MEETING OF THE STATE BOARD OF ADMINISTRATION

GOVERNOR DESANTIS AS CHAIR
CHIEF FINANCIAL OFFICER PATRONIS
ATTORNEY GENERAL MOODY

April 2, 2019

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AGENDA

ITEM 1. **APPROVAL OF FEBRUARY 26, 2019 MEETING MINUTES**

(See Attachment 1)

ACTION REQUIRED

ITEM 2. **A RESOLUTION OF THE STATE BOARD OF ADMINISTRATION APPROVING THE FISCAL SUFFICIENCY OF AN AMOUNT NOT EXCEEDING $25,700,000 STATE OF FLORIDA, BOARD OF GOVERNORS, FLORIDA INTERNATIONAL UNIVERSITY PARKING FACILITY REVENUE REFUNDING BONDS, SERIES 2019A**

(See Attachment 2)

ACTION REQUIRED

ITEM 3. **A RESOLUTION OF THE STATE BOARD OF ADMINISTRATION APPROVING THE FISCAL SUFFICIENCY OF AN AMOUNT NOT EXCEEDING $640,000,000 STATE OF FLORIDA, FULL FAITH AND CREDIT, STATE BOARD OF EDUCATION PUBLIC EDUCATION CAPITAL OUTLAY REFUNDING BONDS, 2019 SERIES (TO BE DETERMINED)**

(See Attachment 3)

ACTION REQUIRED

ITEM 4. **A RESOLUTION OF THE STATE BOARD OF ADMINISTRATION OF FLORIDA MAKING THE FISCAL DETERMINATION IN CONNECTION WITH THE ISSUANCE OF AN AMOUNT NOT EXCEEDING $450,000,000 FLORIDA HOUSING FINANCE CORPORATION HOMEOWNER MORTGAGE REVENUE BONDS, 2019 PHASE ONE (MULTIPLE SERIES TO BE DETERMINED)**

(See Attachment 4)

ACTION REQUIRED

ITEM 5. REQUEST APPROVAL OF THE 2019-2020 FLORIDA HURRICANE CATASTROPHE FUND REIMBURSEMENT PREMIUM FORMULA.

(See Attachment 5)

ACTION REQUIRED

ITEM 6. REQUEST AUTHORITY TO FILE A NOTICE OF PROPOSED RULE FOR THE FLORIDA HURRICANE CATASTROPHE FUND FOR RULE 19-8.028, F.A.C., REIMBURSEMENT PREMIUM FORMULA, AND TO FILE THIS RULE, ALONG WITH THE INCORPORATED FORM, FOR ADOPTION IF NO MEMBER OF THE PUBLIC TIMELY REQUESTS A RULE HEARING, OR IF A HEARING IS REQUESTED BUT NO NOTICE OF CHANGE IS NEEDED.

(See Attachment 6)

ACTION REQUIRED

ITEM 7. REQUEST APPROVAL OF THE STATE BOARD OF ADMINISTRATION'S 2019 CORPORATE GOVERNANCE PRINCIPLES AND VOTING GUIDELINES.

(See Attachment 7)

ACTION REQUIRED

ITEM 8. QUARTERLY REPORTS PURSUANT TO SECTION 215.44 (2)(e), FLORIDA STATUTES

- Executive Director & CIO Introductory Remarks and Standing Reports
- Major Mandates Investment Performance Reports as of June 30, 2018
  - Florida Retirement System Pension Plan (DB)
  - Florida Retirement System Investment Plan (DC)
  - Florida PRIME (Local Government Surplus Funds Trust Fund)
  - Lawton Chiles Endowment Fund (LCEF)
  - Florida Hurricane Catastrophe Fund (FHCF)

(See Attachments 8A – 8B)

STATE OF FLORIDA

IN RE: MEETING OF THE GOVERNOR AND CABINET
_______________________________________/

CABINET MEMBERS: GOVERNOR RON DESANTIS
ATTORNEY GENERAL ASHLEY MOODY
CHIEF FINANCIAL OFFICER JIMMY PATRONIS
COMMISSIONER OF AGRICULTURE NIKKI FRIED

DATE: February 26, 2019

LOCATION: CABINET MEETING ROOM
LOWER LEVEL, THE CAPITOL
TALLAHASSEE, FLORIDA

REPORTED BY: NANCY S. METZKE, RPR, FPR
COURT REPORTER

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STATE BOARD OF ADMINISTRATION

GOVERNOR DESANTIS: Okay. Our last agency on the agenda is the State Board of Administration, so Ash Williams is here somewhere. There he is. So he's going to present four items.

