



Ohio Public Facilities Commission

Mike DeWine, Chairman
Governor
Keith Faber,
Auditor of State

Kimberly Murnieks, Secretary
Director of Budget and Management
Frank LaRose,
Secretary of State

Robert Sprague, Treasurer
Treasurer of State
Dave Yost,
Attorney General

Minutes of August 27, 2019 Meeting

The Ohio Public Facilities Commission held a meeting commencing at 3:30 p.m. on Tuesday, August 27, 2019, in the 35th Floor Conference Room, Office of Budget and Management (OBM), James A. Rhodes State Office Tower, 30 East Broad Street, Columbus, Ohio, pursuant to notice of meeting given by the Secretary pursuant to Ohio Administrative Code 151-1-01 and the Commission Bylaws.

[Copies of the items marked * are attached hereto and made a part of these minutes.]

Pursuant to Section 151.02 of the Ohio Revised Code (O.R.C.) and Section 3.2 of the Bylaws, Mr. Donahue, as Governor DeWine's designee presided as Chair of the meeting and called the meeting to order.

Mr. Larry Scurlock, OBM Assistant Debt Manager and Assistant Secretary of the Commission, reported that no new written designations, pursuant to O.R.C. §151.02 and Section 2.1 of the Bylaws, were filed with the Secretary since the last meeting of the Commission.

Upon roll call, the Chair declared a quorum to be present. The following member and designees of the members of the Commission, eligible to vote at the meeting, were present during the meeting:

Matthew Donahue, Chairman, Office of the Governor
Kimberly Murnieks, Secretary, Office of Budget and Management
Jonathan Azoff, Treasurer, Office of Treasurer of State
Shawn Busken, Office of the Attorney General
Tim Keen, Office of the Auditor of State
Katherine Nickey, Office of Secretary of State

Mr. Scurlock filed the certificate of compliance* with the Commission's rule for notification of meetings to the public and news media.

Mr. Donahue then requested the minutes of the Commission's August 1, 2019 meeting be submitted for approval. Ms. Murnieks then moved, seconded by Ms. Nickey, to approve those minutes. There being no discussion, upon roll call, the motion was approved as follows: Ayes – Donahue, Azoff, Keen, Nickey, Busken and Murnieks; Nays – None. The Chair declared the motion passed and the minutes approved.

At the request of the Chair, Mr. Azoff then presented to the Commission the tabulation of bids* received for the State of Ohio \$300,000,000 Common Schools General Obligation Bonds,

Series 2019A and \$20,000,000 Third Frontier Research and Development General Obligation Bonds Series 2019A.

There was then presented to the Commission completed Resolution No. 2019-3*, entitled "Series Resolution Providing for the Competitive Sale and Issuance of \$300,000,000 State of Ohio Common Schools

RESOLUTION NO. 2019-3
SERIES RESOLUTION
(COMMON SCHOOLS 2019A)

General Obligation Bonds, Series 2019A." It was moved by Mr. Azoff, and Mr. Busken seconded the motion, that Resolution No. 2019-3 be adopted. Upon roll call, the motion was approved as follows: Ayes – Donahue, Azoff, Keen, Nickey, Busken and Murnieks; Nays – None. The Chair declared the motion passed and Resolution No. 2019-3 adopted.

There was then presented to the Commission completed Resolution No. 2019-4*, entitled "Series Resolution Providing for the Competitive Sale and Issuance of \$20,000,000 State of Ohio Third Frontier

RESOLUTION NO. 2019-4
SERIES RESOLUTION
(THIRD FRONTIER 2019A)

Research and Development General Obligation Bonds, Series 2019A." It was moved by Ms. Murnieks, and Mr. Azoff seconded the motion, that Resolution No. 2019-4 be adopted. Upon roll call, the motion was approved as follows: Ayes – Donahue, Azoff, Keen, Nickey, Busken and Murnieks; Nays – None. The Chair declared the motion passed and Resolution No. 2019-4 adopted.

At the request of the Chair, Mr. Scurlock, presented the recommended revisions to the State of Ohio Debt and Interest Rate Risk Management Policy* (Policy). Mr. Scurlock explained that this policy is reviewed every fourth fiscal year, was a joint effort between OBM each State Issuer, was also reviewed by the Commission's municipal advisors and bond counsel, and that the suggested revision were fairly modest. Representatives from Public Resources Advisory Group ("PRAG"), one of the Commission's Municipal also presented, covering the actual changes that were being recommended to the policy. The Commission members had general discussion about the practical implications of some of these proposed changes. Mr. Azoff submitted two additional proposed edits to the Policy. Mr. Donahue then moved that the proposed revisions to the Policy, including those proposed edits offered by Mr. Azoff at the meeting, be approved. Ms. Murnieks seconded the motion of the Chair. Upon roll call, the motion was approved as follows: Ayes – Donahue, Azoff, Keen, Nickey, Busken and Murnieks; Nays – None. The Chair declared the motion passed.

At the request of the Chair, Mr. Kurt Kauffman, OBM Capital Finance Director, then presented the Staff Report and Recommendation* regarding the additional responses from two investment banking firms (Piper Jeffray and Raymond James Financial), received in response to the Commission's Request for Qualifications (RFQ) for Underwriting and Investment Banking Services. Mr. Kauffman explained the staff used the same evaluation process and criteria that staff used to evaluate each of the proposals when qualifying firms for both the senior managers and co-managers pools at the Commission's June 11, 2019 meeting. Mr. Kauffman stated that the staff is recommending the Commission qualify both of these two additional firms for the co-manager pool as a result of the evaluation process. Mr. Donahue then moved to accept the staff recommendation to qualify the two additional firms for inclusion in the pool of co-manager firms serving as underwriter on Commission bond sales for the period July 1, 2019 through June 30, 2023. Ms. Murnieks seconded the motion of the Chair. Upon roll call, the motion was approved as follows: Ayes – Donahue, Azoff, Keen, Nickey, Busken and Murnieks; Nays – None. The Chair declared the motion passed.

Mr. Scurlock stated that the next Commission meeting will be scheduled for a later determined date in September of 2019 for the Third Frontier Bonds Series and additional matters as needed.

There being no further business, the meeting was adjourned.



Secretary



Ohio Public Facilities Commission

Mike DeWine, Chairman
Governor

Keith Faber,
Auditor of State

Kimberly Murnieks, Secretary
Director of Budget and Management

Frank LaRose,
Secretary of State


Robert Sprague, Treasurer
Treasurer of State

Dave Yost,
Attorney General

CERTIFICATION REGARDING NOTIFICATION OF MEETING TO THE PUBLIC AND NEWS MEDIA

The undersigned, Assistant Secretary of the Ohio Public Facilities Commission, hereby certifies that the notice of the time, place and purposes of the meeting of the Commission on August 27, 2019 at 3:30 p.m. was posted on August 23, 2019 in accordance Section 151-1-01 of the Rules for Notification of Meetings to the Public and New Media effective May 10, 2019, and that requests for notification provided for in Sections 151-1-01(I) and 151-1-01(J) of those Rules have been received and the notifications pursuant to those sections were given under the Rules.

Dated: August 27, 2019



Larry Scurlock
Assistant Secretary
Ohio Public Facilities Commission

\$300,000,000.00

STATE OF OHIO
Common Schools GO Bonds
2019A

Morgan Stanley & Co.

Date of Sale:
08/27/19
Dated Date
09/10/19
Issuer:
OPFC

TIC 2.3471840%
NIC 2.7612942%

TOTAL **300,000,000** **183,007,083.33** **483,007,083.33** **482,416,458.33** **-**

Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
12/15/20	-	-	7,500,000.00	7,500,000.00	-	-
06/15/21	10,000,000	5.000% ^a	7,500,000.00	17,500,000.00	2021	25,000,000.00
12/15/21	-	-	7,250,000.00	7,250,000.00	-	-
06/15/22	10,310,000	5.000% ^a	7,250,000.00	17,560,000.00	2022	24,810,000.00
12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000% ^a	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000% ^a	6,721,625.00	18,086,625.00	2024	24,808,250.00
12/15/24	-	-	6,437,500.00	6,437,500.00	-	-
06/15/25	11,935,000	5.000% ^a	6,437,500.00	18,372,500.00	2025	24,810,000.00
12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000% ^a	6,139,125.00	18,669,125.00	2026	24,808,250.00
12/15/26	-	-	5,825,875.00	5,825,875.00	-	-
06/15/27	13,155,000	5.000% ^a	5,825,875.00	18,980,875.00	2027	24,806,750.00
12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000% ^a	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000% ^a	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000% ^a	4,789,000.00	20,019,000.00	2030	24,808,000.00
12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000% ^a	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
06/15/32	16,790,000	5.000% ^a	4,008,500.00	20,798,500.00	2032	24,807,000.00
12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
06/15/33	17,630,000	5.000% ^a	3,588,750.00	21,218,750.00	2033	24,807,500.00
12/15/33	-	-	3,148,000.00	3,148,000.00	-	-
06/15/34	18,515,000	5.000% ^a	3,148,000.00	21,663,000.00	2034	24,811,000.00
12/15/34	-	-	2,685,125.00	2,685,125.00	-	-
06/15/35	19,440,000	5.000% ^a	2,685,125.00	22,125,125.00	2035	24,810,250.00
12/15/35	-	-	2,199,125.00	2,199,125.00	-	-
06/15/36	20,410,000	5.000% ^a	2,199,125.00	22,609,125.00	2036	24,808,250.00
12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000% ^a	1,688,875.00	23,118,875.00	2037	24,807,750.00
12/15/37	-	-	1,153,125.00	1,153,125.00	-	-
06/15/38	22,500,000	5.000% ^a	1,153,125.00	23,653,125.00	2038	24,806,250.00
12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000% ^a	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO
Common Schools GO Bonds
2019A

Date of Sale:

08/27/19

Dated Date

09/10/19

Issuer:

OPTC

Bank of America Merrill Lynch

TIC

2.3483044%^a

NIC

2.7624137%^a

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33	-
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
12/15/20	-	-	7,500,000.00	7,500,000.00	-	-
06/15/21	10,000,000	5.000% ^a	7,500,000.00	17,500,000.00	2021	25,000,000.00
12/15/21	-	-	7,250,000.00	7,250,000.00	-	-
06/15/22	10,310,000	5.000% ^a	7,250,000.00	17,560,000.00	2022	24,810,000.00
12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000% ^a	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000% ^a	6,721,625.00	18,086,625.00	2024	24,808,250.00
12/15/24	-	-	6,437,500.00	6,437,500.00	-	-
06/15/25	11,935,000	5.000% ^a	6,437,500.00	18,372,500.00	2025	24,810,000.00
12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000% ^a	6,139,125.00	18,669,125.00	2026	24,808,250.00
12/15/26	-	-	5,825,875.00	5,825,875.00	-	-
06/15/27	13,155,000	5.000% ^a	5,825,875.00	18,980,875.00	2027	24,806,750.00
12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000% ^a	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000% ^a	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000% ^a	4,789,000.00	20,019,000.00	2030	24,808,000.00
12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000% ^a	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
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12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
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12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000% ^a	1,688,875.00	23,118,875.00	2037	24,807,750.00
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12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000% ^a	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO

Common Schools GO Bonds

2019A

Citigroup Global Markets Inc.

Date of Sale:

08/27/19

Dated Date

09/10/19

Issuer:

OPI-C

TTC

2.3509380%^a

NIC

2.7650445%^a

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33	-
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
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12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000% ^a	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000% ^a	6,721,625.00	18,086,625.00	2024	24,808,250.00
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12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000% ^a	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000% ^a	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000% ^a	4,789,000.00	20,019,000.00	2030	24,808,000.00
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06/15/39	23,625,000	5.000% ^a	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO
Common Schools GO Bonds
2019A

Date of Sale:
08/27/19
Dated Date
09/10/19
Issuer:
OPEC

Barclays Capital Inc.

TIC 2.3529788%
NIC 2.7670825%

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33	-
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
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06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
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06/15/21	10,000,000	5.000%	7,500,000.00	17,500,000.00	2021	25,000,000.00
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12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000%	6,139,125.00	18,669,125.00	2026	24,808,250.00
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12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
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12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000%	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
06/15/32	16,790,000	5.000%	4,008,500.00	20,798,500.00	2032	24,807,000.00
12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
06/15/33	17,630,000	5.000%	3,588,750.00	21,218,750.00	2033	24,807,500.00
12/15/33	-	-	3,148,000.00	3,148,000.00	-	-
06/15/34	18,515,000	5.000%	3,148,000.00	21,663,000.00	2034	24,811,000.00
12/15/34	-	-	2,685,125.00	2,685,125.00	-	-
06/15/35	19,440,000	5.000%	2,685,125.00	22,125,125.00	2035	24,810,250.00
12/15/35	-	-	2,199,125.00	2,199,125.00	-	-
06/15/36	20,410,000	5.000%	2,199,125.00	22,609,125.00	2036	24,808,250.00
12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000%	1,688,875.00	23,118,875.00	2037	24,807,750.00
12/15/37	-	-	1,153,125.00	1,153,125.00	-	-
06/15/38	22,500,000	5.000%	1,153,125.00	23,653,125.00	2038	24,806,250.00
12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000%	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO

Common Schools GO Bonds

2019A

RBC Capital Markets

Date of Sale:

08/27/19

Dated Date

09/10/19

Issuer:

OPFC

TIC

2.3565141%^a

NIC

2.7706117%^a

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33	-
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
12/15/20	-	-	7,500,000.00	7,500,000.00	-	-
06/15/21	10,000,000	5.000% ^a	7,500,000.00	17,500,000.00	2021	25,000,000.00
12/15/21	-	-	7,250,000.00	7,250,000.00	-	-
06/15/22	10,310,000	5.000% ^a	7,250,000.00	17,560,000.00	2022	24,810,000.00
12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000% ^a	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000% ^a	6,721,625.00	18,086,625.00	2024	24,808,250.00
12/15/24	-	-	6,437,500.00	6,437,500.00	-	-
06/15/25	11,935,000	5.000% ^a	6,437,500.00	18,372,500.00	2025	24,810,000.00
12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000% ^a	6,139,125.00	18,669,125.00	2026	24,808,250.00
12/15/26	-	-	5,825,875.00	5,825,875.00	-	-
06/15/27	13,155,000	5.000% ^a	5,825,875.00	18,980,875.00	2027	24,806,750.00
12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000% ^a	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000% ^a	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000% ^a	4,789,000.00	20,019,000.00	2030	24,808,000.00
12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000% ^a	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
06/15/32	16,790,000	5.000% ^a	4,008,500.00	20,798,500.00	2032	24,807,000.00
12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
06/15/33	17,630,000	5.000% ^a	3,588,750.00	21,218,750.00	2033	24,807,500.00
12/15/33	-	-	3,148,000.00	3,148,000.00	-	-
06/15/34	18,515,000	5.000% ^a	3,148,000.00	21,663,000.00	2034	24,811,000.00
12/15/34	-	-	2,685,125.00	2,685,125.00	-	-
06/15/35	19,440,000	5.000% ^a	2,685,125.00	22,125,125.00	2035	24,810,250.00
12/15/35	-	-	2,199,125.00	2,199,125.00	-	-
06/15/36	20,410,000	5.000% ^a	2,199,125.00	22,609,125.00	2036	24,808,250.00
12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000% ^a	1,688,875.00	23,118,875.00	2037	24,807,750.00
12/15/37	-	-	1,153,125.00	1,153,125.00	-	-
06/15/38	22,500,000	5.000% ^a	1,153,125.00	23,653,125.00	2038	24,806,250.00
12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000% ^a	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO

Common Schools GO Bonds

2019A

Mesimw Financial, Inc.

Date of Sale:

08/27/19

Dated Date:

09/10/19

Issuer:

OPTIC

TIC

2.3623126%^a

NIC

2.7763967%^a

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33	-
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
12/15/20	-	-	7,500,000.00	7,500,000.00	-	-
06/15/21	10,000,000	5.000% ^a	7,500,000.00	17,500,000.00	2021	25,000,000.00
12/15/21	-	-	7,250,000.00	7,250,000.00	-	-
06/15/22	10,310,000	5.000% ^a	7,250,000.00	17,560,000.00	2022	24,810,000.00
12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000% ^a	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000% ^a	6,721,625.00	18,086,625.00	2024	24,808,250.00
12/15/24	-	-	6,437,500.00	6,437,500.00	-	-
06/15/25	11,935,000	5.000% ^a	6,437,500.00	18,372,500.00	2025	24,810,000.00
12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000% ^a	6,139,125.00	18,669,125.00	2026	24,808,250.00
12/15/26	-	-	5,825,875.00	5,825,875.00	-	-
06/15/27	13,155,000	5.000% ^a	5,825,875.00	18,980,875.00	2027	24,806,750.00
12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000% ^a	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000% ^a	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000% ^a	4,789,000.00	20,019,000.00	2030	24,808,000.00
12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000% ^a	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
06/15/32	16,790,000	5.000% ^a	4,008,500.00	20,798,500.00	2032	24,807,000.00
12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
06/15/33	17,630,000	5.000% ^a	3,588,750.00	21,218,750.00	2033	24,807,500.00
12/15/33	-	-	3,148,000.00	3,148,000.00	-	-
06/15/34	18,515,000	5.000% ^a	3,148,000.00	21,663,000.00	2034	24,811,000.00
12/15/34	-	-	2,685,125.00	2,685,125.00	-	-
06/15/35	19,440,000	5.000% ^a	2,685,125.00	22,125,125.00	2035	24,810,250.00
12/15/35	-	-	2,199,125.00	2,199,125.00	-	-
06/15/36	20,410,000	5.000% ^a	2,199,125.00	22,609,125.00	2036	24,808,250.00
12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000% ^a	1,688,875.00	23,118,875.00	2037	24,807,750.00
12/15/37	-	-	1,153,125.00	1,153,125.00	-	-
06/15/38	22,500,000	5.000% ^a	1,153,125.00	23,653,125.00	2038	24,806,250.00
12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000% ^a	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO

Common Schools GO Bonds

2019A

J.P. Morgan Securities LLC

Date of Sale:

08/27/19

Dated Date:

09/10/19

Issuer:

