certificates, in accordance with, and as the only obligated person with respect to the Series 2018 Certificates under SEC Rule 15c2-12 (the Rule), to provide or cause to be provided such financial information and operating data (Annual Information), audited financial statements and notices, in such manner as may be required for purposes of paragraph (b)(5)(i) of the Rule (Continuing Disclosure Agreements).

The State 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 2019) 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 Offering Circular under the captions **Fiscal Matters, State Debt, State Employees and Collective Bargaining Agreements, Retirement Systems, and Tax Levels and Tax Bases**. The State expects that Annual Information will be provided directly by the State (specifically, by OBM) and may be provided in part by cross-reference to other documents, such as the State's Comprehensive Annual Financial Report, and subsequent final official statements.
- When and if available, audited general purpose financial statements of the State for each Fiscal Year. The State expects that those financial statements will be prepared, that they will be available separately from the Annual Information, and that the accounting principles to be applied in their preparation will, except as may otherwise then be stated, be as described under and by reference in **Appendix A** under **Fiscal Matters - Accounts and Controls; Financial Reports**.

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

- The occurrence of any of the following events with respect to a series of the Series 2018 Certificates, within the meaning of the Rule, within 10 business days of the occurrence of the event:
 - principal and interest payment delinquencies;
 - non-payment related defaults, if material;

- unscheduled draws on any debt service reserves or on credit enhancements (Credit Enhancement Facility) reflecting financial difficulties;
 - substitution of credit or liquidity providers (Credit Enhancement Facility providers), or their failure to perform*;
 - adverse tax opinions, the issuance by the IRS of proposed or final determinations of taxability, Notice of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of that series of the Series 2018 Certificates, or other material events affecting that series of the tax-exempt status of the Series 2018 Certificates;
 - modifications to rights of registered owners or Beneficial Owners, if material;
 - Series 2018 Certificate calls, if material, and tender offers related to that series;
 - defeasances;
 - release, substitution, or sale of property securing repayment of that series of the Series 2018 Certificates, if material;
 - bankruptcy, insolvency, receivership or similar event of the obligated person;
 - consummation of a merger, consolidation or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, or the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;
 - appointment of a successor or additional trustee or the change of name of a trustee, if material; and
 - rating changes.
- The failure to provide the Annual Information within the specified time.
 - Any change in the accounting principles applied in the preparation of the annual financial statements or in the Fiscal Year, any failure of the General Assembly to appropriate moneys for the purpose of paying costs to be incurred by the State in performing the Continuing Disclosure Agreements for the applicable fiscal period (biennium), and termination of the Continuing Disclosure Agreements.

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

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

Any such amendment or waiver will not be effective unless that Continuing Disclosure Agreement (as amended or taking into account the waiver) would have complied with the requirements of the Rule at the time of the primary offering of the Series 2018 Certificates, after taking into account any applicable amendments to or official interpretations of the Rule, as well as any change in circumstances, and until the State shall have received either:

- A written opinion of bond, disclosure or other qualified independent special counsel selected by the State that the amendment or waiver would not materially impair the interest of holders or Beneficial Owners of the respective Series 2018 Certificates; 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 respective Series 2018 Certificates.

* Neither the State, the Secretary of State nor DAS has obtained or provided, or expects to obtain or provide, any debt service reserves, other credit enhancements or credit or liquidity providers for the Series 2018 Certificates.

In order to provide certain continuing disclosure with respect to the Series 2018 Certificates in accordance with the Rule, the State has entered into a Disclosure Dissemination Agent Agreement (Disclosure Dissemination Agreement) for the benefit of the holders of the Series 2018 Certificates 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 in the Annual Report, Audited Financial Statements, notice of Notice Event or any voluntary report, or any other information, disclosure or notices provided to it by the State, and the Disclosure Dissemination Agent shall not be or be deemed to be acting in any fiduciary capacity for the State, the holders of the Series 2018 Certificates or any other party. The Disclosure Dissemination Agent has no responsibility for any failure by the State to report to the Disclosure Dissemination Agent a Notice Event or a duty to determine the materiality thereof, or to determine or liability for failing to determine whether the State has complied with the Continuing Disclosure Agreements, and the Agent may conclusively rely upon certification of the State at all times.

The Continuing Disclosure Agreements will be solely for the benefit of the holders and Beneficial Owners of the respective Series 2018 Certificates including holders of book-entry interests in them. The right to enforce the provisions of a Continuing Disclosure Agreements may be limited to a right of the respective Holders and 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.

The performance by the State, as the only obligated person with respect to the Series 2018 Certificates, of the Continuing Disclosure Agreements will be subject to the biennial appropriation by the General Assembly of moneys for that purpose.

The Continuing Disclosure Agreements will remain in effect only for such period that the respective Series 2018 Certificates are Outstanding under the related Trust Agreement and the State remains an obligated person with respect to the respective Series 2018 Certificates within the meaning of the Rule.

Over the last five years, the State of Ohio has complied in all material respects with its prior continuing disclosure undertakings applicable to (a) the Certificates and other certificates of participation referenced in **Appendix A – State Debt – General – Certificates of Participation**, and (b) State general obligations and other State direct obligations payable from its General Revenue Fund or net State lottery proceeds.

CONCLUDING STATEMENT

To the extent that any statements made in this Offering Circular involve matters of opinion or estimates, whether or not expressly stated to be such, they are made as such and not as representations of fact or certainty and no representation is made that any of these opinions or estimates have been or will be realized. Information in this Offering Circular has been derived by the Secretary of State, DAS and the State from official and other sources and is believed by the Secretary of State, DAS and the State to be accurate and reliable. Information other than that obtained from official records of the State has not been independently confirmed or verified by the Secretary of State, DAS or the State and its accuracy is not guaranteed.

Neither this Offering Circular nor any statements that may have been or that may be made orally or in writing is to be construed as a part of a contract with the Original Purchaser or subsequent Registered Holders of the Series 2018 Certificates.

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APPENDIX A

Information Concerning the State of Ohio

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INFORMATION CONCERNING THE STATE OF OHIO

The following discusses certain matters relating to general State finances and debt, and the State’s economy and 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 2018 Certificates have no right to have taxes or excises levied by the General Assembly to pay Lease Payments.

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 that 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, 2017 and ends June 30, 2019). Within a fiscal biennium, the State operates on the basis of a July 1 to June 30 Fiscal Year. 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. Consistent with the fiscal biennium for operating purposes, the Governor is generally required to submit the Executive Budget to the General Assembly in February of each odd-numbered year. Appropriations legislation reflecting that Executive Budget is then introduced for extended committee hearings and review first in the House and then in the Senate, with that appropriations legislation as approved by the General Assembly then presented to the Governor for his approval (with possible line item vetoes). See **FISCAL MATTERS – Recent and Current Finances – Current Biennium** for discussion of the enacted budget for the 2018-19 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 Constitution 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.” 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 Constitution to \$750,000.

Most State operations are financed through the General Revenue Fund (GRF). Personal income and sales and use taxes are the major sources of GRF tax revenue. The last complete Fiscal Year ended June 30, 2018 with a GRF fund balance (after year-end transfers) of \$162.4 million. The State has a “rainy day” fund (the Budget Stabilization Fund (BSF)) which by law is intended to carry a balance of up to 8.5% of the GRF revenue for the preceding Fiscal Year (this amount was 5% for Fiscal Year 2016 and prior years). The current BSF balance is \$2.691 billion, which equals 8.3% of Fiscal Year 2018 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)	% of GRF Revenue
2013	\$1,477,934,000	5.0%
2014	1,477,934,000	5.1
2015	2,004,569,000	6.4
2016	2,034,051,000	6.0
2017	2,034,051,000	6.0
2018	2,691,554,000	8.3

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

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. As discussed under **Recent and Current Finances**, the Governor implemented this directive in the 2008-09 biennium as also had been done several times in prior fiscal biennia.

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 itself 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. The Constitution has since 1934 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% 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 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% 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.

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% 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 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 the 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, higher education institutions). The OBM Director's certification is required for all expenditure vouchers before OBM may issue State warrants. Upon certification, OBM updates its accounting records to reflect the level of vouchered expenditures. The Treasurer of State maintains the cash and investments that comprise the State treasury and invests State funds. 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 basis). Each Comprehensive Annual Financial Report (CAFR) includes the State's Basic Financial Statements (BFS) for that Fiscal Year as examined by the Auditor of State. The most recent CAFRs are accessible via OBM's web page at <http://obm.ohio.gov/stateaccounting/financialreporting/cafr.aspx>, and copies may be obtained by contacting OBM, 30 E. Broad Street, 34th Floor, Columbus, Ohio 43215, phone (614) 466-4034. The Fiscal Year 2017 CAFR received the Government Finance Officers Association certificate of achievement for excellence in financial reporting.

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.

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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.

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

Cash Receipts

SOURCE OF RECEIPTS	Fiscal Year				
	2014	2015	2016	2017	2018
Taxes:					
Personal Income(a).....	\$8,425.1	\$8,883.2	\$8,169.4	\$7,981.1	\$8,796.1
Sales and Use(b).....	9,549.9	10,417.8	10,807.7	11,070.5	10,616.2
Corporate Franchise(c)	(11.2)	2.6	33.2	(1.2)	2.2
Financial Institutions Tax(c)	197.8	182.1	213.5	187.3	201.1
Commercial Activity Tax(d)	1,684.7	1,752.6	1,689.1	1,750.8	1,805.5
Gasoline.....	1,825.5	1,800.6	1,740.4	1,817.4	1,802.8
Public Utilities and Kilowatt Hour	742.5	809.8	796.0	796.9	826.5
Cigarette(e)	814.0	808.2	1,007.6	980.5	939.8
Foreign Insurance	308.0	287.3	316.4	321.4	299.4
Highway Use	16.7	35.2	36.2	39.1	34.8
Estate(f).....	39.4	3.1	2.2	0.8	0.2
Alcoholic Beverages	56.6	57.7	55.6	58.4	56.8
Liquor Gallonage.....	41.8	43.4	45.1	46.5	48.1
Domestic Insurance Franchise	202.3	257.2	263.5	273.9	283.4
Other	<u>44.3</u>	<u>60.0</u>	<u>75.7</u>	<u>83.7</u>	<u>104.6</u>
Total Taxes	23,937.5	25,400.7	25,251.6	25,407.1	25,817.5
Licenses, Permits and Fees	3,225.5	3,072.0	3,641.3	3,284.5	3,946.6
Sales, Services and Charges	1,262.9	1,392.1	1,749.2	1,512.1	1,636.9
Federal Government.....	21,047.1	22,692.1	22,953.9	22,911.5	23,014.9
Other(g).....	4,179.6	4,702.8	5,655.3	5,889.9	6,113.3
Proceeds from Sale of Bonds and Notes	<u>1,468.6</u>	<u>1,103.8</u>	<u>1,214.9</u>	<u>1,507.8</u>	<u>2,202.7</u>
Total Cash Receipts	\$55,121.1	\$58,363.4	\$60,466.2	\$60,512.9	\$62,731.9

- (a) The personal income tax rate was reduced by 8.5% in calendar year 2013, 1.5% in calendar year 2014 and 6.3% in calendar year 2015, and a deduction commenced in tax year 2013 for small businesses of 50%, increasing to 75% in tax years 2014 and 2015, and to 100% for tax years 2016 and beyond, of annual business net income up to \$250,000 (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2014-15 and 2016-17**).
- (b) Beginning September 1, 2013, the sales and use tax rate was increased one-quarter percent to 5.75%. The Fiscal Year 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 – Current Biennium**).
- (c) Beginning in calendar year 2006, except for financial institutions, the corporate franchise tax was phased-out in even annual increments over five years; Fiscal Years 2014 and 2017 reflect refunds. Beginning in tax year 2014, the financial institutions component was replaced with a new financial institutions tax.
- (d) See **TAX LEVELS AND TAX BASES – Commercial Activity Tax** for discussion of the commercial activity tax (CAT) on gross receipts from doing business in Ohio.
- (e) Beginning July 1, 2015, the cigarette tax was increased from \$1.25 per pack (of 20 cigarettes) to \$1.60 per pack (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2014-15**).
- (f) Eliminated effective January 1, 2013; receipts in all years reflect delayed filings or payments from prior years.
- (g) Largest components consist of various reimbursements, loan repayments, unclaimed funds, and investment income.

Cash Disbursements

FUND TYPE	Fiscal Year				
	2014	2015	2016	2017	2018
General Fund:					
General Revenue Fund	\$28,901.8	\$30,831.6	\$33,593.1	\$34,503.5	\$31,727.3
General Services Fund.....	4,591.6	4,758.6	4,712.1	4,809.3	5,884.3
Special Revenue Fund(h)	19,204.9	20,644.3	19,356.1	19,005.7	21,947.0
Capital Projects Fund(i).....	318.0	412.0	607.0	601.2	671.7
Debt Service Fund(j)	1,064.8	1,116.7	1,136.0	1,168.2	1,155.0
Enterprise Fund(k).....	<u>699.7</u>	<u>825.0</u>	<u>844.4</u>	<u>775.1</u>	<u>812.9</u>
Total Cash Disbursements	\$54,780.9	\$58,588.3	\$60,248.8	\$60,863.0	\$62,198.1

- (h) Includes local government support disbursements.
- (i) Includes amounts disbursed from proceeds of special obligation bonds and highway general obligation bonds.
- (j) Includes the several bond retirement funds for general obligation bonds secured by a pledge of taxes and excises.
- (k) Includes workers' compensation, industrial commission, and lottery including deferred prizes, among others.

**SUMMARY STATEMENT
GENERAL REVENUE FUND CASH BASIS ACTIVITY
(\$ in Millions)**

	Fiscal Year				
	2014	2015	2016	2017	2018
Beginning Cash Balance.....	\$2,639.2	\$1,700.1	\$1,711.7	\$1,193.3	\$557.1
Cash Receipts:					
Taxes:					
Personal Income(a).....	8,064.9	8,506.7	7,799.3	7,606.5	8,411.0
Sales and Use(b).....	9,165.8	9,960.2	10,348.0	10,614.6	10,148.2
Corporate Franchise(c).....	(11.4)	2.5	33.2	(1.2)	2.2
Financial Institutions Tax(c).....	197.8	182.1	213.5	187.3	201.1
Commercial Activity Tax(d).....	794.2	854.0	1,255.3	1,301.5	1,522.8
Public Utilities and Kilowatt Hour.....	488.4	464.5	502.0	516.1	531.1
Cigarette(e).....	814.0	808.2	1,007.6	980.5	939.8
Domestic Insurance.....	196.9	251.6	258.3	268.6	278.4
Foreign Insurance.....	286.5	266.6	293.5	301.5	276.5
Other.....	<u>137.5</u>	<u>109.3</u>	<u>110.8</u>	<u>110.4</u>	<u>112.1</u>
Total Taxes.....	20,134.7	21,405.8	21,821.6	21,885.8	22,423.2
Federal Government.....	8,575.6	9,301.3	11,645.7	11,761.2	9,469.9
Licenses, Permits and Fees.....	57.3	57.5	56.0	57.4	59.2
Investment Income.....	17.3	23.1	35.1	48.7	64.2
Other.....	<u>42.2</u>	<u>43.7</u>	<u>49.8</u>	<u>69.1</u>	<u>266.1</u>
Total Cash Receipts.....	28,827.1	30,831.4	33,608.3	33,822.1	32,282.6
Cash Disbursements:					
Primary, Secondary and Other Education(f).....	6,813.2	7,299.5	7,624.1	7,945.9	8,063.6
Higher Education.....	2,085.0	2,139.6	2,222.8	2,294.8	2,304.8
Public Assistance and Medicaid.....	13,570.5	14,863.2	16,995.9	17,437.4	14,482.5
Health and Human Services.....	1,235.8	1,249.8	1,283.6	1,289.6	1,251.8
Justice and Public Protection.....	1,837.0	1,850.3	1,983.8	2,052.8	2,130.4
Environmental Protection and Natural Resources.....	63.1	62.6	63.0	66.0	53.6
General Government and Transportation(g).....	232.1	235.1	249.1	247.8	244.4
Community and Economic Development.....	53.4	42.4	50.2	56.4	49.9
Property Tax Reimbursements(h).....	1,785.2	1,801.5	1,786.7	1,790.3	1,802.4
Debt Service.....	<u>1,226.4</u>	<u>1,287.7</u>	<u>1,333.9</u>	<u>1,322.7</u>	<u>1,343.9</u>
Total Cash Disbursements.....	28,901.8	30,831.6	33,593.1	34,503.5	31,727.3
Cash Transfers:					
Transfers-in(i).....	405.7	641.6	322.2	355.9	188.6
Transfers-out(j).....	<u>(1,270.2)</u>	<u>(629.9)</u>	<u>(855.8)</u>	<u>(310.8)</u>	<u>(80.0)</u>
Ending Cash Balance.....	\$1,700.1	\$1,711.7	\$1,193.3	\$557.1	\$1,221.0

- (a) The personal income tax rate was reduced by 8.5% in calendar year 2013, 1.5% in calendar year 2014 and 6.3% in calendar year 2015, and a deduction commenced in tax year 2013 for small businesses of 50%, increasing to 75% in tax years 2014 and 2015, and to 100% for tax years 2016 and beyond, of annual business net income up to \$250,000 (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2014-15, 2016-17**).
- (b) Beginning September 1, 2013, the sales and use tax rate was increased one-quarter percent to 5.75%. Fiscal Year 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 – Current Biennium**).
- (c) Beginning in calendar year 2006, except for financial institutions, the corporate franchise tax rate was phased out annually over five years; Fiscal Years 2014 and 2017 reflect refunds. Beginning in tax year 2014, the financial institutions component was replaced with a new financial institutions tax.
- (d) See **TAX LEVELS AND TAX BASES – Commercial Activity Tax** for discussion of the commercial activity tax (CAT) on gross receipts from doing business in Ohio and on the increased share of CAT receipts being deposited into the GRF.
- (e) Beginning July 1, 2015, the cigarette tax was increased from \$1.25 to \$1.60 per pack (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2014-15**).
- (f) Mainly subsidies to local school districts for primary and secondary education.
- (g) Transportation amounts are for non-highway transportation purposes, including mass transit, rail, and aviation.
- (h) State reimbursements to taxing subdivisions for the 12.5% 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 (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2014-15**).
- (i) Fiscal Years 2015-2018 include transfers of \$81.0 million, \$53.2 million, \$10 million and \$46.2 million, respectively, from the Motor Fuel Receipts Tax Fund; Fiscal Years 2014, 2015 and 2017 include transfers of \$126.6 million, \$250.4 million and \$163.3 million from the Commercial Activities Tax Receipts Fund, respectively; Fiscal Year 2015 includes a transfer of \$221.0 million from the Small Business Augmentation Fund, and Fiscal Year 2016 includes a transfer of \$158.0 million from the Medicaid reserve fund.
- (j) Fiscal Years 2014, 2016 and 2017 include transfers of \$995.9 million, \$425.5 million and \$29.5 million to the BSF, respectively; Fiscal Years 2014 and 2016 include transfers of \$120.0 million and \$40.0 million to the Unemployment Compensation Contingency Fund, respectively; Fiscal Year 2015 includes a transfer of \$330.0 million to the Medicaid reserve fund and \$229 million to the Small Business Augmentation Fund; and Fiscal Years 2016 to 2018 include transfers of \$50.0 million, \$150.0 million and \$41.8 million to the Health and Human Services Fund, respectively.

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.

Economic activity in Ohio, as in other industrially-developed states, tends to be somewhat more cyclical than in some other states and in the nation as a whole. The GRF ending (June 30) fund balance tends to be reduced during less favorable national economic periods and increased during more favorable economic periods. The GRF ending cash and fund balances for Fiscal Year 2018 were \$1.22 billion and \$849.9 million, respectively, with \$687.5 million of that ending fund balance transferred pursuant to statutory designations leaving a balance of \$162.4 million (see **FISCAL MATTERS – Recent and Current Finances – Current Biennium**). Recent biennium-ending GRF balances were:

Biennium	Cash Balance	Fund Balance(a)	Fund Balance less Designated Transfers(b)
2008-09	\$734,526,000	\$389,103,000	\$389,103,000
2010-11	844,467,000	430,707,000	138,816,000
2012-13	2,639,249,000	2,278,202,000	1,110,942,000
2014-15	1,711,679,000	1,286,469,000	550,366,000
2016-17	557,089,900	170,872,600	170,872,600

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

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

Actions have been and may be taken by the State during less favorable economic periods to ensure resource/expenditure balance (particularly in the GRF), some of which are described below. None of those actions have been applied to appropriations or expenditures needed for debt service or lease payments relating to any State obligations.

The appropriations acts for the 2018-19 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 **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 Fiscal Year 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% 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 Fiscal Year 2007 have complied with this limitation.

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

Recent Biennia

2008-09

2008-09 Biennial Budget and Appropriations. Ongoing and rigorous consideration was given by the Governor and the General Assembly to revenues and expenditures throughout Fiscal Years 2008-09, primarily as a result of the Ohio economy being negatively affected by the national economic downturn. Budgetary pressures during this period were primarily due to continuing lower than previously estimated levels of receipts from certain major revenue sources.

Consideration came in three general time frames – winter 2007, fall/winter 2008, and spring 2009. Significant measures were taken including use of the entire BSF balance and expenditure reductions and spending controls on State agencies and departments.

Consistent with State law, the Governor’s Executive Budget for the 2008-09 biennium was released in March 2007 and introduced in the General Assembly. After extended hearings and review, the GRF appropriations Act for the biennium was passed by the General Assembly and signed (with selective vetoes) by the Governor on June 30, 2007. Reflecting the continued implementation of the restructuring of State taxes that commenced in 2006-07, that Act was based upon then estimated total GRF biennial revenues of approximately \$53.5 billion (a 3.9% increase over the 2006-07 biennial revenue) and contained total GRF biennial appropriations of approximately \$52.4 billion. Spending increases for major program categories over the 2006-07 actual expenditures were: 2.2% for Medicaid (the Act also included a number of Medicaid reform and cost containment initiatives); 13.2% for higher education; 5.2% for elementary and secondary education; 4.9% for corrections and youth services; and 4.7% for mental health and mental retardation. The Executive Budget, the GRF appropriations Act and the separate appropriations acts for the biennium included all necessary debt service and lease rental payments related to State obligations.

The original GRF expenditure authorizations for the 2008-09 biennium reflected and were supported by tax law changes contained in the Act, including:

- Restructuring the nonresident tax exemption for Ohio motor vehicle purchases projected to produce approximately \$54.0 million for the biennium.
- Restoring local government fund support by committing a specified percentage of all tax revenues deposited into the GRF, with local governments to receive 3.7% of total GRF tax revenues annually and local libraries to receive 2.22% of total GRF tax revenues annually (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2012-13** below for discussion of changes to these allocations).
- Eliminating the \$300 per month cigarette and tobacco product importation exemption projected to produce approximately \$25.0 million annually.

The GRF appropriations Act also created the Buckeye Tobacco Settlement Financing Authority (Authority) to securitize tobacco settlement receipts payable to the State under the November 1998 national tobacco settlement. On October 29, 2007, the Authority issued \$5.53 billion of tobacco settlement asset-backed bonds to fund capital expenditures for higher education (\$938 million) and common school (\$4.112 billion) purposes over three years in lieu of the State issuing GRF-backed general obligation bonds to fund those capital expenditures. The resulting debt service savings to the GRF partially funded the expansion of the homestead exemption property tax relief program in the Act. The Act reprogrammed all prior General Assembly allocations of anticipated tobacco settlement receipts to enable the pledge of 100% of those receipts to the payment of debt service on the Authority’s obligations. The State had previously enacted legislation allocating its anticipated share of those receipts through Fiscal Year 2012 and making a partial allocation thereafter through Fiscal Year 2025, with the largest allocations to elementary and secondary school capital expenditures, and with other amounts allocated for smoking cessation and health-related purposes, biomedical research and technology transfer, and assistance to the tobacco growing areas in the State.

Winter 2007. With the Ohio economy expected to be negatively affected by the national economic downturn, in January 2008 OBM reduced its original GRF revenue projections by \$172.6 million for Fiscal Year 2008 and \$385.1 million for Fiscal Year 2009. Based on those lower GRF revenue estimates and increased costs associated with rising Medicaid caseloads, OBM projected a budgetary shortfall for the 2008-09 biennium of \$733 million.

Executive and legislative actions taken in response to those OBM estimates, included:

- On January 31, 2008, the Governor issued an executive order directing expenditure reductions and spending controls totaling approximately \$509 million (of which about \$402 million was realized) for the 2008-09 biennium, as well as limitations on major purchases, hiring and travel, based primarily on the transfers of unspent agency appropriations and the June 2008 action described below. Allocation of those reductions was determined by the OBM Director in consultation with the affected agencies and departments, with annual expenditure reductions ranging up to 10%. An employee reduction plan was also announced aimed at reducing the State’s workforce by up to 2,700 through selective elimination of positions, attrition, unfilled vacancies and an early retirement incentive program. Expressly excluded from the cutbacks were appropriations for or relating to debt service on State obligations, State higher

education instructional support, foundation formula support for primary and secondary education, Medicaid entitlement programs, and ad valorem property tax relief payments.

- Transfer of unspent agency appropriations then expected to total \$120 million in Fiscal Year 2008 and \$78 million in Fiscal Year 2009.
- Authorizing expansion of the State-run lottery system to include “keno” games then projected to generate \$65 million in Fiscal Year 2009 of which approximately \$25 million was realized.

In June 2008, the General Assembly also passed legislation that provided for, among other things, transfers to the GRF (after a selective line-item veto) of up to \$63.3 million from the BSF for the State’s share of increased Medicaid costs, \$55 million from rotary funds and \$25 million in uncommitted interest earnings from proceeds of the Authority’s Tobacco Settlement Asset-Backed Bonds issued in October 2007.

Fall/Winter 2008. With the Ohio economy continuing to be negatively affected by the national economic downturn, OBM on September 10, 2008 announced a \$540 million further reduction in its GRF revenue projections for Fiscal Year 2009 and a projected Fiscal Year budgetary shortfall of the same amount. Executive actions announced to offset the projected shortfall included:

- Use of additional planned Fiscal Year-end lapses and GRF carry forward totaling \$126.4 million.
- Use of balances in various non-GRF “rotary funds” totaling \$112 million.
- Transfer to the GRF of an additional \$40 million of interest earnings on the proceeds of the tobacco securitization referred to above.
- As authorized by June 2008 legislation referred to above, a transfer to the GRF of \$63.3 million to pay for previously authorized Medicaid expenditures.

The \$198.3 million remainder of the projected shortfall was offset by a 4.75% reduction in most agency appropriations, which did not apply to appropriations for debt service or tax relief, Medicaid and disability financial assistance, Department of Education aid to local school districts, the Departments of Rehabilitation and Corrections and Youth Services, and selected others.