EXECUTIVE DIRECTOR WILLIAMS: Good morning, Governor --

GOVERNOR DESANTIS: Good morning.

EXECUTIVE DIRECTOR WILLIAMS: -- trustees, Cabinet members.

By way of performance update, as of last night's close, 25 February, the Florida Retirement System Trust Fund is up 2.2 percent, fiscal year to date. That's 86 basis points ahead of target. To put some numbers on that, looking back to the beginning of the fiscal year, there's a change in fund value of 760 million dollars down. That is net of benefit payments of 4.56 billion, meaning we had total investment gains of 3.8 billion.

Item 1, request approval of the January 29 meeting minutes.

GOVERNOR DESANTIS: Is there a motion?

ATTORNEY GENERAL MOODY: So moved.

GOVERNOR DESANTIS: Second?

CFO PATRONIS: Second.

GOVERNOR DESANTIS: All right. The motion carries.

Item 2.

EXECUTIVE DIRECTOR WILLIAMS: Thank you.

Item 2 is a resolution of the SBA, a fiscal determination in connection with issuing up to $5 million Florida Housing Finance Corporation Multifamily Mortgage Revenue Notes. This is for the acquisition and rehab of a 48-unit affordable housing facility in Okaloosa County, Florida.

GOVERNOR DESANTIS: Is there a motion on the item?

ATTORNEY GENERAL MOODY: So moved.

GOVERNOR DESANTIS: Second?

CFO PATRONIS: Second.

GOVERNOR DESANTIS: Okay. The motion carries.

EXECUTIVE DIRECTOR WILLIAMS: Thank you.

Item 3 is likewise a fiscal determination in connection with the issuance of not more than $16 million Florida Housing Finance Corporation Multifamily Mortgage Family Bonds. This is for the acquisition, construction, and equipment of a 116-unit affordable housing community in Broward County, Florida, the Suncrest Court.

Request approval.

GOVERNOR DESANTIS: Is there a motion?

ATTORNEY GENERAL MOODY: So moved.

GOVERNOR DESANTIS: Second?

CFO PATRONIS: Second.

GOVERNOR DESANTIS: All right. The motion carries.

EXECUTIVE DIRECTOR WILLIAMS: Thank you.

Item 4 is another fiscal determination, this one an amount not exceeding $9 million, Florida Housing Finance Corporation Multifamily Mortgage Revenue Bonds. This is for new construction of an 88-unit affordable workforce housing facility, The Palms at Town Center in Flagler County Florida.

Request approval.

GOVERNOR DESANTIS: Is there a motion?

ATTORNEY GENERAL MOODY: So moved.

GOVERNOR DESANTIS: Second?

CFO PATRONIS: Second.

GOVERNOR DESANTIS: Okay. Hearing no comments or objection, the motion carries.

So thank you, Ash.

EXECUTIVE DIRECTOR WILLIAMS: Thank you.

GOVERNOR DESANTIS: Does anyone have anything else today?

(NO RESPONSE).

GOVERNOR DESANTIS: All right. That concludes today's meeting. Our next meeting is scheduled for Tuesday, March 12th.

(WHEREUPON, THE MEETING WAS ADJOURNED).

* * * *

STATE BOARD OF ADMINISTRATION
1801 HERMITAGE BOULEVARD
TALLAHASSEE, FLORIDA 32308

TO: Ash Williams
FROM: Robert Copeland
SUBJECT: Fiscal Sufficiency
DATE: March 15, 2019

APPROVAL OF FISCAL SUFFICIENCY OF AN AMOUNT NOT EXCEEDING $25,700,000 STATE OF FLORIDA, BOARD OF GOVERNORS, FLORIDA INTERNATIONAL UNIVERSITY PARKING FACILITY REVENUE REFUNDING BONDS, SERIES 2019A:

The Division of Bond Finance of the State Board of Administration (the "Division") has submitted for approval as to fiscal sufficiency a proposal to issue an amount not exceeding $25,700,000 State of Florida, Board of Governors, Florida International University Parking Facility Revenue Refunding Bonds, Series 2019A (the "Bonds"), for the purpose of refunding all or a portion of the outstanding Series 2009B Bonds, and to pay costs associated with the issuance of the proposed Bonds.