OPFC

TIC

2.3629043%

NIC

2.7769866%

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33	-
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
12/15/20	-	-	7,500,000.00	7,500,000.00	-	-
06/15/21	10,000,000	5.000%	7,500,000.00	17,500,000.00	2021	25,000,000.00
12/15/21	-	-	7,250,000.00	7,250,000.00	-	-
06/15/22	10,310,000	5.000%	7,250,000.00	17,560,000.00	2022	24,810,000.00
12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000%	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000%	6,721,625.00	18,086,625.00	2024	24,808,250.00
12/15/24	-	-	6,437,500.00	6,437,500.00	-	-
06/15/25	11,935,000	5.000%	6,437,500.00	18,372,500.00	2025	24,810,000.00
12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000%	6,139,125.00	18,669,125.00	2026	24,808,250.00
12/15/26	-	-	5,825,875.00	5,825,875.00	-	-
06/15/27	13,155,000	5.000%	5,825,875.00	18,980,875.00	2027	24,806,750.00
12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000%	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000%	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000%	4,789,000.00	20,019,000.00	2030	24,808,000.00
12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000%	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
06/15/32	16,790,000	5.000%	4,008,500.00	20,798,500.00	2032	24,807,000.00
12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
06/15/33	17,630,000	5.000%	3,588,750.00	21,218,750.00	2033	24,807,500.00
12/15/33	-	-	3,148,000.00	3,148,000.00	-	-
06/15/34	18,515,000	5.000%	3,148,000.00	21,663,000.00	2034	24,811,000.00
12/15/34	-	-	2,685,125.00	2,685,125.00	-	-
06/15/35	19,440,000	5.000%	2,685,125.00	22,125,125.00	2035	24,810,250.00
12/15/35	-	-	2,199,125.00	2,199,125.00	-	-
06/15/36	20,410,000	5.000%	2,199,125.00	22,609,125.00	2036	24,808,250.00
12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000%	1,688,875.00	23,118,875.00	2037	24,807,750.00
12/15/37	-	-	1,153,125.00	1,153,125.00	-	-
06/15/38	22,500,000	5.000%	1,153,125.00	23,653,125.00	2038	24,806,250.00
12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000%	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO

Common Schools GO Bonds

2019A

Wells Fargo Bank, National Association

Date of Sale:

08/27/19

Dated Date:

09/10/19

Issuer:

OPFC

TIC

2.3700072%^a

NIC

2.7840662%^a

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
12/15/20	-	-	7,500,000.00	7,500,000.00	-	-
06/15/21	10,000,000	5.000% ^a	7,500,000.00	17,500,000.00	2021	25,000,000.00
12/15/21	-	-	7,250,000.00	7,250,000.00	-	-
06/15/22	10,310,000	5.000% ^a	7,250,000.00	17,560,000.00	2022	24,810,000.00
12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000% ^a	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000% ^a	6,721,625.00	18,086,625.00	2024	24,808,250.00
12/15/24	-	-	6,437,500.00	6,437,500.00	-	-
06/15/25	11,935,000	5.000% ^a	6,437,500.00	18,372,500.00	2025	24,810,000.00
12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000% ^a	6,139,125.00	18,669,125.00	2026	24,808,250.00
12/15/26	-	-	5,825,875.00	5,825,875.00	-	-
06/15/27	13,155,000	5.000% ^a	5,825,875.00	18,980,875.00	2027	24,806,750.00
12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000% ^a	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000% ^a	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000% ^a	4,789,000.00	20,019,000.00	2030	24,808,000.00
12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000% ^a	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
06/15/32	16,790,000	5.000% ^a	4,008,500.00	20,798,500.00	2032	24,807,000.00
12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
06/15/33	17,630,000	5.000% ^a	3,588,750.00	21,218,750.00	2033	24,807,500.00
12/15/33	-	-	3,148,000.00	3,148,000.00	-	-
06/15/34	18,515,000	5.000% ^a	3,148,000.00	21,663,000.00	2034	24,811,000.00
12/15/34	-	-	2,685,125.00	2,685,125.00	-	-
06/15/35	19,440,000	5.000% ^a	2,685,125.00	22,125,125.00	2035	24,810,250.00
12/15/35	-	-	2,199,125.00	2,199,125.00	-	-
06/15/36	20,410,000	5.000% ^a	2,199,125.00	22,609,125.00	2036	24,808,250.00
12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000% ^a	1,688,875.00	23,118,875.00	2037	24,807,750.00
12/15/37	-	-	1,153,125.00	1,153,125.00	-	-
06/15/38	22,500,000	5.000% ^a	1,153,125.00	23,653,125.00	2038	24,806,250.00
12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000% ^a	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO

Common Schools GO Bonds

2019A

UBS Financial Services Inc.

Date of Sale:

08/27/19

Dated Date

09/10/19

Issuer:

OPFC

TIC

2.3762476%

NIC

2.7902807%

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
12/15/20	-	-	7,500,000.00	7,500,000.00	-	-
06/15/21	10,000,000	5.000% ^a	7,500,000.00	17,500,000.00	2021	25,000,000.00
12/15/21	-	-	7,250,000.00	7,250,000.00	-	-
06/15/22	10,310,000	5.000% ^a	7,250,000.00	17,560,000.00	2022	24,810,000.00
12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000% ^a	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000% ^a	6,721,625.00	18,086,625.00	2024	24,808,250.00
12/15/24	-	-	6,437,500.00	6,437,500.00	-	-
06/15/25	11,935,000	5.000% ^a	6,437,500.00	18,372,500.00	2025	24,810,000.00
12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000% ^a	6,139,125.00	18,669,125.00	2026	24,808,250.00
12/15/26	-	-	5,825,875.00	5,825,875.00	-	-
06/15/27	13,155,000	5.000% ^a	5,825,875.00	18,980,875.00	2027	24,806,750.00
12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000% ^a	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000% ^a	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000% ^a	4,789,000.00	20,019,000.00	2030	24,808,000.00
12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000% ^a	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
06/15/32	16,790,000	5.000% ^a	4,008,500.00	20,798,500.00	2032	24,807,000.00
12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
06/15/33	17,630,000	5.000% ^a	3,588,750.00	21,218,750.00	2033	24,807,500.00
12/15/33	-	-	3,148,000.00	3,148,000.00	-	-
06/15/34	18,515,000	5.000% ^a	3,148,000.00	21,663,000.00	2034	24,811,000.00
12/15/34	-	-	2,685,125.00	2,685,125.00	-	-
06/15/35	19,440,000	5.000% ^a	2,685,125.00	22,125,125.00	2035	24,810,250.00
12/15/35	-	-	2,199,125.00	2,199,125.00	-	-
06/15/36	20,410,000	5.000% ^a	2,199,125.00	22,609,125.00	2036	24,808,250.00
12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000% ^a	1,688,875.00	23,118,875.00	2037	24,807,750.00
12/15/37	-	-	1,153,125.00	1,153,125.00	-	-
06/15/38	22,500,000	5.000% ^a	1,153,125.00	23,653,125.00	2038	24,806,250.00
12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000% ^a	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO

Common Schools GO Bonds

2019A

Jefferies LLC

Date of Sale:

08/27/19

Dated Date

09/10/19

Issuer:

OPTIC

TIC

2.3806874%^a

NIC

2.7946988%^a

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33	-
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
12/15/20	-	-	7,500,000.00	7,500,000.00	-	-
06/15/21	10,000,000	5.000% ^a	7,500,000.00	17,500,000.00	2021	25,000,000.00
12/15/21	-	-	7,250,000.00	7,250,000.00	-	-
06/15/22	10,310,000	5.000% ^a	7,250,000.00	17,560,000.00	2022	24,810,000.00
12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000% ^a	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000% ^a	6,721,625.00	18,086,625.00	2024	24,808,250.00
12/15/24	-	-	6,437,500.00	6,437,500.00	-	-
06/15/25	11,935,000	5.000% ^a	6,437,500.00	18,372,500.00	2025	24,810,000.00
12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000% ^a	6,139,125.00	18,669,125.00	2026	24,808,250.00
12/15/26	-	-	5,825,875.00	5,825,875.00	-	-
06/15/27	13,155,000	5.000% ^a	5,825,875.00	18,980,875.00	2027	24,806,750.00
12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000% ^a	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000% ^a	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000% ^a	4,789,000.00	20,019,000.00	2030	24,808,000.00
12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000% ^a	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
06/15/32	16,790,000	5.000% ^a	4,008,500.00	20,798,500.00	2032	24,807,000.00
12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
06/15/33	17,630,000	5.000% ^a	3,588,750.00	21,218,750.00	2033	24,807,500.00
12/15/33	-	-	3,148,000.00	3,148,000.00	-	-
06/15/34	18,515,000	5.000% ^a	3,148,000.00	21,663,000.00	2034	24,811,000.00
12/15/34	-	-	2,685,125.00	2,685,125.00	-	-
06/15/35	19,440,000	5.000% ^a	2,685,125.00	22,125,125.00	2035	24,810,250.00
12/15/35	-	-	2,199,125.00	2,199,125.00	-	-
06/15/36	20,410,000	5.000% ^a	2,199,125.00	22,609,125.00	2036	24,808,250.00
12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000% ^a	1,688,875.00	23,118,875.00	2037	24,807,750.00
12/15/37	-	-	1,153,125.00	1,153,125.00	-	-
06/15/38	22,500,000	5.000% ^a	1,153,125.00	23,653,125.00	2038	24,806,250.00
12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000% ^a	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

\$300,000,000.00

STATE OF OHIO

Common Schools GO Bonds

2019A

Goldman Sachs & Co. LLC

Date of Sale:

08/27/19

Dated Date

09/10/19

Issuer:

OPFC

TIC

2.3886807%

NIC

2.8026466%

TOTAL	300,000,000	183,007,083.33	483,007,083.33	482,416,458.33
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Date	Principal	Coupon	Interest Due	Period Total	FY	Fiscal Year Total
09/10/19	-	-	-	-	-	-
06/15/20	-	-	11,458,333.33	11,458,333.33	2020	11,458,333.33
12/15/20	-	-	7,500,000.00	7,500,000.00	-	-
06/15/21	10,000,000	5.000%	7,500,000.00	17,500,000.00	2021	25,000,000.00
12/15/21	-	-	7,250,000.00	7,250,000.00	-	-
06/15/22	10,310,000	5.000%	7,250,000.00	17,560,000.00	2022	24,810,000.00
12/15/22	-	-	6,992,250.00	6,992,250.00	-	-
06/15/23	10,825,000	5.000%	6,992,250.00	17,817,250.00	2023	24,809,500.00
12/15/23	-	-	6,721,625.00	6,721,625.00	-	-
06/15/24	11,365,000	5.000%	6,721,625.00	18,086,625.00	2024	24,808,250.00
12/15/24	-	-	6,437,500.00	6,437,500.00	-	-
06/15/25	11,935,000	5.000%	6,437,500.00	18,372,500.00	2025	24,810,000.00
12/15/25	-	-	6,139,125.00	6,139,125.00	-	-
06/15/26	12,530,000	5.000%	6,139,125.00	18,669,125.00	2026	24,808,250.00
12/15/26	-	-	5,825,875.00	5,825,875.00	-	-
06/15/27	13,155,000	5.000%	5,825,875.00	18,980,875.00	2027	24,806,750.00
12/15/27	-	-	5,497,000.00	5,497,000.00	-	-
06/15/28	13,815,000	5.000%	5,497,000.00	19,312,000.00	2028	24,809,000.00
12/15/28	-	-	5,151,625.00	5,151,625.00	-	-
06/15/29	14,505,000	5.000%	5,151,625.00	19,656,625.00	2029	24,808,250.00
12/15/29	-	-	4,789,000.00	4,789,000.00	-	-
06/15/30	15,230,000	5.000%	4,789,000.00	20,019,000.00	2030	24,808,000.00
12/15/30	-	-	4,408,250.00	4,408,250.00	-	-
06/15/31	15,990,000	5.000%	4,408,250.00	20,398,250.00	2031	24,806,500.00
12/15/31	-	-	4,008,500.00	4,008,500.00	-	-
06/15/32	16,790,000	5.000%	4,008,500.00	20,798,500.00	2032	24,807,000.00
12/15/32	-	-	3,588,750.00	3,588,750.00	-	-
06/15/33	17,630,000	5.000%	3,588,750.00	21,218,750.00	2033	24,807,500.00
12/15/33	-	-	3,148,000.00	3,148,000.00	-	-
06/15/34	18,515,000	5.000%	3,148,000.00	21,663,000.00	2034	24,811,000.00
12/15/34	-	-	2,685,125.00	2,685,125.00	-	-
06/15/35	19,440,000	5.000%	2,685,125.00	22,125,125.00	2035	24,810,250.00
12/15/35	-	-	2,199,125.00	2,199,125.00	-	-
06/15/36	20,410,000	5.000%	2,199,125.00	22,609,125.00	2036	24,808,250.00
12/15/36	-	-	1,688,875.00	1,688,875.00	-	-
06/15/37	21,430,000	5.000%	1,688,875.00	23,118,875.00	2037	24,807,750.00
12/15/37	-	-	1,153,125.00	1,153,125.00	-	-
06/15/38	22,500,000	5.000%	1,153,125.00	23,653,125.00	2038	24,806,250.00
12/15/38	-	-	590,625.00	590,625.00	-	-
06/15/39	23,625,000	5.000%	590,625.00	24,215,625.00	2039	24,215,625.00
	-	-	-	-	-	-
	300,000,000		183,007,083.33	483,007,083		482,416,458.33

OVERVIEW REPORT

Issuer	State	Issue Size	Sale Date
State of Ohio	OH	\$300,000,000	08/27/2019
Issue Description		Moody's/S&P/Fitch/Kroll	Sale Time
Common Schools General Obligation Bonds, Series 2019A		Aa1 / AA+ / AA+	10:30AM EDT
Dated Date	Due Date	First Int Date	Delivery
09/10/2019	06/15/2021 Thru 06/15/2039	06/15/2020	On or about 09/10/2019
Bid Award		Bank Qualified	
Low TIC - Delivery Date excluding Accrued Int		No	

Series Size		Series Description	
\$300,000,000		Common Schools General Obligation Bonds, Series 2019A	
Security Type	Bond Form	Insured By Issuer/Enhancement	Interest
Ult G.O.	Book Entry	No	J15-D15

BID SPECS

Max NIC/TIC	None	Series Min Bid	>= \$298,500,000.00 or 99.5 %
Denomination	\$5,000.00	Series Max Bid	
Coupon Mults	1/8 and 1/20 of 1% only	Zeros Cpn	Not Permitted
Overall Cpn Dif	None	Rates per Mat	One
Low Cpn	06/15/2021 - 06/15/2030 None	Term Bonds	Term Bonds Permitted / Bidders Option
Low Cpn	06/15/2031 - 06/15/2039 Not to Exceed Rate (5.0000%)	# of Cpn's	
Low Yield	None	Asc Cpn	
Low Dollar	None		
High Cpn	Not to Exceed Rate (5.0000%)		
High Yield	None		
High Dollar	None		

Maturity	CUSIP	\$ Amount	Rate	Basis/Yield	Mdy's/S&P/Fitch/Kroll
06/15/2021		\$10,000,000			Aa1 / AA+ / AA+ /
06/15/2022		\$10,310,000			Aa1 / AA+ / AA+ /
06/15/2023		\$10,825,000			Aa1 / AA+ / AA+ /
06/15/2024		\$11,365,000			Aa1 / AA+ / AA+ /
06/15/2025		\$11,935,000			Aa1 / AA+ / AA+ /
06/15/2026		\$12,530,000			Aa1 / AA+ / AA+ /
06/15/2027		\$13,155,000			Aa1 / AA+ / AA+ /
06/15/2028		\$13,815,000			Aa1 / AA+ / AA+ /
06/15/2029		\$14,505,000			Aa1 / AA+ / AA+ /
06/15/2030		\$15,230,000			Aa1 / AA+ / AA+ /
06/15/2031		\$15,990,000			Aa1 / AA+ / AA+ /
06/15/2032		\$16,790,000			Aa1 / AA+ / AA+ /
06/15/2033		\$17,630,000			Aa1 / AA+ / AA+ /
06/15/2034		\$18,515,000			Aa1 / AA+ / AA+ /
06/15/2035		\$19,440,000			Aa1 / AA+ / AA+ /
06/15/2036		\$20,410,000			Aa1 / AA+ / AA+ /
06/15/2037		\$21,430,000			Aa1 / AA+ / AA+ /
06/15/2038		\$22,500,000			Aa1 / AA+ / AA+ /
06/15/2039		\$23,625,000			Aa1 / AA+ / AA+ /

Call Feature	Avg Life To Dated Date	Day Count
Bonds due 06/15/2031-06/15/2039 callable Jun 15, 2029 at par.	12 YRS. 2 MOS. 12 DAYS.	30/360

Notes

(1) Prin amts are subj to adjustmt. For purposes of the NOS, the aggregate prin amt & the prin amortization have been calculated assuming bid price of approx 127%. (2) The purchaser must submit a good faith deposit to the Treasurer of State, as instructed by the Treasurer, no later than 1:30PM ET on 8/27/19. (3) Any qualification or commitment for or issuance of any insurance shall be solely at a bidder's option & exp. (4) The bidders for the bonds, by submitting their bids, agree to provide to the Commission & Bond Counsel information as to bona fide initial offering prices to the public & sales of the bonds appropriate for the determination of the issue price of & the yield on, the bonds under the Code, all as and at the time requested by Bond Counsel. (5) The purchaser shall be responsible for any applicable fees of Ohio Municipal Advisory Council (OMAC). (6) Each interest rate bid must be equal to or greater than 1/20 of 1%. (7) Bids will not be subject to cancellation in the event that the issue price of any maturity of the Bonds is determined using the hold-the-offering-price rule.

Bid Address To	Payment Type	Payable To	Good Faith
Electronic bids via Parity	Wire transfer	State Treasurer	\$3,000,000

Parity	Insurance Disclosed	Ins Prem. Disclosed	Bond Cost	Legal Cost	Sure Bid
Yes	No	No	State	State	No

Financial Advisor	Legal Opinion	Paying Agent	Base CUSIP
PFM Fin Advisors, Cleveland OH 440-239-7070	Ice Miller, Columbus OH 614-462-2700, Squire Patton, Cleveland OH 216-479-8500,	State Treasurer (to Cede & Co. as nominee of DTC, NYC)	677522



OVERVIEW REPORT

Issuer	State	Issue Size	Sale Date
State of Ohio	OH	\$20,000,000	08/27/2019
Issue Description		Moody's/S&P/Fitch/Kroll	Sale Time
Third Frontier Research and Development General Obligation Bonds, Series 2019A		Aa1 /AA+ /AA+ /	10:45AM EDT
Dated Date	Due Date	First Int Date	Delivery
09/10/2019	05/01/2021 Thru 05/01/2029	05/01/2020	On or about 09/10/2019
Bid Award		Bank Qualified	
Low TIC - Delivery Date excluding Accrued Int		No	

Series Size		Series Description	
\$20,000,000		Third Frontier Research and Development General Obligation Bonds, Series 2019A	
Security Type	Bond Form	Insured By Issuer/Enhancement	Interest
Ult G.O.	Book Entry	No	MI-NI

BID SPECS

Max NIC/TIC	None	Series Min Bid	>= \$19,900,000.00 or 99.5 %
Denomination	\$5,000.00	Series Max Bid	
Coupon Mults	1/8 and 1/20 of 1% only	Zeros Cpn	Not Permitted
Overall Cpn Dif	None	Rates per Mat	One
Low Cpn	None	Term Bonds	Term Bonds Permitted / Bidders Option
Low Yield	None	# of Cpns	
Low Dollar	None	Asc Cpn	
High Cpn	Not to Exceed Rate (5.0000%)		
High Yield	None		
High Dollar	None		

Maturity	CUSIP	\$ Amount	Rate	Basis/Yield	Mdy's/S&P/Fitch/Kroll
05/01/2021		\$1,500,000			Aa1 /AA+ /AA+ /
05/01/2022		\$1,935,000			Aa1 /AA+ /AA+ /
05/01/2023		\$2,035,000			Aa1 /AA+ /AA+ /
05/01/2024		\$2,135,000			Aa1 /AA+ /AA+ /
05/01/2025		\$2,245,000			Aa1 /AA+ /AA+ /
05/01/2026		\$2,355,000			Aa1 /AA+ /AA+ /
05/01/2027		\$2,475,000			Aa1 /AA+ /AA+ /
05/01/2028		\$2,595,000			Aa1 /AA+ /AA+ /
05/01/2029		\$2,725,000			Aa1 /AA+ /AA+ /

Call Feature	Avg Life To Dated Date	Day Count
Not callable.	6 YRS 0 MOS 15 DAYS.	30/360

Notes

(1) Prin arnts are subj to adjustmt. For purposes of the NOS, the aggregate prin amt & the prin amortization have been calculated assuming bid price of approx 122%. (2) The purchaser must submit a good faith deposit to the Treasurer of State, as instructed by the Treasurer, no later than 1:30PM ET on 8/27/19. (3) Any qualification or commitment for or issuance of any insurance shall be solely at a bidder's option & exp. (4) The bidders for the bonds, by submitting their bids, agree to provide to the Commission & Bond Counsel information as to bona fide initial offering prices to the public & sales of the bonds appropriate for the determination of the issue price of & the yield on, the bonds under the Code, all as and at the time requested by Bond Counsel. (5) The purchaser shall be responsible for any applicable fees of Ohio Municipal Advisory Council (OMAC). (6) Each interest rate bid must be equal to or greater than 1/20 of 1%. (7) Bids will not be subject to cancellation in the event that the issue price of any maturity of the Bonds is determined using the hold-the-offering-price rule.