On December 1, 2008, OBM announced a further \$640.4 million reduction in GRF revenue projections for Fiscal Year 2009 expected to result in a projected Fiscal Year shortfall of the same amount. Executive actions announced to offset much of that further projected shortfall included:

- Reducing total GRF Medicaid spending by \$311.1 million by using cash from non-GRF Medicaid accounts and the corresponding federal share previously planned for use in Fiscal Year 2010.
- Reducing total Medicaid program spending by \$21.3 million by enhanced focus on use of other third-party liability sources and other program savings exceeding original estimates.
- Reducing other GRF expenditures by \$180.5 million through a further 5.75% reduction in most agency appropriations, which did not apply to appropriations for debt service or tax relief, Medicaid and disability financial assistance, Department of Education aid to local school districts, or the Departments of Rehabilitation and Corrections and Youth Services, among others. These reductions were in addition to the approximately \$1.27 billion of 2008-09 biennium budget adjustments previously undertaken.

The \$127.5 million remainder of the shortfall was offset by additional Federal Medical Assistance Payments (FMAP) received under the American Recovery and Reinvestment Act of 2009 (ARRA), which increased federal Medicaid match to the GRF by that amount (after taking into account loss of federal match from the two Medicaid related actions outlined above). Based on these expenditure reductions, spending controls and other measures – and before the revised revenue estimates referred to below – OBM was then projecting a positive GRF fund balance at June 30, 2009.

Spring 2009. Based on the Administration’s continuing monitoring of revenues, and as an anticipated step in the then ongoing 2010-11 biennial budget and appropriations process, OBM reported revised revenue estimates to the General Assembly on June 11, 2009. Those estimates revised Fiscal Year 2009 revenues downward by an additional \$912 million over OBM’s December 2008 adjusted baseline, based primarily on updated income and sales tax receipts through May 31, 2009. To address this additional Fiscal Year 2009 revenue shortfall, the Governor received General Assembly approval for and used the entire remaining BSF balance of \$949 million for Fiscal Year 2009. Additional measures taken to address this shortfall included the restructuring of \$52.8 million of Fiscal Year 2009 GRF debt service into Fiscal Years 2012 through 2021 and expenditure reductions of \$98 million in addition to the expenditure controls previously ordered by the Governor.

The State ended Fiscal Year 2009 with GRF cash and fund balances of \$734.5 million and \$389.1 million respectively, and a \$-0- balance in the BSF. Of the ending GRF fund balance, the State reserved \$133.4 million to maintain the statutory target of one-half of one percent of Fiscal Year 2009 GRF revenues as an ending fund balance.

2010-11

Rigorous consideration was given by the General Assembly to the Governor's Executive Budget proposed for the 2010-11 fiscal biennium in light of the difficult economic and fiscal conditions resulting from the national recession. The final GRF appropriations Act for the 2010-11 biennium, which was preceded by three seven-day interim appropriations acts, was passed by the General Assembly and signed (with selective vetoes) by the Governor on July 17, 2009. All necessary debt service and lease-rental payments related to State obligations for the entire 2010-11 biennium were fully appropriated for the three-week interim appropriations periods and under that final Act. Reflecting the final implementation of the restructuring of State taxes that commenced in 2006-07 and a conservative underlying economic forecast, that Act provided for total GRF biennial appropriations of approximately \$50.5 billion based on total GRF expected biennial revenue of approximately \$51.1 billion (a 4.2% decrease from 2008-09 fiscal biennium revenues). GRF appropriations for major program categories compared to 2008-09 actual GRF spending reflected increases of 3.4% for Medicaid (excluding ARRA funding referred to below) and 0.7% for corrections and youth services; and decreases of 13.8% for mental health and developmental disabilities, 8.3% for higher education, and 5.2% for elementary and secondary education. Among other expenditure controls, the Act included a number of Medicaid reform and cost containment initiatives and also reflected the restructuring of \$736 million of Fiscal Years 2010 and 2011 general revenue fund debt service into Fiscal Years 2012 through 2025.

Major new sources of revenues or savings reflected in the 2010-11 appropriations Act included:

- \$2.4 billion of "Federal Stimulus" funding received under the ARRA, including \$1.464 billion for elementary and secondary education, \$628 million for Federal Medical Assistance Payments (FMAP), and \$326 million for other purposes.
- \$933 million in gaming and license revenues from the Ohio Lottery Commission's implementation of video lottery terminals (VLTs) at the seven horse racing tracks in the State. OBM estimated the VLTs would result in an approximate \$851 million net increase in revenues for the biennium (\$285 million in Fiscal Year 2010 and \$566 million in Fiscal Year 2011) after taking into account offsetting effects of the VLTs on other lottery revenues. On September 21, 2009, the Ohio Supreme Court ruled that the statutory provisions in the biennial appropriations Act for the implementation of VLTs were subject to voter referendum. In October 2011 a complaint was filed in the Court of Common Pleas of Franklin County, Ohio challenging that 2009 law authorizing the VLTs, with those challenges being asserted under various provisions of the Ohio Constitution, and also under the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution for granting a monopoly to only the gaming operators approved in that 2009 law. The trial court on May 30, 2012 granted defendants' motions to dismiss the case after finding that the plaintiffs did not have legal standing to bring these challenges, and the plaintiffs appealed this trial court ruling to the Tenth District Court of Appeals of Franklin County, Ohio. Since the trial court dismissed the case based on plaintiffs' lack of standing, it did not address or decide the merits of the plaintiffs' challenges. On March 14, 2013, the Court of Appeals upheld the trial court's dismissal of the case based on the plaintiffs' lack of standing, and on July 24, 2013, the Ohio Supreme Court announced that it was accepting plaintiffs' appeal of this case but holding it for review after it decided a separate case involving the question of an activist group's standing to bring challenges relating to JobsOhio (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2012-13**). After the Supreme Court released its decision in that separate case involving JobsOhio on June 10, 2014, the defendants on July 2 filed a motion to dismiss the appeal pending before the Supreme Court in the VLT case as improvidently granted based on that June 10 decision. On September 3, 2014, the Supreme Court ruled on that motion to dismiss and ordered the parties to file briefs relating to the standing issues the Court accepted for appeal. Those briefs were filed, and oral argument was held by the Court on June 23, 2015. On March 24, 2016, the Court affirmed the dismissal for lack of legal standing of all but one of the plaintiff-appellants' claims. With respect to the claim that the 2009 law granted a monopoly in violation of the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution, the Court found the plaintiff had legal standing to bring this challenge, reversed the Tenth District's

judgment affirming the dismissal of this claim, and remanded this claim to the Franklin County Court of Common Pleas for further proceedings. On September 27, 2016, the Court of Common Pleas ruled on motions for judgment on the pleadings filed by the parties addressing the remanded equal protection claim, upholding the constitutionality of the 2009 law authorizing the VLTs and dismissing that equal protection claim.

- \$259 million from the Ohio Tobacco Use Prevention and Control Foundation Endowment Fund (TUPAC) to be deposited into a special State fund (non-GRF) and then intended to be used for various health care initiatives. After a trial court in August 2009 ordered these monies must remain in that endowment fund and be used for the purpose of reducing tobacco use, the State immediately appealed and in December 2009 the court of appeals ruled in favor of the State and reversed the trial court's order. The Ohio Supreme Court in December 2010 affirmed the court of appeals decision in favor of the State.
- \$1.036 billion of "one-time" revenues or savings (\$640 million in Fiscal Year 2010 and \$396 million in Fiscal Year 2011), including \$364 million from the spend-down of carry-forward balances, \$250 million transferred from a cash account at the Ohio School Facilities Commission, \$272 million savings from subjecting State employees to a two-week unpaid "furlough" during each year of the biennium, \$84 million from a reduction in State funding to public libraries, and \$65 million from the transfer to the GRF of interest on the proceeds of the State's 2007 tobacco securitization.
- \$530 million from transfers to the GRF of unclaimed funds and from other non-GRF funds.

In September 2010 the State also received from the federal government an award of \$518.6 million of enhanced Federal Medical Assistance Payments funding ("eFMAP"), and \$361.2 million of federal funding was also received by Ohio school districts for teacher salaries and personnel costs for primary and secondary education ("Ed Jobs").

In response to the September 2009 decision of the Ohio Supreme Court declaring the VLT provisions in the biennial appropriations Act subject to referendum, the Governor proposed for General Assembly consideration postponing for two years the final installment of the personal income tax reduction then scheduled to take effect in tax year 2009 (for returns filed in 2010). After extended hearings and review, the General Assembly approved, and the Governor signed into law on December 22, 2009, legislation keeping personal income tax rates at 2008 levels through tax year 2010 (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2012-13** for discussion of implementation of the final phase of that personal income tax reduction).

The State ended Fiscal Year 2011 with GRF cash and fund balances of \$844.5 million and \$430.7 million, respectively. Of that ending GRF fund balance, the State reserved \$138.8 million in the GRF to maintain the statutory target of one-half of one percent of Fiscal Year 2011 GRF revenues the State is required to maintain as an ending fund balance and transferred \$45.0 million into disaster services/emergency funds. The remaining \$246.9 million was deposited into the BSF. These ending balances reflect the use of approximately \$680 million in Fiscal Year 2011 GRF revenue to make payments for Medicaid managed care, the State's share of instruction for higher education, payroll and other commitments that were previously scheduled to be deferred into Fiscal Year 2012.

2012-13

2012-13 Biennial Budget and Appropriations. Consistent with State law, the Governor's Executive Budget for the 2012-13 biennium was released in March 2011 and introduced in the General Assembly. After extended hearings and review, the 2012-13 biennial appropriations Act was passed by the General Assembly and signed (with selective vetoes) by the Governor on June 30, 2011. To address the use of non-recurring funding sources in the prior 2010-11 fiscal biennium including federal stimulus amounts received under ARRA, the Act included targeted spending cuts across most State agencies and major new Medicaid reform and cost containment measures. Reflecting the tax law changes described below and a conservative underlying economic forecast, that Act provided for total GRF biennial appropriations of approximately \$55.8 billion. This reflected a 10.5% increase over the 2010-11 GRF biennial appropriations, based on total expected GRF biennial revenue of approximately \$56.07 billion (a 6% increase from 2010-11 GRF biennial revenues). GRF appropriations for major program categories (including debt service) compared to 2010-11 actual GRF biennial spending reflected increases of 30.2% for Medicaid (due in large part to the absence of ARRA funding in the 2012-13 biennium and the redirection of 2012-13 biennial spending from non-GRF to GRF sources); decreases of 3% for elementary and secondary education, 9.1% for higher education, and 8.1% for mental health and developmental disabilities (due to the

transfer of community mental health Medicaid services to the Department of Job and Family Services); and flat funding for corrections and youth services. That Act also reflected the restructuring of \$440 million of Fiscal Year 2012 GRF debt service into Fiscal Years 2013 through 2025, approximately three-quarters of which was accomplished by the July 2011 issuance by the Ohio Public Facilities Commission of \$488.8 million in refunding bonds, with the remainder accomplished by the September 2011 issuance by the Ohio Building Authority of \$149.3 million in refunding bonds.

The Executive Budget, the GRF appropriations Act and the separate appropriations acts for the biennium included all necessary debt service and lease rental payments related to State obligations (after the restructuring of Fiscal Year 2012 GRF debt service payments).

Major new sources of revenues or expenditure savings reflected in the 2012-13 appropriations Act included:

- Transfer of the State's spirituous liquor system to JobsOhio. On February 1, 2013, the State granted a 25-year franchise on its spirituous liquor system to JobsOhio Beverage System, a nonprofit corporation the sole member of which is JobsOhio, itself a nonprofit corporation created to promote economic development, job creation and retention, job training and the recruitment of business to the State. In exchange for the franchise, the State received a payment of \$1.464 billion, \$500 million of which was deposited in the GRF, \$863.5 million of which was used to make provision for payment of all debt service on \$725.0 million of then outstanding State bonds and notes secured by a pledge of the State's profits from the sale of spirituous liquor, and \$100 million of which was for funding certain revitalization projects. With granting of that franchise to JobsOhio Beverage System, the State stopped receiving annual deposits to the GRF from net liquor profits (those deposits totaled \$153.0 million in Fiscal Year 2011, \$92.5 million in Fiscal Year 2012 and \$167.0 million in Fiscal Year 2013, \$88 million of which was generated through the February 1 granting of the franchise to JobsOhio Beverage System). Litigation commenced in April 2011 and August 2014 that challenged, under various provisions of the Ohio Constitution, certain aspects of both JobsOhio and the General Assembly's February 2011 law that authorized its creation and the 2012-13 appropriations Act that amended various statutes applying to JobsOhio. In August 2011, the Ohio Supreme Court dismissed the first case, and in June 2014, the Ohio Supreme Court affirmed prior judgments of the lower courts in the second case after concluding that the plaintiffs lacked standing to bring this suit. Plaintiffs in the second case subsequently filed additional actions and appeals with the Court of Appeals and the Ohio Supreme Court in an attempt to revive these challenges to JobsOhio and the laws authorizing its creation and the transfer of the State's spirituous liquor system. The Supreme Court ultimately denied plaintiffs' motion for reconsideration in November 2016.
- Sale of five State-owned prison facilities to private operators expected to result in a net payment to the GRF of \$75 million. (Based on the proposals it received for the five prisons, the State opted to sell only one of those facilities that accomplished most of the desired financial result for the 2012-13 biennium.) Litigation commenced in August 2011, and then again in July 2012, challenging the authorization in the 2012-13 appropriations Act to sell these prison facilities. Specifically, this litigation alleged that the provisions in that Act authorizing the sale of these prisons, as well as that entire Act, were enacted in violation of the "one subject rule" of the Ohio Constitution and violated the constitutional right to referendum, and that the sale of the prisons would create a joinder of private and public property interests violating the constitutional prohibition against the State entering into a joint venture. In February 2016, the Supreme Court upheld the prison sale provisions of the Act, finding their enactment did not violate the "one subject rule" of the Ohio Constitution or its prohibition against the State entering into a joint venture with private enterprise.
- Reduction of local government fund allocations by \$111 million in Fiscal Year 2012 and \$340 million in Fiscal Year 2013. Beginning in Fiscal Year 2014, allocations are made by committing to the local government fund a set percentage of annual tax revenues deposited into the GRF (beginning with Fiscal Year 2013 GRF tax revenues).
- Reduction of public library fund allocations to 95% of Fiscal Year 2011 levels resulting in expenditure reductions of \$52.3 million in Fiscal Year 2012 and \$102.8 million in Fiscal Year 2013. Beginning in Fiscal Year 2014, allocations to public libraries are made by committing to the public library fund a set percentage of annual tax revenues deposited into the GRF (beginning with Fiscal Year 2013 GRF tax revenues).

- Accelerated phase-out of reimbursement payments to local governments and school districts in connection with the elimination of the tangible personal property tax resulting in an increased share (estimated at \$293.5 million in Fiscal Year 2012 and \$597.7 million in Fiscal Year 2013) of the commercial activity tax being deposited into the GRF (see **TAX LEVELS AND TAX BASES – Property Tax**).
- Accelerated phase-out of reimbursement payments to local governments and school districts for electric power generation deregulation and natural gas deregulation resulting in a larger share (estimated at \$141.6 million in Fiscal Year 2012 and \$147.4 million in Fiscal Year 2013) of the kilowatt-hour tax and the entire (approximately \$66.0 million in Fiscal Year 2012 and \$66.0 million in Fiscal Year 2013) natural gas consumption tax being reallocated to the GRF.
- \$235 million from transfers to the GRF of unclaimed funds and from other non-GRF funds, and \$12 million from a tax amnesty program.

The 2012-13 appropriations Act also reflected the following tax law changes:

- Implementation of the previously postponed final 4.2% annual decrease in State personal income tax rates (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2010-11**).
- Elimination of the estate tax beginning January 1, 2013, previously levied at a rate of 6% on estates over \$338,333 and 7% on estates over \$500,000. In Fiscal Year 2010, estate tax collections totaled \$285.8 million of which \$230.8 million was distributed to the local government jurisdictions from which it was collected and with \$55.0 million retained by the State and deposited into the GRF.
- Establishment of the InvestOhio income tax credit program under which investors in small businesses based in Ohio who hold their investments for at least two years may receive 10% income tax credits limited to a maximum of \$10 million per investor per biennium with no more than \$100 million of those credits to be issued over two years.

The 2012-13 biennial appropriations Act created a Medicaid reserve fund and authorized the OBM Director to transfer up to \$130 million from the GRF, if necessary, to provide for the payment of Medicaid costs above the enacted level of appropriations. That Act also created a \$104 million Unemployment Compensation Contingency Fund to pay interest on federal advances to the State Unemployment Compensation Fund, \$70.7 million of which was used to make the interest payment due in September 2011, with the remaining amount applied to the September 2012 interest payment of \$65.8 million. The September 2012 interest payment was also funded by a \$25 million GRF supplemental appropriation and a contribution from the State's Unemployment Compensation Administration Fund.

2012 Mid-Biennium Review. On March 14, 2012, the Governor announced a series of policy proposals resulting from a “mid-biennium review” (2012 MBR), with a stated focus on job creation as a priority. The Governor’s 2012 MBR included proposals for General Assembly consideration in the areas of: *energy* (including shale oil and gas production opportunities in the Marcellus and Utica fields in the State, and modernizing the State’s oil and gas severance tax; electric generation and transmission; coal; cogeneration, alternative fuels and renewables; energy efficiency; and regulatory reform); *personal income tax reduction* (proposing that any new revenue from shale oil and gas production and the 2012 MBR proposal to modernize the State’s oil and gas severance tax system be used to reduce personal income tax rates by a commensurate amount); *bank and financial institutions tax reform* (including a modernization, intended to be revenue-neutral, of Ohio’s taxes on banks and financial institutions replacing the corporate franchise and dealers in intangibles tax with a new financial institutions tax more accurately reflecting modern banking practices, closing loopholes and reducing the overall tax burden on most banks); *education* (including proposals for strengthening Ohio’s “third grade reading guarantee”, career education, a new school performance measuring system, expansion of digital and online learning, flexibility for teacher evaluations, new standards for dropout recovery schools, assessments of all publicly funded early childhood programs, and supporting adoption of a school reform plan for the City of Cleveland schools); *workforce development* (creating job opportunities for the developmentally disabled; an improved workforce development program; allowing those undergoing training with an employer to continue collecting unemployment benefits; linking energy companies with trained workers; and matching skilled veterans to in demand jobs); and achieving more *management efficiency* with associated State and local government budgetary savings (including combining the separate Offices of the State Architect and Engineer and the Office of Energy Services into an Ohio Facilities Construction Commission (OFCC) to administer the design and

construction of state public facilities, with the Ohio School Facilities Commission retained as an independent agency within the OFCC but sharing employees and facilities). Those 2012 MBR proposals were considered by the General Assembly commencing in March in twelve separate pieces of legislation, and the General Assembly in May and June passed seven pieces of legislation addressing the subjects of energy (not including the 2012 MBR proposed changes to the State's oil and gas severance tax), tax reform (not including the 2012 MBR personal income tax reduction proposal), education, workforce development, and management efficiency for both state and local governments.

As further implementation of the 2012 MBR, the General Assembly enacted and the Governor signed into law on December 20, 2012, a new financial institutions tax that first applied to tax year 2014. This new tax applies to many companies that were previously subject to Ohio's corporate franchise tax (primarily banks and other corporations classified as financial institutions) and also generally subjects "dealers in intangibles" (e.g., mortgage brokers, stockbrokers, finance and loan companies not classified as financial institutions) to the commercial activity tax. This new financial institutions tax replaced the prior corporate franchise tax on financial institutions and the prior dealers in intangibles tax. The proceeds from the new financial institutions tax are deposited in the GRF like the proceeds from the taxes it replaced. Based on revenue targets and mechanisms established in the legislation, OBM projected the effect of these tax changes to be revenue neutral to the GRF.

Fiscal Year 2013 Results. The State ended Fiscal Year 2013 with GRF cash and fund balances of \$2.64 billion and \$2.28 billion, respectively. These ending balances reflect approximately \$1.15 billion in Fiscal Year 2013 underspending due largely to actual Medicaid expenditures \$883.0 million below the original Fiscal Year 2013 spending estimate. Of that ending GRF fund balance, the State deposited \$995.9 million into the BSF increasing its balance to \$1.48 billion which was the then statutorily designated five percent of Fiscal Year 2013 GRF revenues; carried-forward \$963.2 million to offset the one-time cost of accelerating the phase-in of reductions in State personal income tax withholding rates (see **FISCAL MATTERS – Recent and Current Finances - Current Biennium**), and transferred \$120 million into the Unemployment Compensation Contingency Fund to pay interest on federal advances to the State Unemployment Compensation Fund and \$51.3 million into disaster services/emergency funds. The remaining \$147.8 million was reserved in the GRF to maintain the statutory target of one-half of one percent of Fiscal Year 2013 GRF revenues as an ending fund balance.

2014-15

2014-15 Biennial Budget and Appropriations. Consistent with State law, the Governor's Executive Budget for the 2014-15 biennium was released in February 2013 and introduced in the General Assembly. After extended hearings and review, the 2014-15 biennial appropriations Act was passed by the General Assembly and signed (with selective vetoes) by the Governor on June 30, 2013. With a stated focus on job creation and continued spending restraint, and based on a conservative economic forecast, that Act provided for total GRF biennial appropriations of approximately \$62.0 billion. This reflected an 11.1% increase over 2012-13 GRF biennial appropriations, and was based on expected total GRF biennial revenue (not including the \$963.2 million carried-forward from the 2012-13 biennium) of approximately \$61.1 billion (a 7.7% increase from 2012-13 GRF biennial revenues).

GRF major program categories (including debt service) reflected the following changes in spending: for Medicaid, increases of 16.8% in Fiscal Year 2014 appropriations over Fiscal Year 2013 expenditures (attributable in part to federal Affordable Care Act induced enrollment of previously eligible individuals and federally mandated physician rate increases) and 6.2% for Fiscal Year 2015 appropriations over Fiscal Year 2014 appropriations; for elementary and secondary education, increases of 5.0% for Fiscal Year 2014 appropriations over Fiscal Year 2013 expenditures and 5.8% for Fiscal Year 2015 appropriations over Fiscal Year 2014 appropriations (due largely to enhancements in the K-12 school funding formula); for higher education, increases of 1.8% for Fiscal Year 2014 appropriations over Fiscal Year 2013 expenditures and 2.1% for Fiscal Year 2015 appropriations over Fiscal Year 2014 appropriations; for corrections and youth services, increases of 0.1% for Fiscal Year 2014 appropriations over Fiscal Year 2013 expenditures and 0.2% for Fiscal Year 2015 appropriations over Fiscal Year 2014 appropriations; and for mental health and developmental disabilities, an increase of 5.0% for Fiscal Year 2014 appropriations over Fiscal Year 2013 expenditures and an increase of 4.0% for Fiscal Year 2015 appropriations over Fiscal Year 2014 appropriations.

The Act also implemented a new school funding formula (see **SCHOOLS AND MUNICIPALITIES – Schools**), allocated a portion of State public higher education funding to institutions based on their graduation

rates, and eliminated the Ohio Cultural Facilities Commission by moving the administration of cultural facilities projects to the Ohio Facilities Construction Commission to achieve efficiencies and budgetary savings.

The Executive Budget, the 2014-15 appropriations Act and separate appropriations acts for the biennium included all necessary debt service and lease rental payments related to State debt obligations.

The 2014-15 biennial appropriations Act reflected the following reductions and related adjustments of major State taxes (primarily the personal income and sales and use taxes), resulting in an estimated net reduction in GRF revenues of \$1.16 billion in Fiscal Year 2014 and \$771 million in Fiscal Year 2015, including:

- A 10% reduction in State personal income tax rates phased-in over three years (8.5% in calendar year 2013, 0.5% in calendar year 2014, and 1.0% in calendar year 2015), coupled with a freeze on the indexing of the State income tax brackets and the personal exemption for tax years 2013 through 2015 until these rate reductions are fully implemented.
- Creation of a non-refundable earned income tax credit equal to 5% of the federal earned income credit that is limited to 50% of liability for gross income that exceeds \$20,000.
- A new deduction for small businesses of 50% of annual adjusted business net income up to \$250,000.
- Elimination of the \$20 personal income tax exemption for filers with a gross income greater than \$30,000 and of the gambling loss deduction.
- An increase in the State sales and use tax by one-quarter percent (from 5.5% to 5.75%) beginning September 1, 2013.
- Authorization of full membership for the State in the streamlined sales tax project for the collection of State sales taxes on out-of-state companies for catalog and internet purchases.
- Expansion of the State sales tax base to include digital goods such as e-books, music and video downloads and repeal of the exemption for magazine purchases.
- Elimination of the corporate franchise tax (and dealers in intangibles tax) and the initial implementation and collection of the new financial institutions tax in tax year 2014.
- Elimination of the 12.5% property tax roll back for owner-occupied residential property for new voter-approved local property tax levies.
- Reinstating income requirements for eligibility for new applicants for the State's homestead tax exemption (this exemption was expanded in 2007 to include all senior citizens and disabled Ohioans regardless of income).
- Establishing a variable minimum for the commercial activity tax for businesses with gross receipts greater than \$1 million and an exemption from the CAT for grain handlers.

Medicaid Expansion. Subsequent to the passage of the GRF appropriations Act, the seven member State Controlling Board on October 21, 2013 voted 5 to 2 to increase federal Medicaid appropriations by approximately \$562 million in Fiscal Year 2014 and approximately \$2.0 billion in Fiscal Year 2015. These additional federal appropriations were to support the federally-authorized expansion of the Medicaid program to cover those with incomes up to 138% of the federal poverty level using 100% federal funds in fiscal years 2014 and 2015. On October 22, 2013, six State Representatives and two local right to life organizations filed an action in the Ohio Supreme Court against the Controlling Board and the Ohio Department of Medicaid requesting that Court vacate the Controlling Board's October 21 action. The Controlling Board and State Department of Medicaid filed their initial answer to the complaint on November 5 and, after all evidence and briefs of the parties were submitted on the expedited schedule set for this case, the Court on December 20, 2013 issued its decision upholding the Controlling Board's action.

2014 Mid-Biennium Review. On March 12, 2014, the Governor announced a series of initiatives across a range of topics resulting from a "mid-biennium review" for 2014-15 (2014 MBR). The Governor's 2014 MBR included a range of proposals in the areas of: *elementary and secondary education* (including proposals for dropout prevention and recovery and making technical and vocational education accessible by more students as early as the seventh grade); *higher education* (including proposals for reforming Ohio's dual credit programming to encourage more students to earn college credit while in high school; extending to two-year community colleges a funding formula tied to successful student outcomes; tying state funding for technical centers to the percentage of their students that find a job and other outcome-based benchmarks; increased use of technology and distance learning; increasing enrollment of international students and their retention in Ohio post-graduation; providing

community colleges the option to offer a guaranteed tuition rate; and providing veterans college credit for their military training and experience); *income tax reductions and other tax adjustments* (including proposals to lower income tax rates across all income levels by 8.5% over the next three years; increasing the state's earned income tax credit for low-income Ohioans from 5% to 15% of the federal earned income tax credit; increasing the state income tax personal exemptions for those with annual incomes up to \$80,000; raising the tax on cigarettes by 60 cents to \$1.85 per pack with equivalent taxes on other tobacco products including e-cigarettes; increasing the oil and gas severance tax to 2.75% of producer gross receipts while eliminating that tax for small conventional gas producers and exempting from that tax up to \$8 million of gross receipts per well during the first three years to help producers recoup their start-up drilling costs, with approximately 20% of severance tax revenue directed to local governments in shale oil and gas producing regions of the state; and updating the commercial activity tax rate from its initial 0.26% rate established in 2005 to 0.30%); *workforce* (aligning the three main federal workforce programs through a single, integrated plan to provide faster and improved training; and expediting professional licensing and certification for veterans and their spouses); and *human services* (including increased access to crisis intervention and safe places for those with mental illness and addictions; allocating \$26.9 million of non-GRF funds to support tobacco prevention and cessation programs; and expanding drug and substance abuse prevention in schools and prioritizing statewide funding for prevention initiatives). The 2014 MBR also proposed increasing appropriations to the Department of Rehabilitation and Correction by \$53.5 million to address a rise in the prison population, and reducing local property tax reimbursement and debt service appropriations for the biennium by \$35 million and \$92 million, respectively, due to lower than expected payments, while continuing all necessary appropriations for debt service and lease rental payments for State obligations.