The Bonds will be issued pursuant to the Original Resolution adopted by the Governor and Cabinet on February 28, 1995, as amended by the Second Supplemental Resolution adopted on June 12, 2002, a Sale Resolution adopted on September 10, 2002, the Third Supplemental Resolution adopted on September 15, 2009, and the Sixth Supplemental Resolution anticipated to be adopted on April 2, 2019 (collectively, the “Resolution”). The principal of and interest due on the Bonds shall be secured by the revenues of the parking system after deducting operating expenses (the “Pledged Revenues”), as described in the Resolution.

The Division has heretofore issued Florida International University Parking Facility Revenue Bonds, Series 2009B and Series 2013A (the “Outstanding Bonds”). The proposed Bonds shall be issued on a parity as to lien on and source and security for payment from the Pledged Revenues with the Outstanding Bonds.

A study of this proposal and the estimates of revenue expected to accrue from the Pledged Revenues indicate that the proposed Bonds are fiscally sufficient and that the proposal will be executed pursuant to the applicable provisions of law.

RECOMMENDATION: It is recommended that the Board approve the proposal outlined above.

cc: Janie knight

A RESOLUTION OF THE STATE BOARD OF ADMINISTRATION APPROVING THE FISCAL SUFFICIENCY OF AN AMOUNT NOT EXCEEDING $25,700,000 STATE OF FLORIDA, BOARD OF GOVERNORS, FLORIDA INTERNATIONAL UNIVERSITY PARKING FACILITY REVENUE REFUNDING BONDS, SERIES 2019A

WHEREAS, the Division of Bond Finance of the State Board of Administration (the "Division") proposes to issue an amount not exceeding $25,700,000 State of Florida, Board of Governors, Florida International University Parking Facility Revenue Refunding Bonds, Series 2019A (the "Bonds"), for the purpose of refunding all or a portion of the outstanding Series 2009B Bonds, and to pay costs associated with the issuance of the proposed Bonds; and,

WHEREAS, the Division has requested the State Board of Administration to approve the fiscal sufficiency of the proposed issue as required by Section 215.73, Florida Statutes; and,

WHEREAS, the Bonds will be issued pursuant to the Original Resolution adopted by the Governor and Cabinet on February 28, 1995, as amended by the Second Supplemental Resolution adopted on June 12, 2002, a Sale Resolution adopted on September 10, 2002, the Third Supplemental Resolution adopted on September 15, 2009, and the Sixth Supplemental Resolution anticipated to be adopted on April 2, 2019 (collectively, the “Resolution”); and,

WHEREAS, the principal of and interest due on the Bonds shall be secured by the revenues of the parking system after deducting operating expenses (the “Pledged Revenues”), as described in the Resolution; and,

WHEREAS, the Division has heretofore issued Florida International University Parking Facility Revenue Bonds, Series 2009B and Series 2013A (the “Outstanding Bonds”); and,

WHEREAS, the proposed Bonds shall be issued on a parity as to lien on and source and security for payment from the Pledged Revenues with the Outstanding Bonds; and,

WHEREAS, the Bonds do not constitute an obligation, either general or special, of the State of Florida or any of its units of local government and shall not be a debt of the State or of any unit of local government, and neither the State nor any unit of local government shall be liable thereon; and,

WHEREAS, Florida International University shall not have the power to pledge the credit, the revenues, or the taxing power of the State or of any unit of local government, and neither the credit, the revenues, nor the taxing power of the State or of any unit of local government shall be deemed to be pledged to the payment of the Bonds; and,

WHEREAS, the estimate of funds pledged to the issue indicates that in no State fiscal year will the debt service requirements of the Bonds exceed the Pledged Revenues available for payment of such debt service requirements and that in no State fiscal year will the moneys pledged for the debt service requirements be less than the required coverage amount; and,

WHEREAS, the Division, has furnished sufficient information to enable the State Board of Administration to fulfill its duties pursuant to Section 215.73, Florida Statutes; and,

WHEREAS, the State Board of Administration has relied upon information from others but has not independently verified the accuracy or completeness of such information; and,

WHEREAS, the State Board of Administration does not approve or disapprove the Bonds as an investment and has not passed upon the accuracy or adequacy of the Official Statement; **Now, Therefore,**

BE IT RESOLVED, by the State Board of Administration of Florida, a constitutional body described in Section 4 of Article IV of the Constitution of the State of Florida, as revised in 1968 and subsequently amended, that pursuant to the requirements of Section 215.73, Florida Statutes, the proposal of the Division of Bond Finance of the State Board of Administration to issue an amount not exceeding $25,700,000 State of Florida, Board of Governors, Florida International University Parking Facility Revenue Refunding Bonds, Series 2019A for the uses and purposes hereinabove set forth, is hereby approved as to fiscal sufficiency.