Bid Address To	Payment Type	Payable To	Good Faith
Electronic bids via Parity	Wire transfer	State Treasurer	\$200,000

Parity	Insurance Disclosed	Ins Prem. Disclosed	Bond Cost	Legal Cost	Sure Bid
Yes	No	No	State	State	No

Financial Advisor	Legal Opinion	Paying Agent	Base CUSIP
PFM Fin Advisors , Cleveland OH 440-239-7070. PFM Fin Advisors , Memphis TN 901-682-8356;	Ice Miller , Columbus OH 614-462-2700. Squire Sanders , Cleveland OH 216-479-8500;	State Treasurer (to Cede & Co, as nominee of DTC, NYC)	677522

RESOLUTION NO. 2019-3**Series Resolution Providing for the Competitive Sale and Issuance of \$300,000,000 State of Ohio Common Schools General Obligation Bonds, Series 2019A.**

WHEREAS, Section 2n of Article VIII of the Ohio Constitution authorizes the General Assembly to provide, subject to certain limitations, for the issuance of bonds and other general obligations of the State for the purpose of paying costs of capital facilities for a system of common schools throughout the State, and provides that the full faith and credit, revenue and taxing power of the State shall be pledged to the payment of those obligations; and

WHEREAS, Sections 151.01 and 151.03 of the Revised Code authorize this Commission to issue and sell Obligations of the State pursuant to that Section 2n, in the aggregate principal amount as from time to time provided or authorized by the General Assembly, for the purpose of paying Costs of Capital Facilities for a system of common schools throughout the State; and

WHEREAS, this Commission has adopted the General Bond Resolution making general provisions for Bonds; and

WHEREAS, the Notice of Sale has been given in accordance with all requirements of law and this Resolution; and

WHEREAS, there has been reported to the Commission the receipt of bids pursuant to and in accordance with the Notice of Sale, and the tabulation of those bids shows that the bid of the Original Purchaser identified below is the best bid for the Series 2019A Bonds based on the lowest true interest cost rate determined in accordance with the Notice of Sale; and

WHEREAS, pursuant to the foregoing, the Commission has determined to issue \$300,000,000 principal amount of Bonds to provide moneys to pay Costs of Capital Facilities, and desires to provide therefor by this Resolution; and

WHEREAS, the General Assembly has to date authorized the issuance of \$5,645,000,000 principal amount of Obligations to pay Costs of Capital Facilities as described above, and the issuance of the Series 2019A Bonds authorized by this Resolution for that purpose, together with the Bonds (excluding refunding Bonds) previously issued for that purpose, will not cause that authorized principal amount or any other limitation under the Act to be exceeded;

NOW, THEREFORE, BE IT RESOLVED BY THE OHIO PUBLIC FACILITIES COMMISSION, that:

Section 1. Definitions and General References. (a) Definitions. When used in this Resolution (including its preambles) and in related Bond Proceedings and the Series 2019A Bonds, and in addition to words and terms defined in the Act, the General Bond Resolution, or elsewhere in this Resolution, the following words and terms shall have the following meanings unless otherwise provided or unless the context or use clearly indicates another or different meaning or intent:

“Code” means the Internal Revenue Code of 1986, as amended, the Treasury Regulations (whether proposed, temporary or final) under that Code or the statutory predecessor of that Code, and any amendments of or successor provisions to them, and any official rulings, announcements, notices, procedures and judicial determinations regarding any of them, all as and to the extent applicable to the Series 2019A Bonds.

“Delivery Date” means the date on which the Series 2019A Bonds are delivered to the Original Purchaser in exchange for payment.

“Depository” as to the Series 2019A Bonds means initially The Depository Trust Company (a limited purpose trust company), New York, New York.

“General Bond Resolution” means Resolution No. 2000-11 adopted by the Commission on December 20, 2000, as amended by Commission Resolutions No. 2009-7 adopted on May 20, 2009, No. 2011-11 adopted on June 8, 2011, and No. 2012-10 adopted on March 21, 2012, as the same may from time to time be further amended, supplemented or superseded.

“Interest Payment Date” or “Interest Payment Dates” as to the Series 2019A Bonds means June 15 and December 15 of each year, commencing June 15, 2020, and any other date on which any Interest on the Series 2019A Bonds shall be due and payable.

“Net Proceeds” means amounts received from the Issuer’s sale of the Series 2019A Bonds, excluding both:

- Amounts, if any, required to be deposited in Special Funds pursuant to this Resolution.
- Amounts, if any, to pay Financing Costs.

“Notice of Sale” means the Official Notice of Sale for the Series 2019A Bonds.

“Original Purchaser” means Morgan Stanley & Co. LLC and Associates.

“Resolution” means this Resolution as it may from time to time be amended, supplemented or superseded, being a “Series Resolution” as referred to in the General Bond Resolution.

“Series 2019A Bonds” means the State of Ohio Common Schools General Obligation Bonds, Series 2019A, sold and issued by the Issuer pursuant to this Resolution.

“Series 2019A Cost of Issuance Fund” means the Common Schools General Obligation Bonds, Series 2019A Cost of Issuance Fund created in Section 6.

(b) Section References. Reference to a “Section” or “Subsection” without more means that section or subsection of this Resolution.

Section 2. Determinations. The Commission hereby determines that:

- The Series 2019A Bonds will be issued for the purpose of paying Costs of Capital Facilities, as authorized by the Act.
- The Series 2019A Bonds constitute Obligations within the meaning of the Act.
- The Series 2019A Bonds are issued in accordance with the provisions of the Act and the General Bond Resolution.
- The Bond Proceedings for the Series 2019A Bonds are and will be in compliance with law.
- It is appropriate and desirable to (i) issue the Series 2019A Bonds in an aggregate principal amount of \$300,000,000; (ii) authorize and sell the Series 2019A Bonds pursuant to this Resolution and the General Bond Resolution; and (iii) authorize the execution of such other documents, certificates or instruments and to take such other actions as are deemed necessary or appropriate to consummate the transactions contemplated by this Resolution.

Section 3. Authorization, Sale and Terms of the Series 2019A Bonds.

(a) Authorization. The State, through the Commission, shall issue, sell and deliver to the Original Purchaser, as provided and authorized in this Resolution, the Series 2019A Bonds in the aggregate principal amount of \$300,000,000. The Series 2019A Bonds are being issued to provide moneys for the purpose of paying Costs of Capital Facilities, including Financing Costs relating to the Series 2019A Bonds.

(b) Sale and Award. The Commission hereby sells and awards the Series 2019A Bonds to the Original Purchaser at a purchase price of \$381,939,805.10, plus accrued Interest, if any, to the Delivery Date. That purchase price represents the principal amount of the Series 2019A Bonds (\$300,000,000.00), plus premium (\$81,939,805.10), with those Series 2019A Bonds having the terms provided or authorized in this Resolution.

The Treasurer as Bond Registrar is authorized and directed to authenticate and deliver the Series 2019A Bonds, upon the payment of that purchase price plus accrued Interest, if any. Subject to the terms of this Resolution, the Secretary, the Assistant Secretary, the Director, and others acting for and at her direction, and members and officers of the Commission are further authorized and directed:

- To execute such other documents, certifications, financing statements, assignments and instruments as are necessary or appropriate to consummate the transactions contemplated by this Resolution.
- To take all other actions and make all other arrangements necessary for the authorization, execution, authentication, registration, issuance, sale and delivery of the

Series 2019A Bonds to the Original Purchaser in accordance with this Resolution and the Notice of Sale.

(c) **Ratings.** The Commission hereby approves, confirms and ratifies the Secretary's application for, and acquisition of, the ratings of the Series 2019A Bonds by Fitch Ratings, Moody's Investors Service, Inc., and S&P Global Ratings Services.

(d) **Form and Denominations.** The following provisions apply to the Series 2019A Bonds:

(i) They shall be issued in fully registered form, shall be negotiable instruments subject to registration and issuance in a book entry form as provided in Section 4, and shall be numbered in such manner as to distinguish each Series 2019A Bond from any other Series 2019A Bond.

(ii) They shall be dated as of the Delivery Date and shall bear Interest (computed on the basis of a 360-day year consisting of twelve 30-day months) payable on the Interest Payment Dates from the most recent date to which Interest has been paid or provided for, or if no Interest has been paid or provided for, then from their date, to the Registered Owner as of the Regular Record Date applicable to that Interest Payment Date.

(iii) Except as provided in Section 4, there shall be a single Bond for each maturity (and interest rate within a maturity, if applicable) of the Series 2019A Bonds, and they shall be issued in denominations of \$5,000 or whole multiples of \$5,000. They shall be issued for holding in a book entry system, all as further provided for in Section 4.

(e) **Interest Rates and Principal Maturities.** The Series 2019A Bonds shall mature on June 15 in the years and in the principal amounts, and those principal amounts shall bear Interest at the respective rates per year, as follows:

Maturity Year	Principal Amount	Interest Rate	Maturity Year	Principal Amount	Interest Rate
2021	\$10,000,000	5.00%	2031	\$15,990,000	5.00%
2022	10,310,000	5.00	2032	16,790,000	5.00
2023	10,825,000	5.00	2033	17,630,000	5.00
2024	11,365,000	5.00	2034	18,515,000	5.00
2025	11,935,000	5.00	2035	19,440,000	5.00
2026	12,530,000	5.00	2036	20,410,000	5.00
2027	13,155,000	5.00	2037	21,430,000	5.00
2028	13,815,000	5.00	2038	22,500,000	5.00
2029	14,505,000	5.00	2039	23,625,000	5.00
2030	15,230,000	5.00			

(f) **Stated Purpose.** All Series 2019A Bonds shall express on their faces that they are issued pursuant to the Act, the General Bond Resolution and this Resolution, and for the purpose of

providing moneys to pay Costs of Capital Facilities for a system of common schools throughout the State as authorized by the Act.

(g) Prior Redemption. The Series 2019A Bonds maturing on and after June 15, 2031 are subject to redemption at the option of the Commission prior to their stated maturities, in whole or in part (if in part, by lot), on any date on or after June 15, 2029, at a redemption price equal to 100% of the principal amount redeemed plus accrued Interest to the date fixed for redemption.

Section 4. Book Entry; Replacement Bonds. The Series 2019A Bonds shall be issued only to a Depository for holding in a book entry system, and:

- Shall be registered in the name of the Depository or its nominee, as Registered Owner, and immobilized in the custody of the Depository.
- Shall not be transferable or exchangeable, except for transfer to another Depository or to another nominee of a Depository, without further action by the Commission.

The owners of book entry interests will have no right to receive Series 2019A Bonds in the form of physical securities or certificates. Ownership of book entry interests shall be shown by book entry on the system maintained and operated by the Depository and its participants, and transfers of the ownership of book entry interests shall be made only by book entry by the Depository and its participants.

If any Depository determines not to continue to act as a Depository for the Series 2019A Bonds for holding in a book entry system or if the Commission determines to withdraw the Series 2019A Bonds from a Depository, the Commission may attempt to have established a securities depository/book entry system relationship with another qualified Depository. If the Commission does not or is unable to do so, the Commission, after making provision for notification of the owners of book entry interests by appropriate notice to the then Depository and any other arrangements it considers necessary, shall permit withdrawal of the Series 2019A Bonds from the Depository and authenticate and deliver Series 2019A Bond certificates in fully registered form to the assigns of the Depository or its nominee, and if the event is not the result of Issuer action or inaction, all at the cost and expense (including any costs of printing) of those persons requesting that authentication and delivery. Series 2019A Bond certificates authenticated and delivered pursuant to this paragraph shall be in the denomination of \$5,000 or any whole multiple of \$5,000.

The Director and the Treasurer, and any person acting for either of them, are each authorized and directed to sign and deliver on behalf of the Commission a representation letter to the Depository generally relating to the book entry system as referred to in this Resolution.

Section 5. Allocation of Net Proceeds. The Net Proceeds of the Series 2019A Bonds, after depositing those amounts required pursuant to Section 6, shall be allocated to and deposited as follows:

- To the Improvement Fund, an amount not less than \$300,000,000 (representing the par amount of the Series 2019A Bonds) as determined by the Director.
- To the Bond Service Fund, any remaining Series 2019A Bond proceeds, to be applied to the payment of Debt Service.

Section 6. Cost of Issuance Fund. There is hereby created as a Special Fund for purposes of the Series 2019A Bonds the "Common Schools General Obligation Bonds, Series 2019A Cost of Issuance Fund". That Fund is to be maintained for up to six months in the custody of the Treasurer as a separate fund. The Treasurer shall deposit in that Fund from the Series 2019A Bond proceeds the amount reasonably determined to be necessary to pay Financing Costs payable by the Issuer.

The Treasurer, as Treasurer of the Commission, shall make payment from the Series 2019A Cost of Issuance Fund of all Financing Costs incurred in connection with the Series 2019A Bonds that are payable from that Fund. The Commission orders payments of those Financing Costs from that Fund upon the vouchers, invoices and statements for payment approved by the Office of Budget and Management.

Any moneys remaining in the Series 2019A Cost of Issuance Fund after the payment or provision for payment of all the Financing Costs payable from it shall be deposited in the Bond Service Fund. In the event that the amount initially deposited in the Series 2019A Cost of Issuance Fund is insufficient to pay all those Financing Costs, then there shall be transferred to the Series 2019A Cost of Issuance Fund from the Improvement Fund the additional amount necessary to pay all remaining Financing Costs.

Section 7. Covenant and Warrants. The Issuer warrants and covenants that:

- It is, and upon delivery of the Series 2019A Bonds will be, duly authorized by the laws of the State, including particularly and without limitation the Act, to issue the Series 2019A Bonds in accordance with the provisions of the General Bond Resolution and this Resolution, and to provide the security for payment of Debt Service on the Series 2019A Bonds in the manner and to the extent set forth in the applicable Bond Proceedings.
- All actions on the Issuer's part necessary for the issuance of the Series 2019A Bonds have been or will be duly and effectively taken.
- When executed, authenticated and delivered, the Series 2019A Bonds will each be valid and enforceable general obligations of the State according to their terms.

Section 8. Tax Covenants. The Issuer covenants that it will use, and will restrict the use and investment of, the proceeds of the Series 2019A Bonds in such manner and to such extent as may be necessary so that:

- (i) The Series 2019A Bonds will not constitute private activity bonds or arbitrage bonds under Section 141 or 148 of the Code, respectively, or be treated other than

as bonds the Interest on which is excluded from gross income under Section 103 of the Code.

(ii) The Interest on the Series 2019A Bonds will not be an item of tax preference under Section 57 of the Code for the purposes of the alternative minimum tax.

The Issuer also covenants that:

- It will take or cause to be taken such actions that may be required of it for the Interest on the Series 2019A Bonds to be and remain excluded from gross income for federal income tax purposes.
- It will not take or authorize to be taken any actions that would adversely affect that exclusion.
- It, or persons acting for it, will, if necessary among other acts of compliance:
 - Apply the proceeds of the Series 2019A Bonds to the governmental purposes of the borrowing.
 - Restrict the yield on investment property.
 - Make timely and adequate payments to the federal government.
 - Maintain books and records and make calculations and reports.
 - Refrain from certain uses of those proceeds and, as applicable, of property financed with such proceeds.

all in such manner and to the extent necessary to assure that exclusion of that Interest under the Code.

The Director or the Treasurer is each authorized to do all of the following:

- Make or effect any election, selection, designation, choice, consent, approval or waiver on behalf of the Issuer with respect to the Series 2019A Bonds as the Issuer is permitted to make or give under the federal income tax laws, including, without limitation, any of the elections provided for in Section 148(f)(4)(C) of the Code or available under Section 148 of the Code, for the purpose of assuring, enhancing or protecting favorable tax treatment or status of the Series 2019A Bonds or Interest on them or assisting compliance with requirements for that purpose, reducing the burden or expense of such compliance, reducing the rebate amount or payments of penalties with respect to the Series 2019A Bonds, or making payments of special amounts in lieu of making computations to determine, or paying, excess earnings as rebate, or obviating those amounts or payments, with respect to the Series 2019A Bonds, which action shall be in writing and signed by that officer.

- Take any and all other actions, make or obtain calculations, make payments, and make or give reports, covenants and certifications of and on behalf of the Issuer, as may be appropriate to assure the exclusion of Interest from gross income and the intended tax status of the Series 2019A Bonds, all subject to the Treasurer's responsibilities under Section 151.01(S) of the Revised Code.
- Give one or more appropriate certificates, for inclusion in the transcript of proceedings for the Series 2019A Bonds, setting forth the reasonable expectations of the Issuer regarding the amount and use of all the proceeds of the Series 2019A Bonds, the facts, circumstances and estimates on which they are based, and other facts and circumstances relevant to the tax treatment of the Interest on and the tax status of the Series 2019A Bonds.

Section 9. Continuing Disclosure Agreement. The Issuer, for the benefit of the Registered Owners and beneficial owners of the Series 2019A Bonds, makes the Continuing Disclosure Agreement as provided for in this Section and formed by this Section and the Continuing Disclosure Certificate incorporated herein by reference (collectively, the "Continuing Disclosure Agreement") and to be signed by the Director, all in accordance with Section 126.11 of the Revised Code, and the Issuer covenants to comply with that Continuing Disclosure Agreement.