Those 2014 MBR proposals were introduced in the General Assembly in March as fourteen separate pieces of legislation, seven of which were enacted by the General Assembly in May and June addressing the subjects of elementary and secondary education (including \$5 million for alternative education programs), higher education (including \$3.1 million for the State share of instruction), workforce and human services (including \$16 million for early education and child care, \$16.8 million for adult and child protection services, and \$3.2 million for Family and Children Services). As further implementation of the biennial appropriations Act and due to positive Fiscal Year 2014 financial results, the 2014 MBR legislation passed by the General Assembly also included the following additional reductions and adjustments to the State personal income tax resulting in an estimated net reduction in GRF revenues of \$402 million in Fiscal Year 2015:

- Acceleration into calendar year 2014 of the remaining 1% reduction in State personal income tax rates previously scheduled to be effective in calendar year 2015.
- An increase in the non-refundable earned income tax credit from 5% to 10% of the federal earned income credit that is limited to 50% of liability for gross income that exceeds \$20,000.
- A temporary increase in the deduction for small businesses from 50% up to 75% of annual business net income up to \$250,000 for tax year 2014.
- An increase in the State income tax personal exemption from \$1,700 to \$2,200 for gross income less than \$40,000, and from \$1,700 to \$1,950 for gross income between \$40,000 and \$80,000.

The 2014 MBR legislation passed by the General Assembly also authorized the OBM Director to transfer to a Medicaid reserve fund up to \$300 million from the GRF, if necessary, to provide for the payment of Medicaid costs above the enacted level of appropriations. The full amount of this transfer was made at the end of Fiscal Year 2014 (see next paragraph for further transfers out of the Medicaid reserve fund at the end of Fiscal Year 2015).

Fiscal Year 2015 Financial Results. The State ended Fiscal Year 2015 with GRF cash and fund balances of \$1.71 billion and \$1.29 billion, respectively. Of that ending GRF fund balance, the State reserved \$157.4 million to maintain the statutory target of one-half of one percent of State Fiscal Year 2015 GRF revenues as an ending fund balance, carried-forward \$393.0 million to cover the planned for and modest variance of Fiscal Year 2016 GRF appropriations over estimated revenue, transferred \$425.5 million to the BSF, \$50 million to the health and human services fund (see **2016-17** below for discussion on the creation of this fund), \$42 million to the Straight A fund, \$40 million to pay unemployment compensation loan interest and \$20 million for disaster services. The State also made 14 other smaller transfers totaling \$149.3 million with the remaining \$9.1 million transferred to the income tax reduction fund. Of the \$331.1 million Fiscal Year 2015 ending balance in the Medicaid reserve fund, the State transferred \$72.0 million to a school district tangible personal property tax supplement fund, \$101.1 million to the BSF (bringing its balance to \$2.005 billion), and \$158.0 million to the GRF.

2016-17

2016-17 Biennial Budget and Appropriations. Consistent with State law, the Governor's Executive Budget for the 2016-17 biennium was released on February 2, 2015 and introduced in the General Assembly. After extended hearings and review, the 2016-17 biennial appropriations Act was passed by the General Assembly and signed (with selective vetoes) by the Governor on June 30, 2015. Reflecting a stated continuing focus on job creation, and based on a conservative economic forecast, that Act provided for total GRF biennial appropriations of approximately \$71.2 billion reflecting a 14.9% increase over the 2014-15 GRF biennial appropriations. Those appropriations were based upon then estimated total expected GRF revenue of \$34.9 billion in Fiscal Year 2016, which excluded the \$393.0 million carried-forward from Fiscal Year 2015 (reflecting a 10.8% increase over Fiscal Year 2015 revenue), and \$36.5 billion in Fiscal Year 2017 (reflecting a 4.6% increase over expected Fiscal Year 2016 revenues) (see discussion below of Fiscal Year 2017 GRF revenue revisions in July 2016 and January 2017). Total estimated GRF revenues across the 2016-17 biennium reflected a 17.5% increase from 2014-15 GRF biennial revenues.

GRF major program categories (excluding debt service) reflected the following increases: for Medicaid, 21.8% in Fiscal Year 2016 appropriations over Fiscal Year 2015 expenditures (driven in large part to the shift in funding to the GRF from non-GRF sources beginning in Fiscal Year 2016 for the Medicaid expansion population), and 5.1% for Fiscal Year 2017 appropriations over Fiscal Year 2016 appropriations; for elementary and secondary education, 5.0% for Fiscal Year 2016 appropriations over Fiscal Year 2015 expenditures, and 4.2% for Fiscal Year 2017 appropriations over Fiscal Year 2016 appropriations; for higher education, 4.5% for Fiscal Year 2016 appropriations over Fiscal Year 2015 expenditures, and 3.3% for Fiscal Year 2017 appropriations over Fiscal Year 2016 appropriations; for mental health and developmental disabilities, 9.1% for Fiscal Year 2016 appropriations over Fiscal Year 2015 expenditures, and 7.3% for Fiscal Year 2017 appropriations over Fiscal Year 2016 appropriations; for corrections and youth services, 4.8% for Fiscal Year 2016 appropriations over Fiscal Year 2015 expenditures, and 3.0% for Fiscal Year 2017 appropriations over Fiscal Year 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 2016-17 biennial appropriations Act and separate appropriations acts for the biennium included all necessary debt service and lease rental payment appropriation authority related to State debt obligations.

The 2016-17 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 Fiscal Year 2016 and \$952.0 million in Fiscal Year 2017, including:

- An across-the-board 6.3% reduction in State personal income tax rates in calendar year 2015.
- Continuation of the 75% 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 (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2014-15**)) 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% on the amount of business net income. Legislation subsequently passed by the General Assembly clarifying this provision was estimated by OBM to reduce GRF revenues in Fiscal Year 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 2016-17 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 Fiscal Year 2016 and \$445.3 million in Fiscal Year 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 Fiscal Year 2016 and \$56.0 million in Fiscal Year 2017) of the kilowatt-hour tax being reallocated to the GRF.

The 2016-17 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 Fiscal Year 2017 into the fund, which amount is in addition to the \$50 million transferred from the GRF at the end of Fiscal Year 2015 into the fund.

As is customary at the beginning of the second year of a fiscal biennium, OBM in July 2016 revised its Fiscal Year 2017 GRF revenue forecast to reflect updated economic assumptions, actual Fiscal Year 2016 revenue performance, and tax law adjustments enacted by General Assembly after adoption of the 2016-17 biennial appropriations Act. As part of this revision, OBM reduced its estimated Fiscal Year 2017 GRF tax revenue forecast by \$282.0 million, a 1.2% reduction compared to the original Fiscal Year 2017 tax revenue forecast. This reduction in forecasted tax revenues was largely within the personal income and commercial activity taxes. As part of the Governor’s Executive Budget proposal for the 2018-19 fiscal biennium (see **Current Biennium** below), and based on tax revenue underperformance, in January 2017 OBM further reduced its estimated Fiscal Year 2017 GRF tax revenue forecast by \$592.2 million, a 2.7% 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%), the sales and use tax (reduced by \$259.3 million or 2.4%), and the commercial activity tax (reduced by \$32.0 million or 2.5%).

Fiscal Year 2017 Financial Results. The State ended Fiscal Year 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 Fiscal Year 2017 GRF revenues as an ending fund balance.

Current Biennium

Consistent with State law, the Governor’s Executive Budget for the 2018-19 fiscal biennium was released on January 30, 2017, and introduced in the General Assembly. After extended hearings and review, the 2018-19 biennial appropriations Act was passed by the General Assembly and signed by the Governor (with selective vetoes) on June 30, 2017. The General Assembly overrode six gubernatorial vetoes including vetoes of provisions relating to the legislative approval of new Medicaid optional eligibility groups, Medicaid rates for neonatal and newborn services, Medicaid rates for skilled nursing facilities, the delay by six months of the State’s behavioral health Medicaid redesign, a limitation on the amount of additional appropriations that may be approved by the Controlling Board, and authorization by the Controlling Board of certain Medicaid appropriations in the 2018-19 fiscal biennium. None of the veto overrides has a material impact on the GRF in the 2018-19 fiscal biennium.

To address lower GRF revenue estimates for the 2018-19 fiscal biennium, the Act included both across-the-board and targeted spending cuts across most State agencies and programs. Reflecting a stated continuing focus on job creation, and based on a conservative economic forecast, that Act provides for the following GRF appropriations:

GRF Appropriations 2018-19 Biennium (\$ in billions)

Fiscal Year 2017 Expenditures	Fiscal Year 2018 Appropriations	% Change Over Fiscal Year 2017 Expenditures	Fiscal Year 2019 Appropriations	% Change Over Fiscal Year 2018 Appropriations	2018-19 Biennium Total	% Change Over 2016-17 Biennial Appropriations
\$34.5	\$32.2	-6.7%	\$33.3	3.5%	\$65.5	-8.1%

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

- *Medicaid* - Fiscal Year 2018 appropriations decrease 15.0% over Fiscal Year 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 being deposited into a dedicated non-GRF fund), and Fiscal Year 2019 appropriations increase 5.7% over Fiscal Year 2018 appropriations.
- *Elementary and Secondary Education* - Fiscal Year 2018 appropriations increase 1.5% over Fiscal Year 2017 expenditures, and Fiscal Year 2019 appropriations increase 1.6% over Fiscal Year 2018 appropriations.

- *Higher Education* – Fiscal Year 2018 appropriations increase 0.5% over Fiscal Year 2017 expenditures, and Fiscal Year 2019 appropriations decrease 0.3% over Fiscal Year 2018 appropriations.
- *Mental Health and Developmental Disabilities* – Fiscal Year 2018 appropriations decrease 0.9% over Fiscal Year 2017 expenditures (driven by the shift in funding of certain Medicaid expenditures to the Medicaid program category), and Fiscal Year 2019 appropriations increase 2.1% over Fiscal Year 2018 appropriations.
- *Corrections and Youth Services* – Fiscal Year 2018 appropriations increase 4.2% over Fiscal Year 2017 expenditures, and Fiscal Year 2019 appropriations increase 1.6% over Fiscal Year 2018 appropriations.

The Act also modifies 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 limits increases in tuition and fees for two- and four-year higher education institutions.

The Executive Budget, the 2018-19 biennial appropriations Act and separate appropriations acts for the biennium include all necessary debt service and lease rental payment appropriation authority related to State debt obligations.

The forgoing appropriations were based upon total expected GRF revenue as follows:

Estimated GRF Revenue 2018-19 Biennium (\$ in billions)

Fiscal Year 2017 Actual Revenue	Fiscal Year 2018 Est. Revenue	% Change Over Fiscal Year 2017 Actual Revenue	Fiscal Year 2019 Est. Revenue	% Change Over Fiscal Year 2018 Est. Revenue	2018-19 Biennium Total	% Change Over 2016-17 Biennium Actual Revenue
\$34.2	\$32.3	-5.5%	\$33.3	3.2%	\$65.6	-3.7%

Potentially non-recurring sources of revenues reflected in the 2018-19 biennial appropriations Act include \$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 2018-19 biennial appropriations Act reflects certain tax law changes, resulting in an estimated net GRF revenue increase of \$12.8 million in Fiscal Year 2018 and an estimated net GRF revenue decrease of \$30.8 million in Fiscal Year 2019, including, among others:

- Reduces the number of personal income tax brackets from nine to seven in tax year 2017 and for certain low income taxpayers completely exempts 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% on the amount over \$210,600. (See **TAX LEVELS AND TAX BASES – Personal Income Tax.**)
- Increases on a temporary basis the percent of GRF tax revenues deposited into the public library fund to 1.68% from 1.66% in each of Fiscal Years 2018 and 2019.
- Increases the State personal income tax deduction from \$2,000 to \$4,000 for contributions to accounts for college savings and care for disabled individuals.
- Authorizes 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 2018-19 biennial appropriations Act also reflects:

- The creation of a new health insuring corporation provider assessment, the revenues of which are 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 revenues to draw federal matching dollars. The GRF revenue loss is estimated to be approximately \$600 million in each of Fiscal Years 2018 and 2019.
- Increases the portion of the commercial activity tax deposited into the GRF (estimated at \$175 million in Fiscal Year 2018 and \$179 million in Fiscal Year 2019) from 75% to 85% to more closely match the amounts 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 remains unchanged. (See **TAX LEVELS AND TAX BASES – Property Tax.**)

Fiscal Year 2018 Financial Results. The State ended Fiscal Year 2018 with GRF cash and fund balances of \$1.22 billion and \$849.9 million, respectively. Of that ending GRF fund balance, the State reserved \$162.4 million to maintain the statutory target of one-half of one percent of State Fiscal Year 2018 GRF revenues as an ending fund balance and transferred \$657.5 million to the BSF (bringing its balance to \$2.692 billion) and \$30.0 million to the Medicaid Local Sales Tax Transition Fund.

As is customary at the beginning of the second year of a fiscal biennium, OBM in July 2018 revised its Fiscal Year 2019 GRF revenue forecast to reflect updated economic assumptions, actual Fiscal Year 2018 revenue performance, and certain minor tax law adjustments enacted by the General Assembly after adoption of the 2018-19 biennial appropriations Act. As part of this revision, OBM increased its estimated Fiscal Year 2019 GRF tax revenue forecast by \$531.1 million, a 2.4% increase compared to the original Fiscal Year 2019 tax revenue forecast. This increase in forecasted tax revenues is largely within the personal income tax (increased by \$379.5 million or 4.5%) and the sales and use tax (increased by \$129.0 million or 1.3%).

OBM is currently projecting a positive GRF fund balance at the end of Fiscal Year 2019. As discussed 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 and expenditures and related developments (including pending litigation) and prepares a Monthly Financial Report, the most recent of which is accessible at <https://www.obm.ohio.gov/Budget/monthlyfinancial/> with copies also available upon request to OBM.

Cash Flow

Because GRF cash receipts and disbursements do not precisely coincide, temporary GRF cash flow deficiencies often occur in some months, particularly the middle months, of a Fiscal Year. Statutory provisions provide for effective management of cash flow by permitting the adjustment of payment schedules (as was done during some prior Fiscal Years) and the use of the Total Operating Fund (TOF). The State has not done and does not do external revenue anticipation borrowing.

The TOF includes the total consolidated cash balances, revenues, disbursements and transfers of the GRF and several other specified funds (including the BSF). The TOF 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 TOF. The GRF is permitted to incur a temporary cash deficiency by drawing upon the available consolidated cash balance in the TOF. The amount of that permitted GRF cash deficiency at any time is limited by statute to 10% of GRF revenues for the then preceding Fiscal Year.

The State plans for and manages monthly GRF cash flow deficiencies within each Fiscal Year. GRF cash flow deficiencies have been within the TOF 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 State 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 expressly precludes the State from assuming the debts of any county, city, town or township, or of any corporation. (An exception in both cases is for debts incurred to repel invasion, suppress insurrection, or defend the State in war.) The Constitution 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 2i 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), various cultural facilities, and formerly for the Department of Public Safety (DPS). Debt service on all these special obligations is paid from GRF appropriations, with the exception of debt issued for ODOT and DPS facilities which is paid from highway user receipts. All of 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 also have participated in buildings and equipment, information systems and non-highway transportation projects that have local as well as State use and benefit, in connection with which the State has entered into lease-purchase agreements with terms ranging from 7 to 20 years. Certificates of Participation (COPs) have been issued in connection with those agreements that represent fractionalized interests in and are payable from the State's anticipated lease payments. Excluding the Series 2018 Certificates, the maximum annual payment from GRF appropriations under those existing agreements is \$27.5 million in Fiscal Year 2020 and the total GRF-supported principal amount outstanding is \$181.5 million. 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 (OCF) 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 and \$380 million in total. The bond trustee has made claims for tax credits totaling \$7.5 million in Fiscal Year 2017, \$15.4 million in Fiscal Year 2018 and \$6.5 million in Fiscal Year 2019. The highest annual payment for outstanding credit-collateralized bonds is \$19.2 million in Fiscal Year 2020 and the total principal amount outstanding for those bonds is \$132.6 million. Proceeds of the OCF bonds fund investments in venture capital funds to promote investment in seed and early-stage Ohio-based business enterprises.

Prior Economic Development and Revitalization Obligations. Prior to the February 1, 2013 granting of a 25-year franchise on the State's spirituous liquor system to JobsOhio, there were outstanding \$725.0 million of 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 defeased and no longer outstanding obligations of the State (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2012-13**). 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 \$187.3 million in Fiscal Year 2019. 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 also 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 are expected to be 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. That public-private agreement provides for availability payments in a base annual amount of \$25.8 million beginning no earlier than Fiscal Year 2019, increasing to a projected maximum payment of \$40.6 million in Fiscal Year 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.

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Variable Rate Debt

The State currently has \$385,480,000 in outstanding variable rate debt as follows with liquidity provided by the State for all of these issues:

<u>Dated Date</u>	<u>Outstanding</u>	<u>Purpose/Series</u>	<u>Rate Period</u>	<u>Final Maturity</u>
11/29/2001	\$26,700,000	Infrastructure, 2001B	Weekly	8/1/2021
3/20/2003	9,930,000	Infrastructure Refunding, 2003D	Weekly	2/1/2019
12/15/2003	67,000,000	Common Schools, 2003D	Weekly	3/15/2024
3/3/2004	39,660,000	Infrastructure Refunding, 2004A	Weekly	2/1/2023
4/1/2005	82,350,000	Common Schools, 2005A/B	Weekly	3/15/2025
6/7/2006	95,220,000	Common Schools, 2006B/C	Weekly	6/15/2026
10/26/2016	64,620,000	DRC Prison Facilities, 2016B/C	Weekly	10/1/2036

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 \$310,930,000:

<u>Outstanding Notional Amount</u>	<u>Related Bond Series</u>	<u>State Pays</u>	<u>State Receives</u>	<u>Counterparty</u>	<u>Effective Date</u>	<u>Termination Date</u>
\$26,700,000	Infrastructure 2001B	4.630%	SIFMA ¹	JP Morgan/Wells Fargo	11/29/2001	8/1/2021
67,000,000	Common Schools 2003D	3.414%	LIBOR ²	JP Morgan/Wells Fargo	9/14/2007	3/15/2024
39,660,000	Infrastructure 2004A Refunding	3.510%	LIBOR ²	Wells Fargo	3/3/2004	2/1/2023
82,350,000	Common Schools 2005A/B	3.750%	LIBOR ^{2,3}	JP Morgan	3/15/2007	3/15/2025
95,220,000	Common Schools 2006B/C	3.202%	LIBOR ²	US Bank/RBC	6/15/2006	6/15/2026

¹ Securities Industry and Financial Markets Association (SIFMA) weekly variable rate index.

² Variable interest rate based on a percentage of one-month London Inter-Bank Offered Rate (LIBOR) plus a fixed increment.

³ Variable interest rate based on 62% of 10-year LIBOR beginning September 15, 2014.

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 the then outstanding obligations of those categories would exceed 5% 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% determinations and certifications. Application of the 5% cap may be waived in a particular instance by a three-fifths vote of each house of the Ohio General Assembly and may be changed by future constitutional amendments.

The following table presents a current summary of State debt authorizations and the principal that has been issued and is outstanding against those authorizations. The General Assembly has appropriated sufficient moneys to meet debt service requirements for the current biennium (ending June 30, 2019) on all of the obligations included in this and the accompanying tables.

	Authorized by General Assembly	Issued(a)	Outstanding(b)
<i>Obligations Payable from the GRF</i>			
<u>General Obligations</u>			
Coal Development(c)	\$260,000,000	\$246,000,000	\$37,380,000
Infrastructure(d,e)	4,425,000,000	4,084,986,136	1,833,470,000
Natural Resources(f)	492,000,000	453,130,000	137,270,000
Common School Facilities(e)	5,545,000,000	5,070,000,000	2,657,340,000
Higher Education Facilities	4,445,000,000	3,830,000,000	2,201,020,000
Conservation(g)	700,000,000	500,000,000	253,415,000
Research & Development(h)	1,200,000,000	851,000,000	340,475,000
Site Development	150,000,000	150,000,000	37,250,000
Veterans Compensation(i)	200,000,000	83,910,000	<u>32,430,000</u>
		Total:	\$7,530,050,000
<u>Special Obligations</u>			
DAS Facilities(j)	\$2,030,000,000	\$1,916,000,000	\$556,935,000
DRC Prison Facilities(j)	2,462,000,000	2,134,500,000	484,570,000
DYS Facilities	400,000,000	367,000,000	100,750,000
Cultural & Sports Facilities	710,000,000	604,690,000	117,070,000
Mental Health Facilities	1,850,000,000	1,617,085,000	191,520,000
Parks & Recreation Facilities	960,000,000	828,000,000	<u>434,445,000</u>
		Total:	\$1,885,290,000
<i>Obligations Payable from Non-GRF Sources(k)</i>			
<u>Highway User Receipts</u>			
G.O. Highway(l)	\$3,683,000,000	\$3,125,830,000	\$925,720,000
ODOT Facilities	385,000,000	326,590,000	158,720,000
DPS Facilities	140,285,000	140,285,000	<u>3,795,000</u>
		Total:	\$1,088,235,000
<u>Federal Transportation Grants</u>			
ODOT GARVEE Highway(m)	n.a.	\$2,575,710,000	\$991,015,000

- (a) Excludes refunding bonds; includes bonds refunded.
- (b) As of November 15, 2018. Excludes bonds refunded; includes refunding bonds.
- (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 Fiscal Year 2018 through Fiscal Year 2022 and \$200,000,000 in each Fiscal Year beginning in Fiscal Year 2023 through Fiscal Year 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. Issued amount includes \$130,000 in refunding bonds in excess of the principal amount of the bonds refunded.
- (g) Not more than \$50,000,000 may be issued in any Fiscal Year plus any obligations unissued from previous Fiscal Years and not more than \$400,000,000 may be outstanding at any time.
- (h) Not more than \$1,200,000,000 may be issued with the annual issuance now limited to no more than \$175,000,000 in any Fiscal Year plus any obligations unissued from previous Fiscal Years.
- (i) Constitutional authorization was self-implementing and did not require further General Assembly authorization. No more new obligations may be issued under this authorization.
- (j) Outstanding debt does not include the issuance of \$51.3 million of forward delivery refunding bonds nor does it exclude the bonds being refunded. While the purchase agreements allow for termination of the sale under certain circumstances, the State does not expect those conditions to be met. Settlement is expected to occur on July 9, 2019. Once those refunding bonds settle, the figures will not materially change.
- (k) See discussion above of “availability payments” under ODOT’s first public-private agreement, which payments are expected to be made from biennial appropriations of non-GRF funds available to ODOT and remaining after the payment of debt service on highway general obligations, special obligations and GARVEE bonds shown above.
- (l) 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.
- (m) 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 Fiscal Year debt service on outstanding State obligations currently payable from the GRF:

Annual Debt Service Requirements on State Obligations Paid from the GRF

FY	General Obligations			Special Obligations			Total GRF Debt Service		
	Education(a,b)	Infra-structure(b)	All Other(c)	DAS Facilities(d)	DRC Facilities(b,d)	All Other(e)	Principal	Interest	Total
2019	\$698,531,189	\$228,858,118	\$179,438,426	\$88,327,501	\$76,447,080	\$132,661,643	\$965,050,000	\$439,213,956	\$1,404,263,956
2020	700,778,998	224,848,509	166,335,381	85,884,535	62,098,841	126,498,767	956,435,000	410,010,031	1,366,445,031
2021	693,467,990	213,977,230	142,106,975	85,543,809	62,522,584	111,726,190	941,800,000	367,544,778	1,309,344,778
2022	656,623,100	205,807,100	120,454,002	75,387,855	61,815,000	99,381,944	894,135,000	325,334,000	1,219,469,000
2023	589,761,144	196,426,539	108,481,518	69,610,057	57,753,467	99,295,882	835,995,000	285,333,606	1,121,328,606
2024	490,542,676	178,608,796	88,071,130	59,525,516	55,899,354	94,001,917	718,120,000	248,529,389	966,649,389
2025	419,261,812	170,229,479	66,680,228	53,985,043	51,284,143	87,518,564	633,055,000	215,904,269	848,959,269
2026	349,551,397	155,983,831	60,620,069	30,987,317	27,597,806	69,780,425	505,735,000	188,785,845	694,520,845
2027	293,950,329	141,189,871	43,676,738	30,984,263	27,632,412	60,251,125	430,810,000	166,874,737	597,684,737
2028	272,855,439	141,030,246	40,207,261	30,982,926	27,585,821	53,856,300	419,205,000	147,312,993	566,517,993
2029	273,073,174	132,287,485	24,383,250	30,986,043	27,628,751	43,521,375	403,940,000	127,940,078	531,880,078
2030	283,502,280	115,232,777	20,851,125	26,699,043	24,761,900	43,510,844	403,775,000	110,782,969	514,557,969
2031	283,756,377	115,059,891	17,467,750	23,649,331	24,777,206	37,894,000	411,240,000	91,364,555	502,604,555
2032	259,436,663	91,311,950	12,947,750	23,658,806	22,182,895	30,173,250	366,635,000	73,076,314	439,711,314
2033	192,202,975	82,242,250	3,444,000	21,215,469	22,120,604	20,775,500	285,570,000	56,430,798	342,000,798
2034	168,556,875	71,418,250	-0-	17,147,050	22,145,247	7,909,750	244,515,000	42,662,172	287,177,172
2035	144,705,500	47,804,375	-0-	17,148,425	18,612,605	7,906,625	205,695,000	30,482,530	236,177,530
2036	120,516,000	47,787,375	-0-	11,173,250	18,640,410	7,907,750	185,780,000	20,244,785	206,024,785
2037	97,398,750	36,394,875	-0-	11,169,125	13,039,525	7,907,250	153,940,000	11,969,525	165,909,525
2038	47,974,500	25,622,125	-0-	5,490,125	7,723,375	7,909,250	90,055,000	4,664,375	94,719,375
2039	-0-	12,653,625	-0-	5,488,875		7,907,875	<u>25,415,000</u>	<u>635,375</u>	<u>26,050,375</u>
							\$10,075,065,000	\$3,364,124,658	\$13,439,189,658

- (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%.
- (c) Includes natural resources, coal development, conservation, research and development, site development and veteran's compensation general obligation bonds.
- (d) Does not include the issuance of \$51.3 million of forward delivery refunding bonds nor does it exclude the bonds being refunded. While the purchase agreements allow for termination of the sale under certain circumstances, the State does not expect those conditions to be met. Settlement is expected to occur on July 9, 2019. Once those refunding bonds settle, the figures will not materially change.
- (e) Includes lease-rental bonds for mental health, parks and recreation, cultural and sports facilities, and facilities for the Department of Youth Services.