ADOPTED April 2, 2019

STATE OF FLORIDA)
:
COUNTY OF LEON)

I, Ashbel C. Williams, Executive Director & CIO of the State Board of Administration of Florida, a constitutional body described in Section 4 of Article IV of the Constitution of the State of Florida, as revised in 1968 and subsequently amended, **DO HEREBY CERTIFY** that the above and foregoing is a true and correct copy of a resolution adopted by said Board at a meeting held April 2, 2019, approving the fiscal sufficiency of an amount not exceeding $25,700,000 State of Florida, Board of Governors, Florida International University Parking Facility Revenue Refunding Bonds, Series 2019A.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Board at Tallahassee, Leon County, Florida this 2nd day of April 2019.

____

Ashbel C. Williams, Executive Director & CIO

(SEAL)

J. BEN WATKINS III
DIRECTOR

STATE OF FLORIDA
DIVISION OF BOND FINANCE

March 11, 2019

Mr. Ashbel C. Williams
Executive Director & CIO
State Board of Administration
Post Office Box 13300
Tallahassee, Florida 32317-3300

RE: Not Exceeding $25,700,000 State of Florida, Board of Governors, Florida International University Parking Facility Revenue Refunding Bonds, Series 2019A

Dear Mr. Williams:

In compliance with Section 215.73, Florida Statutes, the Division of Bond Finance requests State Board of Administration approval as to fiscal sufficiency for the above referenced bond issue. We request such approval at your board meeting of April 2, 2019.

The proposed bonds will be secured by the revenues of the parking system after deducting operating expenses. Parking system revenues are derived primarily from a mandatory per semester student transportation access fee and parking decal revenues. The proposed bonds will be on a parity with the Series 2009B Bonds and the Series 2013A Bonds remaining outstanding subsequent to the refunding.

The proposed bonds are being issued to refund all or a portion of the outstanding Series 2009B Bonds and to pay costs associated with the issuance and sale of the proposed bonds. The bonds will only be issued if there is debt service savings.

The bonds will be issued pursuant to the Original Resolution adopted by the Governor and Cabinet on February 28, 1995, as amended by the Second Supplemental Resolution adopted on June 12, 2002, a Sale Resolution adopted on September 10, 2002, the Third Supplemental Resolution adopted on September 15, 2009, and the Sixth Supplemental Resolution anticipated to be adopted on April 2, 2019. The Original, Supplemental and the amending resolutions have been previously provided with prior fiscal sufficiency requests.

Enclosed for your review are the following:

Enclosure 1: an estimated coverage table for the program, without considering the potential savings from the proposed refunding bonds;

Enclosure 2: an estimated debt service and savings schedule from a recent sizing of the proposed refunding bonds; and

Enclosure 3: a draft copy of the Sixth Supplemental Resolution, which is anticipated to be adopted by the Governor and Cabinet on April 2, 2019.

A draft of the fiscal sufficiency resolution should be sent to Donna Biggins and Kelsey Manno of this office for review. Should you have any questions, please contact either myself, Kelsey Manno, or Donna Biggins, at 488-4782. Your consideration of this matter is appreciated.

Sincerely,

Kimberly J. Nichols for

J. Ben Watkins III
Director

JBW:km

Enclosures

cc: Robert Copeland

NOT EXCEEDING $25,700,000
STATE OF FLORIDA, BOARD OF GOVERNORS
FLORIDA INTERNATIONAL UNIVERSITY
PARKING FACILITY REVENUE REFUNDING BONDS
FISCAL SUFFICIENCY REQUEST