Failure of the Issuer to comply with any provision of that Continuing Disclosure Agreement shall not constitute a default with respect to, or in any way impair the obligation of or security for, the Series 2019A Bonds. The obligations of the Issuer under the Continuing Disclosure Agreement are determined and acknowledged to be acts specifically enjoined by the law as a duty resulting from an office, trust or station within the meaning of Section 2731.01 of the Revised Code.

(a) Definitions. For purposes of and as used in this Section 9, the following words and terms shall have the following meanings:

"Accounting Principles" means the accounting principles applied from time to time in the preparation of the annual General Purpose Financial Statements of the State, initially being generally accepted accounting principles applicable to governments as promulgated by the Governmental Accounting Standards Board and as in effect from time to time.

"Annual Information" means for each Fiscal Year the annual financial information and operating data of the type included in the final official statement for the Series 2019A Bonds under the captions to be identified in the Continuing Disclosure Certificate. The Annual Information to be provided will be consistent with the financial information and operating data relating to the State and the Series 2019A Bonds included in the final official statement for those Bonds, and will include financial statements and general descriptions of State finances and debt in the general format as presented in that final official statement.

"Authorized Disclosure Representative" means the Director or the person or persons at the time designated to act on behalf of the State and Commission by written certificate filed with the Secretary of the Commission and signed by the Director as such and as Secretary of the Commission. That certificate may designate one or more alternates for the purpose, each of whom shall have the same authority, duties and powers as Authorized Disclosure Representative.

“Filing Date” with respect to any Fiscal Year means the 90th day following the end of that Fiscal Year. If that is not a State Business Day, the Filing Date is the next State Business Day.

“Financial Obligation” means a (a) debt obligation, (b) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (c) guarantee of an obligation or instrument described in either clause (a) or (b). Financial obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

“MSRB” means the Municipal Securities Rulemaking Board established by the U.S. Securities and Exchange Commission (SEC).

“OBM” means the Office of Budget and Management.

“Obligated Person” shall have the meaning as provided in the Rule.

“Rule” means SEC Rule 15c2-12.

“Specified Events” means any of the following, within the meaning of the Rule, with respect to the Series 2019A Bonds as applicable: principal and Interest payment delinquencies; non-payment related defaults, if material; unscheduled draws on 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 Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Series 2019A Bonds, or other material events affecting the tax status of the Series 2019A Bonds; modifications to rights of Series 2019A Registered Owners or beneficial owners, if material; Series 2019A Bond calls, if material, and tender offers; defeasances; release, substitution or sale of property securing repayment of the Series 2019A Bonds, if material; rating changes; 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; incurrence of a Financial Obligation of the Obligated Person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Obligated Person, any of which affect Series 2019A Bond holders, if material; and default, event of acceleration, termination event, modification of terms, or other similar events under the terms of the Financial Obligation of the Obligated Person, any of which reflect financial difficulties. There are initially no credit or liquidity providers or debt service reserves applicable to the Series 2019A Bonds, or any property (except the Special Funds) securing repayment of those Bonds, and there is no trustee for the Series 2019A Bonds.

(b) General. For the benefit of the Registered Owners and beneficial owners of the Series 2019A Bonds, the Commission agrees on behalf of itself and the State, in accordance with this Section 9, to provide or cause to be provided Annual Information, audited financial statements and notices as referred to below in this Section.

The Commission determines and represents that the State (including, for this purpose, the Commission) is and will be the only Obligated Person with respect to the Series 2019A Bonds at the time those Bonds are delivered to the Original Purchaser, and that no other person is reasonably expected to become an Obligated Person any time after issuance of those Bonds.

The Director and OBM shall have the responsibility for the compliance by the State and the Commission with their agreements under this Section, and the Director shall establish procedures in order to ensure that compliance. Reference is made to the "Statement" of the Director that follows the signature line on this Resolution.

(c) Provision of Annual Information; Audited Financial Statements.

(i) The Commission agrees to provide or cause to be provided to the MSRB through its Electronic Municipal Market Access (EMMA) system:

- (A) Annual Information for each Fiscal Year (beginning with the Fiscal Year ending June 30, 2020) not later than the Filing Date for that Fiscal Year.
- (B) When and if available, audited general purpose financial statements of the State for each Fiscal Year prepared in accordance with the Accounting Principles. The Commission expects that audited statements will be prepared and available separately from the Annual Information.

(ii) The Commission expects that Annual Information will be provided directly by the State through OBM, and may be provided in part by cross-reference to other documents, such as the State's Comprehensive Annual Financial Reports and subsequent final official statements relating to other State bonds, that may be provided to the MSRB, and that the audited general purpose financial statements will be provided directly by the State through OBM.

(d) Notice of Specified Events; Changes in Accounting Principles or Fiscal Year.

The Commission agrees to provide or cause to be provided to the MSRB through its EMMA system, all in a timely manner:

- (i) Notice of the occurrence of any Specified Event within 10 business days of its occurrence.

- (ii) Notice of failure to provide or cause to be provided the Annual Information by the Filing Date.
- (iii) Notice of any material change in the Accounting Principles, or of any change in the Fiscal Year.
- (iv) Notice of any failure of the General Assembly to appropriate moneys for the purpose of paying costs to be incurred by the Issuer to perform the Continuing Disclosure Agreement for the applicable fiscal period.
- (v) Notice of the termination of the Continuing Disclosure Agreement.

The Commission further agrees that all documents provided to the MSRB shall be in the format and accompanied by the identifying information prescribed by the MSRB.

(e) Enforcement. Registered Owners or beneficial owners of Series 2019A Bonds may institute and maintain proceedings to enforce the obligations under the Continuing Disclosure Agreement. The right of the Registered Owners or beneficial owners to enforce any provision of the Continuing Disclosure Agreement, and their means to address any failure to comply with any provision of the Continuing Disclosure Agreement, may be limited to a right to enforce to the extent permitted by law (by mandamus, or other suit, action or proceeding at law or in equity) the obligations of the Commission and State under that Agreement.

(f) Amendment. The Continuing Disclosure Agreement may be amended, and the Commission may obtain the waiver of noncompliance with any provision of that Agreement, as may be necessary or appropriate for any of the following:

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

Any such amendment or waiver shall not be effective unless the Continuing Disclosure Agreement (as amended or taking into account such waiver) would have complied with the requirements of the Rule at the time of the primary offering of the Series 2019A Bonds, after taking into account any applicable amendments to or official interpretations of the Rule, as well as any change in circumstances, and until the Commission shall have received either:

- (i) A written opinion of nationally recognized bond counsel selected by the Commission that the amendment or waiver would not materially impair the interests of Registered Owners or beneficial owners of the Series 2019A Bonds.

(ii) The written consent to the amendment, or waiver, by the Registered Owners of at least a majority of the then Aggregate Outstanding Principal Amount of the Series 2019A Bonds.

Except in the case as provided for in clause (ii), any such amendments shall be by resolution adopted by the Commission.

(g) **Term.** The obligations of the Commission and State under this Section 9 shall remain in effect only for such period that the Series 2019A Bonds are outstanding in accordance with their terms and the State remains an Obligated Person with respect to those Bonds within the meaning of the Rule.

(h) **Source of Payments.** The performance of the Commission's obligations under this Continuing Disclosure Agreement shall be subject to the biennial appropriation by the General Assembly of moneys for the applicable purposes, and, if and to the extent applicable, to Section 126.07 of the Revised Code. Costs and expenses under this Continuing Disclosure Agreement do not and shall not constitute general obligations of the State.

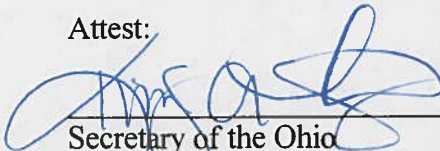
(i) **Beneficiaries.** The agreements in and pursuant to this Section 9 shall inure solely to the benefit of the Registered Owners and beneficial owners of the Series 2019A Bonds including owners of book entry interests in them, and shall not create any rights in any other person.

Section 10. Confirmation and Ratification. The Commission hereby approves, confirms and ratifies the Notice of Sale and the arrangements made by the Secretary for its distribution on behalf of and in the name of the Commission and the timeliness of that distribution, authorizes and ratifies the preparation and distribution of and approves the preliminary official statement and the final official statement for the Series 2019A Bonds, and all other actions by the Secretary, the Assistant Secretary and the Director, and others acting for and at her direction, and of Commission officers and members (and their designees), in connection with the authorization, issuance, sale and distribution of the Series 2019A Bonds.

Section 11. Open Meeting. It is found and determined that all formal actions of the Commission (there being no Commission committees) concerning and relating to the adoption of this Resolution were adopted in an open meeting of the Commission, and that all deliberations of the Commission that resulted in those formal actions were in meetings open to the public, all in compliance with the law, including Section 121.22 of the Revised Code.

Adopted: August 27, 2019


Attest:


 Secretary of the Ohio
 Public Facilities Commission

STATEMENT OF DIRECTOR OF BUDGET AND MANAGEMENT

Pursuant to Section 126.11 of the Revised Code, I approve the Continuing Disclosure Agreement provided for in Section 9 of this Resolution. I certify that the Office of Budget and Management accepts responsibility for compliance by the State and the Ohio Public Facilities Commission with the provisions of this Resolution regarding continuing disclosure.

Dated: August 27, 2019



Kimberly Murnieks
Director of Budget and Management
of the State of Ohio

RESOLUTION NO. 2019-4

Series Resolution Providing for the Competitive Sale and Issuance of \$20,000,000 State of Ohio Third Frontier Research and Development General Obligation Bonds, Series 2019A.

WHEREAS, Section 2p of Article VIII of the Ohio Constitution authorizes the General Assembly to provide, subject to certain limitations, for the issuance of bonds and other general obligations of the State for the purpose of financing or assisting in the financing of the cost of research and development projects in support of Ohio industry, commerce and business (excluding purposes provided for in Section 15 of Article VIII of the Ohio Constitution), and provides that the full faith and credit, revenue and taxing power of the State shall be pledged to the payment of those obligations or other obligations issued pursuant to laws passed under Section 2p; and

WHEREAS, Sections 151.01 and 151.10 of the Revised Code authorize this Commission to issue and sell Obligations of the State pursuant to that Section 2p for the purpose of paying Costs of Research and Development Projects in support of Ohio industry, commerce and business, including Financing Costs, in the aggregate principal amount as from time to time provided or authorized by the General Assembly, but subject to the limitations in that Section 2p that not more than \$1,200,000,000 original principal amount may be issued for those purposes, with not more than \$450,000,000 issued in Fiscal Years 2006 through 2011, not more than \$225,000,000 issued in the next Fiscal Year of issuance, and not more than \$175,000,000 principal amount issued in any other Fiscal Year (plus in each case the principal amount of those Obligations that in any prior Fiscal Year could have been but were not issued); and

WHEREAS, this Commission has adopted the General Bond Resolution making general provisions for Bonds; and

WHEREAS, the Notice of Sale has been given in accordance with all requirements of law and this Resolution; and

WHEREAS, there has been reported to the Commission the receipt of bids pursuant to and in accordance with the Notice of Sale, and the tabulation of those bids shows that the bid of the Original Purchaser identified below is the best bid for the Series 2019A Bonds based on the lowest true interest cost rate determined in accordance with the Notice of Sale; and

WHEREAS, pursuant to the foregoing, the Commission has determined to issue \$20,000,000 principal amount of Bonds to provide moneys to pay Costs of Research and Development Projects, and desires to provide therefor by this Resolution; and

WHEREAS, the General Assembly has to date authorized the issuance of \$1,200,000,000 principal amount of Obligations to pay Costs of Research and Development Projects in support of Ohio industry, commerce and business, and the issuance of the Series 2019A Bonds authorized by this Resolution for that purpose, together with the Bonds previously issued for that purpose (excluding refunding Bonds), will not cause that authorized principal amount to be exceeded or the principal amount of Obligations (excluding refunding Bonds) issued to exceed the limitations referred to in the second recital paragraph above;

NOW, THEREFORE, BE IT RESOLVED BY THE OHIO PUBLIC FACILITIES COMMISSION, that:

Section 1. Definitions and General References. (a) Definitions. When used in this Resolution (including its preambles) and in related Bond Proceedings and the Series 2019A Bonds, in addition to words and terms defined in the Act, the General Bond Resolution, or elsewhere in this Resolution, the following words and terms shall have the following meanings unless otherwise provided or unless the context or use clearly indicates another or different meaning or intent:

“Code” means the Internal Revenue Code of 1986, as amended, the Treasury Regulations (whether proposed, temporary or final) under that Code or the statutory predecessor of that Code, and any amendments of or successor provisions to them, and any official rulings, announcements, notices, procedures and judicial determinations regarding any of them, all as and to the extent applicable to the Series 2019A Bonds.

“Delivery Date” means the date on which the Series 2019A Bonds are delivered to the Original Purchaser in exchange for payment.

“Depository” as to the Series 2019A Bonds means initially The Depository Trust Company (a limited purpose trust company), New York, New York.

“General Bond Resolution” means Resolution No. 2006-3 adopted by the Commission on August 3, 2006, as amended by Resolutions No. 2009-16 adopted October 22, 2009, No. 2010-11 adopted August 4, 2010, and No. 2012-10 adopted March 21, 2012, as the same may from time to time be amended, supplemented or superseded.

“Improvement Fund” means, and shall mean for purposes of the General Bond Resolution, the Third Frontier Research and Development Fund created by Section 184.191 of the Revised Code, including any accounts in that Fund.

“Interest Payment Date” or “Interest Payment Dates” as to the Series 2019A Bonds means May 1 and November 1 of each year, commencing May 1, 2020, and any other date on which any Interest on the Series 2019A Bonds shall be due and payable.

“Net Proceeds” means amounts received from the Issuer’s sale of the Series 2019A Bonds, excluding both:

- Amounts, if any, required to be deposited in Special Funds pursuant to this Resolution.
- Amounts, if any, to pay Financing Costs.

“Notice of Sale” means the Official Notice of Sale for the Series 2019A Bonds.

“Original Purchaser” means Fifth Third Securities, Inc.

“Resolution” means this Resolution as it may from time to time be amended, supplemented or superseded, being a “Series Resolution” as referred to in the General Bond Resolution.

“Series 2019A Bonds” means the State of Ohio Third Frontier Research and Development General Obligation Bonds, Series 2019A, sold and issued by the Issuer pursuant to this Resolution.

“Series 2019A Cost of Issuance Fund” means the Third Frontier Research and Development General Obligation Bonds, Series 2019A, Cost of Issuance Fund created in Section 6.

(b) Section References. Reference to a “Section” or “Subsection” without more means that section or subsection of this Resolution.

Section 2. Determinations. The Commission hereby determines that:

- The Series 2019A Bonds will be issued for the purpose of paying Costs of Research and Development Projects, as authorized by the Act.
- The Series 2019A Bonds constitute Obligations within the meaning of the Act.
- The Series 2019A Bonds are issued in accordance with the provisions of the Act and the General Bond Resolution.
- The Bond Proceedings for the Series 2019A Bonds are and will be in compliance with law.
- It is appropriate and desirable to (i) issue the Series 2019A Bonds in an aggregate principal amount of \$20,000,000; (ii) authorize and sell the Series 2019A Bonds pursuant to this Resolution and the General Bond Resolution; and (iii) authorize the execution of such other documents, certificates or instruments and to take such other actions as are deemed necessary or appropriate to consummate the transactions contemplated by this Resolution.

Section 3. Authorization, Sale and Terms of the Series 2019A Bonds.

(a) Authorization. The State, through the Commission, shall issue, sell and deliver to the Original Purchaser, as provided and authorized in this Resolution, the Series 2019A Bonds in the aggregate principal amount of \$20,000,000. The Series 2019A Bonds are being issued to provide moneys for the purpose of paying Costs of Research and Development Projects, including Financing Costs relating to the Series 2019A Bonds.

(b) Sale and Award. The Commission hereby sells and awards the Series 2019A Bonds to the Original Purchaser at a purchase price of \$24,398,408.00, plus accrued Interest, if any, to the Delivery Date. That purchase price represents the principal amount of the Series 2019A Bonds (\$20,000,000.00), plus premium (\$4,398,408.00), with those Series 2019A Bonds having the terms provided or authorized in this Resolution.

The Treasurer, as Bond Registrar, is authorized and directed to authenticate and deliver the Series 2019A Bonds, upon the payment of that purchase price plus accrued Interest, if any. Subject to the terms of this Resolution, the Secretary, the Assistant Secretary, the Director, and others acting for and at her direction, and members and officers of the Commission are further authorized and directed:

- To execute such other documents, certifications, financing statements, assignments and instruments as are necessary or appropriate to consummate the transactions contemplated by this Resolution.
- To take all other actions and make all other arrangements necessary for the authorization, execution, authentication, registration, issuance, sale and delivery of the Series 2019A Bonds to the Original Purchaser in accordance with this Resolution and the Notice of Sale.

(c) **Ratings.** The Commission hereby approves, confirms and ratifies the Secretary's application for, and acquisition of, the ratings of the Series 2019A Bonds by Fitch Ratings, Moody's Investors Service, Inc., and S&P Global Ratings Services.

(d) **Form and Denominations.** The following provisions apply to the Series 2019A Bonds:

(i) They shall be issued in fully registered form, shall be negotiable instruments subject to registration and issuance in a book entry form as provided in Section 4, and shall be numbered in such manner as to distinguish each Series 2019A Bond from any other Series 2019A Bond.

(ii) They shall be dated as of the Delivery Date, and shall bear Interest (computed on the basis of a 360-day year consisting of twelve 30-day months) payable on the Interest Payment Dates from the most recent date to which Interest has been paid or provided for, or if no Interest has been paid or provided for, then from their date, to the Registered Owner as of the Regular Record Date applicable to that Interest Payment Date.

(iii) Except as provided in Section 4, there shall be a single Bond for each maturity (and interest rate within a maturity, if applicable) of the Series 2019A Bonds, and they shall be issued in denominations of \$5,000 or whole multiples of \$5,000. They shall be issued for holding in a book entry system, all as further provided for in Section 4.

(e) **Interest Rates and Principal Maturities.** The Series 2019A Bonds shall mature on May 1 in the years and in the principal amounts, and those principal amounts shall bear Interest at the respective rates per year, as follows:

Maturity Year	Principal Amount	Interest Rate	Maturity Year	Principal Amount	Interest Rate
2021	\$ 1,500,000	5.00%	2026	\$2,355,000	5.00%
2022	1,935,000	5.00	2027	2,475,000	5.00
2023	2,035,000	5.00	2028	2,595,000	5.00
2024	2,135,000	5.00	2029	2,725,000	5.00
2025	2,245,000	5.00			

(f) **Stated Purpose.** All Series 2019A Bonds shall express on their faces that they are issued pursuant to the Act, the General Bond Resolution and this Resolution, and for the purpose of

paying Costs of Research and Development Projects in support of Ohio industry, commerce and business, as authorized by the Act.

(g) **Prior Redemption.** The Series 2019A Bonds are not subject to redemption prior to their stated maturities.