The following table shows total Fiscal Year debt service on certain outstanding State obligations currently payable from the indicated non-GRF revenues.

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

FY	Highway User Receipts			GARVEE Federal Transportation Grants(b)
	Highway G.O.	ODOT/DPS Facilities(a)	Total	
2019	\$133,611,683	\$18,932,000	\$152,543,683	\$187,310,803
2020	130,864,712	18,084,200	148,948,912	182,767,446
2021	128,536,192	18,087,250	146,623,442	148,204,553
2022	125,500,302	16,522,000	142,022,302	103,420,375
2023	121,628,556	16,526,250	138,154,806	102,644,713
2024	118,763,027	16,520,500	135,283,527	101,903,025
2025	101,190,895	16,524,000	117,714,895	101,158,125
2026	72,162,550	16,520,000	88,682,550	65,376,875
2027	69,891,550	16,522,500	86,414,050	65,378,375
2028	67,620,800	16,519,750	84,140,550	65,379,875
2029	51,583,800	16,520,500	68,104,300	65,379,250
2030	33,075,250	16,518,000	49,593,250	41,281,875
2031	31,628,750	8,375,750	40,004,500	-0-
2032	14,987,500	8,379,000	23,366,500	-0-
2033	14,306,250	8,379,000	22,685,250	-0-

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

(b) Debt service paid from federal transportation grants apportioned to the State under Title 23 of the U.S. Code.

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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:

<u>Year</u>	Obligations Payable from the GRF			Non-GRF Obligations
	<u>Education(a)</u>	<u>Other GO(b)</u>	<u>Special Obligations(c)</u>	<u>Highway User Receipts(d)</u>
2019	\$4,742,010,000	\$2,672,045,000	\$1,793,860,000	\$1,004,065,000
2020	4,261,735,000	2,241,520,000	1,602,350,000	903,420,000
2025	2,182,965,000	1,131,995,000	767,540,000	393,510,000
2030	1,121,235,000	449,080,000	348,720,000	78,890,000

- (a) Includes obligations for common school and higher education capital facilities.
 (b) Includes natural resources, coal development, infrastructure improvement, conservation, research and development, site development and veterans compensation general obligation bonds.
 (c) Includes lease-rental obligations for various state capital facilities. Does not include the issuance of \$51.3 million of forward delivery refunding bonds nor does it exclude the bonds being refunded. While the purchase agreements allow for termination of the sale under certain circumstances, the State does not expect those conditions to be met. Settlement is expected to occur on July 9, 2019. Once those refunding bonds settle, the figures will not materially change.
 (d) Includes general obligations for highways and lease-rental obligations 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.

<u>Fiscal Year</u>	<u>Principal Amount Outstanding</u>	<u>Outstanding Debt Per Capita</u>	<u>Outstanding Debt as % of Annual Personal Income</u>
1980	\$1,991,915,000	\$184	1.86%
1990	3,707,054,994	342	1.83
2000	6,308,680,025	556	1.94
2010	8,586,655,636	744	2.03
2011	8,996,752,848	779	1.99
2012	9,760,505,915	845	2.08
2013	9,263,358,266	801	1.94
2014	9,517,346,998	821	1.92
2015	9,354,508,600	806	1.81
2016	9,271,400,000	798	1.77
2017	9,450,790,000	811	1.73
2018	9,746,900,000	836(a)	1.79(b)

<u>Fiscal Year</u>	<u>Debt Service Payable</u>	<u>Total GRF Revenue and Net State Lottery Proceeds</u>	<u>Debt Service as % of GRF Revenue and Lottery Proceeds</u>	<u>Debt Service as % of Annual Personal Income</u>
1980	\$187,478,382	\$4,835,670,223	3.88%	0.18%
1990	488,676,826	12,230,681,298	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
2011	755,023,015*	26,777,133,000**	2.82	0.17
2012	692,776,090*	27,956,513,000	2.48	0.15
2013	1,204,775,861	30,361,815,000	3.97	0.25
2014	1,237,701,225	30,137,140,000	4.11	0.25
2015	1,278,258,664	32,463,100,000	3.94	0.25
2016	1,314,513,346	34,997,651,000	3.76	0.25
2017	1,328,277,201	35,218,700,000	3.77	0.24
2018	1,338,395,923	33,642,813,000	3.98	0.25(b)

- (a) Based on July 2017 population estimate.
 (b) Based on 2017 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 Fiscal Year 2010, \$336.9 million in Fiscal Year 2011, and \$449.3 million in Fiscal Year 2012.

** Excludes federal funds from the American Recovery and Reinvestment Act of 2009.

Recent Debt Authorizations

Only a portion of State capital needs can be met by direct GRF appropriations, so additional State borrowing for capital and other purposes has been and will continue to be required. For the 2019-20 capital biennium, the General Assembly approved \$2.642 billion in new capital appropriations, with \$2.24 billion of those new capital appropriations to be funded by GRF-supported debt authorizations, \$60 million to be funded from non-GRF debt authorizations (for Ohio Department of Transportation maintenance facilities) and the remaining \$342 million to be funded from cash. The following additional GRF-supported debt authorizations reflect all of the new 2019-20 capital appropriations:

General Obligation

- \$375,000,000 for capital improvements for elementary and secondary public schools.
- \$325,000,000 for local infrastructure projects.
- \$429,000,000 for higher education facilities.
- \$34,000,000 for natural resources facilities.
- \$100,000,000 for conservation purposes.
- \$2,000,000 for coal development purposes.

Special Obligation

- \$200,000,000 for prisons and local jails.
- \$21,000,000 for youth services facilities.
- \$90,800,000 for State administrative facilities.
- \$69,000,000 for cultural facilities (including both arts and sports facilities).
- \$193,000,000 for mental health facilities (including local projects).
- \$119,000,000 for parks and recreation facilities (including local projects).

In addition to the above \$375 million general obligation debt authorization for elementary and secondary public school improvements, the General Assembly also appropriated \$75 million to be funded from the transfer of non-GRF development loan funds and \$50 million from State lottery profits for elementary and secondary public school capital improvements.

Recent constitutional authorizations are:

- 2014 – authorizes an 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 – authorizes the issuance of \$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% 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 Fiscal Years 2006 through 2011, no more than \$225 million in Fiscal Year 2012 and no more than \$175 million in any Fiscal Year thereafter, plus any amounts that in any prior Fiscal Year could have been but were not issued.
- 2009 – authorized the issuance of State general obligation debt to provide 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 obligations not subject to the 5% direct obligation debt service cap described above. Not more than \$200 million in obligations could have been issued no later than December 31, 2013.
- 2008 – authorizes the issuance of State bonds for land conservation and revitalization purposes (including statewide brownfields clean-up). For each of the two purposes, the authorization is for not more than \$50 million in principal amount to be issued in any Fiscal Year plus any amount unissued from previous

Fiscal Years and 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; see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2012-13**). The authorization is in addition to the 2000 constitutional amendment for the same purposes.

- 2005 – authorizes the issuance over ten years of \$500 million of State general obligation debt in support of research and development, and \$150 million 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% 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 that 5% debt service cap.
- 2000 – authorizes the issuance of State bonds for land conservation and revitalization purposes (including statewide brownfields clean-up). For each of the two purposes, the amendment authorizes not more than \$50 million in principal amount to be issued in any Fiscal Year plus any amount unissued from previous Fiscal Years and 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; see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2012-13**).
- 1999 – authorizes State general obligation debt to pay costs of facilities for a system of common schools throughout the state and for state-supported and state-assisted institutions of higher education. The amendment also provides for the 5% direct obligation debt service cap described above.
- 1995 – authorizes additional highway bonds and extends the local infrastructure bond program. For the latter, it authorized an additional \$1.2 billion of State full faith and credit obligations to be issued over 10 years, with not more than \$120 million to be issued in any Fiscal Year. The highway finance portion authorizes not more than \$1.2 billion to be outstanding at any time and not more than \$220 million to be issued in any Fiscal Year.
- 1994 – pledges the State's full faith and credit and taxing power to meet certain guarantees under the State's tuition credit program, a program that provides for the purchase of tuition credits which are guaranteed to cover a specified amount when applied to tuition and other eligible higher education costs. Under the amendment, to secure the tuition guarantees, the General Assembly shall appropriate money sufficient to offset any deficiency that occurs in the trust fund, at any time necessary to make payment of the full amount of any tuition payment or refund required by a tuition payment contract.
- 1990 – authorizes greater State and political subdivision participation in the provision of individual and family housing. This supplements the previous constitutionally authorized loans-for-lenders and other housing assistance programs, financed in part with State revenue bonds. The amendment authorizes the General Assembly to provide for State assistance for housing in a variety of ways, including State borrowing for the purpose by the issuance of obligations secured by a pledge of all or such portion of State revenues or receipts as it authorizes (but not by a pledge of the State's full faith and credit).
- 1985 – authorizes the issuance of general obligation debt to 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 may be outstanding at any time.

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ECONOMY AND EMPLOYMENT

Although manufacturing (including auto-related manufacturing) in Ohio remains an integral part of the State's economy, the greatest growth in Ohio's economy in recent years has been in the non-manufacturing sectors. Ohio's 2017 economic output, as measured by gross state product (GSP), totaled \$649.1 billion, 3.37% of the national GDP and seventh largest among the states. The State ranks third within the manufacturing sector as a whole (\$108.0 billion) and fourth in durable goods (\$59.5 billion). As a percent of Ohio's 2017 GSP, 16.6% was attributable to manufacturing, with 23.0% attributable to the goods-producing sectors and 34.2% to the business services sectors, including finance, insurance and real estate. Ohio is the ninth largest exporting state with 2017 merchandise exports totaling \$50.1 billion. The State's leading export products are machinery (including electrical machinery), motor vehicles, aircraft/spacecraft and plastics, which together accounted for 55.6% of that total.

Non-farm payroll employment in Ohio, in a diversifying employment base, decreased in 2001 through 2003, increased in 2004 through 2006, decreased in 2007 through 2010, and increased in 2011 through 2017. 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 87.5% 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)

	<u>1980</u>	<u>1990*</u>	<u>2000*</u>	<u>2010*</u>	<u>2017*</u>
Mining & Logging.....	31	18	13	11	11
Construction.....	167	192	246	169	216
Manufacturing.....	1,264	1,060	1,021	621	687
Trade, Transportation & Public Utilities...	1,180	963	1,115	947	1,024
Financial Activities.....	204	255	305	277	307
Services.....	831 ¹	n.a.	n.a.	n.a.	n.a.
Professional & Business Services.....	n.a.	455	647	627	722
Educational & Health Services.....	n.a.	539	679	839	929
Leisure & Hospitality.....	n.a.	400	483	475	560
Information & Other Services.....	n.a.	279	331	284	288
Government.....	<u>690</u>	<u>722</u>	<u>785</u>	<u>786</u>	<u>782</u>
TOTAL	4,367	4,882	5,624	5,036	5,526

* Reflects change in the bases for industry classification from the 1987 Standard Industrial Classification (SIC) system to the current 2017 North American Industry Classification System (NAICS). Data since 1990 reflects this change.

¹ Data under SIC system included professional and business, education and health, leisure and hospitality, information and 'other' services under a single "Services" industry category.

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

Distribution of Nonfarm Payroll Jobs by Industry Type (%)

	<u>1980</u>		<u>1990*</u>		<u>2000*</u>		<u>2010*</u>		<u>2017*</u>	
	<u>Ohio</u>	<u>U.S.</u>	<u>Ohio</u>	<u>U.S.</u>	<u>Ohio</u>	<u>U.S.</u>	<u>Ohio</u>	<u>U.S.</u>	<u>Ohio</u>	<u>U.S.</u>
Mining & Logging.....	0.7	1.1	0.4	0.7	0.2	0.5	0.2	0.5	0.2	0.5
Construction.....	3.8	4.8	3.9	4.8	4.4	5.1	3.4	4.2	3.9	4.7
Manufacturing	28.9	22.4	21.7	16.2	18.2	13.1	12.3	8.8	12.4	8.5
Trade, Transportation & Public Utilities	27.0	28.2	19.7	20.7	19.8	19.9	18.8	18.9	18.5	18.8
Financial Activities.....	4.7	5.7	5.2	6.0	5.4	5.9	5.5	5.9	5.5	5.8
Services.....	19.0 ¹	19.8 ¹	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Professional & Business Services.....	n.a.	n.a.	9.3	9.9	11.5	12.6	12.5	12.8	13.1	14.0
Educational & Health Services.....	n.a.	n.a.	11.0	10.1	12.1	11.6	16.7	15.3	16.8	15.8
Leisure & Hospitality.....	n.a.	n.a.	8.2	8.5	8.6	9.0	9.4	10.0	10.1	10.9
Information & Other Services.....	n.a.	n.a.	5.7	6.3	5.9	6.7	5.6	6.2	5.2	5.8
Government	15.8	18.0	14.8	16.8	14.0	15.7	15.6	17.3	14.2	15.2

* Reflects change in the bases for industry classification from the 1987 Standard Industrial Classification (SIC) system to the current 2017 North American Industry Classification System (NAICS). Data since 1990 has been adjusted to reflect this change.

¹ Data under SIC system included professional and business, education and health, leisure and hospitality, information and 'other' services under a single "Services" industry category.

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)

<u>Year</u>	<u>Ohio</u>	<u>U.S.</u>
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.....	4.9	5.3
2016.....	5.0	4.9
2017.....	5.0	4.4
2018 January.....	4.7	4.1
February.....	4.5	4.1
March.....	4.4	4.1
April.....	4.3	3.9
May.....	4.3	3.8
June.....	4.5	4.0
July.....	4.6	3.9
August.....	4.6	3.9
September.....	4.6	3.7

Source: Ohio Department of Job and Family Services, Labor Market Information.

The following are the private sector employers that had the highest number of full-time equivalent employees (estimated and rounded) in Ohio in 2018.

OHIO’S TOP 25 PRIVATE SECTOR EMPLOYERS – 2018

<u>Company</u>	<u>Employment Headcount (Estimated)</u>	<u>Sector</u>
Wal-Mart Stores, Inc.	50,200	Retail General Merchandiser
Cleveland Clinic Health System	49,800	Health Care
Kroger Company	45,150	Retail Food Stores
Mercy Health	32,200	Health Care
University Hospitals Health System	26,000	Health Care
Ohio Health	21,100	Health Care
JPMorgan Chase & Co.	21,000	Financial Services
Giant Eagle, Inc.	19,000	Retail Food Stores
Cincinnati Children’s Hospital	15,400	Health Care
Golden Gate Capital LP / Bob Evans	15,100	Restaurants
Honda Motor Company	15,000	Motor Vehicles
Nationwide Mutual Insurance Co.	14,750	Finance, Insurance
ProMedica Health System	14,450	Health Care
General Electric Company	14,100	Aerospace/Electrical Equipment
Premier Health Partners	13,850	Health Care
United Parcel Service, Inc.	13,700	Transportation Air Delivery
Home Depot, Inc.	12,200	Retail Home Improvement
Kettering Health Network	12,000	Health Care
TriHealth, Inc.	12,000	Health Care
Berkshire Hathaway, Inc.	11,900	Manufacturer, Financial Services
Lowe’s Companies, Inc.	11,800	Retail Home Improvement
Meijer, Inc.	11,700	Retail General Merchandiser
UC Health	11,250	Health Care
Procter & Gamble Company	11,000	Soaps and Consumer Goods
Progressive Corporation	11,000	Finance, Insurance

Boldface indicates headquartered in Ohio. Source: Development Services Agency, Office of Research, May 2018.

POPULATION

Ohio's 2010 decennial census population of 11,536,504 indicated a 1.6% population growth over 2000 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

* July 2017 Census population estimate is 11,658,609.

Source: U.S. Census Bureau Web Site, Population Estimates.

Population of Ohio Metropolitan Areas(a)

	1970	1980	1990	2000	2010
Cleveland.....	2,063,729	1,898,825	2,202,069(b)	2,250,871(b)	2,077,240(b)
Cincinnati	1,106,821	1,100,983	1,526,092(c)	1,646,395(c)	2,130,151(d)
Columbus.....	1,017,847	1,093,316	1,345,450(e)	1,540,157(e)	1,836,536(e)
Dayton	852,531	830,070	951,270(f)	950,558(f)	979,835(f)
Akron.....	679,239	660,328	657,575	694,960	703,200
Toledo.....	643,443	656,940	614,128	618,203	651,429
Youngstown-Warren.....	537,124	531,350	600,895(g)	594,746(g)	565,773(g)
Canton.....	393,789	404,421	394,106	406,934	404,422
Lorain-Elyria	256,843	274,909	(b)	(b)	(b)
Hamilton-Middletown	226,207	258,787	291,479	332,807	(d)
Lima.....	210,074	218,244	154,340	155,084	106,331
Mansfield.....	129,997	131,205	174,007(g)	175,818(g)	124,475
Steubenville	96,193	91,564	142,523(h)	132,008(h)	124,454(h)

(a) SMSAs in 1970 & 1980, MSAs in 1990 and 2000 (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.

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

AGRICULTURAL AND RESOURCES BASES

With 14.0 million acres (of a total land area of 26.4 million acres) in farmland and an estimated 74,500 individual farms, agriculture combined with related agricultural sectors is an important segment of Ohio's economy. Ohio's 2017 crop production value of \$5.3 billion ranked thirteenth among states and represented 2.6% of the U.S. total value. Ohio's 2017 livestock production value of \$3.4 billion ranked nineteenth among states and represented 1.9% of the U.S. total value. Ohio accounts for 3.8% of total U.S. cash receipts for corn and 6.0% for soybeans. In 2017, Ohio's agricultural sector output (consisting of crops, livestock, poultry and dairy, and services and forestry, and all farm-related income) totaled \$9.9 billion and represented 2.4% of the U.S. total value. Ohio purchased inputs (feed, seed, chemicals, fertilizer, livestock, utilities, labor, and machinery) totaled \$5.8 billion. The net farm income on Ohio farms in 2017 was \$1.2 billion.

The availability of natural resources, such as water and energy, is of vital nationwide concern. Ohio has large quantities of these important natural resources. With Lake Erie and the Ohio River on the State's borders, and many lakes and streams throughout the State, water is readily available for all uses. Additionally, Ohio has sizable coal resources ranking seventh among the states in coal reserves and fourteenth in coal production in 2016.

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 51,695 at the end of Fiscal Year 2018 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 current collective bargaining agreement with the Ohio Civil Service Employees Association (OCSEA), the largest State employee union representing approximately 28,000 employees, became effective May 12, 2018 and runs through February 28, 2021. The collective bargaining agreement with the Service Employees International Union District 1199 (the second largest State employee union representing approximately 4,200 employees) expired on April 30, 2018 and the State is maintaining the same terms and conditions until a new three-year agreement has been negotiated. The collective bargaining agreement with the Ohio Education Association (representing approximately 660 State employees) expired on May 31, 2018 and has been extended under the same terms and conditions until December 31, 2018 while a new three-year agreement is being negotiated. The collective bargaining agreements with the Fraternal Order of Police of Ohio and the Ohio State Troopers Association (the remaining two unions representing a combined approximate 2,000 State employees) expired on June 30, 2018 and have also been extended under the same terms and conditions until December 31, 2018 while new three-year agreements are being negotiated.

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 website in that system's Comprehensive Annual Financial Report (CAFR).

The five retirement systems began reporting pensions in accordance with GASB Statement No. 67, Financial Reporting for Pension Plans, in Fiscal Year 2014, and the State began reporting pensions in accordance with GASB Statement No. 68, Accounting and Financial Reporting for Pensions, in Fiscal Year 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 Fiscal Year 2017. The five retirement systems and the State are also preparing to implement GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions in Fiscal Year 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% 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. With the exception of employees contributions for HPRS and 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 eighteen years for PERS and STRS, twenty-seven years for SERS and HPRS, and twenty-eight 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% to 0.5% the amount of employer contributions directed to health care and redirecting the 2.35% difference to pensions, and the STRS board increased (effective July 1, 2014) contributions to its pension fund by redirecting to pensions the 1.0% 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% to 0.0% the amount of employer contributions directed to its health care fund.

After extensive review, the General Assembly in September 2012 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 or at not more than thirty years. The reform act for PERS made changes including, among others, 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% to a maximum of 14% in July 2016) and OP&F (from 10% to a maximum of 12.25% in July 2015). The HPRS board was authorized to increase employee contributions up to a maximum of 14% from 10% beginning in July 2013, and it has implemented this authorization by increasing the employee contribution rate to 11.5% for 2014 and to 12.5% for 2015 and thereafter. With the exception of 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% to 0.0% beginning July 1, 2017) and reduced by the HPRS board (phased down from 3.0% to 1.25% beginning January 1, 2015). As reflected above, these reform acts did not change the requirement that each system establish a period of not more than thirty years to amortize its pension UAAL and prepare and submit to the ORSC and the Ohio General Assembly a plan to reduce that amortization period if it exceeds thirty years.

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Retirement Contributions

The State makes its employer contributions based on a percent of salary for each State employee that is an active member of a state retirement system. Currently, just over 95% of State employees are members of PERS, about 3.3% are in HPRS and about 1.3% are in STRS. The following table summarizes State employer and employee contributions to those retirement systems with State employee members (\$ in millions):

State Fiscal Year	<u>PERS</u>		<u>STRS</u>		<u>HPRS</u>		<u>Total</u>
	Employer/Employee Amount	Pct. of Salary(a)	Employer/Employee Amount	Pct. of Salary	Employer/Employee Amount	Pct. of Salary	Employer/Employee Contributions
2013(b)	\$385.8/\$269.1	14.0%/10.0%	\$6.2/\$4.4	14.0%/10.0%	\$26.1/\$9.8	26.5%/10.0%	\$418.0/\$283.3
2014	384.9/268.8	14.0/10.0	5.9/4.6	14.0/11.0	26.5/10.7	26.5/11.5	417.3/284.1
2015	383.7/266.8	14.0/10.0	5.8/4.9	14.0/12.0	26.7/12.0	26.5/12.5	416.2/283.7
2016	395.9/278.4	14.0/10.0	5.7/4.8	14.0/13.0	27.2/12.8	26.5/12.5	428.9/296.0
2017	411.5/289.5	14.0/10.0	5.9/5.4	14.0/14.0	31.1/14.6	26.5/12.5	448.5/309.5
2018	421.5/296.7	14.0/10.0	5.9/5.5	14.0/14.0	30.1/14.6	26.5/12.5	458.3/316.8

(a) Reflects PERS state and local contribution rates only. PERS law enforcement employer/employee contribution rate was 18.1%/12.1% in Fiscal Year 2012, increasing in increment to 18.1%/13.0% in Fiscal Year 2014, and public safety was 18.1%/11.5% in Fiscal Year 2012, increasing to 18.1%/12.0% in Fiscal Year 2013.

(b) Flat contributions for Fiscal Years 2014 and 2015 due to modest reductions in the State workforce and the absence of employee wage increases over this period. Higher contributions for Fiscal Years 2016, 2017 and 2018 largely due to the resumption of employee wage increases over this period.

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 \$40.9 million in the 2014-15 biennium, \$40.8 million in the 2016-17 biennium, and are appropriated at \$40.7 million in the 2018-19 biennium. All State employer contributions are subject to appropriation in each State budget and are included in the appropriations for each department or agency's personnel costs.

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Pension Benefits

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

Valuation as of:	<u>PERS</u> 12/31/17	<u>STRS</u> 07/01/18	<u>SERS(a)</u> 06/30/17	<u>OP&F(b)</u> 01/01/17	<u>HPRS</u> 12/31/17
Active Members.....	331,266	170,327	157,981	27,990	1,650
Retirees and Beneficiaries	216,978	157,422	79,157	28,913	1,637
Employer/Employee Contributions (% of Salary) (c)...	14.0/10.0(d)	14.0/14.0	14.0/10.0	(e)	26.5/12.5
Active Member Payroll	\$14,058.0	\$11,923.7	\$3,302.8	\$2,180.9	\$112.7
Market Value of Assets (MVA) (f).....	\$87,104.9	\$74,916.3	\$13,613.6	\$13,682.4	\$786.4
Actuarial Value of Assets (AVA) (g).....	\$83,292.2	\$73,115.4	\$13,560.0	\$14,162.5	\$774.7
Actuarial Accrued Liability (AAL) (h).....	\$102,656.1	\$96,904.1	\$19,186.6	\$20,290.4	\$1,153.6
Funding Ratio (AVA to AAL %, (MVA to AAL %)) ..	81.1 (84.9)	75.5 (77.3)	70.7 (71.0)	69.8 (67.4)	67.2 (68.2)
Unfunded Actuarial Accrued Liability (UAAL).....	\$19,363.9	\$23,788.7	5,626.6	\$6,127.9	\$378.9
UAAL to Active Member Payroll %	137.7	199.5	170.4	281.0	336.2
UAAL Funding Period (years) (i).....	18	18	27	28	27

(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% and 10.0%. For STRS and HPRS, the maximum employer and employee contributions rates are 14.0/14.0% and 26.5/14.0%, 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%, local is 14.0/10.0%, law enforcement is 18.1/13.0%, and public safety is 18.1/12.0%. PERS state and local employer and employee contribution rates increased to their current statutory maximum of 14.0% and 10.0%, respectively, in calendar year 2008.

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

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

(g) Recognizes assumed long-term investment returns fully each year (7.45% for STRS, 7.5% for PERS and SERS, 7.75% for HPRS, and 8.0% 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' CAFRs and annual actuarial valuations.