Section 4. Book Entry; Replacement Bonds. The Series 2019A Bonds shall be issued only to a Depository for holding in a book entry system, and:

- Shall be registered in the name of the Depository or its nominee, as Registered Owner, and immobilized in the custody of the Depository.
- Shall not be transferable or exchangeable, except for transfer to another Depository or to another nominee of a Depository, without further action by the Commission.

The owners of book entry interests will have no right to receive Series 2019A Bonds in the form of physical securities or certificates. Ownership of book entry interests shall be shown by book entry on the system maintained and operated by the Depository and its participants, and transfers of the ownership of book entry interests shall be made only by book entry by the Depository and its participants.

If any Depository determines not to continue to act as a Depository for the Series 2019A Bonds for holding in a book entry system or if the Commission determines to withdraw the Series 2019A Bonds from a Depository, the Commission may attempt to have established a securities depository/book entry system relationship with another qualified Depository. If the Commission does not or is unable to do so, the Commission, after making provision for notification of the owners of book entry interests by appropriate notice to the then Depository and any other arrangements it considers necessary, shall permit withdrawal of the Series 2019A Bonds from the Depository, and authenticate and deliver Series 2019A Bond certificates in fully registered form to the assigns of the Depository or its nominee, and if the event is not the result of Issuer action or inaction all at the cost and expense (including any costs of printing) of those persons requesting that authentication and delivery. Series 2019A Bond certificates authenticated and delivered pursuant to this paragraph shall be in the denomination of \$5,000 or any whole multiple of \$5,000.

The Director and the Treasurer, and any person acting for either of them, are each authorized and directed to sign and deliver on behalf of the Commission a representation letter to the Depository generally relating to the book entry system as referred to in this Resolution.

Section 5. Allocation of Net Proceeds. The Net Proceeds of the Series 2019A Bonds, after depositing those amounts required pursuant to Section 6, shall be allocated to and deposited as follows:

- To the Improvement Fund, an amount not less than \$20,000,000 (representing the par amount of the Series 2019A Bonds) as determined by the Director.
- To the Bond Service Fund, any remaining Series 2019A Bond proceeds, to be applied to the payment of Debt Service.

Section 6. Cost of Issuance Fund. There is hereby created as a Special Fund for purposes of the Series 2019A Bonds the "Third Frontier Research and Development General Obligation Bonds, Series 2019A, Cost of Issuance Fund". That Fund is to be maintained for up to six months in the custody of the Treasurer as a separate fund. The Treasurer shall deposit in that Fund from the Series 2019A Bond proceeds the amount reasonably determined to be necessary to pay Financing Costs payable by the Issuer.

The Treasurer, as Treasurer of the Commission, shall make payment from the Series 2019A Cost of Issuance Fund of all Financing Costs incurred in connection with the Series 2019A Bonds that are payable from that Fund. The Commission orders payments of those Financing Costs from that Fund upon the vouchers, invoices and statements for payment approved by the Office of Budget and Management.

Any moneys remaining in the Series 2019A Cost of Issuance Fund after the payment or provision for payment of all the Financing Costs payable from it shall be deposited in the Bond Service Fund. In the event that the amount initially deposited in the Series 2019A Cost of Issuance Fund is insufficient to pay all those Financing Costs, then there shall be transferred to the Series 2019A Cost of Issuance Fund from the Improvement Fund the additional amount necessary to pay all remaining Financing Costs.

Section 7. Covenant and Warrants. The Issuer warrants and covenants that:

- It is, and upon delivery of the Series 2019A Bonds will be, duly authorized by the laws of the State, including particularly and without limitation the Act, to issue the Series 2019A Bonds in accordance with the provisions of the General Bond Resolution and this Resolution, and to provide the security for payment of Debt Service on the Series 2019A Bonds in the manner and to the extent set forth in the applicable Bond Proceedings.
- All actions on the Issuer's part necessary for the issuance of the Series 2019A Bonds have been or will be duly and effectively taken.
- When executed, authenticated and delivered, the Series 2019A Bonds will each be valid and enforceable general obligations of the State according to their terms.

Section 8. Tax Covenants. The Issuer covenants that it will use, and will restrict the use and investment of, the proceeds of the Series 2019A Bonds in such manner and to such extent as may be necessary so that:

(i) The Series 2019A Bonds will not constitute private activity bonds or arbitrage bonds under Section 141 or 148 of the Code, respectively, or be treated other than as bonds the Interest on which is excluded from gross income under Section 103 of the Code.

(ii) The Interest on the Series 2019A Bonds will not be an item of tax preference under Section 57 of the Code for the purposes of the alternative minimum tax.

The Issuer also covenants that:

- It will take or cause to be taken such actions that may be required of it for the Interest on the Series 2019A Bonds to be and remain excluded from gross income for federal income tax purposes.
- It will not take or authorize to be taken any actions that would adversely affect that exclusion.
- It, or persons acting for it, will, if necessary among other acts of compliance:
 - Apply the proceeds of the Series 2019A Bonds to the governmental purposes of the borrowing.
 - Restrict the yield on investment property.
 - Make timely and adequate payments to the federal government.
 - Maintain books and records and make calculations and reports.
 - Refrain from certain uses of those proceeds and, as applicable, of property financed with such proceeds.

all in such manner and to the extent necessary to assure that exclusion of that Interest under the Code.

The Director or the Treasurer is each authorized to do all of the following:

- Make or effect any election, selection, designation, choice, consent, approval or waiver on behalf of the Issuer with respect to the Series 2019A Bonds as the Issuer is permitted to make or give under the federal income tax laws, including, without limitation, any of the elections provided for in Section 148(f)(4)(C) of the Code or available under Section 148 of the Code, for the purpose of assuring, enhancing or protecting favorable tax treatment or status of the Series 2019A Bonds or Interest on them or assisting compliance with requirements for that purpose, reducing the burden or expense of such compliance, reducing the rebate amount or payments of penalties with respect to the Series 2019A Bonds, or making payments of special amounts in lieu of making computations to determine, or paying, excess earnings as rebate, or obviating those amounts or payments, with respect to the Series 2019A Bonds, which action shall be in writing and signed by that officer.
- Take any and all other actions, make or obtain calculations, make payments, and make or give reports, covenants and certifications of and on behalf of the Issuer, as may be appropriate to assure the exclusion of Interest from gross income and the intended tax status of the Series 2019A Bonds, all subject to the Treasurer's responsibilities under Section 151.01(S) of the Revised Code.

- Give one or more appropriate certificates, for inclusion in the transcript of proceedings for the Series 2019A Bonds, setting forth the reasonable expectations of the Issuer regarding the amount and use of all the proceeds of the Series 2019A Bonds, the facts, circumstances and estimates on which they are based, and other facts and circumstances relevant to the tax treatment of the Interest on and the tax status of the Series 2019A Bonds.

Section 9. Continuing Disclosure Agreement. The Issuer, for the benefit of the Registered Owners and beneficial owners of the Series 2019A Bonds, makes the Continuing Disclosure Agreement as provided for in this Section and formed by this Section and the Continuing Disclosure Certificate incorporated herein by reference (collectively, the “Continuing Disclosure Agreement”) and to be signed by the Director, all in accordance with Section 126.11 of the Revised Code, and the Issuer covenants to comply with that Continuing Disclosure Agreement.

Failure of the Issuer to comply with any provision of that Continuing Disclosure Agreement shall not constitute a default with respect to, or in any way impair the obligation of or security for, the Series 2019A Bonds. The obligations of the Issuer under the Continuing Disclosure Agreement are determined and acknowledged to be acts specifically enjoined by the law as a duty resulting from an office, trust or station within the meaning of Section 2731.01 of the Revised Code.

(a) **Definitions.** For purposes of and as used in this Section 9, the following words and terms shall have the following meanings:

“Accounting Principles” means the accounting principles applied from time to time in the preparation of the annual General Purpose Financial Statements of the State, initially being generally accepted accounting principles applicable to governments as promulgated by the Governmental Accounting Standards Board and as in effect from time to time.

“Annual Information” means for each Fiscal Year the annual financial information and operating data of the type included in the final official statement for the Series 2019A Bonds under the captions to be identified in the Continuing Disclosure Certificate. The Annual Information to be provided will be consistent with the financial information and operating data relating to the State and the Series 2019A Bonds included in the final official statement for those Bonds, and will include financial statements and general descriptions of State finances and debt in the general format as presented in that final official statement.

“Authorized Disclosure Representative” means the Director or the person or persons at the time designated to act on behalf of the State and Commission by written certificate filed with the Secretary of the Commission and signed by the Director as such and as Secretary of the Commission. That certificate may designate one or more alternates for the purpose, each of whom shall have the same authority, duties and powers as Authorized Disclosure Representative.

“Filing Date” with respect to any Fiscal Year means the 90th day following the end of that Fiscal Year. If that is not a State Business Day, the Filing Date is the next State Business Day.

“Financial Obligation” means a (a) debt obligation, (b) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (c) guarantee of an obligation or instrument described in either clause (a) or (b).

Financial obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

“MSRB” means the Municipal Securities Rulemaking Board established by the U.S. Securities and Exchange Commission (SEC).

“OBM” means the Office of Budget and Management.

“Obligated Person” shall have the meaning as provided in the Rule.

“Rule” means SEC Rule 15c2-12.

“Specified Events” means any of the following, within the meaning of the Rule, with respect to the Series 2019A Bonds as applicable: principal and Interest payment delinquencies; non-payment related defaults, if material; unscheduled draws on 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 Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Series 2019A Bonds, or other material events affecting the tax status of the Series 2019A Bonds; modifications to rights of Series 2019A Registered Owners or beneficial owners, if material; Series 2019A Bond calls, if material, and tender offers; defeasances; release, substitution or sale of property securing repayment of the Series 2019A Bonds, if material; rating changes; 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; incurrence of a Financial Obligation of the Obligated Person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Obligated Person, any of which affect Series 2019A Bond holders, if material; and default, event of acceleration, termination event, modification of terms, or other similar events under the terms of the Financial Obligation of the Obligated Person, any of which reflect financial difficulties. There are initially no credit or liquidity providers or debt service reserves applicable to the Series 2019A Bonds, or any property (except the Special Funds) securing repayment of those Bonds, and there is no trustee for the Series 2019A Bonds.

(b) General. For the benefit of the Registered Owners and beneficial owners of the Series 2019A Bonds, the Commission agrees on behalf of itself and the State, in accordance with this Section 9, to provide or cause to be provided Annual Information, audited financial statements and notices as referred to below in this Section.

The Commission determines and represents that the State (including, for this purpose, the Commission) is and will be the only Obligated Person with respect to the Series 2019A Bonds at the time those Bonds are delivered to the Original Purchaser, and that no other person is reasonably expected to become an Obligated Person any time after issuance of those Bonds.

The Director and OBM shall have the responsibility for the compliance by the State and the Commission with their agreements under this Section, and the Director shall establish procedures in order to ensure that compliance. Reference is made to the "Statement" of the Director that follows the signature line on this Resolution.

(c) Provision of Annual Information; Audited Financial Statements.

(i) The Commission agrees to provide or cause to be provided to the MSRB through its Electronic Municipal Market Access (EMMA) system:

- (A) Annual Information for each Fiscal Year (beginning with the Fiscal Year ending June 30, 2020) not later than the Filing Date for that Fiscal Year.
- (B) When and if available, audited general purpose financial statements of the State for each Fiscal Year prepared in accordance with the Accounting Principles. The Commission expects that audited statements will be prepared and available separately from the Annual Information.

(ii) The Commission expects that Annual Information will be provided directly by the State through OBM, and may be provided in part by cross-reference to other documents, such as the State's Comprehensive Annual Financial Reports and subsequent final official statements relating to other State bonds, that may be provided to the MSRB, and that the audited general purpose financial statements will be provided directly by the State through OBM.

(d) Notice of Specified Events; Changes in Accounting Principles or Fiscal Year.

The Commission agrees to provide or cause to be provided to the MSRB through its EMMA system, all in a timely manner:

- (i) Notice of the occurrence of any Specified Event within 10 business days of its occurrence.
- (ii) Notice of failure to provide or cause to be provided the Annual Information by the Filing Date.
- (iii) Notice of any material change in the Accounting Principles, or of any change in the Fiscal Year.
- (iv) Notice of any failure of the General Assembly to appropriate moneys for the purpose of paying costs to be incurred by the Issuer to perform the Continuing Disclosure Agreement for the applicable fiscal period.
- (v) Notice of the termination of the Continuing Disclosure Agreement.

The Commission further agrees that all documents provided to the MSRB shall be in the format and accompanied by the identifying information prescribed by the MSRB.

(e) **Enforcement.** Registered Owners or beneficial owners of Series 2019A Bonds may institute and maintain proceedings to enforce the obligations under the Continuing Disclosure Agreement. The right of the Registered Owners or beneficial owners to enforce any provision of the Continuing Disclosure Agreement, and their means to address any failure to comply with any provision of the Continuing Disclosure Agreement, may be limited to a right to enforce to the extent permitted by law (by mandamus, or other suit, action or proceeding at law or in equity) the obligations of the Commission and State under that Agreement.

(f) **Amendment.** The Continuing Disclosure Agreement may be amended, and the Commission may obtain the waiver of noncompliance with any provision of that Agreement, as may be necessary or appropriate for any of the following:

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

Any such amendment or waiver shall not be effective unless the Continuing Disclosure Agreement (as amended or taking into account such waiver) would have complied with the requirements of the Rule at the time of the primary offering of the Series 2019A Bonds, after taking into account any applicable amendments to or official interpretations of the Rule, as well as any change in circumstances, and until the Commission shall have received either:

(i) A written opinion of nationally recognized bond counsel selected by the Commission that the amendment or waiver would not materially impair the interests of Registered Owners or beneficial owners of the Series 2019A Bonds.

(ii) The written consent to the amendment, or waiver, by the Registered Owners of at least a majority of the then Aggregate Outstanding Principal Amount of the Series 2019A Bonds.

Except in the case as provided for in clause (ii), any such amendments shall be by resolution adopted by the Commission.

(g) **Term.** The obligations of the Commission and State under this Section 9 shall remain in effect only for such period that the Series 2019A Bonds are outstanding in accordance with their terms and the State remains an Obligated Person with respect to those Bonds within the meaning of the Rule.

(h) **Source of Payments.** The performance of the Commission's obligations under this Continuing Disclosure Agreement shall be subject to the biennial appropriation by the General Assembly of moneys for the applicable purposes, and, if and to the extent applicable, to Section

126.07 of the Revised Code. Costs and expenses under this Continuing Disclosure Agreement do not and shall not constitute general obligations of the State.

(i) **Beneficiaries.** The agreements in and pursuant to this Section 9 shall inure solely to the benefit of the Registered Owners and beneficial owners of the Series 2019A Bonds including owners of book entry interests in them, and shall not create any rights in any other person.

Section 10. Confirmation and Ratification. The Commission hereby approves, confirms and ratifies the Notice of Sale and the arrangements made by the Secretary for its distribution on behalf of and in the name of the Commission and the timeliness of that distribution, authorizes and ratifies the preparation and distribution of and approves the preliminary official statement and the final official statement for the Series 2019A Bonds, and all other actions by the Secretary, the Assistant Secretary and the Director, and others acting for and at her direction, and of Commission officers and members (and their designees), in connection with the authorization, issuance, sale and distribution of the Series 2019A Bonds.

Section 11. Open Meeting. It is found and determined that all formal actions of the Commission (there being no Commission committees) concerning and relating to the adoption of this Resolution were adopted in an open meeting of the Commission, and that all deliberations of the Commission that resulted in those formal actions were in meetings open to the public, all in compliance with the law, including Section 121.22 of the Revised Code.

Adopted: August 27, 2019

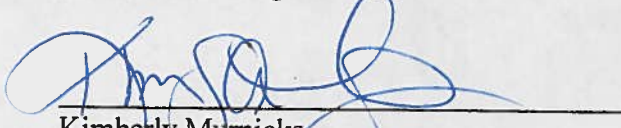
Attest:


 Secretary of the Ohio
 Public Facilities Commission

STATEMENT OF DIRECTOR OF BUDGET AND MANAGEMENT

Pursuant to Section 126.11 of the Revised Code, I approve the Continuing Disclosure Agreement provided for in Section 9 of this Resolution. I certify that the Office of Budget and Management accepts responsibility for compliance by the State and the Ohio Public Facilities Commission with the provisions of this Resolution regarding continuing disclosure.

Dated: August 27, 2019


 Kimberly Murnieks
 Director of Budget and Management
 of the State of Ohio

State of Ohio

Debt and Interest Rate Risk Management Policy



Ohio Public Facilities Commission

Treasurer of State

Office of Budget and Management

~~June 2015~~ August 2019

State of Ohio

Debt and Interest Rate Risk Management Policy

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State of Ohio

Debt and Interest Rate Risk Management Policy

I. INTRODUCTION

The State of Ohio (the “State”) has significant capital program requirements, both for the funding of new facilities, the renovation and replacement of existing facilities, and other qualified capital purposes such as research and development. The State provides funding for its capital program primarily through the issuance of debt to be paid from the State’s general revenue fund (GRF) receipts, highway user receipts, federal transportation grants, and other State revenues (collectively, “State Revenue”).

~~This Debt and Interest Rate Risk Management Policy (the “Policy”) provides a policy framework and guidance, through the Office of Budget and Management (OBM), to issuers of debt payable from State Revenue, for the structuring, issuance, and the ongoing management of, and reporting on, State debt obligations and related derivative products.~~ The Ohio Public Facilities Commission (OPFC) and the Treasurer of State (Treasurer) (collectively, the “State Issuers”) serve as the issuing authorities for State debt including general obligation bonds, lease appropriation and other special obligation bonds, and revenue bonds. The OPFC is comprised of the Governor, Attorney General, Auditor of State, Secretary of State, Treasurer, and the OBM Director (or their designees) and serves as the issuing authority for the state general obligation debt payable from the GRF. The Treasurer serves as the issuing authority for general obligations payable from highway user receipts, and lease appropriation and other special obligation, and revenue bonds payable from State Revenue.

~~This Policy largely formalizes pre-existing practices and procedures (including those required by State statutes and existing bond documents, as well as the State’s financial planning, management, budget, and disclosure documents.) This Policy benefited from similar efforts by other highly rated municipal bond issuers, rating agency guidelines, and industry best practices. The State will continue to consult and refer to those sources as it periodically reviews, revises, and updates the Policy.~~

This Debt and Interest Rate Risk Management Policy (the “Policy”) establishes a framework, through the Office of Budget and Management (OBM), for the issuance and effective management of debt and derivative instruments payable from State Revenue. The Policy is intended to serve as a source of guidance for the ongoing management of existing debt for the State Issuers. It will be reviewed on a periodic basis to ensure it reflects current market practices, regulatory requirements, industry “best practices” guidance and rating agency criteria.

A. General Policy Statement

In managing its debt, it is the State’s policy to:

- Achieve the lowest cost of capital.
- Ensure high credit quality.
- Maximize access to the capital debt markets.
- Preserve financial flexibility.
- Manage interest rate risk exposure.
- Limit exposure to third party credit and financial risk.

B. Goals and Objectives

The State’s debt policies and procedures are established as tools to ensure that financial resources are adequate to meet its long-term capital program and financial planning objectives.

In particular, this Policy is intended to ensure that financings undertaken by the State Issuers enable the State to meet its long-term capital needs while protecting its financial resources. The adoption of clear and comprehensive financial policies is intended to enhance the internal financial management of the State.

General Objectives: This Policy establishes parameters for State Issuers in issuing debt and managing the State's debt portfolio based upon the State's overall capital improvement needs, its ability to repay financial obligations, and existing legal, economic, financial and debt market conditions. Specifically, this Policy is intended to:

- Guide decision making and promote prudent financial management of State debt.
- Promote cooperation, coordination and consistency within the State with respect to the structuring, issuance and management of debt.
- Protect and enhance the State's credit ratings.
- Ensure the legal and appropriate use of the State's debt issuance authority.
- Maintain appropriate resources and funding capacity for present and future capital needs.
- Promote and maintain balance between interest rate risk and the long-term cost of capital.
- Promote the appropriate diversification within the debt portfolio to balance risk and liquidity.
- Promote the evaluation of the State's debt portfolio in the context of asset-liability management.

Interest Rate Risk Management Objectives: As part of the management of interest rate risk and the long-term cost of capital, the State, in addition to the opportunistic issuance of fixed rate debt in low interest rate environments, may make selective use of variable rate debt and interest rate exchange contracts (referred to herein also as "interest rate swaps", "swaps", "derivative products" or "derivatives") as tools to manage its borrowing cost, including interest rate risk, and access to the capital debt markets. While these types of structures and products provide opportunities to lower the cost of borrowing and enhance the State's financial position, they also introduce types of risks not found in the fixed rate market that require more intensive and ongoing oversight. To ensure that the State uses derivative products prudently and effectively, this Policy also provides a framework outlining purposes, procedures and limitations with respect to:

- The use and management of derivative products.
- The management of interest rate risk with respect to the State's debt portfolio.
- The use of variable interest rate debt either through direct issuance or through the execution of derivative products.
- The use of third party liquidity facilities and the provision of self-liquidity by the State.

II. THRESHOLD CONSIDERATIONS FOR DEBT ISSUANCE

A. Authorization and Approval

The State, by and through the State Issuers, is permitted to issue fixed rate debt, variable rate debt and to enter into interest rate swaps and other derivative products in connection with the issuance and management of State debt (see Article VIII of the Ohio Constitution and Ohio Revised Code (ORC) Sections 9.98 et seq., 5531.10 and Chapters 151, and 154).

Pursuant to ORC Section 126.11, OBM is required to review and approve the issuance of State debt including any derivative products related to that debt. In furtherance of this provision, State Issuers must submit proposed debt and derivative product transactions to OBM for review and

approval prior to execution. OBM review and approval will include compliance with applicable ORC authorization provisions and this Policy.

In assessing compliance with the limitations set forth in the Policy, OBM shall take into account existing or pending debt issuances and interest rate exchange contracts under which payments do not begin until a future date. If the limitations set forth in the Policy are to be exceeded, OBM and the affected State Issuer will examine suitable means to achieve compliance with those limitations, including, but not limited to, fixed and variable rate debt issuance, the termination or commencement of permissible derivative products, and consideration of alternate debt amortization schedules.

Each State Issuer shall consider the use and execution of fixed rate debt, variable rate debt and derivative products in a manner consistent with the authorization, structuring requirements, limitations and approval process contained in applicable sections of the ORC and pursuant to the provisions of the Policy.

B. Debt Issuance Limitations

It is the responsibility of each State Issuer to ensure that its debt is issued in accordance with applicable provisions of the Ohio Constitution and State statutes and laws, as well as applicable federal tax law and securities law requirements. In this regard, OBM will ensure that State debt conforms to the following legal and policy-driven limitations and provisions:

1) GRF Debt Limitations

- a) 5% Debt Service Limitation - Section 17 of Article VIII of the Ohio Constitution establishes an annual debt service “cap” applicable to future issuances of State direct obligations expected to be paid from the GRF or net State lottery proceeds (“Direct Obligations”). Generally, Direct Obligations of the State payable from the GRF may not be issued if debt service for any future fiscal year on those new and any then outstanding Direct Obligations would exceed 5% of the total of estimated GRF revenue plus net State lottery proceeds for the fiscal year of issuance. Direct Obligations payable from the GRF excludes (i) debt payable from non-GRF sources (i.e., highway user receipts) and (ii) general obligation debt for third frontier research and development, site development, and veterans’ compensation.
- b) 1% Debt Service Limitation - Excluding State debt subject to the constitutional 5% debt service limitation, all other debt obligations backed by the GRF (including third frontier research and development, site development, and veterans’ compensation bonds and certificates of participation) may not be issued if debt service on the new and any existing obligations would exceed 1% of the total of estimated GRF revenue plus net State lottery proceeds for the fiscal year of issuance.
- c) 50% Amortized within 10 Years - The State will manage the issuance of its Direct Obligations payable from the GRF to ensure that, in aggregate, at least 50% of this debt outstanding at any time is amortized within 10 years.
- d) Maximum ~~Term of 25 Years~~ Maturity - The final maturity of any issuance of Direct Obligations payable from the GRF ~~must~~ should not exceed the useful life of the assets financed and in no event be ~~no~~ more than 25 years from the date of issuance.

2) Debt Covenants for Non-GRF Debt

State Issuers are to adhere to all limitations set forth in State law and all covenants detailed in the applicable bond proceedings (e.g., trust indentures) for all non-GRF supported debt, including, but not limited to:

- Additional Bonds Test.
- Debt Service Coverage Test.
- Flow of Funds Requirements.
- Maintenance and Operation Requirements.

C. Funding of Capital Projects

Subject to General Assembly authorization, the State is permitted to fund capital projects through cash (pay-as-you-go) and through the issuance of debt. Debt financing is generally employed when the cost of the capital project is significant and the asset has a relatively long useful life (i.e., five years or longer).

The State Issuers typically issue debt on a program basis to fund the cash flow needs of various categories of capital projects over a short term (e.g., 12-24 months). As bond proceeds are depleted, new debt can be issued to provide funding for ensuing periods. This “capital cash-flow” borrowing approach safeguards against over issuance, unnecessary interest costs and provides for a rate of spend-down that is consistent with arbitrage temporary periods and exceptions to rebate. In certain situations dictated by financial market conditions or State capital program requirements, State Issuers may issue debt for funding capital cash-flow requirements for longer or shorter periods.

The State may also consider borrowing on a “project” basis, where debt is issued upfront to generate proceeds to pay for a particular capital project with a multi-year spend-down. This approach may be implemented, when appropriate, to lock-in relatively low long-term fixed interest rates, and minimize costs of issuance.

D. Rating/Credit Objectives

The State will seek to maintain the highest possible credit ratings for all categories of State debt within the context of fulfilling financial responsibilities and policy objectives. The State will consider published rating agency guidelines in developing its capital funding and debt strategy. In particular, State debt should be structured consistent with the best practice standards established by Moody’s Investors Services, Standard & Poor’s Ratings Services and Fitch Ratings. These standards include, but are not limited to: a focus on:

- Rapid Debt Amortization.
- Appropriate level of variable rate and derivative exposure.
- Stringent Additional Bonds Test (revenue-backed debt).
- Flow of Fundsfunds (revenue-backed debt).

III. DEBT ISSUANCE AND MANAGEMENT

A. Permissible Types of Debt

To the extent authorized by Federal and State law, the State Issuers may issue the types of debt outlined below.

- 1) Tax Status – The State Issuers should issue debt on a tax-exempt basis whenever permissible and manageable under federal tax law. In addition, the State Issuers should compare the cost of capital of traditional tax-exempt obligations versus other tax-advantaged obligations (e.g. federal subsidy or tax-credit bonds) ~~versus traditional tax-exempt bonds~~. Non-tax advantaged obligations should only be considered when tax-

advantaged financing is not permissible or non-tax-advantaged obligations it provides necessary flexibility not provided through tax-advantaged debt issuance (e.g., paying debt service with proceeds, over issuance constraints, the need to terminate burdensome trust indenture provisions, accommodating private use of public facilities or public-private partnerships, etc.) or it is determined to be more cost effective.

- 2) Fixed Rate Debt – The State Issuers may issue debt with a rate of interest that is fixed at the time of issuance in the following or comparable forms:
 - Bonds
 - Bond Anticipation Notes (BANS)
 - Certificates of Participation (COPS)
- 3) Variable Rate Debt – The State Issuers may issue debt with a rate of interest that varies according to a pre-determined formula (based on a spread to an interest rate index) or is set via a periodic remarketing of the securities. The debt may be issued in the following or comparable forms:
 - Variable Rate Demand Obligations (VRDOs)
 - Bond Anticipation Notes (BANS)
 - Floating Rate Notes (FRNs)
 - Commercial Paper (CP)
- 4) Use and Allocation of Fixed and Variable Rate Debt – Each State Issuer will make determinations and allocations among the different types and modes of debt based on cost/benefit and risk factors, including but not limited to the following:
 - Interest cost and market conditions (including the shape of yield curves and relative value considerations) for both the bond and swap markets.
 - Self-liquidity costs and capacity as specified by the Policy.
 - Cost and availability of third-party liquidity.
 - Exposure to third-party credit and financial risk.
 - Cost and availability of bond insurance.
 - Integration of fixed rate and alternative modes of variable rate debt within the framework of the Policy.

See section **IV. VARIABLE RATE DEBT EXPOSURE AND LIQUIDITY** for standards relating to the use of variable rate debt, limitations on variable rate exposure and the use of liquidity facilities.

B. Structuring Considerations

- 1) Final Maturity/Rapidity of Debt Repayment – The term of State debt should comply with all State constitutional and statutory limitations as well as applicable federal tax law. The final maturity of a State debt issuance should not exceed the useful life of the financed project(s). A shorter amortization should be considered when the level of the expected source of payment stream is sufficient to support that debt service. When the types of projects or improvements financed have a history of changing from public to private use, the shortest feasible amortization schedule and/or call provisions should be used. With respect to refunding debt issued solely to achieve economic savings, the final maturity of the refunding debt should not exceed the final maturity of the debt being refunded.
- 2) Debt Service Payment Structure – In general, State debt should be structured to produce a level annual debt service payment. Level principal payment structures may also be considered for non-GRF supported debt when the useful life of the asset is short and the

coverage ratio (annual projected revenue over annual debt service) is high. Debt service for non-GRF supported debt may also be structured to match the expected source of payment revenue stream.

- 3) Debt Service Payment Dates – Interest on fixed rate bonds and variable rate obligations should be payable on a semiannual basis. With the consent of OBM and the Treasurer, alternate payment frequencies may be utilized. Debt issued as part of an ongoing debt program (e.g., multiple issues of bonds under the same bond documents) should maintain consistent principal and interest payment dates. Debt service transfers to any trustee should be required to be made as few days in advance of the actual payment date as possible ~~and as per the~~, should conform to applicable bond documents. and should be structured consistent with applicable rating agency criteria (as necessary).
- 4) Coupon Structure – State debt can be structured using discount, par, or premium coupons or any combination thereof within any applicable limitations in statute or the bond proceedings. State Issuers should utilize the coupon structure that produces the lowest ~~True Interest Cost (“TIC”)~~borrowing cost taking into consideration the call option value of any ~~callable maturities. When comparing yields associated with callable premium and callable discount bonds of the same maturity, the~~that are priced on a yield to maturity should be evaluated in addition to the yield to call date basis.
- 5) Optional Redemption Provisions – In general, State debt (both taxable and tax-exempt) should be issued with the earliest optional redemption date that is determined to be cost-effective, taking into consideration the call dates on existing State debt. When State debt is issued with a make-whole call or as non-callable, an analysis should be prepared to determine the value of a par call option to ensure the State Issuer is being fairly compensated for foregoing that par call option.
- 6) Serial and Term Bonds – State debt may be structured with serial or term bonds or any combination thereof. All term bonds must be subject to mandatory annual sinking fund redemptions. When issuing bonds in parts of the yield curve that are upward sloping, State Issuers should evaluate the cost-effectiveness of serial bonds versus term bonds.
- 7) Capital Appreciation Bonds/Zero Coupon Bonds – The use of capital appreciation bonds or zero coupon bonds should be avoided unless they are necessary for legal and/or bond structuring reasons (e.g., refunding bonds with par-to-par restrictions), they produce the lowest ~~TIC~~borrowing cost compared to other structures (e.g., relative to term bonds), or they are issued for programmatic reasons (e.g., college savings program).
- 8) Credit Enhancement – Credit enhancement facilities should be utilized when they provide net economic benefit to the State.
 - a) Bond Insurance – The State Issuer should perform a maturity-by-maturity insurance feasibility analysis when considering the use of bond insurance. The assumed insured and uninsured yields utilized in the analysis should be documented. The economic feasibility of insurance should be determined based on the value of insurance as priced to the earliest possible call date of the applicable maturity. The State Issuer may insure bonds that are borderline from an economic feasibility standpoint if warranted by other factors (e.g., use of insurance to attract investor interest where certain bond maturities might otherwise be difficult to sell).

- b) Letter of Credit (LOC) – Evaluations of the economic feasibility of a credit facility should compare the cost to the State with and without the LOC and should take into account the trading spread of the LOC provider, the cost and term of the facility and the interest costs of the State’s debt if enhanced.

- 9) Costs of Issuance – Costs of issuance (COI) accounts created to hold bond proceeds for payment of bond counsel, financial advisor, rating agencies, and other expenses of the issuer should be closed within six months. Any funds remaining after payment of all COI expenses or expiration of this six-month guideline should be deposited into the applicable bond service or project improvement fund.

C. Method of Sale

Each State Issuer is responsible for determining the method of sale for its issuances. Unless otherwise specified in applicable sections of the ORC, State Issuers may issue debt through competitive bidding, negotiation, or direct placement.

- 1) Competitive Sales – Competitive sales should be awarded to the bid with the lowest True Interest Cost (TIC) provided the bid conforms to the applicable bid specifications. State Issuers should consider and/or address the following in the bid specifications:
- Maximum and minimum bid limitations on the total purchase price.
 - Maximum and minimum coupons and allowable coupon rate for each maturity.
 - ~~The number of coupons per maturity and the allowable coupon rates (i.e., generally multiples of five basis points and one-eighths of a percent).~~
 - Maturities subject to optional prior redemption should have a minimum initial reoffering price or a specified coupon range ~~(to minimize variations in call option value and increase the opportunity to refund those maturities for economic savings).~~
 - Ability to adjust annual and aggregate principal amounts before and after the sale.
 - Ability to change bid date, closing date and bid parameters.
 - Use of an electronic bidding platform. ~~Receipt of a good faith deposit.~~
 - Issue price determination.
- 2) Negotiated Sales – The State Issuers will use a qualifications process to select underwriters for each issuance of negotiated bonds and should consider the following factors ~~should be considered~~ when issuing bonds on a negotiated basis:
- Underwriter selection, including use of a selling group.
 - Priority of orders.
 - Designation policy.
 - Underwriter compensation (takedown, management fee and expenses).
 - Use of a retail order period and definition of retail.
 - ~~Method of allocating Review and filling orders.~~
 - Use approval of a selling group all allotments.
- 3) Direct Placement – The State Issuer may consider the use of direct placement (typically direct placements with a bank) when the incremental economic benefit of this approach is estimated to be significant relative to issuance in the traditional publicly-offered debt markets. The following potential risk factors should be reviewed and the State Issuer should take steps to mitigate these risks when considering the use of direct placement of debt with banks:
- Assumption of risk of changes in tax law.

- Bank cost pass-through risk (i.e. increased bank costs due to regulatory or other changes) that may be passed on to the borrower.
- Legal documentation and covenant requirements from direct purchasers (acceleration provisions, cross-defaults or remedies favoring the direct purchaser over market investors).
- Continuing Disclosure.

D. Refundings and Restructurings

The State Issuer and its financial advisors should monitor the markets and the State's debt portfolio for opportunities to refund existing debt for savings. The Tax Cuts and Jobs Act of 2017 eliminated the ability to advance refund outstanding bonds on a tax-exempt basis. Forward refundings allow for the sale of tax-exempt bonds to refunding outstanding bonds by setting a future date upon which the bonds will be issued that is within 90 days of the call date of the outstanding bonds.

- 1) Advance and Forward Refunding Savings Criteria – When considering the advance or forward refunding of State debt, each State Issuer should calculate the net present value (“NPV”) savings for the refunding transaction as a whole and on a maturity-by-maturity basis. The NPV savings should be estimated net of all costs of issuance and any other associated costs. Additionally, the State Issuer should calculate one of the following statistics for each bond/maturity being considered for refunding:
 - a) Opportunity Cost Index (OCI) - NPV savings divided by potential NPV savings associated with a current refunding of the callable bond at its call date assuming relatively low interest rates at the time of the call date; or
 - b) Option Value - NPV savings divided by the callable bond's Option Value (projected dollar value of the call option based on implied forward rates in current market yield curve).

In general, ~~an advance~~ refunding transaction should generate NPV savings of 3.0% or greater. Additionally, each bond/maturity being refunded should meet **both** of the following criteria:

- NPV savings of about 1.0% or greater; **and**
- Option Value **or** OCI of about 70% or greater.

The implied forward rates and historical interest rates to be used in the OCI and/or Option Value are to be approved by the State Issuer. Refunding candidates that do not meet the above criteria may still be refunded if they provide some other economic benefit, such as mitigating negative arbitrage in an escrow, or providing positive savings and are unlikely to be refunded in the future (e.g., near-term calls and stranded maturities). ~~Final refunding candidate selection should be made as close to the sale date as practical, with the most recent available market interest rates and other assumptions. State Issuers should also conduct a breakeven analysis calculating how much interest rates would have to change by the refunded bond's call date to produce a current refunding with savings matching those achieved with an advance or forward refunding.~~

The State may consider other refunding alternatives as appropriate to the extent they meet the general policy objectives of the State.

- 2) Current Refunding Savings Criteria – The current refunding of State debt should only be considered when NPV savings are greater than the cost of the refunding transaction.