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The following table summarizes financial and funding information for each of the retirement systems for the five years previous to the current year information provided above as reported by the particular system (\$ in millions):

Retirement System Valuation Year-End	Actuarial Value of Assets (AVA)(a)	Actuarial Accrued Liability (AAL)(b)	Unfunded Actuarial Accrued Liability (UAAL)(c)	Funding Ratio (AVA to AAL)	Market Value of Assets (MVA)(d)	Funding Ratio (MVA to AAL)	Active Member Payroll	UAAL Percent of Active Member Payroll
<u>PERS</u>								
12/31/16	\$80,279.7	\$100,167.1	\$19,887.4	80.1%	\$77,514.2	77.4%	\$13,717.6	145.0%
12/31/15	\$78,061.0	\$97,177.0	\$19,116.0	80.3%	\$74,560.1	76.7%	\$13,177.0	145.1%
12/31/14	\$74,865.0	\$89,285.0	\$14,420.0	83.8%	\$77,263.2	86.5%	\$12,932.5	111.5%
12/31/13	\$71,411.2	\$86,644.6	\$15,233.4	82.4%	\$74,866.6	86.4%	\$12,331.0	123.5%
12/31/12	\$67,854.8	\$83,878.1	\$16,023.3	80.9%	\$67,854.9	80.9%	\$12,194.0	131.4%
<u>STRS</u>								
07/01/17	\$72,216.2	\$96,126.4	\$23,910.2	75.1%	\$72,371.2	75.3%	\$11,557.1	206.9%
07/01/16	\$70,114.6	\$100,756.4	\$30,641.8	69.6%	\$67,283.4	66.8%	\$11,099.6	276.1%
07/01/15	\$68,656.0	\$99,014.7	\$30,358.7	69.3%	\$71,377.6	72.1%	\$10,948.6	277.3%
07/01/14	\$66,657.2	\$96,167.1	\$29,509.9	69.3%	\$71,843.6	74.7%	\$10,725.3	275.1%
07/01/13	\$62,590.8	\$94,366.7	\$31,775.9	66.3%	\$65,392.5	69.3%	\$10,765.6	295.2%
<u>SERS(e)</u>								
06/30/16	\$13,037.0	\$19,368.6	\$6,331.6	67.3%	\$12,451.6	64.3%	\$2,932.2	215.9%
06/30/15	\$12,467.0	\$18,122.0	\$5,655.0	68.8%	\$12,797.2	70.6%	\$2,845.4	198.7%
06/30/14	\$11,903.0	\$17,492.0	\$5,589.0	68.0%	\$12,820.9	73.3%	\$2,759.3	202.6%
06/30/13	\$11,007.0	\$16,860.0	\$5,853.0	65.3%	\$11,300.5	67.0%	\$2,746.8	213.1%
06/30/12	\$10,284.0	\$16,372.0	\$6,088.0	62.8%	\$10,331.7	63.1%	\$2,788.2	218.3%
<u>OP&F(f)</u>								
01/01/16	\$13,653.0	\$19,135.9	\$5,482.9	71.3%	\$12,923.9	67.5%	\$2,060.9	266.1%
01/01/15	\$13,029.3	\$18,395.6	\$5,366.3	70.8%	\$13,453.4	73.1%	\$1,986.6	270.1%
01/01/14	\$11,063.2	\$16,577.8	\$5,514.6	66.7%	\$11,920.5	71.9%	\$1,942.3	283.9%
01/01/13	\$10,278.0	\$16,007.9	\$5,729.9	64.2%	\$10,602.8	66.2%	\$1,913.4	299.5%
01/01/12	\$10,309.0	\$16,346.7	\$6,037.7	63.1%	\$9,688.4	59.3%	\$1,897.4	318.2%
<u>HPRS</u>								
12/31/16	\$763.7	\$1,127.9	\$364.3	67.7%	\$721.7	64.0%	\$108.8	334.8%
12/31/15	\$739.8	\$1,079.0	\$339.1	68.6%	\$704.2	65.3%	\$100.0	339.2%
12/31/14	\$712.3	\$1,012.8	\$300.5	70.3%	\$740.7	73.1%	\$99.2	302.9%
12/31/13	\$690.6	\$989.1	\$298.5	69.8%	\$729.0	73.7%	\$98.5	303.0%
12/31/12	\$658.4	\$966.3	\$307.9	68.1%	\$642.6	66.5%	\$98.1	313.8%

- (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, except for OP&F in 2012 which phases-in over a five-year period.
- (b) Reflects an individual entry age actuarial cost method.
- (c) UAAL is calculated based on a closed period as a level percent of payroll, except for STRS in 2013-2014 and OP&F in 2012-2014 for which UAAL is calculated based on an open period of time and the portion of PERS members who participate in the member directed plan which uses a level dollar of payroll.
- (d) Defined contribution plan assets are excluded for PERS and included for STRS.
- (e) 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.
- (f) Effective with the January 1, 2015 valuation, OP&F deferred retirement option plan balances are included in AVA, AAL, and MVA.
- Sources: Retirement systems' CAFRs and annual actuarial valuations.

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

	<u>PERS(a)</u>	<u>STRS</u>	<u>SERS</u>	<u>OP&F</u>	<u>HPRS</u>
Valuation as of:	<u>12/31/17</u>	<u>07/01/18</u>	<u>06/30/17</u>	<u>12/31/17</u>	<u>12/31/17</u>
Total Pension Liability (b).....	\$102,653.3	\$96,904.1	\$19,588.4	\$21,101.1(d)	\$1,178.5(e)
Fiduciary Net Position (c).....	\$87,104.9	\$74,916.3	\$13,613.6	\$14,963.6	\$786.4
Net Pension Liability (NPL).....	\$15,548.4	\$21,987.8	\$5,974.8	\$6,137.5	\$392.2
Fiduciary Net Position as a Percentage of					
Total Pension Liability.....	84.9%	77.3%	69.5%	70.9%	66.7%
NPL Calculated With 1% Decrease in Discount Rate.....	\$27,781.8	\$32,110.2	\$8,291.4	\$8,508.1	\$523.8
NPL Calculated With 1% Increase in Discount Rate.....	\$5,357.8	\$13,420.5	\$4,034.1	\$4,204.0	\$282.4

(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 7.45% for STRS, 7.5% for PERS and SERS, 7.75% for HPRS, and 8.00% 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) Based on the market value of assets.

(d) Total pension liability was determined by an actuarial valuation as of 01/01/17, and updated with roll-forward procedures to 12/31/17.

(e) Total pension liability was determined by an actuarial valuation as of 12/31/16, and updated with roll-forward procedures to 12/31/17.

Sources: Retirement systems' CAFRs and annual actuarial valuations.

GASB Statement No. 68 replaced prior accounting standards for state and local governments reporting of pension plan information beginning in Fiscal Year 2015. This new accounting standard requires employers and non-employer contributing entities to report a proportionate share of their NPL in their financial statements. Employers determine their proportionate share of NPL 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 and the sensitivity of the NPL to changes in the single discount rate for PERS, STRS and HPRS for the most recent year are as follows (\$ in millions):

	<u>PERS(a)</u>	<u>STRS</u>	<u>HPRS</u>
Valuation as of:	<u>12/31/16</u>	<u>07/01/16</u>	<u>12/31/17</u>
Total Pension Liability (b).....	\$100,166.4	\$100,756.4	\$1,178.5(d)
Fiduciary Net Position (c).....	\$77,514.2	\$67,283.4	\$786.4
Net Pension Liability (NPL).....	\$22,652.2	\$33,473.0	\$392.2
State Proportionate Share of			
Net Pension Liability (PSL).....	\$4,726.0	\$126.9	\$392.2
PSL as a Percentage of NPL	21.0%	0.4%	100.0%
PSL Calculated With 1% Decrease in Discount Rate	\$7,237.0	\$168.7	\$523.8
PSL Calculated With 1% Increase in Discount Rate	\$2,633.1	\$91.7	\$282.4

(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 7.5% for PERS and 7.75% for STRS and HPRS.

(c) Based on the market value of assets.

(d) Total pension liability was determined by an actuarial valuation as of 12/31/16, and updated with roll-forward procedures to 12/31/17.

Sources: State of Ohio Fiscal Year 2017 CAFR, Retirement systems' CAFRs and annual actuarial valuations.

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Other Post-Employment Benefits

Each of the State's public retirement systems also offers 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 as reflected in the most recent valuation shown below. For Fiscal Years 2016 and prior, financial reporting of their health care plans is in compliance with GASB Statement 43 -- Financial Reporting for Post-Employment Benefit Plans Other than Pension Plans.

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

Valuation as of:	<u>PERS</u> 12/31/16	<u>STRS</u> 06/30/18	<u>SERS</u> 06/30/17	<u>OP&F</u> 01/01/17	<u>HPRS</u> 12/31/17
Value of Assets (a).....	\$12,098.2	\$3,721.3	\$382.1	\$901.7	\$110.1
Actuarial Accrued Liability (AAL) (b).....	\$19,924.4	\$2,114.5	\$2,396.5	\$5,487.8	\$248.1
Unfunded Actuarial Accrued Liability (UAAL) (c).....	\$7,826.2	(\$1,606.9)	\$2,014.4	\$4,586.2	\$138.0
Funding Ratio (Assets to AAL %)	60.7%	176.0%	15.9%	16.4%	44.4%
Employer Contribution (% of Salary) (d)	2.0%	0.0%	0.0%(e)	0.50%	4.0%

- (a) For PERS and HPRS, investment returns are recognized fully each year with the differences between actual and assumed investment returns (assumed at 5% for PERS and 7.75% for HPRS), 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. For PERS, includes assets for member-directed plan participants.
- (b) Reflects an individual entry age normal actuarial cost method.
- (c) UAAL is calculated based on an open period as a level percent of payroll.
- (d) 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.
- (e) 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 actuarial valuations.

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The following table presents a summary of assets and actuarial accrued liabilities for post-employment healthcare benefits for the four years previous to the current year information provided above for each of the State's public retirement systems (\$ in millions):

Retirement System Valuation Year-End	Value of Assets(a)	Actuarial Accrued Liability (AAL)(b)	Unfunded Actuarial Accrued Liability(c)	Funding Ratio (Assets to AAL)	Employer Contribution (% of Salary)(d)(e)
<u>PERS</u>					
12/31/15*	\$11,933.1	\$19,224.0	\$7,291.0	62.1%	2.0%
12/31/15	\$11,933.1	\$18,514.6	\$6,581.5	64.5%	2.0%
12/31/14	\$12,062.4	\$19,404.9	\$7,342.5	62.2%	2.0%
12/31/13	\$12,031.4	\$19,784.1	\$7,752.7	60.8%	1.0%
12/31/12	\$12,193.3	\$19,182.3	\$6,989.0	63.6%	4.0%
<u>STRS</u>					
01/01/18	\$3,691.4	\$2,416.0	(\$1,275.4)	152.8%	0.0%
01/01/17	\$3,222.1	\$5,886.2	\$2,664.1	54.7%	0.0%
01/01/16	\$3,258.2	\$5,154.2	\$1,896.0	63.2%	0.0%
01/01/15	\$3,454.4	\$4,676.2	\$1,221.9	73.9%	0.0%
<u>SERS</u>					
06/30/16	\$370.2	\$2,407.3	\$2,037.1	15.4%	0.0%
06/30/15	\$408.4	\$2,424.5	\$2,016.2	16.8%	0.82%
06/30/14	\$413.9	\$2,475.6	\$2,061.8	16.7%	0.14%
06/30/13	\$379.2	\$2,918.3	\$2,539.1	13.0%	0.16%
<u>OP&F</u>					
01/01/16	\$929.4	\$5,166.6	\$4,237.2	18.0%	0.50%
01/01/15	\$1,031.9	\$5,399.6	\$4,367.6	19.1%	0.50%
01/01/14	\$1,053.5	\$5,244.6	\$4,191.0	20.1%	0.50%
01/01/13	\$935.6	\$4,234.8	\$3,299.2	22.1%	3.62%
<u>HPRS</u>					
12/31/16	\$108.3	\$403.7	\$295.4	26.8%	4.00%
12/31/15	\$106.6	\$412.4	\$305.8	25.8%	4.00%
12/31/14	\$103.8	\$376.7	\$272.9	27.6%	4.30%
12/31/13	\$102.1	\$438.6	\$336.5	23.3%	3.65%

- (a) For PERS & HPRS, recognizes investment returns fully each year (assumed at 5%) 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) UAAL is calculated based on an open period as a level percent of payroll.
- (d) Each system's board annually determines the portion of the employer contribution, if any, that is directed to fund post-employment health care benefits.
- (e) 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.

*Reflects revised actuarial assumptions based on completion of a five-year experience study.

Sources: Retirement systems' annual actuarial valuations.

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

Valuation as of:	<u>PERS</u> 12/31/17	<u>STRS</u> 06/30/17	<u>SERS</u> 06/30/17	<u>OP&F</u> 12/31/17	<u>HPRS</u> 12/31/17
Total OPEB Liability (a).....	\$23,678.1(c)	\$7,377.4(d)	\$3,065.8	\$6,597.9(e)	\$566.1(c)
Fiduciary Net Position (b).....	\$12,818.8	\$3,475.8	\$382.1	\$932.1	\$111.8
Net OPEB Liability (NOL).....	\$10,859.3	\$3,901.6	\$2,683.7	\$5,665.9	\$454.3
Fiduciary Net Position as a Percentage of					
Total OPEB Liability.....	54.1%	47.1%	12.5%	14.1%	19.7%
NOL Calculated With 1% Decrease in Discount Rate....	\$14,427.4	\$5,237.9	\$3,241.0	\$7,082.4	\$573.8
NOL Calculated With 1% Increase in Discount Rate.....	\$7,972.7	\$2,845.6	\$2,242.3	\$4,575.9	\$362.4
NOL Calculated With 1% Decrease in Trend Rates.....	\$10,390.2	\$2,710.7	\$2,177.7	\$4,401.3	n/a
NOL Calculated With 1% Increase in Trend Rates.....	\$11,344.4	\$5,469.1	\$3,353.6	\$7,370.0	n/a

(a) For PERS, STRS, SERS and HPRS, the fiduciary net position was not projected to be available to make all projected future benefit payments and, therefore, blended discount rates of 3.85%, 4.13%, 3.63% and 3.42%, 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 OP&F, the fiduciary net position was projected to be available to make all projected future benefit payments until 2025 and, therefore, a single discount rate of 3.24%, representing a tax-exempt, high quality municipal bond rate, was used. After 2025, benefit payments will be funded on a pay-as-you go basis. For all retirement systems, reflects an individual entry age normal actuarial cost method as a level percent of payroll.

(b) Based on the market value of assets.

(c) Total OPEB liability was determined by an actuarial valuation as of 12/31/16, and updated with roll-forward procedures to 12/31/17.

(d) Total OPEB liability was determined by an actuarial valuation as of 01/01/17, and updated with roll-forward procedures to 6/30/17.

(e) Total OPEB liability was determined by an actuarial valuation as of 01/01/17, and updated with roll-forward procedures to 12/31/17.

Sources: Retirement systems' CAFRs.

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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 35th in state taxes per capita in 2017. Three major tax bases in the State, 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 counties and transit authorities), and real and 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 “gasoline” tax was last raised by two-cents per gallon effective July 1, 2005 to 28 cents per gallon (one cent of this tax is specifically directed to local highway-related infrastructure projects).

Sales and Use Tax

The State sales and use tax rate was increased one-quarter percent from 5.5% to 5.75% beginning September 1, 2013 (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2014-15**). Prior to this increase, the rate had been 5.5% since July 1, 2005. The sales and use tax is 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% to 1.5% in quarter-percent increments and beginning in Fiscal Year 2019 in one-tenth percent increments. The highest potential aggregate of State and permissive local sales taxes is 8.75% and the highest currently levied in any county is 8%. The State collects the combined state and local tax and returns the local share directly to the counties and transit authorities.

Personal Income Tax

Under recent legislation, State personal income tax rates, applying generally to federal adjusted gross income minus (or plus) adjustments and personal exemptions, were reduced by 8.5% in calendar year 2013, 1.5% in calendar year 2014, and 6.3% in calendar year 2015 (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2014-15** and **2016-17**). Recent legislation also established a deduction for pass-through entities and sole proprietorships annual business net income of 75% in tax years 2014 and 2015, and 100% in tax year 2016 and beyond, up to \$250,000 per taxpayer (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2014-15** and **2016-17**). Previously, personal income tax rates were reduced 4.2% annually in each of the years 2005 through 2008 and, after the postponement discussed under **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2010-11** resulted in an aggregate 21% decrease through 2011 from the 2004 rates.

The 2017 personal income tax rates (adjusted for inflation) ranged from \$77.96 plus 1.98% on incomes more than \$10,650 but less than \$16,000, with increasing bracketed base rates and percentages up to a maximum on incomes over \$213,350 of \$8,178 plus 4.997% on the amount over \$213,350.

The Constitution requires 50% of State income tax receipts to be returned to the political subdivisions or school districts in which those receipts originate. There is no present constitutional limit on income tax rates.

Municipalities and school districts, and joint economic development districts and zones, may also levy certain income taxes. Any municipal rate (applying generally to wages and salaries and business net income) over 1%, and any school district income tax (applying generally 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 2017 was 3%. A school district income tax is currently approved in 184 districts. Each joint economic development district or zone may also levy an income tax (which like municipal income taxes applies generally 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)

		<u>U.S.</u>	<u>Ohio</u>	<u>Ohio Percent of U.S.</u>	<u>State Rank*</u>
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
	per capita.....	19,591	18,669	95.3	21
2000	Total.....	8,650.3	326.0	3.8	8
	per capita.....	30,657	28,684	93.6	26
2010	Total.....	12,542.0	423.1	3.4	8
	per capita.....	40,545	36,663	90.4	32
2014	Total.....	14,983.1	496.5	3.3	8
	per capita.....	47,025	42,826	91.1	29
2015	Total.....	15,711.6	515.9	3.3	8
	per capita.....	48,940	44,451	90.8	29
2016	Total.....	16,115.6	525.1	3.3	8
	per capita.....	49,831	45,176	90.7	29
2017	Total.....	16,820.3	544.8	3.2	8
	per capita.....	51,640	46,732	90.5	29

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

* Excludes District of Columbia.

In addition to personal income, the retail sales base is an important indicator of sales and use tax receipts.

Retail Sales (\$ in Billions)

<u>Fiscal Year</u>	<u>Ohio Retail Sales</u>	<u>U.S. Retail Sales</u>	<u>Ohio Percent of U.S.</u>
1980	\$39.01	\$979.25	4.0%
1990	66.95	1,914.04	3.5
2000	117.72	3,213.82	3.6
2010	134.14	4,170.51	3.2
2015	165.27	5,282.72	3.1
2016	166.56	5,421.57	3.1
2017	171.61	5,628.41	3.0

Source: Calculated by Global Insight based on data from the U.S. Department of Commerce, Bureau of the Census.

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 Fiscal Years 2006 through 2010 until levied at the current rate of 0.26%. Beginning calendar year 2014, the State established a variable minimum tax on the CAT for businesses with taxable gross receipts greater than \$1 million (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2014-15**). The State phased-out over the same general period 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 (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia – 2012-13 and 2014-15**). On December 7, 2012, the Ohio Supreme Court 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 approximately \$100 million annually – could not in the future be applied to non-highway purposes. Under provisions enacted in the biennial appropriations Act for the 2014-15 biennium, the State phased-out the CAT on the sale of motor vehicle fuel and replaced it with a “motor fuel receipts tax” (MFRT), computed on the basis of gross motor fuel receipts received by in-State suppliers. In accordance with the Ohio Supreme Court’s ruling, MFRT receipts are required to be used for highway purposes.

As described further 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 Fiscal Year 2012, the State has 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 – 2014-15 and 2016-17, and Current Biennium**).

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 2017 show that these property taxes represent 3.29% of Ohio personal income.

		<u>Assessed Value (a)</u>	<u>Percent of True Value (b)</u>	<u>Taxes Charged</u>
1980	Real(c).....	\$56,457,842,607	27.1%	\$2,343,384,488(e)
	Tangible(d).....	15,649,200,844	39.2	765,047,826
	Public Utility(c).....	8,670,052,613	83.3	411,321,235
1990	Real.....	93,857,482,000	35.0	4,593,147,000(e)
	Tangible(d).....	18,473,055,000	28.0	1,149,643,000
	Public Utility(c)(f).....	12,934,191,000	88.6	799,396,000
2000	Real.....	167,857,657,350	35.0	8,697,809,112(e)
	Tangible(d).....	23,298,302,564	25.0	1,720,740,378
	Public Utility(c)(f).....	13,635,709,860	67.0	967,674,709
2010	Real.....	238,264,394,249	35.0	14,486,087,962(e)
	Tangible(d).....	320,961,400	5.0(b)	18,432,832
	Public Utility(c)(f).....	10,096,712,600(g)	52.9	747,237,219
2014	Real.....	230,378,310,115	35.0	15,465,341,626(e)
	Tangible(d).....	-0-	-0-(b)	-0-
	Public Utility(c)(f).....	12,880,528,010 (g)	55.3	1,045,187,750
2015	Real.....	234,225,079,130	35.0	15,676,144,409(e)
	Tangible(d).....	-0-	-0-(b)	-0-
	Public Utility(c)(f).....	14,111,055,940 (g)	52.9	1,120,681,300
2016	Real.....	238,100,197,518	35.0	16,170,309,495(e)
	Tangible(d).....	-0-	-0-(b)	-0-
	Public Utility(c)(f).....	15,962,565,444 (g)	56.8	1,271,855,503
2017	Real.....	247,070,913,220	35.0	16,591,449,814(e)
	Tangible(d).....	-0-	-0-(b)	-0-
	Public Utility(c)(f).....	16,700,657,510 (g)(h)	58.7	1,347,897,157

- (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% 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% rollback (12.5% 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% rollback was eliminated for real property used in business, with exceptions for certain property used in farming or for housing. The 12.5% rollback for owner-occupied residences was eliminated for new voter-approved tax levies (see **FISCAL MATTERS – Recent and Current Finances – Current Biennium**).
 - (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% to 25%.
 - (h) The statutory assessment rate for waterworks utilities is 88%, except for certain property first subject to taxation in 2017 is 25%.
- Source: Ohio Department of Taxation.

Under State legislation 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 generally eliminated beginning in tax year 2009. That 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 were and are generally based on the taxable value of tangible personal property as reported in 2004 and property tax levies in effect for 2005. In Fiscal Year 2012, the State began phasing-out those TPPT replacement payments to schools and local governments with replacement payments to schools reduced by two percent of each district’s total resources in each of Fiscal Years 2012 and 2013 for a total reduction of four percent; and 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 Fiscal Years 2014 and 2015. The phasing out of these replacement payments resumed beginning in Fiscal Year 2016, with payments to school districts to be reduced in Fiscal Years 2016 and 2017 by between 1% and 2% of each district's total resources with the variance based on district wealth levels, with guarantees in both Fiscal Year 2016 and Fiscal Year 2017 that no district will fall below 100% and 96%, respectively, of its Fiscal Year 2015 total funding level. Fiscal Year 2016 and thereafter replacement payments to other local governments are reduced annually by two percent of their total resources (see **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2016-17**).

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 (see **FISCAL MATTERS – Recent and Current Finances - Recent Biennia – 2014-15**). The total cost of the homestead exemption program in Fiscal Year 2016 was \$454.1 million, in Fiscal Year 2017 was \$446.3 million, and in Fiscal Year 2018 was \$434.7 million.

Property tax relief payments by the State to local subdivisions totaled \$3.59 billion for the 2014-15 biennium, \$3.58 billion for the 2016-17 biennium, and are appropriated at \$3.67 billion for the 2018-19 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 Ohio Supreme Court, in a 4-3 decision on a motion to reconsider its own decision rendered in September 2001, concluded (as it had in its 1997 and 2000 opinions in that litigation) that the State did not comply with that requirement, even after again noting and crediting significant State steps in preceding years.

In its prior decisions, the Ohio Supreme Court 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 particular respect to funding sources, the Court concluded in 1997 and 2000 decisions that property taxes no longer may 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."

Under the financial structure in place before the 2009-10 biennium, Ohio's 613 public school districts and 49 joint vocational school districts received a major portion (but less than 50%) 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 take into account 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 appropriations cutbacks 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 the 2009-10 biennium 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.

To broaden the potential local tax revenue base, local school districts also may submit for voter approval income taxes on the district income of individuals and estates. Many districts have submitted the question, and income taxes are currently approved in 184 districts.

Biennial school funding State appropriations from the GRF and Lottery Profits Education Fund (but excluding federal and other special revenue funds) for recent biennia were:

- 2008-09 - \$17.2 billion (a 5.1% increase over the previous biennium before the expenditure reductions discussed under **Fiscal Matters – Recent and Current Finances - Recent Biennia - 2008-09**).
- 2010-11 - \$17.0 billion (a 1.6% decrease over the previous biennium. These amounts are exclusive of the \$1.463 billion of appropriations to school districts for the 2010-11 biennium from “Federal Stimulus” funding received under the American Recovery and Reinvestment Act of 2009).
- 2012-13 - \$16.6 billion (a 2.3% decrease over the previous biennium).
- 2014-15 - \$18.3 billion (a 10.5% increase over the previous biennium).
- 2016-17 - \$20.0 billion (a 9.3% increase over the previous biennium).

State appropriations for school funding for the 2018-19 biennium are \$20.7 billion (a 3.5% increase from those appropriations in the previous biennium), representing an increase of 0.7% in Fiscal Year 2018 over Fiscal Year 2017 and an increase of 1.4% in Fiscal Year 2019 over Fiscal Year 2018.

The amount of lottery profits transferred to the Lottery Profits Education Fund (LPEF) totaled \$1.07 billion in Fiscal Year 2016, \$1.04 billion in Fiscal Year 2017, \$1.17 billion in Fiscal Year 2018 and is currently estimated to be \$1.09 billion in Fiscal Year 2019. 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 2010-11 biennial appropriations Act also authorized the implementation of video lottery terminals (VLTs) at Ohio seven horse racing tracks. See **FISCAL MATTERS - Recent and Current Finances – Recent Biennia - 2010-11** for discussion of litigation concluded in the Ohio Supreme Court declaring that the authorization of those VLTs is subject to voter referendum and subsequent withdrawal of that referendum by the committee for the petitioners, and for another case attempting to challenge the VLT authorization in the 2010-11 biennial appropriations Act.

The 2014-15 biennial appropriations Act enacted a new funding formula for the distribution of State funding to local school districts based on a per pupil amount. This per pupil formula is similar to the “Building Blocks” school funding formula in place through Fiscal Year 2009 until its replacement with the “Evidence Based Model” for the 2010-11 biennium. The Evidence Based Model was repealed in July 2011 and a temporary formula was put in place for the 2012-13 biennium that allocated funding to each school district based on the per pupil funding it received for Fiscal Year 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 2016-17 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, the State Department of Education will compute and pay to each school district education aid based on a per pupil funding amount of \$5,900 in Fiscal Year 2016 and \$6,000 in Fiscal Year 2017, multiplied by each school district's “state share index,” which uses a three-year average of adjusted property valuation per pupil and the median income of that school district to calculate the percentage of the per-pupil amount that is to be paid by the

State and the amount assumed to be contributed by the school district through local sources. The 2016-17 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 be used to help school districts comply with Ohio's 3rd grade reading guarantee. The Act continued funding for the "Straight A Fund" to provide school districts with grants to develop and implement creative and innovative instructional models to inspire learning and student growth.

The current 2018-19 biennial appropriations Act maintains all components of the 2016-17 funding formula with certain minor modifications. School district's education aid continues to be paid based on a per pupil funding amount (increasing to \$6,010 in Fiscal Year 2018 and \$6,020 in Fiscal Year 2019) multiplied by each school district's state share index. The 2018-19 appropriations Act reduces the minimum share of transportation funding to better target school districts with lower capacity to raise revenue locally and increases 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 take into account changes in student population. Funding also continues for other education initiatives including Early Childhood Education, EdChoice Expansion Scholarships, and the Community Connectors grant program.

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>.

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. Five cities have populations of more than 100,000 and 16 cities exceed 50,000 in population.

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, is to monitor the fiscal affairs of a municipality facing substantial financial problems. That 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).