- 3) Final Maturity and Savings Structure – The final maturity of refunding bonds should not exceed that of the bonds being refunded, except to achieve other overriding State policy objectives. Refunding bonds should generally be structured to produce level debt service savings. Alternatively, refunding bonds may be structured to accelerate debt service savings, to increase overall NPV savings, or to achieve other identified State policy objectives, such as budgetary relief.
- 4) Escrow Structuring and Restructuring – State Issuers should analyze the use of State and Local Government Securities (SLGS) and federal open market securities (OMS) when evaluating a refunding escrow. State Issuers should utilize SLGS in cases in which the additional savings generated by OMS are minimal and OMS when the additional savings are more significant. Where OMS are utilized, State Issuers will procure a third party agent to competitively bid the escrow securities, ~~preferably on a security-by-security basis.~~ For an escrow with a large number of securities and/or for different bond programs, the issuer should consider bidding the escrow as several smaller portfolios, each addressing specific bond program or a group of securities. State Issuers may restructure escrows (as and if legally allowable) to realize cost savings.
- 5) Economic versus Legal Defeasance – An economic defeasance should only be used when there is significant incremental economic benefit relative to a legal defeasance or there is a compelling legal, administrative, technical or practical advantage of an economic versus legal defeasance. An economic defeasance should be pursued as an alternative to a legal defeasance only when the economic and/or other advantages significantly outweigh the following:
 - Effect on State debt capacity.
 - Effect on other legal requirements (e.g., coverage requirements).
 - Effect on State balance sheet.
 - Effect on State credit ratings.
- 6) Restructuring Considerations – State Issuers may consider debt restructuring when it is in the financial interest of the State, as determined by OBM. State Issuers may restructure debt to:
 - Remove unduly restrictive bond covenants.
 - Smooth irregular debt service payments.
 - Achieve cost savings.
 - Provide budgetary relief.

E. Investment of Bond Proceeds

Bond proceeds that are deposited into the State Treasury will be invested by the Treasurer pursuant to ORC Section 135.143. Proceeds held by a bond trustee under a trust indenture will be invested in accordance with the terms of that indenture and applicable state law.

F. Rating Agency Coordination

With respect to State debt secured by State Revenue, OBM will be responsible, on behalf of the State Issuers, for the communication of information relating to the demographics, economy, financial condition, funds or general operations of the State to the rating agencies, keeping the rating agencies informed of significant developments throughout the year and for the scheduling of rating agency calls and/or visits.

G. Use of Professional Services

State Issuers will periodically procure professional services through a Request for Qualifications or Proposals (RFQ or RFP) process or as required by State law and regulations.

- 1) Legal Services – The State Issuer will engage a firm to serve as issuer and disclosure counsel and a firm to serve as bond counsel to assist in each debt issuance.
- 2) Financial Advisors – The State Issuers will engage one or more firms to serve as an independent registered municipal advisor (IRMA) within the meaning of Securities Exchange Act of 1934 (the “Exchange Act”) Rule 15Ba1-1(d)(3)(vi). In conjunction with the use of interest rate swaps and derivatives, the State Issuers will engage one or more firms to serve as a Qualified Independent Representative (QIR) in accordance with the requirements of the Commodities and Futures Trading Commission (CFTC) regulation §23.450 and its related safe harbor provisions.
- 3) Underwriters – The State Issuer, with assistance from its financial advisor, shall qualify underwriters prior to the selection of underwriters to serve on a negotiated transaction.
- 4) Professional Services for Managing Variable Rate Debt – Each State Issuer should evaluate the merits of utilizing financial service providers in the issuance and management of its variable rate debt including: broker dealers; remarketing agents and third party liquidity providers. The Treasurer, as paying agent for the State, will be responsible for evaluating each remarketing agent’s performance in relation to the Securities Industry and Financial Markets Association Index (SIFMA) or other ~~tax-exempt~~applicable indices. For each service being procured, the criteria for evaluating each provider should include, but is not limited to: i) experience in the municipal bond market; ii) capital position; iii) market position; iv) credit ratings and; v) cost.

IV. VARIABLE RATE DEBT EXPOSURE AND LIQUIDITY

A. Rationale for Use of Variable Rate Debt

~~Variable rate debt may be utilized as part of a strategy to realize the State’s primary objectives to (i) lower the cost of capital, (ii) maintain the financial flexibility of the State’s debt portfolio and/or (iii) manage interest rate risk exposure. Variable rate debt should~~Variable rate debt may be issued to achieve one or more of the following objectives:

- 1) Reduce borrowing costs by creating an exposure to short-term interest rates as opposed to historically higher long-term fixed interest rates, particularly when fixed, long-term interest rates are high.
- 2) Diversify the State’s debt portfolio introducing debt instruments that have a historically different investor base and risk profile.
- 3) Mitigate interest rate risk of the State’s asset and liability profile by creating short-term interest rate debt exposure to balance short-term interest rate exposure of the State’s investment portfolio.

B. Variable Interest Rate Exposure

For purposes of the Policy, the variable rate exposure of the State or of any State Issuer shall be defined as including the following debt and derivative products:

- The principal amount of outstanding variable rate debt for which the periodic interest reset period is less than one year.
- The notional amount of any fixed-to-floating interest rate swap pursuant to which a State Issuer pays a variable interest rate for which the periodic interest reset period is less than one year.

Variable rate exposure shall exclude the amount of variable rate debt for which variable interest rate exposure has been substantially eliminated via:

- Interest rate swaps, including floating-to-fixed swaps.
- Other hedging transactions, including interest rate caps, collars, and swaptions.

C. Limitation on Variable Rate Exposure

Recognizing that some level of variable rate debt may be appropriate, the amount of the State's un-hedged variable rate exposure shall be limited to no more than 20% of the total outstanding debt for each of the following categories of debt:

- General obligation and special obligation (appropriation-backed) debt payable from GRF receipts.
- General obligation highway and special obligation (appropriation-backed) debt payable from highway user receipts.
- Other types of debt as may become appropriate.

D. Liquidity Facilities

- 1) Self-Liquidity – For variable rate debt requiring liquidity facilities to protect against remarketing risk, the State, acting through the Treasurer, will evaluate the merits of providing the required liquidity facility via self-liquidity as a means of reducing the cost and increasing the benefits of variable rate debt. When evaluating the merits of self-liquidity, the Treasurer shall consider the following factors and limitations:
 - The total amount of self-liquidity obligations currently assumed by the State.
 - The ability of the State to provide self-liquidity without adversely impacting investment returns on the State's invested funds.
 - The effect of providing self-liquidity on any applicable ratings of the State's investment accounts.
 - ~~Self liquidity shall not be provided for any variable rate obligation in a daily interest mode.~~
 - Other applicable considerations as determined by the Treasurer.

The State will maintain the highest possible short-term credit rating that provides the optimal balance between costs and benefits on all variable rate debt obligations for which the State provides liquidity. The ability and appropriateness of providing self-liquidity for variable rate debt shall be determined at the discretion of the Treasurer. Each State Issuer shall submit requests for self-liquidity to the Treasurer at least 60 days prior to the applicable debt issuance date. Associated amortization schedules and drafts of documents should be submitted as soon as possible thereafter and the Treasurer shall respond to the request in a timely manner.

- 2) Third-Party Liquidity – The use of third-party liquidity providers should generally be limited due to the various risks associated with such an agreement (e.g. exposure risk of the provider, renewal risk). Where the use of third-party liquidity facilities is required or appropriate, State Issuers shall consider the following factors and shall select the provider that offers the optimal combination of these factors:

- a) Type of Liquidity Facility - Different forms of liquidity should be evaluated in order to balance the protection offered against the economic costs associated with each structure. These forms may include, but are not limited to, direct pay letters of credit, standby letters of credit and lines of credit.
- b) Provider Credit Ratings - State Issuers should seek out liquidity providers that have the highest ~~short-term~~ credit ratings.
- c) Reimbursement Agreement - In addition to credit ratings, State Issuers should seek providers willing to accept the contractual provisions most favorable to the State. Those provisions, negotiated as part of the Reimbursement Agreement, should include, but not be limited to, the following: (i) term; (ii) interest rate and repayment provisions; (iii) termination events; and (iv) bank cost pass-through.
- d) Provider Trading Values - Prior to awarding liquidity facility provider contracts, State Issuers should seek input from market participants, including financial advisors, on anticipated trading levels and general market acceptance of bonds secured by similar types of liquidity facilities of the various providers.
- e) Costs - All costs associated with a proposed liquidity facility, including commitment fees, standby fees, draw fees, and interest rates charged when a draw occurs, should be evaluated.
- f) Term of Facility - State Issuers shall select liquidity providers offering the longest facility term when all other factors listed herein are the same.

V. INTEREST RATE SWAPS AND DERIVATIVES

A. Rationale for Use of Derivatives

The use of interest rate swaps and derivative products ~~should balance the State's primary goals of: (i) reducing the cost of capital; (ii) minimizing interest rate volatility; and (iii) gaining flexibility in structuring and managing its debt portfolio over time. In particular the use of swaps and derivatives~~ should further one or more of the following objectives:

- 1) Reduce expected borrowing costs (e.g., achieving a lower fixed or variable rate of interest at the time of issuance than is available via a direct issuance in the traditional bond market).
- 2) Achieve the desired balance between fixed and variable interest rate exposure, including asset liability management considerations (e.g., through the creation of prudent levels of variable interest rate exposure via fixed-to-floating interest rate swaps, or through the purchase of an interest rate cap, collar or floor).
- 3) Manage and hedge future interest rate risk (e.g., through locking in current market rates via a forward starting floating-to-fixed interest rate swap).
- 4) Optimize the State's capital structure or create benefits not available through traditional financing structures (e.g., through the sale of an option (swaption) to enter into a forward starting floating-to-fixed swap to extract refunding savings on callable bonds that are not eligible for advanced refunding).
- 5) Improve the State's financial position or flexibility (e.g., through altering the schedule of debt service payments, or through changing the index associated with floating rate receipt of the swap, or through the receipt of an upfront payment via the sale of an option (swaption)).
- 6) Take advantage of a capital market opportunity in a more timely manner than may be possible with conventional debt instruments.

The use of a particular derivative product is not permitted if:

- The rationale for using the derivative is based predominantly on speculation regarding the future direction or level of interest rates.
- The fair market value of the derivative cannot be readily and reliably determined at all times by the State Issuer or its [agentsadvisor](#).
- The transaction structure and terms result in a lack of liquidity and the inability to timely terminate the transaction at market.
- The transaction is inconsistent with the overall intent of this Policy.

In general, the State will have a bias toward using derivatives that have greater price transparency and liquidity unless the State Issuer determines there is a compelling reason to enter into a more complex derivative instrument (e.g. no other suitable hedge substitute exists).

B. Limitation on Derivatives

- 1) Overall Limitation – Within each category of debt backed by a distinct fund or source of revenue (i.e., GRF or highway user receipts), the State shall limit the total notional amount of derivatives to an amount not to exceed 20% of the outstanding debt backed by that fund or revenue source. In assessing compliance with this limitation, OBM shall take into account (i) existing or pending interest rate exchange contracts under which payments do not begin until a future date; and (ii) overall financial exposure to existing credit or liquidity facilities and other investment providers.
- 2) Limitation on Tax-Risk Derivatives – The notional amount of the derivative transactions in which the State assumes tax risk (e.g., synthetic fixed rate debt in which the variable receipt is based on a taxable index and basis swaps) shall not exceed 10% of the total outstanding debt for each category of debt backed by a distinct fund or source of revenue (i.e., GRF or highway user receipts).

C. Permitted Derivative Instruments and Transaction Types

According to the applicable provisions of State law:

- Derivative transactions executed by the State must be associated with specifically identified State debt.
- There can be no amortization risk with respect to such derivatives (i.e., the notional amount of the derivative may not exceed the principal amount of the related debt and the amortization of any derivative must replicate the amortization of the State debt to which it specifically relates).

State Issuers may use the following types of derivatives, after identifying the financial objectives to be realized and assessing the attendant risks, pursuant to section **IV. INTEREST RATE SWAPS AND DERIVATIVES – D. Risk Assessment and Mitigation** below. State Issuers must submit the identified objectives and risk assessment to OBM as part of the review and approval process required under ORC Section 126.11.

- 1) Interest rate swaps, including, but not limited to:
 - Fixed-to-floating rate swap (synthetic variable).
 - Floating-to-fixed rate swap (synthetic fixed).
 - Floating-to-floating (basis) swaps.

Each of these forms of swaps may be forward starting or include cancellation options.

- 2) Rate locks and other products designed to hedge interest rate risk associated with future issuance.
- 3) Interest rate caps, floors and collars, including but not limited to:
 - Interest rate caps and floors embedded in approved swap transactions.
 - Purchased caps.
 - Purchased floors.
 - Purchased collars (buy cap/sell floor).
- 4) Options on swaps (swaptions), including but not limited to:
 - Floating-to-fixed rate swaption purchases or sales.
 - Fixed-to-floating rate swaption purchases or sales.
- 5) Total return swap.
- 6) Other authorized swap and derivative products that OBM and State Issuers consider appropriate for use pursuant to the terms of the Policy.

D. Risk Assessment and Mitigation

State Issuers shall evaluate each proposed derivative transaction to assess the types and degrees of risk associated with that transaction and to consider what means are available to mitigate such risks. The risk and corresponding risk mitigation strategies to be assessed include, but are not limited to the following:

- 1) Interest Rate Risk – The rate of interest paid may increase on direct variable rate bonds or synthetic variable rate swaps. *Mitigation – Limit total variable rate exposure. Consider floating-to-fixed swaps on direct variable rate debt and caps and collars on direct and synthetic variable rate debt. Take advantage of low interest rate environments to fix out variable rate debt and to terminate synthetic variable rate swaps.*
- 2) Counterparty Risk – The risk that the counterparty does not perform pursuant to the terms of the interest rate exchange agreement. *Mitigation – Limit total counterparty exposure through limit on total notional amount of derivatives and incorporate individual counterparty exposure limits and minimum ratings requirements.*
- 3) Tax Risk – The risk associated with a rise in tax-exempt interest rates relative to taxable interest rates as would result from a decrease in the federal marginal corporate or personal income tax rates, or the full or partial elimination of the exemption from taxation of debt issued by state and local governments. *Mitigation – Limit total direct variable rate and synthetic fixed rate debt in which a State Issuer receives a variable payment based on a taxable index or rate.*
- 4) Termination Risk – The risk that a swap could be terminated and a market based termination payment required due to any of several events, which may include ratings downgrade, covenant violations, swap or bond payment defaults. *Mitigation – Progressive collateralization and budgeting of potential termination payments as conditions increase the possibility of a termination payment and the incorporation in swap documentation of nonparallel downgrade provisions to the benefit of the State Issuer.*
- 5) Liquidity/Remarketing Risk – The risk that holders of variable rate bonds exercise their “put” option to tender their bonds back to the State Issuer. If those bonds cannot be immediately remarketed, the Treasurer must purchase and hold those bonds as an investment (self-liquidity) or the State Issuer may have to pay a higher rate of interest to

a financial institution (third-party liquidity). *Mitigation – Limit total direct variable and synthetic fixed rate exposure. Utilize self-liquidity as a preferred option and negotiate competitive rates for third-party liquidity.*

- 6) Liquidity/Rollover Risk – Two risks arise when the term of the liquidity facility is shorter than the term of the applicable bonds: i) the State Issuer may incur higher renewal fees when new agreements are negotiated; ii) the liquidity bank market constricts such that it is difficult to secure third-party liquidity at any interest rate. *Mitigation – Utilize self-liquidity as a preferred option and negotiate longer terms on provider contracts to minimize the number of rollovers.*
- 7) Basis Risk – The risk of receiving insufficient payments from the variable receipt component of a synthetic fixed rate swap to pay the interest due on the underlying variable rate debt issued by a State Issuer. *Mitigation: Carefully construct variable rate swap formulas so that they closely match the anticipated trading pattern of the State’s variable rate debt across a range of interest rate environments. Limit total exposure to variable receipts based on taxable indices that support tax-exempt variable debt issued by the State.*
- 8) Benchmark Index Overhaul Risk – The risk that the observed benchmark index on any interest rate swap may be overhauled, discontinued, or phased out at some point in the future. Mitigation: Understand the legal process to replace such an index within the documentation and negotiate favorable fallback language that will provide for a transition path to a replacement index.
- 8)9) Amortization Risk – The risk that the notional value of a swap contract could become mismatched versus the amortization of a particular series of fixed or floating rate bonds to which the swap is tied. *Mitigation: Swap agreements must have the flexibility to adjust notional amounts, including optional termination provisions, to ensure a one-to-one match with the underlying bonds throughout the life of the swap (as required by Ohio law).*
- 9)10) Operational Risk – The risk that the State Issuer or the counterparty may not have the adequate systems, policies, or practices to ensure timely and accurate cash flow exchanges and compliance with collateral provisions. *Mitigation: Continue to refine policies and practices to ensure timely compliance by State Issuers with applicable swap agreement provisions.*
- 10)11) Regulatory risk – The risk that federal derivative regulations will be established or modified, impacting the rights or responsibilities of the State Issuer (e.g. requirement to: i) pay initial or variation margin; ii) obtain Legal Entity Identifiers; or iii) report swap information to swap data repositories. *Mitigation: Consult with legal counsel and QIR) as to changing requirements.*

When appropriate, the risk assessment conducted by State Issuers should include analyses that quantify tax risk, basis risk and other risks on a sensitivity basis over the life of the proposed derivative transaction, considering key variables (e.g., federal marginal tax rates, taxable and tax-exempt index rates, etc.) affecting expected financial results and benefits.

E. Procurement, Approval and Execution

Each State Issuer is responsible for determining the method of procurement for swaps and related financial products. Unless otherwise specified in applicable sections of the ORC, State Issuers may use competitive bidding or a negotiation process to procure swaps and other derivative products; however, competitive bidding for financial products that are non-proprietary and widely available in the marketplace is recommended. A negotiated approach may be

appropriate to procure financial products that are proprietary or that have been customized to meet the needs of the State, in order to manage overall counterparty exposure, or to obtain pricing that is in the best interest of the State. This policy presumes State Issuers will structure and execute swaps on a direct, bilateral basis, but that the availability, costs, and benefits, of a central clearinghouse will be considered in each case.

All derivative transactions proposed for execution by a State Issuer shall be submitted to OBM for review and approval pursuant to ORC Section 126.11. OBM review will include the proposed transaction's compliance with the applicable authorization provisions under State law and with the Policy, as well as compliance with federal law.

The State Issuer shall select an independent financial advisor to evaluate and make recommendations on swaps and derivative products. The State Issuer shall select and monitor the qualifications and performance of the financial advisor in accordance with the criteria established by the CFTC to be a QIR for entities such as a State Issuer. Each derivative executed by a State Issuer shall be subject to an independent review and analysis by a QIR and include a finding that the derivative based on its terms and conditions was priced at a fair market value as of the date and time of its execution. A State Issuer shall secure the necessary opinions from legal counsel to the counterparties and its credit support provider, if applicable, in connection with each swap to the effect that such swap and any related credit support agreement is a legal, valid and binding obligation of each respective party.

F. Documentation

- 1) Form of Agreements – State Issuers will use standard International Swaps & Derivatives Association, Inc. (ISDA) swap documentation including the Schedule to the Master Agreement and a Credit Support Annex. It is intended that certain provisions of these standard documents will be modified in favor of the State. State Issuers may use additional documentation if the product is proprietary or if the State Issuer deems in its sole discretion that such documentation is otherwise in its interest.
- 2) Swap Terms and Provisions – The swap documentation negotiated by a State Issuer shall include, but not be limited to, payment, duration, security, collateral, default, and remedy and should include, as appropriate, the following terms and provisions:
 - a) The State shall have the option to terminate at any time over the term of the agreement. The valuation methodology of termination cost must be established in the swap documents (e.g., market value, no-cost, etc.).
 - b) Credit rating downgrade provisions triggering termination shall be bilateral.
 - c) Governing law for swaps will be New York law, but should reflect Ohio law authorization provisions.
 - d) The jurisdiction of adjudication shall be Ohio.
 - e) An amortization schedule of the notional amount and the requirement to modify that schedule to ensure a one-to-one match with the principal amount of the underlying bonds throughout the life of the swap.
 - f) The specified indebtedness related to credit events should be narrowly drafted referring only to debt payable from the same revenues that are the source of payment on the swap and be reflective of the categorization of State debt described in section IV. **VARIABLE RATE DEBT EXPOSURE AND LIQUIDITY – C. Limitation on Variable Rate Exposure.**
 - g) The Counterparty Collateral Requirements set forth in section V. **INTEREST RATE SWAPS AND DERIVATIVES – G. Swap Counterparties – 3) Counterparty Collateral Requirements.**

- h) Termination value upon an Event of Default or an Additional Termination Event should be set by “market quotation, 2nd Method” methodology.
- i) The State Issuer should only agree to an Additional Termination Event in respect to the State when the ratings on the applicable bonds fall below BBB-/Baa3 and the State fails to provide collateral or other credit support as may be permitted under the swap documentation.
- j) Termination currency shall be U.S. Dollars.
- ~~k) If the State is required to post collateral to the counterparty, that collateral should be held by a third-party custodian without the right of rehypothecation.~~

G. Swap Counterparties

- 1) Counterparty Qualifications – State Issuers shall enter into interest rate swap transactions only with qualified swap counterparties that meet the following requirements:
 - a) Credit Rating - Qualified counterparties, or their guarantor or credit support provider, shall be rated at least “Aa3” or “AA-”, or equivalent, by at least two of the three nationally recognized rating agencies ~~(i.e., Moody’s, Standard and Poor’s, and Fitch)~~ or have, as support for their obligations, a “AAA” subsidiary or other entity (e.g., bond insurer) as rated by at least one nationally recognized rating agency.
 - b) Experience - Demonstrated experience successfully executing swap transactions with other municipal entities, and in the case of swaps associated with non-general obligation debt of the State, a willingness to accept one-way collateral provisions.
 - c) CFTC Registration – The counterparty is registered with the CFTC as a “Swap Dealer”.
- 2) Counterparty Downgrade Provisions – State Issuers should structure swap agreements to provide protection against credit deterioration of counterparties, including the use of credit support annexes or other forms of credit enhancement to secure counterparty performance. If a counterparty rating ~~falls~~is below “AA-/Aa3/AA-” by any rating agency, the counterparty must provide collateral as required by a credit support annex, subject to negotiated posting thresholds. Such protection shall include any terms and conditions that the State Issuer deems necessary or appropriate or in the State’s best interest. A minimum counterparty credit rating post-trade execution of “BBB+/Baa1” is required. Counterparty credit ratings below these levels shall trigger an Additional Termination Event.
- 3) Counterparty Collateral Requirements – To secure any or all swap payment obligations, a State Issuer may require collateral or other credit enhancement to be posted by the swap counterparty with the following provisions:
 - a) In the case of swaps associated with non-general obligation debt of the State, collateral provisions shall provide for one-way collateral by counterparties (i.e., no collateral posting required for the State Issuer).
 - b) In the case of swaps associated with general obligation debt of the State, one-way collateral by the counterparties is preferred, but not required. Provisions must ensure that the counterparty provide the State Issuer and OBM with written notice of their intent to liquidate any collateral posted by the State a minimum of five business days prior to any liquidation.
 - c) The counterparty shall be required to post collateral, subject to negotiated thresholds, if the credit rating of the counterparty ~~falls~~is below the “AA-/Aa3/AA-” category and

the mark-to-market value of the swap is positive to the State Issuer. Additional collateral for further decreases in counterparty credit ratings shall be posted by the counterparty in accordance with the provisions of the credit support annex.

- d) When required, collateral thresholds should be set on a non-parallel structure incorporating a two or more rating step differential between the State Issuer and the counterparty, reflecting the relative credit strength of the State.
- e) Threshold amounts for the initial deposit and for increments of collateral posting thereafter shall be determined by the State Issuer on a case-by-case basis.
- f) In determining maximum uncollateralized exposure, the State Issuer shall consider and include, as applicable, financial exposure to the same corporate entities that it may have through other forms of financial dealings, such as securities lending agreements and commercial paper investments.
- ~~g) Collateral shall be deposited with a third-party custodian without the right of rehypothecation by either party.~~
- ~~h)g)~~ A list of acceptable securities that may be posted as collateral and the valuation of such collateral must be set forth in the swap agreement. Eligible collateral should be limited to cash (U.S. Dollars), U.S. Treasury securities and other agency securities that are guaranteed by the United States Treasury with respect to principal and interest payments.
- ~~h)~~ The market value of the collateral shall be determined on a daily basis.

- 4) Counterparty Exposure Limitation – In order to diversify the State's counterparty credit risk (i.e., to limit credit and financial exposure to any one counterparty), limits will be established for each counterparty serving in that capacity or as a credit support provider for another counterparty, based upon both the credit rating of the counterparty as well as the relative level of risk associated with each existing and proposed swap transaction. The following table provides general termination exposure limits as a factor to be considered by the State when deciding whether to enter into an additional transaction with an existing counterparty. The State may make exceptions to the guidelines to the extent that the execution of a swap achieves one or more of the goals outlined herein or provides other benefits to the State or State Issuer. The maximum net termination exposure (defined below) to any single counterparty should be set so that it does not exceed a prudent level as measured against gross revenues, available assets or other financial resources of the State.

Under this approach, the State will set limits on individual counterparty exposure based on existing, as well as pending or proposed transactions. The sum of the **current market value** and the **projected exposure** shall constitute the maximum net termination exposure. For outstanding transactions, current exposure will be based on the market value as of the most recent swap valuation report. Projected exposure shall be calculated annually based on the swap's potential termination value taking into account possible adverse changes in interest rates as implied by historical or projected measures of potential rate changes applied over the remaining term of the swap.

The aggregate maximum exposure thresholds for a single counterparty are shown in the table below and depend on the credit ratings of the counterparty and whether or not collateral has been posted. If the counterparty has more than one rating, the lowest rating will govern for purposes of calculating the level of exposure.

Counterparty Credit Ratings	Maximum Uncollateralized Net Termination Value	Maximum Net Termination Exposure*
AAA Category	\$50 million	\$100 million

AA Category	\$35 million	\$70 million
A Category	\$15 million	\$30 million
BBB+/Baa1	\$0	\$10 million
BBB or Below	None	None

**Includes collateralized and uncollateralized net termination exposure.*

These guidelines are not intended to retroactively require additional collateral posting for existing transactions, or mandate or otherwise force automatic termination of existing agreements. The guidelines will be used in making a determination as to whether a particular proposed transaction should be executed based on levels of existing and projected net termination exposure to a specific counterparty. If the exposure limit is exceeded by a counterparty, OBM and the applicable State Issuer shall explore remedial strategies to mitigate this exposure.

H. Benefit Expectation

Interest rate swaps, or other derivative products based on SIFMA or other tax-exempt indices, should generate at least 20% greater interest cost savings than the State Issuer's benefit threshold then in effect for comparable traditional bond market transactions. If based on the London Inter-bank Offered Rate (LIBOR) or other taxable indices, such as SOFR (Secured Overnight Financing Rate), interest cost savings should be greater by at least 50%. Reasonable exceptions on a case-by-case basis are acceptable if the State Issuer determines such exceptions are necessary to meet other objectives outlined herein. The higher savings target reflects the greater complexity and higher risk of derivative products. Comparative savings analyses shall include the consideration of the probability (based on historical interest rate indices or other accepted analytic techniques) of the realization of savings for both the derivative and traditional structures. –All such analyses shall also consider structural differences in comparing traditional vs. derivative alternatives, such as the non-callable nature of derivatives, costs of remarketing and liquidity facilities, basis risk, etc.

I. Ongoing Management and Reporting

With respect to each outstanding derivative, the State Issuer, or its agent, will monitor on a monthly basis or more frequently: (i) identities of counterparties and their ratings, and (ii) the market valuation of the derivative. If a swap agreement is to be terminated or has been terminated in that month, the State Issuer will immediately notify OBM and provide a summary of that agreement including the date and amount of any termination payment or receipt.

Within 30 days of the end of each fiscal year, each State Issuer will provide or cause to be provided to OBM a written report fully describing each outstanding interest rate swap or derivative product, including: (i) the type of swap, (ii) the applicable bond series, (iii) hedge performance (e.g., applicable rates and the amount paid and received), (iv) total notional amount, (v) remaining life, (vi) counterparty and their ratings, (vii) collateral postings and credit enhancement (if any), (viii) market valuation, and (ix) other information that may be requested by OBM as necessary to comply with disclosure requirements set by the Governmental Accounting Standards Board, the CFTC, or as may be required under any continuing disclosure agreement entered into with an underwriter or purchaser by a State Issuer in connection with the Securities Exchange Commission Rule 15c2-12.

VI. GENERAL PROVISIONS

A. Asset / Liability Management

The State will continue to monitor its debt and interest rate risk profile in the context of an asset-liability management strategy. To this end, the State may evaluate and quantify the difference between the State's debt interest costs (variable and fixed rate) and its investment income (variable and fixed).

B. Budgeting Methodology

OBM establishes and monitors debt service appropriations within various agency budgets to ensure that debt service payments are authorized and that sufficient resources are available to ensure full and timely payment. Funds for ongoing debt-related administrative expenses are included in the debt service appropriations or other appropriations in the budget. For outstanding bonds and swaps, OBM will budget debt service as follows:

- 1) Fixed Rate Bonds – the actual principal and interest payments.
- 2) Variable Rate Bonds and Synthetic Variable Swaps – actual principal and estimated interest payments. Variable interest rate payments are estimated by utilizing the greater of (i) the 10-year average of the SIFMA index plus one standard deviation; (ii) current SIFMA Index rates plus 50 basis points; or (iii) three percent.
- 3) Synthetic Fixed Rate Swaps (receipt based on the SIFMA index) – the variable swap receipt is assumed to equal the variable interest payment on the State bonds, resulting in a budgeted payment equal to the fixed payor rate under the swap.
- 4) Synthetic Fixed Rate Swaps (receipt based on the LIBOR index) – the variable swap receipt is assumed to be 25 basis points lower than the variable interest payment on the State bonds. Thus, the budgeted payment is equal to the fixed payor rate under the swap plus the 25 basis points.

For new issues, OBM will assume a fixed rate structure and budget debt service based upon the sum of current Municipal Market Data AAA tax-exempt rates plus approximately one hundred basis points and amortized on a level debt service basis over the expected term of the bonds. It is important to note that State general obligation bonds do not require an appropriation for the State to make debt service payments; however, State practice is to include appropriations in the budget for accounting and tracking purposes.

State special obligation lease-rental bonds do require a biennial appropriation for debt service. Appropriations are included in each budget bill along with accompanying uncodified language stating that if the appropriation is insufficient, additional amounts are automatically appropriated. Appropriations and related uncodified language are included in the budget for all State debt, including those backed by federal highway grants, and certificates of participation.

C. Primary and Secondary Market Disclosure

Pursuant to ORC 126.11(E), OBM is responsible for ensuring compliance by State Issuers with a contractual undertaking under SEC Rule 15c2-12 to provide for the timely filing of annual information, general purpose financial statements (when and if available), and material and other event notices. OBM also maintains "Information Concerning the State of Ohio" that is included as Appendix A in each official statement for bonds payable from GRF receipts. Appendix A provides comprehensive up-to-date information on the State budget and finances, State debt,

certain economic and demographic information, and other information deemed necessary to comply with the continuing disclosure agreements.

D. Arbitrage Compliance

The State and the State Issuers shall maintain a system of record keeping and reporting in order to comply with the arbitrage rebate compliance requirements of the Internal Revenue Code of 1986, as amended. The State is committed to minimizing the cost of arbitrage rebate and yield restriction, while strictly complying with these requirements. The Treasurer serves as the arbitrage compliance agent for all State debt issuance payable from State Revenues.

E. Post-Issuance Compliance

The State Issuers are responsible for developing and maintaining post-issuance compliance procedures to help ensure compliance with federal tax laws over the term of each issuance of tax-exempt bonds or ~~Build America Bonds (BABs)~~other tax-advantaged bonds. These post-issuance procedures work in tandem with the tax compliance certificate executed in connection with each issuance of tax-exempt bonds or ~~BABs~~other tax advantaged bonds. In advance of each capital biennium and in coordination with OBM, the State Issuers shall provide post-issuance compliance training to state agency personnel that are responsible for managing the ~~state's~~State's bond funded capital programs.

F. Dodd-Frank Act and Related Regulatory Compliance

OBM and the State Issuers shall implement this Policy in compliance with the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") and its related regulatory reforms. To this end, State Issuers will engage one or more financial advisors in the areas of debt issuance and derivative products. This engagement shall include the evaluation of proposals made to the State by third-parties. The State will also make a representation to the appropriate entity that the financial advisor is serving as an IRMA or a QIR, as appropriate, and that the State Issuer will independently evaluate and take into account the advice of its financial advisors in the review of those proposals.

Additional requirements, that apply to the State's use of swaps and derivative products may include, but are not limited to:

- Obtaining and maintaining a Legal Entity Identifier.
- Satisfying recordkeeping and reporting requirements for State Issuer swaps in accordance with the CFTC Dodd-Frank Act rules.
- Amendment of ISDA Master Agreements to incorporate certain representations and elections (e.g., ISDA Dodd-Frank Protocols) required to enter into new swaps or amend existing swaps.
- Engaging, monitoring and evaluating a QIR in accordance with the CFTC Dodd-Frank Act rules.
- Engaging an IRMA in accordance with the SEC Exchange Act Rule 15Ba1-1(d)(3)(vi).

G. Policy Review and Revision

OBM in conjunction with each State Issuer will review and update this Policy no less than every ~~fourth fiscal year (beginning June 30, 2019)~~four years or upon request of a State Issuer. The review will focus on assuring that the Policy meets all regulatory, rating and disclosure guidelines and requirements and the State's fundamental objectives of debt and interest rate risk management. The changes and updates made shall be approved by each of the State Issuers prior to taking effect as part of the Policy.



Ohio Public Facilities Commission
Underwriting and Investment Banking Services RFQ

Recommendation:

Staff is recommending that both Piper Jaffray and Raymond James be qualified for the Commission's co-manager underwriting pool.

- While both firms have strong national experience, much of that experience is in specific sectors other than State-level general obligation credits.
- While Raymond James has a notable retail brokerage network in the State, neither firm has a physical public finance presence and both have limited experience with respect to transactions comparable in size to the Commission's with other Ohio governmental issuers.

We recognize that both firms have quality staff and broad marketing and distribution capabilities that would provide value on Commission bond sales. Therefore, we recommend including both firms in the co-manager pool.

OPFC - Underwriter and Investment Banking Proposals
STAFF REPORT AND RECOMMENDATION
Summary of National and Ohio Experience - Senior Manager Respondents

Firm	Senior Manager Underwriting Experience Since January 1, 2015 (# of series/par amount)		
	State-Level Issuers (excluding Ohio) par amount > \$50M	Ohio State-Level Issuers par amount > \$50M	Ohio Regional or Local Government par amount > \$25M
Bank of America/Merrill Lynch	551 / \$162.8B	8 / \$1.8B	30 / \$4.6B
Barclays Capital	132 / \$37.4B	4 / \$654.9M	13 / \$1.8B
Citigroup Global Markets	384 / \$135.0B	14 / \$2.4B	6 / \$400.1M
Fifth Third Securities, Inc.	-	3 / \$252.3M	18 / \$1.1B
Goldman Sachs	178 / \$72.1B	4 / \$745.4M	6 / \$640.1M
Huntington Capital Markets	-	2 / \$306.9M	8 / \$358.7M
J.P. Morgan Securities	336 / \$111.1B	13 / \$2.6B	15 / \$2.3B
KeyBanc Capital Markets	3 / \$246.8M	16 / \$3.3B	26 / \$3.2B
Loop Capital	21 / \$8.2B	1 / \$228.0M	2 / \$91.2M
Morgan Stanley	245 / \$65.1B	5 / 655.2M	8 / \$1.2B
PNC Capital Markets	5 / \$1.4B	2 / \$119.8M	18 / \$959.4M
Piper Jaffray	64 / \$22.9B	1 / \$250.0M	13 / \$806.0M
RBC Capital Markets	231 / \$66.3B	10 / \$1.6B	23 / \$2.1B
Raymond James	60 / \$10.3B	3 / \$284.3M	2 / \$165.6M
Stifel Nicolaus & Co.	52 / \$17.4B	2 / \$640.0M	36 / \$1.9B
UBS Financial Services	20 / \$11.7B	1 / \$50.0M	4 / \$886.3M
U.S. Bancorp	2 / \$242.2M	2 / \$130.4M	3 / \$92.8M
Wells Fargo Securities	131 / \$48.6B	1 / \$100.0M	7 / \$1.0B

***Ohio Public Facilities Commission
Underwriting and Investment Banking Services RFQ***

In response to its May Underwriting RFQ, the Commission received proposals from 31 firms.

- Sixteen (16) firms met the minimum qualifications and applied for the senior manager underwriting pool and fifteen (15) firms applied for and met the minimum qualifications for the co-manager pool.
- Subsequent to the establishment of the initial underwriting services pools, and as permitted in the RFQ, Piper Jaffray and Raymond James submitted qualifications to serve as senior managers, increasing the number of senior manager applicants to 18.

OBM and Acacia evaluated the two new proposals based on the evaluation criteria as set forth in the RFQ, including:

- Qualifications, education, and experience of the firm and the individuals to be assigned.
- Ability to market and distribute municipal obligations similar in structure and credit to the Commission's obligations.
- Financial capacity and willingness to underwrite at aggressive pricing levels.
- Quality and applicability of proposed ideas with respect to structures to achieve the lowest cost of borrowing.
- Experience in the Ohio bond market and physical presence within the State.

At its June 11 meeting, staff recommended that the Commission not qualify all of the senior manager applicants, but to make a distinction among the top firms:

- Qualifying a smaller number of top firms is in line with our expectation of the number of negotiated transactions over the term (6-8 based on market conditions).
- Being more selective incentivizes those firms in the senior pool to actively cover the Commission.

Piper Jaffray

- Investment banking firm focusing on public finance, corporate finance, fixed income services, and equities.
- Public finance department HQ in Minneapolis, MN and a total of 135 public finance professionals across 37 U.S. offices.
- 1 Ohio office (1 employee).

Raymond James

- Diversified financial services company providing capital markets, asset management, banking and other services.
- Public finance HQ in Memphis, TN with 167 public finance professionals and has 477 employees in sales, trading and support across 47 offices nationwide.
- 300 retail financial advisors across 133 Ohio offices