As noted in the discussion above under **FISCAL MATTERS – Recent and Current Finances – Recent Biennia - 2008-09 and 2012-13**, the amount 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 counties (88 in the State) 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

Book-Entry System; DTC

Book-Entry System

The information set forth in the following numbered paragraphs is based on information provided by The Depository Trust Company in its "Sample Offering Document Language Describing DTC and Book-Entry-Only Issuance" (August 2011). As such, the Secretary of State and DAS believe it to be reliable, but the Secretary of State and DAS take no responsibility for the accuracy or completeness of that information. It has been adapted to the Series 2018 Certificate issue by substituting "Certificates" for "Securities," the "Secretary of State" and "DAS" for "Issuer," "Trustee" for "registrar" and by the addition of the italicized language set forth in the text. See also the additional information following those numbered paragraphs.

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

2. 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 securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com. (*This internet site is included for reference only, and the information in this internet site is not incorporated by reference in this Offering Circular.*)

3. Purchases of Certificates under the DTC system must be made by or through Direct Participants, which will receive a credit for the Certificates on DTC's records. The ownership interest of each actual purchaser of each Certificate ("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 Certificates are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Certificates, except in the event that use of the book-entry system for the Certificates is discontinued.

4. To facilitate subsequent transfers, all Certificates 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 Certificates 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 Certificates; DTC's records reflect only the identity of the Direct Participants to whose accounts such Certificates 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 Certificates may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Certificates, such as redemptions, tenders, defaults and proposed amendments to the Certificate documents. For example, Beneficial Owners of Certificates may wish to ascertain that the nominee holding the Certificates 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 Certificates 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 Certificates unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Secretary of State or DAS, as applicable, as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Certificates are credited on the record date (identified in a listing attached to the Omnibus Proxy).

8. Redemption proceeds, distributions and dividends (*debt charges payments*) on the Certificates 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 Secretary of State, DAS or the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee, the Secretary of State or DAS, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions and dividends (*debt charges*) to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of DAS or the Trustee, 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 Certificates.*)

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

11. The Secretary of State or DAS, as applicable, may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Certificates will be printed (or otherwise produced) and delivered to DTC. (*See also Revision of Book-Entry System; Replacement Certificates.*)

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

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

The Secretary of State, DAS 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 Secretary of State, DAS 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 Secretary of State, DAS 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 Certificates 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 Offering Circular.

For all purposes under the Certificate proceedings (except the Continuing Disclosure Agreement under which others as well as DTC may be considered an owner or holder of the Certificates, see **Continuing Disclosure Agreements**), DTC will be and will be considered by the Secretary of State, DAS and the Trustee to be the owner or holder of the Certificates.

Beneficial Owners will not receive or have the right to receive physical delivery of Certificates, 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 Secretary of State, DAS and the Trustee to be, and will not have any rights as, owners or holders of Certificates under the Certificate proceedings.

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

Revision of Book-Entry System; Replacement Certificates

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

Debt charges on Replacement Certificates will be payable when due without deduction for the services of the Trustee as paying agent. Principal of and any premium on Replacement Certificates, will be payable when due to the registered owner upon presentation and surrender at the designated corporate trust office of the Trustee. Interest on Replacement Certificates will be payable on the interest payment date by the Trustee by transmittal to the registered owner of record on the Trust Agreements as of the 15th day of the calendar month preceding the interest payment date. Replacement Certificates will be exchangeable for other Replacement Certificates of the same series in authorized denominations, and transferable, at the designated corporate trust office of the Trustee without charge (except taxes or governmental fees). Exchange or transfer of then-redeemable Replacement Certificates is not required to be made: (i) between the 15th day preceding the mailing of notice of redemption of Replacement Certificates and the date of that mailing, or (ii) of a particular Replacement Certificate selected for redemption (in whole or part).

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EXHIBIT A-1

Re: \$73,140,000* Certificates of Participation, Series 2018 Evidencing Proportionate Interests of the Owners Thereof in Base Rent To Be Paid By the Secretary of State of the State of Ohio (Voting System Acquisition Project)

We have examined the transcript of proceedings (the "Transcript") relating to the issuance of \$73,140,000* Certificates of Participation, Series 2018 (Voting System Acquisition Project) (the "Series 2018 Certificates"), dated December __, 2018. Each of the Series 2018 Certificates represents a proportionate interest of the owners in the base rent (the "Base Rent") to be paid by the Secretary of State of the State of Ohio (the "Secretary of State") under a Master Lease-Purchase Agreement dated as of December 1, 2018, as supplemented by Supplemental Lease No. 1-18 dated as of December 1, 2018 (collectively, the "Lease"), each between State of Ohio Leasing Corporation, Inc. (the "Lessor"), as lessor, and the Secretary of State, as lessee. The rights of the Lessor under the Lease are being assigned pursuant to the Master Trust Agreement dated as of December 1, 2018, as supplemented by a First Supplemental Trust Agreement dated as of December 1, 2018 (collectively, the "Trust Agreement"), each between the Lessor and The Bank of New York Mellon Trust Company, N.A., New Albany, Ohio, as trustee (the "Trustee").

The Series 2018 Certificates are being signed and delivered pursuant to the Trust Agreement which creates an irrevocable trust for the benefit of the registered owners of the Series 2018 Certificates and all other certificates issued pursuant to the Trust Agreement (collectively, the "Certificates"). The proceeds from the sale of the Series 2018 Certificates will be used for the acquisition including, but not limited to, voting machines, marking devices, automatic tabulating equipment, and direct record electronic voting machines, as defined in Ohio Revised Code Section 3506.01 and associated allowable expenditures, as defined in Amended Substitute Senate Bill No. 135 of the 132nd General Assembly of the State of Ohio (the "Voting System Acquisition Project"). The Secretary of State is required by the Lease to make Base Rent payments from appropriated funds during the initial term and each renewal term of the Lease sufficient to pay interest on the Certificates beginning on March 1, 2019, and principal on the Certificates beginning on September 1, 2019. The initial term of Supplemental Lease No. 1-18 commences as of the date of initial delivery and expires on June 30, 2019. Each renewal term of the Lease will be for a Lease Term beginning July 1 and ending on June 30 of the second succeeding year, except the final Lease Term which will end on September 1, 2028. The initial term of the Lease and each such renewal term during which the Lease is in force are individually, and not collectively, a "Lease Term." The renewal of the Lease and the obligation of the Secretary of State to pay Base Rent are subject to and dependent upon biennial appropriations by the General Assembly of the State of Ohio sufficient to pay Base Rent. If the General Assembly does not make an appropriation of money sufficient to pay Base Rent in any succeeding Lease Term, the Lease will terminate as of the end of the then current Lease Term and DAS will be required to return possession of the Voting System Acquisition Project to the Trustee.

Based on the foregoing examination, we are of the opinion that, under the law existing on the date of this opinion:

1. The Series 2018 Certificates, the Lease, the Trust Agreement and all assignments therein are legal, valid, binding and enforceable in accordance with their respective terms, except that the binding effect and enforceability thereof are subject to applicable bankruptcy, insolvency, reorganization, moratorium and other laws in effect from time to time affecting the rights of creditors generally, and except to the extent that the enforceability thereof may be limited by the application of general principles of equity.

2. The principal of and interest on the Series 2018 Certificates are payable solely from revenues received under the Trust Agreement, which consist of (a) the Base Rent, (b) all other rentals received or to be received by the Trustee from the lease of the Voting System Acquisition Project, (c) any money and investments in the Certificate Fund and (d) all income and profit from the investment of the foregoing money. The obligation of the Secretary of State to pay Base Rent does not constitute a debt of the State of Ohio within any constitutional or statutory limitation.

* Preliminary, subject to change.

3. The interest on the Series 2018 Certificates payable from the interest component of payments of Base Rent paid and denominated as interest under the Lease and received by the owners is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code") and is not an item of tax preference for purposes of the alternative minimum tax imposed on individuals; however, interest on the Series 2018 Certificates is included in the adjusted current earnings of corporations subject to the federal corporate alternative minimum tax for tax years beginning prior to January 1, 2018.

4. Such interest, and any profit made on the sale, exchange or other disposition of the Series 2018 Certificates, are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangible tax, the tax levied on the basis of total equity capital of financial institutions, and the net worth base of the corporate franchise tax. Under certain circumstances, interest paid for periods following termination of the Lease by nonappropriation may not be excluded from gross income for federal income tax purposes.

We express no opinion on the federal income tax or Ohio state or local income tax treatment of amounts paid to owners of the Series 2018 Certificates in the event of termination of the Lease by nonappropriation or as to any other tax consequences regarding the Series 2018 Certificates.

In rendering the foregoing opinions, we have assumed and relied upon continuing compliance with the covenants of the Secretary of State for itself and the State of Ohio, and the accuracy, which we have not independently verified, of the representations and certifications of the Secretary of State and the State of Ohio, all as contained in the Transcript. The accuracy of those representations and certifications, and continuing compliance with those covenants, may be necessary for the interest on the Series 2018 Certificates to be and remain excluded from gross income for federal income tax purposes and for the other tax effects stated above. Failure to comply with certain of the covenants subsequent to issuance could cause the interest on the Series 2018 Certificates to be included in gross income for federal income tax purposes retroactively to their date of issuance.

Under the Code, portions of the interest on the Series 2018 Certificates earned by certain corporations may be subject to a corporate alternative minimum tax. In rendering this opinion, we have also relied on the opinion of the Attorney General of the State of Ohio, counsel to the Secretary of State, and on the opinion of Susan Demaske, Esq., Managing Counsel, as counsel to the Trustee, as to matters contained in their respective opinions.

We have made no examination of the title to either the realty or the personalty comprising the Voting System Acquisition Project, and we express no opinion respecting the title to either the realty or personalty comprising the Voting System Acquisition Project or to the priority of any lien thereon or security interest therein.

We do not undertake to advise you of matters which might come to our attention subsequent to the date hereof which may affect our legal opinions expressed herein. We bring to your attention that our legal opinions are an expression of our professional judgment and not a guarantee of a result.

Very truly yours,

EXHIBIT A-2

Re: \$27,065,000* Certificates of Participation, Series 2018 Evidencing Proportionate Interests of the Owners Thereof in Base Rent To Be Paid By the Ohio Department of Administrative Services (Enterprise Data Center Solutions Project)

We have examined the transcript of proceedings (the "Transcript") relating to the issuance of \$27,065,000* Certificates of Participation, Series 2018 (Enterprise Data Center Solutions Project) (the "Series 2018 Certificates"), dated December __, 2018. Each of the Series 2018 Certificates represents a proportionate interest of the owners in the base rent (the "Base Rent") to be paid by the State of Ohio Department of Administrative Services ("DAS") under a Master Lease-Purchase Agreement dated as of October 1, 2014, as supplemented including as supplemented by Supplemental Lease No. 3-18 dated as of December 1, 2018 (collectively, the "Lease"), each between State of Ohio Leasing Corporation, Inc. (the "Lessor"), as lessor, and DAS, as lessee. The rights of the Lessor under the Lease have been assigned pursuant to the Master Trust Agreement dated as of October 1, 2014, as supplemented including as supplemented by a Third Supplemental Trust Agreement dated as of December 1, 2018 (collectively, the "Trust Agreement"), each between the Lessor and The Bank of New York Mellon Trust Company, N.A., New Albany, Ohio, as trustee (the "Trustee").

The Series 2018 Certificates are being signed and delivered pursuant to the Trust Agreement which creates an irrevocable trust for the benefit of the registered owners of the Series 2018 Certificates and all other certificates issued pursuant to the Trust Agreement (collectively, the "Certificates"). The proceeds from the sale of the Series 2018 Certificates will be used for the continued acquisition, installation and implementation of hardware and software that will expand and improve the cloud computing environment of the State and support upgrades to enterprise shared solutions known as Enterprise Data Center Solutions (EDCS), for use by the DAS (the "Electronic Data Center Solutions Project"). DAS is required by the Lease to make Base Rent payments from appropriated funds during the initial term and each renewal term of the Lease sufficient to pay interest on the Certificates beginning on March 1, 2019, and principal on the Certificates beginning on September 1, 2019. The initial term of Supplemental Lease No. 3-18 commences as of the date of initial delivery and expires on June 30, 2019. Each renewal term of the Lease will be for a Lease Term beginning July 1 and ending on June 30 of the second succeeding year, except the final Lease Term which will end on September 1, 2028. The initial term of the Lease and each such renewal term during which the Lease is in force are individually, and not collectively, a "Lease Term." The renewal of the Lease and the obligation of DAS to pay Base Rent are subject to and dependent upon biennial appropriations by the General Assembly of the State of Ohio sufficient to pay Base Rent. If the General Assembly does not make an appropriation of money sufficient to pay Base Rent in any succeeding Lease Term, the Lease will terminate as of the end of the then current Lease Term and DAS will be required to return possession of the Electronic Data Center Solutions Project to the Trustee.

Based on the foregoing examination, we are of the opinion that, under the law existing on the date of this opinion:

1. The Series 2018 Certificates, the Lease, the Trust Agreement and all assignments therein are legal, valid, binding and enforceable in accordance with their respective terms, except that the binding effect and enforceability thereof are subject to applicable bankruptcy, insolvency, reorganization, moratorium and other laws in effect from time to time affecting the rights of creditors generally, and except to the extent that the enforceability thereof may be limited by the application of general principles of equity.

2. The principal of and interest on the Series 2018 Certificates are payable solely from revenues received under the Trust Agreement, which consist of (a) the Base Rent, (b) all other rentals received or to be received by the Trustee from the lease of the Electronic Data Center Solutions Project, (c) any money and investments in the Certificate Fund and (d) all income and profit from the investment of the foregoing money. The obligation of DAS to pay Base Rent does not constitute a debt of the State of Ohio within any constitutional or statutory limitation.

* Preliminary; subject to change.

3. The interest on the Series 2018 Certificates payable from the interest component of payments of Base Rent paid and denominated as interest under the Lease and received by the owners is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code") and is not an item of tax preference for purposes of the alternative minimum tax imposed on individuals; however, interest on the Series 2018 Certificates is included in the adjusted current earnings of corporations subject to the federal corporate alternative minimum tax for tax years beginning prior to January 1, 2018.

4. Such interest, and any profit made on the sale, exchange or other disposition of the Series 2018 Certificates, are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangible tax, the tax levied on the basis of total equity capital of financial institutions, and the net worth base of the corporate franchise tax. Under certain circumstances, interest paid for periods following termination of the Lease by nonappropriation may not be excluded from gross income for federal income tax purposes.

We express no opinion on the federal income tax or Ohio state or local income tax treatment of amounts paid to owners of the Series 2018 Certificates in the event of termination of the Lease by nonappropriation or as to any other tax consequences regarding the Series 2018 Certificates.

In rendering the foregoing opinions, we have assumed and relied upon continuing compliance with the covenants of DAS for itself and the State of Ohio, and the accuracy, which we have not independently verified, of the representations and certifications of DAS and the State of Ohio, all as contained in the Transcript. The accuracy of those representations and certifications, and continuing compliance with those covenants, may be necessary for the interest on the Series 2018 Certificates to be and remain excluded from gross income for federal income tax purposes and for the other tax effects stated above. Failure to comply with certain of the covenants subsequent to issuance could cause the interest on the Series 2018 Certificates to be included in gross income for federal income tax purposes retroactively to their date of issuance.

Under the Code, portions of the interest on the Series 2018 Certificates earned by certain corporations may be subject to a corporate alternative minimum tax. In rendering this opinion, we have also relied on the opinion of the Attorney General of the State of Ohio, counsel to DAS, and on the opinion of Susan Demaske, Esq., Managing Counsel, as counsel to the Trustee, as to matters contained in their respective opinions.

We have made no examination of the title to either the realty or the personalty comprising the Electronic Data Center Solutions Project, and we express no opinion respecting the title to either the realty or personalty comprising the Electronic Data Center Solutions Project or to the priority of any lien thereon or security interest therein.

We do not undertake to advise you of matters which might come to our attention subsequent to the date hereof which may affect our legal opinions expressed herein. We bring to your attention that our legal opinions are an expression of our professional judgment and not a guarantee of a result.

Very truly yours,

EXHIBIT B-1

Official Notice of Sale

\$73,140,000*

**CERTIFICATES OF PARTICIPATION, SERIES 2018
Evidencing Proportionate Interests Of The Owners Thereof
In Base Rent To Be Paid By
the Secretary of State of the State of Ohio
(Voting Systems Acquisition Project)**

Electronic bids via Ipreo Holdings LLC's PARITY electronic bidding system will be received on Wednesday, November 14, 2018, until 10:30 a.m. EST, for the purchase of \$73,140,000* Certificates of Participation Series 2018 Evidencing Proportionate Interests of the Owners Thereof in the Base Rent to be paid by the Secretary of State of the State of Ohio (Voting Systems Acquisition Project) (the Certificates) to be issued to pay costs of the VSA Project, comprising the acquisition and implementation of voting systems including, but not limited to, voting machines, marking devices, automatic tabulating equipment, and direct record electronic voting machines and associated allowable expenditures, pursuant to the terms and conditions stated below. All bids must be submitted prior to that bid deadline.

The maturity schedule and other Certificate terms, and the bidding parameters and date and time for receipt of bids as set forth in this Official Notice of Sale (Notice), are subject to change until 4:30 p.m. EST on Tuesday, November 13, 2018, with those changes to be published via Thomson Municipal News at www.tm3.com.

Any questions on the bidding procedures and sale terms set forth in this Notice, or any modification or amendment thereof, or any postponement or cancellation of the sale of the Certificates, should be directed to OBM's financial adviser, H.J. Umbaugh & Associates, telephone (614) 987-1684, Attention: Mark Miller (email: mmiller@umbaugh.com).

Terms of Certificates

The Certificates will be issued in fully registered form, one for each maturity, under a book entry system (with no distribution of physical Certificates to the ultimate purchasers), registered in the name of The Depository Trust Company, New York, New York (DTC), or its nominee, and immobilized in DTC's custody. The Certificates will be dated the date of initial delivery and will mature on September 1 in each year as follows:

<u>Year</u>	<u>Principal Amount*</u>	<u>Year</u>	<u>Principal Amount*</u>
2019	\$6,725,000	2024	\$7,320,000
2020	6,025,000	2025	7,685,000
2021	6,325,000	2026	8,070,000
2022	6,640,000	2027	8,475,000
2023	6,975,000	2028	8,900,000

Interest on the Certificates is payable semiannually on March 1 and September 1, beginning March 1, 2019. Interest shall be computed on the basis of a 360-day year of twelve 30-day months.

No Optional Redemption. The Certificates are not subject to optional redemption.

Special Redemption. In the event the Lease is terminated because the Ohio General Assembly does not appropriate sufficient money to pay Lease Payments with respect to the Projects for any immediately succeeding Renewal Term, or the Secretary of State defaults under the Lease, the Certificates are subject to special redemption by

* Preliminary; subject to change.

the Trustee, in whole, at a price equal to 100% of the principal amount thereof, plus accrued interest to the redemption date, from any available funds.

Mandatory Sinking Fund Redemption. The successful bidder may identify consecutive maturities of the Certificates bearing interest at the same rates as one or more term certificates being subject to mandatory sinking fund redemption at a price of par plus interest accrued to the redemption date.

Additional information and details with respect to the Certificates, security and sources of payment, book entry system, optional and mandatory redemption provisions, bids and award, continuing disclosure agreement under SEC Rule 15c2-12, and delivery are set forth in the deemed final Offering Circular, to which this Notice is attached.

Adjustment of Amount and Maturities

The Office of Budget and Management of the State (OBM) reserves the right after bids are opened and prior to award, in its sole discretion, to increase or decrease the principal amount of the Certificates and to adjust the maturity amounts of the Certificates in multiples of \$5,000 to provide the necessary funds for the VSA Project and to ensure that the total amount of principal and interest payments on the Certificates in any fiscal year in which principal is payable is substantially equal. In the event the principal amount of the Certificates is increased or decreased or the maturity amounts of the Certificates are adjusted, the purchase price will be adjusted to ensure that the percentage of net compensation (i.e., the percentage resulting from dividing (i) the aggregate difference between the offering price of the Certificates to the public and the price to be paid to the Trustee by (ii) the principal amount of the Certificates) remains constant. If the successful bidder has exercised its option pursuant to this Notice to identify in its bid maturities of the Certificates as term certificates being subject to mandatory sinking fund redemption, references in this Notice as to maturities of the Certificates include mandatory sinking fund redemptions. For purposes of this Notice, the principal amortization has been calculated assuming a bid price of approximately 111%.

Electronic Bidding Only and Bidding Procedures

Only electronic bids will be accepted (as discussed below) for the purchase of all, but not less than all, of the entire principal amount of the Certificates. Each bid shall be deemed to be made on the terms and conditions provided in this Notice, and shall state the amount bid and the interest rate for each maturity (subject to the conditions stated in this Notice).

All bids must be received as provided in and by the time specified in this Notice.

Electronic bids via Ipreo Holdings LLC's PARITY electronic bidding system will be accepted in accordance with this Notice. No other form of electronic bid or provider of electronic bidding services will be accepted.

Bidders must comply with the rules of PARITY in addition to the requirements of this Notice. To the extent any instructions or directions set forth in PARITY conflict with this Notice, the terms of this Notice shall control.

For purposes of the electronic bidding process, the time as maintained by PARITY shall constitute the official time with respect to all bids submitted. Each bidder submitting an electronic bid agrees that: (i) it is solely responsible for all arrangements with PARITY; (ii) PARITY is not acting as the agent of OBM or the Secretary of State; and (iii) neither OBM nor the Secretary of State is responsible for ensuring or verifying bidder compliance with any of the procedures of PARITY. Neither OBM nor the Secretary of State assumes responsibility for, and each bidder expressly assumes the risks of and responsibility for, any incomplete, inaccurate or untimely bid submitted by the bidder through PARITY. Each bidder shall be solely responsible for making necessary arrangements to access the PARITY system for purposes of submitting its bid in a timely manner and in compliance with the requirements of this Notice. Neither OBM nor the Secretary of State shall have any duty or obligation to provide or assure such access to any bidder, or be responsible for proper operation of, or have any liability for, any delays or interruptions of, or any damages caused by, PARITY.

Bidders should verify the accuracy of their final bids and compare them to the winning bids reported on PARITY immediately after the sale.

For further information about PARITY, potential bidders may contact Ipreo Holdings LLC at 1359 Broadway, 2nd Floor, New York, NY 10018; telephone (212) 849-5021.

Ineligible Bidder

No bid will be accepted from, and no award will be made to Wells Fargo & Company, or any of its subsidiaries (an Ineligible Bidder), as a result of the directive of the Governor of the State of Ohio dated and released October 14, 2016 and further extended by the Governor on October 12, 2017, and as extended by the Director of OBM, to ensure compliance with such directives until the earlier of (i) January 13, 2019, or (ii) such time that the Board of Governors of the Federal Reserve System notifies Wells Fargo & Company that it has met all of the conditions of the Cease and Desist Order of the Board of Governors of the Federal Reserve System which was issued on February 2, 2018. Copies of the Governor's announcements may be obtained upon request to the Office of Budget and Management, 30 East Broad Street, 34th Floor, Columbus, Ohio 43215-3457 (telephone 614-466-4034). Anyone who submits a bid, by that submission, will be deemed to have certified that it is not an Ineligible Bidder.

Bidding Parameters

Each bid shall be for all of the Certificates at a purchase price not less than the par amount of the Certificates. Each interest rate bid must be equal to or greater than one-twentieth (1/20) of one percent and must be a multiple of one-eighth (1/8) or one-twentieth (1/20) of one percent, and only one interest rate may be specified for all Certificates maturing on the same date. The highest interest rate bid may not exceed 5.00%. The successful bidder's bid shall be secured by bid security in the form and amount, and wired at the time, provided in this Notice.

Award

The Certificates will be awarded on the basis of the lowest true interest cost (TIC) rate to the State. The TIC rate for each bid will be determined by doubling the semiannual interest rate, compounded semiannually, necessary to discount the debt service payments on the Certificates to their anticipated December 13, 2018 delivery date and to the price bid to that delivery date. If two or more bids specify the same lowest TIC rate, selection for award will be made by lot from among those bids. OBM reserves the right to reject any or all bids, and to waive any informality, irregularity or defect. The Certificates will not be awarded to an Ineligible Bidder.

Written award of the Certificates will be made by 3:30 p.m. EST on the date bids are received.

Establishment of Issue Price

(a) The winning bidder shall assist OBM in establishing the issue price of the Certificates and shall execute and deliver to OBM at Closing an "issue price" or similar certificate setting forth the reasonably expected initial offering price to the public (such term being used as defined below) or the sales price or prices of the Certificates, together with the supporting pricing wires or equivalent communications, substantially in the form attached hereto as Attachment A-1 or A-2 depending on how the issue price is determined, with such modifications as may be appropriate or necessary, in the reasonable judgment of the winning bidder, OBM and Bond Counsel. All actions to be taken by OBM under this Notice to establish the issue price of the Certificates may be taken on behalf of OBM by OBM's financial adviser and any notice or report to be provided to OBM may be provided to OBM's financial adviser.

(b) OBM intends that the provisions of Treasury Regulation Section 1.148-1(f)(3)(i) (defining "competitive sale" for purposes of establishing the issue price of the Certificates) will apply to the initial sale of the Certificates (the "competitive sale requirements") because:

- (1) OBM shall disseminate this Notice to potential underwriters in a manner that is reasonably designed to reach potential underwriters;
- (2) all bidders shall have an equal opportunity to bid;

(3) OBM may receive bids from at least three underwriters of municipal bonds who have established industry reputations for underwriting new issuances of municipal bonds; and

(4) OBM anticipates awarding the sale of the Certificates to the bidder who submits a firm offer to purchase the Certificates at the lowest interest cost, as set forth in this Notice.

Any bid submitted pursuant to this Notice shall be considered a firm offer for the purchase of the Certificates, as specified in the bid, and by submitting a bid the winning bidder is certifying that it is an underwriter of municipal bonds which has an established industry reputation for underwriting new issuances of municipal bonds.

(c) In the event that the competitive sale requirements are not satisfied, OBM shall so advise the winning bidder. In the case of each maturity of the Certificates of which at least 10% of such maturity is sold to the public at a single price (the "10% test") as of the date and time of award of the Certificates, OBM will treat such price as the issue price of that maturity. In the case of each other maturity of the Certificates, OBM will treat the initial offering price to the public as of the sale date of such maturity as the issue price of that maturity (the "hold-the-offering-price rule"). The foregoing determination of issue price shall be applied on a maturity-by-maturity basis. The winning bidder shall advise OBM of which, if any, maturities of the Certificates satisfy the 10% test as of the date and time of the award of the Certificates. Bids will not be subject to cancellation in the event that OBM determines to apply the hold-the-offering-price rule to any maturity of the Certificates. Bidders should prepare their bids on the assumption that some or all of the maturities of the Certificates will be subject to the hold-the-offering-price rule in order to establish the issue price of the Certificates.

(d) By submitting a bid, the winning bidder shall (i) confirm that the underwriters (such term being used as defined below) have offered or will offer the Certificates to the public on or before the date of award at the offering price or prices (the "initial offering price"), or at the corresponding yield or yields, set forth in the bid submitted by the winning bidder and (ii) agree, on behalf of the underwriters participating in the purchase of the Certificates, that the underwriters will neither offer nor sell unsold Certificates of any maturity to which the hold-the-offering-price rule shall apply to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following:

(1) the close of the fifth (5th) business day after the sale date; or

(2) the date on which the underwriters have sold at least 10% of that maturity of the Certificates to the public at a price that is no higher than the initial offering price to the public.

The winning bidder will advise OBM promptly after the close of the fifth (5th) business day after the sale date whether it has sold 10% of that maturity of the Certificates to the public at a price that is no higher than the initial offering price to the public.

(e) OBM acknowledges that, in making the representations set forth above, the winning bidder will rely on (i) the agreement of each underwriter to comply with the requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates, as set forth in an agreement among underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the Certificates to the public, the agreement of each dealer who is a member of the selling group to comply with the requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an underwriter or dealer who is a member of the selling group is a party to a third-party distribution agreement that was employed in connection with the initial sale of the Certificates to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates, as set forth in the third-party distribution agreement and the related pricing wires. OBM further acknowledges that each underwriter shall be solely liable for its failure to comply with its agreement regarding requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates, and that no underwriter shall be liable for the failure of any other underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a third-party distribution agreement to comply with

its corresponding agreement to comply with the requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates.

(f) By submitting a bid, each bidder confirms that:

(i) any agreement among underwriters, any selling group agreement and each third-party distribution agreement (to which the bidder is a party) relating to the initial sale of the Certificates to the public, together with the related pricing wires, contains or will contain language obligating each underwriter, each dealer who is a member of the selling group, and each broker-dealer that is a party to such third-party distribution agreement, as applicable:

(1)(a) to report the prices at which it sells, as of the date and time of the award of the Certificates, to the public the Certificates of each maturity allocated to it, and (b) to comply with the hold-the-offering-price rule, if applicable, if and for so long as directed by the winning bidder and as set forth in the related pricing wires,

(2) to promptly notify the winning bidder of any sales of Certificates that, to its knowledge, are made to a purchaser who is a related party to an underwriter participating in the initial sale of the Certificates to the public, and

(3) to acknowledge that, unless otherwise advised by the underwriter, dealer or broker-dealer, the winning bidder shall assume that each order submitted by the underwriter, dealer or broker-dealer is a sale to the public.

(ii) any agreement among underwriters or selling group agreement relating to the initial sale of the Certificates to the public, together with the related pricing wires, contains or will contain language obligating each underwriter or dealer that is a party to a third-party distribution agreement to be employed in connection with the initial sale of the Certificates to the public to require each broker-dealer that is a party to such third-party distribution agreement to (A) report the prices at which it sells, as of the date and time of the award of the Certificates, to the public the Certificates of each maturity allocated to it, and (B) comply with the hold-the-offering-price rule, if applicable, if and for so long as directed by the winning bidder or the underwriter and as set forth in the related pricing wires.

(g) Sales of any Certificates to any person that is a related party to an underwriter participating in the initial sale of the Certificates to the public shall not constitute sales to the public for purposes of this Notice. Further, for purposes of this Notice:

(i) "public" means any person other than an underwriter or a related party,

(ii) "underwriter" means (A) any person that agrees pursuant to a written contract with OBM (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Certificates to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Certificates to the public (including a member of a selling group or a party to a third-party distribution agreement participating in the initial sale of the Certificates to the public),

(iii) a purchaser of any of the Certificates is a "related party" to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (A) more than 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (B) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (C) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

(iv) "sale date" means the date that the Certificates are awarded by OBM to the winning bidder.

Good Faith Deposit

The successful bidder (the Purchaser) must submit a good faith deposit of \$750,000.00 (the Deposit) to The Bank of New York Mellon Trust Company, N.A. (the Trustee) in the form of a wire transfer, as instructed by OBM, no later than 1:30 p.m. EST on the date bids are received. If the Deposit is not received by that time, OBM may decline to award the bid to that successful bidder. The Deposit will be retained to secure performance of the bid and to be forfeited as agreed liquidated damages upon failure of the successful bidder to perform and otherwise to be applied as part payment for the Certificates. No interest will be paid on the Deposit.

The Certificates Generally

The Certificates are authorized by Section 4 of Am. Sub. Senate Bill 135 of the 132nd General Assembly of the State. The Certificates are issued to pay costs of the VSA Project.

The Certificates evidence proportionate interests in Base Rent to be paid by the Secretary of State pursuant to the Master Lease-Purchase Agreement dated as of December 1, 2018 (Lease), between the State of Ohio Leasing Corporation, Inc. (Corporation), as lessor, and the Secretary of State, as lessee, as supplemented by Supplemental Lease No. 1-18 dated as of December 1, 2018, to be delivered pursuant to a Trust Agreement dated as of December 1, 2018 between the Corporation and the Trustee, and a First Supplemental Trust Agreement thereto dated as of December 1, 2018. The Corporation will assign, without recourse, all of its rights under the Lease to the Trustee pursuant to the Trust Agreement. Principal of and interest on the Certificates and all Additional Certificates issued pursuant to the Trust Agreement, are payable from (1) principal and interest components of payments by the Secretary of State under the Lease, (2) money received by the Trustee under the Lease (net of Trustee fees and expenses), including income or money received from the lease, sale or disposition of the Project, which income or money is not likely to be sufficient to pay all principal and interest on the Certificates, (3) money in the Certificate Fund and (4) income from the investment of the foregoing.

The obligation of the Secretary of State to make lease payments is subject to and dependent on biennial renewal of the Lease and biennial appropriations by the General Assembly sufficient to pay lease payments. Those appropriations may not be made for more than a two-year period. Failure of the General Assembly to appropriate moneys to the Secretary of State will result in termination of the Lease.

The obligation of the Secretary of State to pay lease payments does not constitute a debt of the Secretary of State or the State of Ohio. The Certificates do not represent or constitute a debt of the Secretary of State or the State of Ohio or of any political subdivision thereof, or a pledge of the faith and credit of the State, any political subdivision thereof or the Secretary of State. Certificate Holders and beneficial owners have no right to have excises or taxes levied by the General Assembly.

Book Entry Only

The Certificates will be issued in fully registered form under a book entry system, with no distribution or right to distribution of Certificates to the ultimate purchasers, as follows:

(i) One fully registered Certificate, in printed, xerographically reproduced or typewritten form, for each maturity will be delivered, and the Purchaser will deposit the Certificates initially delivered with DTC or its agent, registered in the name of DTC or its nominee.

(ii) DTC and its Direct Participants will employ their own book entry systems to evidence ownership interests in the Certificates (book entry interests), with transfer of book entry interests to be effected by them on their records pursuant to their rules and procedures. DTC will maintain records reflecting the book entry positions of Direct Participants, and the Participants and certain persons acting through Participants will maintain records of the ultimate purchasers of book entry interests.

(iii) For all purposes of the Certificate proceedings (except for certain provisions of the Continuing Disclosure Agreement), including payment by the State of principal and interest (which will be paid by the Secretary of State directly to DTC or its nominee as registered owner) and any notices

(including notices of prior redemption) and rights (including rights upon default), DTC or the nominee as registered owner of the Certificates will be and will be considered to be the certificate holder and registered owner of the Certificates. Payments of amounts, received by DTC from the Secretary of State, to DTC Participants holding book entry positions will be the responsibility of DTC, and payments to the ultimate book entry interest owners will be the responsibility of those Participants and other persons acting through Participants.

(iv) The Secretary of State and OBM will have no responsibility for maintaining, supervising or reviewing any records maintained by DTC or its nominee, its Participants, or persons acting through those Participants.

(v) Under certain circumstances provided for in the Certificate proceedings and described in the Offering Circular, OBM may select another securities depository to replace DTC, or authenticate and deliver replacement Certificates (in the denomination of \$5,000 or any multiple of \$5,000) in the form of fully registered Certificates as generally provided for in the Certificate proceedings.

The Purchaser will be responsible for completing and delivering to DTC, prior to delivery of the Certificates, the DTC "Registered Municipal Bond Eligibility Questionnaire."

Payments

Principal and interest will be payable to the registered owner (initially, Cede & Co., as nominee of DTC). Principal will be payable on presentation and surrender at the office of the Paying Agent (initially, The Bank of New York Mellon Trust Company, N.A., New Albany, Ohio). Interest will be transmitted on each interest payment date to the registered owner as of the fifteenth day of the calendar month preceding the interest payment date.

Insurance

Any qualification or commitment for or issuance of any insurance guaranteeing the payment when due of principal of and interest on the Certificates shall be solely at a bidder's option and expense. Bond Counsel will express no opinion concerning such insurance, and any resulting increased costs of preparation or delivery (including, without limitation, legal expenses, required changes in a final Offering Circular and printing) shall be paid by the Purchaser. Bids may not be conditioned on the issuance of any policy or commitment. Any failure of the Certificates to be insured, if applied for by and at the option of the Purchaser, shall not constitute cause for the Purchaser to refuse to accept delivery and pay for those Certificates.

Closing

It is anticipated that the Certificates will be available for delivery prior to noon EST on December 13, 2018, to DTC or its agent. Closing will take place from Columbus, Ohio. Unless other satisfactory arrangements are made, the Purchaser will be required to accept delivery of the Certificates when so available and make payment in federal funds. The Certificates are to be prepared, authenticated and executed without expense to the Purchaser. The successful bidder will be responsible for paying the costs of any fees imposed by DTC. A complete transcript of proceedings, the Certificates, and a no-litigation certificate as described in the Offering Circular, will be furnished at closing by the Secretary of State.

CUSIP numbers and CUSIP Service Bureau charges for the assignment of the numbers are the responsibility of the Financial Adviser. Any delay, error or omission with respect to CUSIP numbers on the Certificates shall not constitute cause for the Purchaser to refuse to accept delivery of and pay for the Certificates.

The successful bidder shall also be responsible for any applicable fees of the Ohio Municipal Advisory Council.

Legal Opinion; Tax Matters

Upon delivery, the Certificates will be accompanied by the legal opinion as to legal matters as described in the Offering Circular and rendered by Bricker & Eckler LLP, Bond Counsel, at no expense to the successful bidder.

The proposed text of Bond Counsel's legal opinion is set forth as **Exhibit A-1** to the deemed final Offering Circular for the Certificates. The legal opinion to be delivered may vary from that text if necessary to reflect facts and law on the date of delivery. See also the Offering Circular's discussion of **Legal Opinions** and **Tax Matters**.

The successful bidder for the Certificates, by submitting its bid, agrees to certify to the Secretary of State and Bond Counsel information as to bona fide initial offering prices to the public and sales of the Certificates appropriate for the determination of the issue price of, and yield on, the Certificates under the Code, as and at the time requested by Bond Counsel. A copy of the form of that certification is attached hereto as Attachment A-1 or Attachment A-2, depending on how the issue price is determined.

Offering Circular

The Offering Circular distributed by the Secretary of State prior to the bid date is "deemed final" as of its date by the Secretary of State for purposes of SEC Rule 15c2-12(b)(1) but is subject to completion, revision and amendment, including changes, in a final Offering Circular. Copies of the deemed final Offering Circular are on file at, and may be obtained from Larry Scurlock, Office of Budget and Management, 30 East Broad Street, 34th Floor, Columbus, Ohio 43215-3457 (telephone 614-466-4034). This Notice is attached as **Exhibit B-1** to the Offering Circular.

Following the award, the Secretary of State in cooperation with the Purchaser will complete the cover pages of the Offering Circular to indicate the initial public offering prices or yields, interest rates, and identity of the original purchaser and ratings, and provide any other information required for a final Offering Circular for the purposes of the Purchaser's compliance with SEC Rule 15c2-12(b)(3) and (4). The Purchaser will within seven business days after the date of award be furnished with a final Offering Circular for purposes of the Purchaser's compliance with the SEC Rule and will be authorized by the Secretary of State to reproduce and circulate at the Purchaser's expense copies of the "deemed final" (until the final Offering Circular is available) and the final Offering Circular for use by the Purchaser in its marketing effort and in its providing copies thereof to its customers. The Secretary of State contemplates that the final Offering Circular for the Certificates, among other changes, will not include this Notice.

The Purchaser at delivery will be furnished with a certificate of the Director of Budget and Management relating to the accuracy and completeness of the deemed final and final Offering Circular, including matters set forth in or contemplated by them. The Secretary of State will furnish the Purchaser up to 50 copies of the final Offering Circular. The Purchaser may obtain, at its expense, additional copies of the final Offering Circular from the printer.

Dated: November 6, 2018

Ohio Office of Budget and Management

Attachment A-1 to Notice of Sale

\$ _____

**CERTIFICATES OF PARTICIPATION, SERIES 2018
Evidencing Proportionate Interests Of The Owners Thereof
In Base Rent To Be Paid By
the Secretary of State of the State of Ohio
(Voting Systems Acquisition Project)**

Dated as of December [], 2018

CERTIFICATE OF ORIGINAL PURCHASER

[Competitive Sale Requirement Satisfied]

_____, [shortened name of lead underwriter] [as Underwriter] [for itself and as representative of the Underwriters] for the certificates identified above (the "Issue"), issued by the State of Ohio (the "Issuer"), acting by and through the Secretary of State of the State of Ohio, based on its knowledge regarding the sale of the Issue, certifies as of this date as follows:

Issue Price.

(A) As of the Sale Date, the reasonably expected initial offering prices of the Issue to the Public by [name of underwriter] are the prices listed in the final Offering Circular, dated [_____], for the Issue (the "Expected Offering Prices"). The Expected Offering Prices are the prices for the Maturities of the Issue used by [name of underwriter] in formulating its bid to purchase the Issue. Attached as Schedule A is a true and correct copy of the bid provided by [name of underwriter] to purchase the Issue.

(B) [name of underwriter] was not given the opportunity to review other bids prior to submitting its bid.

(C) The bid submitted by [name of underwriter] constituted a firm offer to purchase the Issue.

(D) The aggregate of the Expected Offering Prices of each Maturity is \$[_____] (the "Issue Price").

(E) Definitions.

"Maturity" means certificates of the Issue with the same credit and payment terms. Certificates of the Issue with different maturity dates, or certificates of the Issue with the same maturity date but different stated interest rates, are treated as separate Maturities.

"Public" means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a related party to an Underwriter. The term "related party" for purposes of this certificate generally means any two or more persons who have greater than 50 percent common ownership, directly or indirectly.

"Sale Date" means the first day on which there is a binding contract in writing for the sale of a Maturity of the Issue. The Sale Date of the Issue is [DATE].

"Underwriter" means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Issue to the Public, and (ii)

any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Issue to the Public (including a member of a selling group or a party to a third-party distribution agreement participating in the initial sale of the Issue to the Public).

All capitalized terms not defined in this Certificate have the meaning set forth in the Issuer's Tax Compliance Certificate or in Attachment A to it.

The signer is an officer of [name of underwriter] and duly authorized to execute and deliver this Certificate of [name of underwriter]. The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents [name of underwriter]'s interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax Compliance Certificate and with respect to compliance with the federal income tax rules affecting the Issue, and by Bricker & Eckler LLP, as bond counsel, in connection with rendering its opinion that the interest on the Issue is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Issue.

Dated: _____, 20__

[NAME OF UNDERWRITER]

By: _____

Title: _____

SCHEDULE A

COPY OF [NAME OF UNDERWRITER]'S BID

(Attached)

Attachment A-2 to Notice of Sale

\$ _____
CERTIFICATES OF PARTICIPATION, SERIES 2018
Evidencing Proportionate Interests Of The Owners Thereof
In Base Rent To Be Paid By
the Secretary of State of the State of Ohio
(Voting Systems Acquisition Project)

Dated as of December[], 2018

CERTIFICATE OF ORIGINAL PURCHASER

[General Rule/Hold the Price for some or all maturities]

_____, [shortened name of lead underwriter] [as Underwriter] [for itself and as representative of the Underwriters] for the certificates identified above (the "Issue"), issued by the State of Ohio (the "Issuer"), acting by and through the Secretary of State of the State of Ohio, based on its knowledge regarding the sale of the Issue, certifies as of this date as follows:

Issue Price.

[If the issue price is determined using only the general rule (actual sales of at least 10%) in Regulations § 1.148-1(f)(2)(i):

(A) As of the date of this certificate, for each Maturity of the Issue, the first price at which at least 10% of such Maturity of the Issue was sold to the Public is the respective price listed in the final Offering Circular, dated [____], for the Issue (the "Sale Price" as applicable to respective Maturities). The aggregate of the Sale Prices of each Maturity is \$[_____] (the "Issue Price").]

[If the issue price is determined using a combination of actual sales (Regulations § 1.148-1(f)(2)(i)) and hold-the-offering-price (Regulations § 1.148-1(f)(2)(ii)):

(A) As of the date of this certificate, for each Maturity listed on Schedule A as the "General Rule Maturities," the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A (the "Sale Price" as applicable to each Maturity of the General Rule Maturities).

(B) On or before the Sale Date, [name of underwriter][The Underwriting Group] offered the Maturities listed on Schedule A as the "Hold-the-Offering-Price Maturities" to the Public for purchase at the respective initial offering prices listed in the final Offering Circular, dated [____], for the Issue (the "Initial Offering Prices" as applicable to each Maturity of the Hold-the-Offering-Price Maturities). A copy of the pricing wire or equivalent communication for the Issue is attached to this certificate as Schedule B.

(C) As set forth in the [Notice of Sale and bid award], [[name of underwriter] has] [the members of the Underwriting Group have] agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, [it][they] would neither offer nor sell any portion of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the "hold-the-offering-price rule"), and (ii) any selling group agreement shall contain the agreement of each dealer who is a member of the selling group, and any third-party distribution agreement shall contain the agreement of each broker-dealer who is a party to the third-party distribution agreement, to comply with the hold-the-offering-price rule. Pursuant to such agreement, no Underwriter has offered or sold any Maturity of the Hold-the-Offering-Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Issue during the Holding Period.

(D) The aggregate of the Sale Prices of the General Rule Maturities and the Initial Offering Prices of the Hold-the-Offering-Price Maturities is \$[_____] (the "Issue Price").]

[If the issue price is determined using only the hold-the-offering-price rule in Regulations § 1.148-1(f)(2)(ii):

(A) [name of underwriter][The Underwriting Group] offered, on or before the Sale Date, each Maturity of the Issue to the Public for purchase at the respective initial offering prices listed in the final Offering Circular, dated [____], for the Issue (the "Initial Offering Prices"). A copy of the pricing wire or equivalent communication for the Issue is attached to this certificate as Schedule B. The aggregate of the Initial Offering Prices of each Maturity is \$[_____] (the "Issue Price").

(B) As set forth in the [Notice of Sale and bid award], [name of underwriter has][the members of the Underwriting Group have] agreed in writing that, (i) for each Maturity of the Issue, [it][they] would neither offer nor sell any portion of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the "hold-the-offering-price rule"), and (ii) any selling group agreement shall contain the agreement of each dealer who is a member of the selling group, and any third-party distribution agreement shall contain the agreement of each broker-dealer who is a party to the third-party distribution agreement, to comply with the hold-the-offering-price rule. Pursuant to such agreement, no Underwriter has offered or sold any Maturity of the Issue at a price that is higher than the respective Initial Offering Price for that Maturity of the Issue during the Holding Period.]

[(B),(E), or (C)] Definitions.

"Holding Period" means, for each Hold-the-Offering-Price Maturity of the Issue, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date ([DATE]), or (ii) the date on which [Name of underwriter][the Underwriters] [has][have] sold at least 10% of such Maturity of the Issue to the Public at a price that is no higher than the Initial Offering Price for such Maturity.]

"Maturity" means certificates of the Issue with the same credit and payment terms. Certificates of the Issue with different maturity dates, or certificates of the Issue with the same maturity date but different stated interest rates, are treated as separate Maturities.

"Public" means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a related party to an Underwriter. The term "related party" for purposes of this certificate generally means any two or more persons who have greater than 50 percent common ownership, directly or indirectly.

"Sale Date" means the first day on which there is a binding contract in writing for the sale of a Maturity of the Issue. The Sale Date of the Issue is [DATE].

"Underwriter" means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Issue to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Issue to the Public (including a member of a selling group or a party to a third-party distribution agreement participating in the initial sale of the Issue to the Public).

All capitalized terms not defined in this Certificate have the meaning set forth in the Issuer's Tax Compliance Certificate or in Attachment A to it.

The signer is an officer of [name of underwriter] and duly authorized to execute and deliver this Certificate of [name of underwriter] [for itself and as representative of the Underwriting Group]. The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents [name of underwriter]'s interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the [Tax Compliance Certificate/Tax Certificate and Agreement] and with respect to compliance with the federal income tax rules affecting the Issue, and by Bricker & Eckler LLP, as bond counsel, in connection with rendering its opinion that the interest on the Issue is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038[-G][-GC][-TC], and other federal income tax advice that it may give to the Issuer from time to time relating to the Issue.

Dated: _____, 20__

[NAME OF UNDERWRITER] [for itself and as representative of
[names of other underwriters]]

By: _____

Title: _____

[If the issue price is determined using a combination of the general rule (actual sales) and hold-the-offering-price rule:

SCHEDULE A

**SALE PRICES OF THE GENERAL RULE MATURITIES AND
INITIAL OFFERING PRICES OF THE HOLD-THE-OFFERING-PRICE MATURITIES**

(Attached)

SCHEDULE B

PRICING WIRE OR EQUIVALENT COMMUNICATION

(Attached)

[If the issue price is determined using only the hold-the-offering-price rule in Regulations § 1.148-1(f)(2)(ii):

SCHEDULE A

PRICING WIRE OR EQUIVALENT COMMUNICATION

(Attached)

EXHIBIT B-2

Official Notice of Sale

\$27,065,000*

**CERTIFICATES OF PARTICIPATION, SERIES 2018
Evidencing Proportionate Interests Of The Owners Thereof
In Base Rent To Be Paid By
State of Ohio Department of Administrative Services
(Enterprise Data Center Solutions Project)**

Electronic bids via Ipreo Holdings LLC's PARITY electronic bidding system will be received on Wednesday, November 14, 2018, until 10:45 a.m. EST, for the purchase of \$27,065,000* Certificates of Participation Evidencing Proportionate Interests of the Owners Thereof in the Base Rent to be paid by the State of Ohio Department of Administrative Services (Enterprise Data Center Solutions Project) (the Certificates), to be issued to pay costs of the EDCS Project, comprising the continued acquisition, installation, and implementation of hardware and software that will improve the cloud computing environment of the State and support upgrades to enterprise data center solutions (EDCS), pursuant to the terms and conditions stated below. All bids must be submitted prior to that bid deadline.

The maturity schedule and other Certificate terms, and the bidding parameters and date and time for receipt of bids as set forth in this Official Notice of Sale (Notice), are subject to change until 4:30 p.m. EST on Tuesday, November 13, 2018, with those changes to be published via Thomson Municipal News at www.tm3.com.

Any questions on the bidding procedures and sale terms set forth in this Notice, or any modification or amendment thereof, or any postponement or cancellation of the sale of the Certificates, should be directed to OBM's financial adviser, H.J. Umbaugh & Associates, telephone (614) 987-1684, Attention: Mark Miller (email: mmiller@umbaugh.com).

Terms of Certificates

The Certificates will be issued in fully registered form, one for each maturity, under a book entry system (with no distribution of physical Certificates to the ultimate purchasers), registered in the name of The Depository Trust Company, New York, New York (DTC), or its nominee, and immobilized in DTC's custody. The Certificates will be dated the date of initial delivery and will mature on September 1 in each year as follows:

<u>Year</u>	<u>Principal Amount*</u>	<u>Year</u>	<u>Principal Amount*</u>
2019	\$2,490,000	2024	\$2,710,000
2020	2,230,000	2025	2,845,000
2021	2,340,000	2026	2,985,000
2022	2,455,000	2027	3,135,000
2023	2,580,000	2028	3,295,000

Interest on the Certificates is payable semiannually on March 1 and September 1, beginning March 1, 2019. Interest shall be computed on the basis of a 360-day year of twelve 30-day months.

No Optional Redemption. The Certificates are not subject to optional redemption.

Special Redemption. In the event the Lease is terminated because the Ohio General Assembly does not appropriate sufficient money to pay Lease Payments with respect to the Projects for any immediately succeeding Renewal Term, or DAS defaults under the Lease, the Certificates are subject to special redemption by the Trustee, in whole, at a price equal to 100% of the principal amount thereof, plus accrued interest to the redemption date, from any available funds.

* Preliminary; subject to change.

Mandatory Sinking Fund Redemption. The successful bidder may identify consecutive maturities of the Certificates bearing interest at the same rates as one or more term certificates being subject to mandatory sinking fund redemption at a price of par plus interest accrued to the redemption date.

Additional information and details with respect to the Certificates, security and sources of payment, book entry system, optional and mandatory redemption provisions, bids and award, continuing disclosure agreement under SEC Rule 15c2-12, and delivery are set forth in the deemed final Offering Circular, to which this Notice is attached.

Adjustment of Amount and Maturities

The Office of Budget and Management of the State (OBM) reserves the right after bids are opened and prior to award to, in its sole discretion, increase or decrease the principal amount of the Certificates and to adjust the maturity amounts of the Certificates in multiples of \$5,000 to provide the necessary funds for the EDCS Project and to ensure that the total amount of principal and interest payments on the Certificates in any fiscal year in which principal is payable is substantially equal. In the event the principal amount of the Certificates is increased or decreased or the maturity amounts of the Certificates are adjusted, the purchase price will be adjusted to ensure that the percentage net compensation (i.e., the percentage resulting from dividing (i) the aggregate difference between the offering price of the Certificates to the public and the price to be paid to the Trustee by (ii) the principal amount of the Certificates) remains constant. If the successful bidder has exercised its option pursuant to this Notice to identify in its bid maturities of the Certificates as term certificates being subject to mandatory sinking fund redemption, references in this Notice as to maturities of the Certificates include mandatory sinking fund redemptions. For purposes of this Notice, the principal amortization has been calculated assuming a bid price of approximately 111%.

Electronic Bidding Only and Bidding Procedures

Only electronic bids will be accepted (as discussed below) for the purchase of all, but not less than all, of the entire principal amount of the Certificates. Each bid shall be deemed to be made on the terms and conditions provided in this Notice, and shall state the amount bid and the interest rate for each maturity (subject to the conditions stated in this Notice).

All bids must be received as provided in and by the time specified in this Notice.

Electronic bids via Ipreo Holdings LLC's PARITY electronic bidding system will be accepted in accordance with this Notice. No other form of electronic bid or provider of electronic bidding services will be accepted.

Bidders must comply with the rules of PARITY in addition to the requirements of this Notice. To the extent any instructions or directions set forth in PARITY conflict with this Notice, the terms of this Notice shall control.

For purposes of the electronic bidding process, the time as maintained by PARITY shall constitute the official time with respect to all bids submitted. Each bidder submitting an electronic bid agrees that: (i) it is solely responsible for all arrangements with PARITY; (ii) PARITY is not acting as the agent of OBM or DAS; and (iii) neither OBM nor DAS is responsible for ensuring or verifying bidder compliance with any of the procedures of PARITY. Neither OBM nor DAS assumes responsibility for, and each bidder expressly assumes the risks of and responsibility for, any incomplete, inaccurate or untimely bid submitted by the bidder through PARITY. Each bidder shall be solely responsible for making necessary arrangements to access the PARITY system for purposes of submitting its bid in a timely manner and in compliance with the requirements of this Notice. Neither OBM nor DAS shall have any duty or obligation to provide or assure such access to any bidder, or be responsible for proper operation of, or have any liability for, any delays or interruptions of, or any damages caused by, PARITY.

Bidders should verify the accuracy of their final bids and compare them to the winning bids reported on PARITY immediately after the sale.

For further information about PARITY, potential bidders may contact Ipreo Holdings LLC at 1359 Broadway, 2nd Floor, New York, NY 10018; telephone (212) 849-5021.

Ineligible Bidder

No bid will be accepted from, and no award will be made to Wells Fargo & Company, or any of its subsidiaries (an Ineligible Bidder), as a result of the directive of the Governor of the State of Ohio dated and released October 14, 2016 and further extended by the Governor on October 12, 2017, and as extended by the Director of OBM, to ensure compliance with such directives until the earlier of (i) January 13, 2019, or (ii) such time that the Board of Governors of the Federal Reserve System notifies Wells Fargo & Company that it has met all of the conditions of the Cease and Desist Order of the Board of Governors of the Federal Reserve System which was issued on February 2, 2018. Copies of the Governor's announcements may be obtained upon request to the Office of Budget and Management, 30 East Broad Street, 34th Floor, Columbus, Ohio 43215-3457 (telephone 614-466-4034). Anyone who submits a bid, by that submission, will be deemed to have certified that it is not an Ineligible Bidder.

Bidding Parameters

Each bid shall be for all of the Certificates at a purchase price not less than the par amount of the Certificates. Each interest rate bid must be equal to or greater than one-twentieth (1/20) of one percent and must be a multiple of one-eighth (1/8) or one-twentieth (1/20) of one percent, and only one interest rate may be specified for all Certificates maturing on the same date. The highest interest rate bid may not exceed 5.00%. The successful bidder's bid shall be secured by bid security in the form and amount, and wired at the time, provided in this Notice.

Award

The Certificates will be awarded on the basis of the lowest true interest cost (TIC) rate to the State. The TIC rate for each bid will be determined by doubling the semiannual interest rate, compounded semiannually, necessary to discount the debt service payments on the Certificates to their anticipated December 13, 2018 delivery date and to the price bid to that delivery date. If two or more bids specify the same lowest TIC rate, selection for award will be made by lot from among those bids. OBM reserves the right to reject any or all bids, and to waive any informality, irregularity or defect. The Certificates will not be awarded to an Ineligible Bidder.

Written award of the Certificates will be made by 3:30 p.m. EST on the date bids are received.

Establishment of Issue Price

(a) The winning bidder shall assist OBM in establishing the issue price of the Certificates and shall execute and deliver to OBM at Closing an "issue price" or similar certificate setting forth the reasonably expected initial offering price to the public (such term being used as defined below) or the sales price or prices of the Certificates, together with the supporting pricing wires or equivalent communications, substantially in the form attached hereto as Attachment A-1 or A-2 depending on how the issue price is determined, with such modifications as may be appropriate or necessary, in the reasonable judgment of the winning bidder, OBM and Bond Counsel. All actions to be taken by OBM under this Notice to establish the issue price of the Certificates may be taken on behalf of OBM by OBM's financial adviser and any notice or report to be provided to OBM may be provided to OBM's financial adviser.

(b) OBM intends that the provisions of Treasury Regulation Section 1.148-1(f)(3)(i) (defining "competitive sale" for purposes of establishing the issue price of the Certificates) will apply to the initial sale of the Certificates (the "competitive sale requirements") because:

- (1) OBM shall disseminate this Notice to potential underwriters in a manner that is reasonably designed to reach potential underwriters;
- (2) all bidders shall have an equal opportunity to bid;
- (3) OBM may receive bids from at least three underwriters of municipal bonds who have established industry reputations for underwriting new issuances of municipal bonds; and
- (4) OBM anticipates awarding the sale of the Certificates to the bidder who submits a firm offer to purchase the Certificates at the lowest interest cost, as set forth in this Notice.

Any bid submitted pursuant to this Notice shall be considered a firm offer for the purchase of the Certificates, as specified in the bid, and by submitting a bid the winning bidder is certifying that it is an underwriter of municipal bonds which has an established industry reputation for underwriting new issuances of municipal bonds.

(c) In the event that the competitive sale requirements are not satisfied, OBM shall so advise the winning bidder. In the case of each maturity of the Certificates of which at least 10% of such maturity is sold to the public at a single price (the "10% test") as of the date and time of award of the Certificates, OBM will treat such price as the issue price of that maturity. In the case of each other maturity of the Certificates, OBM will treat the initial offering price to the public as of the sale date of such maturity as the issue price of that maturity (the "hold-the-offering-price rule"). The foregoing determination of issue price shall be applied on a maturity-by-maturity basis. The winning bidder shall advise OBM of which, if any, maturities of the Certificates satisfy the 10% test as of the date and time of the award of the Certificates. Bids will not be subject to cancellation in the event that OBM determines to apply the hold-the-offering-price rule to any maturity of the Certificates. Bidders should prepare their bids on the assumption that some or all of the maturities of the Certificates will be subject to the hold-the-offering-price rule in order to establish the issue price of the Certificates.

(d) By submitting a bid, the winning bidder shall (i) confirm that the underwriters (such term being used as defined below) have offered or will offer the Certificates to the public on or before the date of award at the offering price or prices (the "initial offering price"), or at the corresponding yield or yields, set forth in the bid submitted by the winning bidder and (ii) agree, on behalf of the underwriters participating in the purchase of the Certificates, that the underwriters will neither offer nor sell unsold Certificates of any maturity to which the hold-the-offering-price rule shall apply to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following:

- (1) the close of the fifth (5th) business day after the sale date; or
- (2) the date on which the underwriters have sold at least 10% of that maturity of the Certificates to the public at a price that is no higher than the initial offering price to the public.

The winning bidder will advise OBM promptly after the close of the fifth (5th) business day after the sale date whether it has sold 10% of that maturity of the Certificates to the public at a price that is no higher than the initial offering price to the public.

(e) OBM acknowledges that, in making the representations set forth above, the winning bidder will rely on (i) the agreement of each underwriter to comply with the requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates, as set forth in an agreement among underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the Certificates to the public, the agreement of each dealer who is a member of the selling group to comply with the requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an underwriter or dealer who is a member of the selling group is a party to a third-party distribution agreement that was employed in connection with the initial sale of the Certificates to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates, as set forth in the third-party distribution agreement and the related pricing wires. OBM further acknowledges that each underwriter shall be solely liable for its failure to comply with its agreement regarding requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates, and that no underwriter shall be liable for the failure of any other underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a third-party distribution agreement to comply with its corresponding agreement to comply with the requirements for establishing issue price of the Certificates, including, but not limited to, its agreement to comply with the hold-the-offering-price rule, if applicable to the Certificates.

(f) By submitting a bid, each bidder confirms that:

- (i) any agreement among underwriters, any selling group agreement and each third-party distribution agreement (to which the bidder is a party) relating to the initial sale of the Certificates to the public, together with the related pricing wires, contains or will contain language obligating each underwriter, each dealer who is a member of the selling group, and each broker-dealer that is a party to such third-party distribution agreement, as applicable:

(1)(a) to report the prices at which it sells, as of the date and time of the award of the Certificates, to the public the Certificates of each maturity allocated to it, and (b) to comply with the hold-the-offering-price rule, if applicable, if and for so long as directed by the winning bidder and as set forth in the related pricing wires,

(2) to promptly notify the winning bidder of any sales of Certificates that, to its knowledge, are made to a purchaser who is a related party to an underwriter participating in the initial sale of the Certificates to the public, and

(3) to acknowledge that, unless otherwise advised by the underwriter, dealer or broker-dealer, the winning bidder shall assume that each order submitted by the underwriter, dealer or broker-dealer is a sale to the public.

(ii) any agreement among underwriters or selling group agreement relating to the initial sale of the Certificates to the public, together with the related pricing wires, contains or will contain language obligating each underwriter or dealer that is a party to a third-party distribution agreement to be employed in connection with the initial sale of the Certificates to the public to require each broker-dealer that is a party to such third-party distribution agreement to (A) report the prices at which it sells, as of the date and time of the award of the Certificates, to the public the Certificates of each maturity allocated to it, and (B) comply with the hold-the-offering-price rule, if applicable, if and for so long as directed by the winning bidder or the underwriter and as set forth in the related pricing wires.

(g) Sales of any Certificates to any person that is a related party to an underwriter participating in the initial sale of the Certificates to the public shall not constitute sales to the public for purposes of this Notice. Further, for purposes of this Notice:

(i) "public" means any person other than an underwriter or a related party,

(ii) "underwriter" means (A) any person that agrees pursuant to a written contract with OBM (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Certificates to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Certificates to the public (including a member of a selling group or a party to a third-party distribution agreement participating in the initial sale of the Certificates to the public),

(iii) a purchaser of any of the Certificates is a "related party" to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (A) more than 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (B) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (C) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

(iv) "sale date" means the date that the Certificates are awarded by OBM to the winning bidder.

Good Faith Deposit

The successful bidder (the Purchaser) must submit a good faith deposit of \$275,000.00 (the Deposit) to The Bank of New York Mellon Trust Company, N.A. (the Trustee) in the form of a wire transfer, as instructed by OBM, no later than 1:30 p.m. EST on the date bids are received. If the Deposit is not received by that time, OBM may decline to award the bid to that successful bidder. The Deposit will be retained to secure performance of the bid and to be forfeited as agreed liquidated damages upon failure of the successful bidder to perform and otherwise to be applied as part payment for the Certificates. No interest will be paid on the Deposit.

The Certificates Generally

The Certificates are authorized by Section 701.10 of House Bill 529 of the 132nd General Assembly of the State and Chapter 125 of the Ohio Revised Code. The Certificates are issued to pay costs of the EDCS Project.

The Certificates evidence proportionate interests in Base Rent to be paid by DAS pursuant to the Master Lease-Purchase Agreement dated as of October 1, 2014 (Lease), between the State of Ohio Leasing Corporation, Inc. (Corporation), as lessor, and DAS, as lessee, as supplemented by Supplemental Lease No. 3-18 dated as of December 1, 2018, to be delivered pursuant to a Trust Agreement dated as of October 1, 2014 between the Corporation and the Trustee, and a Third Supplemental Trust Agreement thereto dated as of December 1, 2018. The Corporation has assigned, without recourse, all of its rights under the Lease to the Trustee pursuant to the Trust Agreement. Principal of and interest on the Certificates and all Additional Certificates issued pursuant to the Trust Agreement, are payable from (1) principal and interest components of payments by DAS under the Lease, (2) money received by the Trustee under the Lease (net of Trustee fees and expenses), including income or money received from the lease, sale or disposition of the Project, which income or money is not likely to be sufficient to pay all principal and interest on the Certificates, (3) money in the Certificate Fund and (4) income from the investment of the foregoing.

The obligation of DAS to make lease payments is subject to and dependent on biennial renewal of the Lease and biennial appropriations by the General Assembly sufficient to pay lease payments. Those appropriations may not be made for more than a two-year period. Failure of the General Assembly to appropriate moneys to DAS will result in termination of the Lease.

The obligation of DAS to pay lease payments does not constitute a debt of DAS or the State of Ohio. The Certificates do not represent or constitute a debt of DAS or the State of Ohio or of any political subdivision thereof, or a pledge of the faith and credit of the State, any political subdivision thereof or DAS. Certificate Holders and beneficial owners have no right to have excises or taxes levied by the General Assembly.

Book Entry Only

The Certificates will be issued in fully registered form under a book entry system, with no distribution or right to distribution of Certificates to the ultimate purchasers, as follows:

(i) One fully registered Certificate, in printed, xerographically reproduced or typewritten form, for each maturity will be delivered, and the Purchaser will deposit the Certificates initially delivered with DTC or its agent, registered in the name of DTC or its nominee.

(ii) DTC and its Direct Participants will employ their own book entry systems to evidence ownership interests in the Certificates (book entry interests), with transfer of book entry interests to be effected by them on their records pursuant to their rules and procedures. DTC will maintain records reflecting the book entry positions of Direct Participants, and the Participants and certain persons acting through Participants will maintain records of the ultimate purchasers of book entry interests.

(iii) For all purposes of the Certificate proceedings (except for certain provisions of the Continuing Disclosure Agreement), including payment by the State of principal and interest (which will be paid by DAS directly to DTC or its nominee as registered owner) and any notices (including notices of prior redemption) and rights (including rights upon default), DTC or the nominee as registered owner of the Certificates will be and will be considered to be the certificate holder and registered owner of the Certificates. Payments of amounts, received by DTC from DAS, to DTC Participants holding book entry positions will be the responsibility of DTC, and payments to the ultimate book entry interest owners will be the responsibility of those Participants and other persons acting through Participants.

(iv) DAS and OBM will have no responsibility for maintaining, supervising or reviewing any records maintained by DTC or its nominee, its Participants, or persons acting through those Participants.

(v) Under certain circumstances provided for in the Certificate proceedings and described in the Offering Circular, OBM may select another securities depository to replace DTC, or authenticate and deliver replacement Certificates (in the denomination of \$5,000 or any multiple of \$5,000) in the form of fully registered Certificates as generally provided for in the Certificate proceedings.

The Purchaser will be responsible for completing and delivering to DTC, prior to delivery of the Certificates, the DTC "Registered Municipal Bond Eligibility Questionnaire."

Payments

Principal and interest will be payable to the registered owner (initially, Cede & Co., as nominee of DTC). Principal will be payable on presentation and surrender at the office of the Paying Agent (initially, The Bank of New York Mellon Trust Company, N.A., New Albany, Ohio). Interest will be transmitted on each interest payment date to the registered owner as of the fifteenth day of the calendar month preceding the interest payment date.

Insurance

Any qualification or commitment for or issuance of any insurance guaranteeing the payment when due of principal of and interest on the Certificates shall be solely at a bidder's option and expense. Bond Counsel will express no opinion concerning such insurance, and any resulting increased costs of preparation or delivery (including, without limitation, legal expenses, required changes in a final Offering Circular and printing) shall be paid by the Purchaser. Bids may not be conditioned on the issuance of any policy or commitment. Any failure of the Certificates to be insured, if applied for by and at the option of the Purchaser, shall not constitute cause for the Purchaser to refuse to accept delivery and pay for those Certificates.

Closing

It is anticipated that the Certificates will be available for delivery prior to noon EST on December 13, 2018, to DTC or its agent. Closing will take place from Columbus, Ohio. Unless other satisfactory arrangements are made, the Purchaser will be required to accept delivery of the Certificates when so available and make payment in federal funds. The Certificates are to be prepared, authenticated and executed without expense to the Purchaser. The successful bidder will be responsible for paying the costs of any fees imposed by DTC. A complete transcript of proceedings, the Certificates, and a no-litigation certificate as described in the Offering Circular, will be furnished at closing by DAS.

CUSIP numbers and CUSIP Service Bureau charges for the assignment of the numbers are the responsibility of the Financial Adviser. Any delay, error or omission with respect to CUSIP numbers on the Certificates shall not constitute cause for the Purchaser to refuse to accept delivery of and pay for the Certificates.

The successful bidder shall also be responsible for any applicable fees of the Ohio Municipal Advisory Council.

Legal Opinion; Tax Matters

Upon delivery, the Certificates will be accompanied by the legal opinion as to legal matters as described in the Offering Circular and rendered by Bricker & Eckler LLP, Bond Counsel, at no expense to the successful bidder.

The proposed text of Bond Counsel's legal opinion is set forth as **Exhibit A-2** to the deemed final Offering Circular for the Certificates. The legal opinion to be delivered may vary from that text if necessary to reflect facts and law on the date of delivery. See also the Offering Circular's discussion of **Legal Opinions** and **Tax Matters**.

The successful bidder for the Certificates, by submitting its bid, agrees to certify to DAS and Bond Counsel information as to bona fide initial offering prices to the public and sales of the Certificates appropriate for the determination of the issue price of, and yield on, the Certificates under the Code, as and at the time requested by Bond Counsel. A copy of the form of that certification is attached hereto as Attachment A-1 or Attachment A-2, depending on how the issue price is determined.

Offering Circular

The Offering Circular distributed by DAS prior to the bid date is "deemed final" as of its date by DAS for purposes of SEC Rule 15c2-12(b)(1) but is subject to completion, revision and amendment, including changes, in a final Offering Circular. Copies of the deemed final Offering Circular are on file at, and may be obtained from Larry

Scurlock, Office of Budget and Management, 30 East Broad Street, 34th Floor, Columbus, Ohio 43215-3457 (telephone 614-466-4034). This Notice is attached as **Exhibit B-2** to the Offering Circular.

Following the award, DAS in cooperation with the Purchaser will complete the cover pages of the Offering Circular to indicate the initial public offering prices or yields, interest rates, and identity of the original purchaser and ratings, and provide any other information required for a final Offering Circular for the purposes of the Purchaser's compliance with SEC Rule 15c2-12(b)(3) and (4). The Purchaser will within seven business days after the date of award be furnished with a final Offering Circular for purposes of the Purchaser's compliance with the SEC Rule and will be authorized by DAS to reproduce and circulate at the Purchaser's expense copies of the "deemed final" (until the final Offering Circular is available) and the final Offering Circular for use by the Purchaser in its marketing effort and in its providing copies thereof to its customers. DAS contemplates that the final Offering Circular for the Certificates, among other changes, will not include this Notice.

The Purchaser at delivery will be furnished with a certificate of the Director of Budget and Management relating to the accuracy and completeness of the deemed final and final Offering Circular, including matters set forth in or contemplated by them. DAS will furnish the Purchaser up to 50 copies of the final Offering Circular. The Purchaser may obtain, at its expense, additional copies of the final Offering Circular from the printer.

Dated: November 6, 2018

Ohio Office of Budget and Management

Attachment A-1 to Notice of Sale

\$ _____

**CERTIFICATES OF PARTICIPATION, SERIES 2018
Evidencing Proportionate Interests Of The Owners Thereof
In Base Rent To Be Paid By
State of Ohio Department of Administrative Services
(Enterprise Data Center Solutions Project)**

Dated as of December [], 2018

CERTIFICATE OF ORIGINAL PURCHASER

[Competitive Sale Requirement Satisfied]

_____, [shortened name of lead underwriter] [as Underwriter] [for itself and as representative of the Underwriters] for the certificates identified above (the "Issue"), issued by the State of Ohio (the "Issuer"), acting by and through the State of Ohio Department of Administrative Services, based on its knowledge regarding the sale of the Issue, certifies as of this date as follows:

Issue Price.

(A) As of the Sale Date, the reasonably expected initial offering prices of the Issue to the Public by [name of underwriter] are the prices listed in the final Offering Circular, dated [_____], for the Issue (the "Expected Offering Prices"). The Expected Offering Prices are the prices for the Maturities of the Issue used by [name of underwriter] in formulating its bid to purchase the Issue. Attached as Schedule A is a true and correct copy of the bid provided by [name of underwriter] to purchase the Issue.

(B) [name of underwriter] was not given the opportunity to review other bids prior to submitting its bid.

(C) The bid submitted by [name of underwriter] constituted a firm offer to purchase the Issue.

(D) The aggregate of the Expected Offering Prices of each Maturity is \$[_____] (the "Issue Price").

(E) Definitions.

"Maturity" means certificates of the Issue with the same credit and payment terms. Certificates of the Issue with different maturity dates, or certificates of the Issue with the same maturity date but different stated interest rates, are treated as separate Maturities.

"Public" means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a related party to an Underwriter. The term "related party" for purposes of this certificate generally means any two or more persons who have greater than 50 percent common ownership, directly or indirectly.

"Sale Date" means the first day on which there is a binding contract in writing for the sale of a Maturity of the Issue. The Sale Date of the Issue is [DATE].

"Underwriter" means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Issue to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Issue to the Public (including a member of a selling group or a party to a third-party distribution agreement participating in the initial sale of the Issue to the Public).

All capitalized terms not defined in this Certificate have the meaning set forth in the Issuer's Tax Compliance Certificate or in Attachment A to it.

The signer is an officer of [name of underwriter] and duly authorized to execute and deliver this Certificate of [name of underwriter]. The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents [name of underwriter]'s interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax Compliance Certificate and with respect to compliance with the federal income tax rules affecting the Issue, and by Bricker & Eckler LLP, as bond counsel, in connection with rendering its opinion that the interest on the Issue is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Issue.

Dated: _____, 20__

[NAME OF UNDERWRITER]

By: _____

Title: _____

SCHEDULE A

COPY OF [NAME OF UNDERWRITER]'S BID

(Attached)

Attachment A-2 to Notice of Sale

\$ _____
CERTIFICATES OF PARTICIPATION, SERIES 2018
Evidencing Proportionate Interests Of The Owners Thereof
In Base Rent To Be Paid By
State of Ohio Department of Administrative Services
(Enterprise Data Center Solutions Project)

Dated as of December [], 2018

CERTIFICATE OF ORIGINAL PURCHASER

[General Rule/Hold the Price for some or all maturities]

_____, [shortened name of lead underwriter] [as Underwriter] [for itself and as representative of the Underwriters] for the certificates identified above (the "Issue"), issued by the State of Ohio (the "Issuer"), acting by and through the State of Ohio Department of Administrative Services, based on its knowledge regarding the sale of the Issue, certifies as of this date as follows:

Issue Price.

[If the issue price is determined using only the general rule (actual sales of at least 10%) in Regulations § 1.148-1(f)(2)(i):

(B) As of the date of this certificate, for each Maturity of the Issue, the first price at which at least 10% of such Maturity of the Issue was sold to the Public is the respective price listed in the final Offering Circular, dated [____], for the Issue (the "Sale Price" as applicable to respective Maturities). The aggregate of the Sale Prices of each Maturity is \$[_____] (the "Issue Price").]

[If the issue price is determined using a combination of actual sales (Regulations § 1.148-1(f)(2)(i)) and hold-the-offering-price (Regulations § 1.148-1(f)(2)(ii)):

(E) As of the date of this certificate, for each Maturity listed on Schedule A as the "General Rule Maturities," the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A (the "Sale Price" as applicable to each Maturity of the General Rule Maturities).

(F) On or before the Sale Date, [name of underwriter][The Underwriting Group] offered the Maturities listed on Schedule A as the "Hold-the-Offering-Price Maturities" to the Public for purchase at the respective initial offering prices listed in the final Offering Circular, dated [____], for the Issue (the "Initial Offering Prices" as applicable to each Maturity of the Hold-the-Offering-Price Maturities). A copy of the pricing wire or equivalent communication for the Issue is attached to this certificate as Schedule B.

(G) As set forth in the [Notice of Sale and bid award], [[name of underwriter] has] [the members of the Underwriting Group have] agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, [it][they] would neither offer nor sell any portion of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the "hold-the-offering-price rule"), and (ii) any selling group agreement shall contain the agreement of each dealer who is a member of the selling group, and any third-party distribution agreement shall contain the agreement of each broker-dealer who is a party to the third-party distribution agreement, to comply with the hold-the-offering-price rule. Pursuant to such agreement, no Underwriter has offered or sold any Maturity of the Hold-the-Offering-Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Issue during the Holding Period.

(H) The aggregate of the Sale Prices of the General Rule Maturities and the Initial Offering Prices of the Hold-the-Offering-Price Maturities is \$[_____] (the "Issue Price").]

[If the issue price is determined using only the hold-the-offering-price rule in Regulations § 1.148-1(f)(2)(ii):

(C) [name of underwriter][The Underwriting Group] offered, on or before the Sale Date, each Maturity of the Issue to the Public for purchase at the respective initial offering prices listed in the final Offering Circular, dated [____], for the Issue (the "Initial Offering Prices"). A copy of the pricing wire or equivalent communication for the Issue is attached to this certificate as Schedule B. The aggregate of the Initial Offering Prices of each Maturity is \$[_____] (the "Issue Price").

(D) As set forth in the [Notice of Sale and bid award], [name of underwriter has][the members of the Underwriting Group have] agreed in writing that, (i) for each Maturity of the Issue, [it][they] would neither offer nor sell any portion of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the "hold-the-offering-price rule"), and (ii) any selling group agreement shall contain the agreement of each dealer who is a member of the selling group, and any third-party distribution agreement shall contain the agreement of each broker-dealer who is a party to the third-party distribution agreement, to comply with the hold-the-offering-price rule. Pursuant to such agreement, no Underwriter has offered or sold any Maturity of the Issue at a price that is higher than the respective Initial Offering Price for that Maturity of the Issue during the Holding Period.]

[(B),(E), or (C)] Definitions.

"Holding Period" means, for each Hold-the-Offering-Price Maturity of the Issue, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date ([DATE]), or (ii) the date on which [Name of underwriter][the Underwriters] [has][have] sold at least 10% of such Maturity of the Issue to the Public at a price that is no higher than the Initial Offering Price for such Maturity.]

"Maturity" means certificates of the Issue with the same credit and payment terms. Certificates of the Issue with different maturity dates, or certificates of the Issue with the same maturity date but different stated interest rates, are treated as separate Maturities.

"Public" means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a related party to an Underwriter. The term "related party" for purposes of this certificate generally means any two or more persons who have greater than 50 percent common ownership, directly or indirectly.

"Sale Date" means the first day on which there is a binding contract in writing for the sale of a Maturity of the Issue. The Sale Date of the Issue is [DATE].

"Underwriter" means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Issue to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Issue to the Public (including a member of a selling group or a party to a third-party distribution agreement participating in the initial sale of the Issue to the Public).

All capitalized terms not defined in this Certificate have the meaning set forth in the Issuer's Tax Compliance Certificate or in Attachment A to it.

The signer is an officer of [name of underwriter] and duly authorized to execute and deliver this Certificate of [name of underwriter] [for itself and as representative of the Underwriting Group]. The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents [name of underwriter]'s interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the [Tax Compliance Certificate/Tax Certificate and Agreement] and with respect to compliance with the federal income tax rules affecting the Issue, and by Bricker & Eckler LLP, as bond counsel, in connection with rendering its opinion that the interest on the Issue is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038[-G][-GC][-TC], and other federal income tax advice that it may give to the Issuer from time to time relating to the Issue.

Dated: _____, 20__

[NAME OF UNDERWRITER] [for itself and as representative of
[names of other underwriters]]

By: _____

Title: _____

[If the issue price is determined using a combination of the general rule (actual sales) and hold-the-offering-price rule:

SCHEDULE A

**SALE PRICES OF THE GENERAL RULE MATURITIES AND
INITIAL OFFERING PRICES OF THE HOLD-THE-OFFERING-PRICE MATURITIES**

(Attached)

SCHEDULE B

PRICING WIRE OR EQUIVALENT COMMUNICATION

(Attached)

[If the issue price is determined using only the hold-the-offering-price rule in Regulations § 1.148-1(f)(2)(ii):

SCHEDULE A

PRICING WIRE OR EQUIVALENT COMMUNICATION

(Attached)

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