ESTIMATED DEBT SERVICE COVERAGE TABLE

	Pledged Revenues [1]				
Year Ending June 30	Gross Revenues	Current Expenses	Pledged Revenues	Outstanding Debt Service[2]	Coverage [3]
Historical					
2014	$ 13,761,991	$ 4,711,041	$ 9,050,950	$ 6,274,193	1.44
2015	13,844,516	4,863,252	8,981,264	6,927,527	1.30
2016	14,377,423	5,675,809	8,701,614	6,915,978	1.26
2017	15,651,035	6,201,973	9,449,062	6,904,654	1.37
2018	15,274,837	5,599,742	9,675,095	6,894,422	1.40
Projected					
2019	$ 15,426,563	$ 6,532,128	$ 8,894,435	$ 6,879,643	1.29
2020	16,175,620	7,380,051	8,795,569	6,279,903	1.40
2021	16,188,792	7,551,085	8,637,707	6,260,478	1.38
2022	16,215,198	7,738,563	8,476,635	6,253,355	1.36
2023	16,933,148	6,930,923	10,002,225	4,583,655	2.18
2024	16,933,148	6,930,923	10,002,225	4,569,155	2.19
2025	16,933,148	6,930,923	10,002,225	4,540,985	2.20
2026	16,933,148	6,930,923	10,002,225	4,523,475	2.21
2027	16,933,148	6,930,923	10,002,225	4,500,725	2.22
2028	16,933,148	6,930,923	10,002,225	4,474,288	2.24
2029	16,933,148	6,930,923	10,002,225	4,446,981	2.25
2030	16,933,148	6,930,923	10,002,225	4,423,381	2.26
2031	16,933,148	6,930,923	10,002,225	4,391,513	2.28
2032	16,933,148	6,930,923	10,002,225	4,357,975	2.30
2033	16,933,148	6,930,923	10,002,225	4,333,506	2.31
2034	16,933,148	6,930,923	10,002,225	4,296,719	2.33
2035	16,933,148	6,930,923	10,002,225	4,259,656	2.35
2036	16,933,148	6,930,923	10,002,225	4,219,875	2.37
2037	16,933,148	6,930,923	10,002,225	4,182,031	2.39
2038	16,933,148	6,930,923	10,002,225	4,140,625	2.42
2039	16,933,148	6,930,923	10,002,225	4,100,313	2.44
2040	16,933,148	6,930,923	10,002,225	2,145,500	4.66
2041	16,933,148	6,930,923	10,002,225	2,147,250	4.66
2042	16,933,148	6,930,923	10,002,225	2,144,500	4.66
2043	16,933,148	6,930,923	10,002,225	2,147,250	4.66

[1] Historical revenue and expense information has been provided by Florida International University. The projected revenue and expense information through fiscal year 2022-23 has also been provided by the University. Projections for fiscal year 2022-23 and thereafter are held constant for coverage purposes; however, no representation is made that the amounts shown will be collected in any

[2] Outstanding debt service for Series 2009B and Series 2013A bonds. Does not include expected receipt of federal subsidy on the 2009B Bonds.

[3] Coverage is determined by dividing Pledged Revenues by Outstanding Debt Service.

SAVINGS

State of FLorida, Board of Governors
Florida International University Revenue Refunding Bonds
Series 2019A

Date	Prior Debt Service	BABS Subsidy	Prior Net Cash Flow	Refunding Debt Service	Savings	Present Value to 07/01/2019 @ 3.4987663%
07/01/2020	2,488,296.25	-542,777.16	1,945,519.09	1,589,000.00	356,519.09	345,392.71
07/01/2021	2,472,371.25	-527,699.98	1,944,671.27	1,589,000.00	355,671.27	332,820.18
07/01/2022	2,458,498.75	-511,655.14	1,946,843.61	1,587,500.00	359,343.61	324,773.12
07/01/2023	2,436,298.75	-494,517.88	1,941,780.87	1,584,500.00	357,280.87	311,890.21
07/01/2024	2,420,498.75	-476,198.74	1,944,300.01	1,585,000.00	359,300.01	302,933.44
07/01/2025	2,396,328.75	-456,773.22	1,939,555.53	1,588,750.00	350,805.53	285,682.95
07/01/2026	2,379,018.75	-436,316.86	1,942,701.89	1,585,500.00	357,201.89	280,936.65
07/01/2027	2,352,868.75	-414,599.81	1,938,268.94	1,585,500.00	352,768.94	267,971.20
07/01/2028	2,327,018.75	-417,206.57	1,909,812.18	1,588,500.00	321,312.18	235,612.59
07/01/2029	2,303,243.75	-391,385.31	1,911,858.44	1,584,250.00	327,608.44	232,008.43
07/01/2030	2,276,218.75	-364,426.57	1,911,792.18	1,588,000.00	323,792.18	221,470.56
07/01/2031	2,246,312.50	-334,709.38	1,911,603.12	1,589,250.00	322,353.12	212,934.21
07/01/2032	2,212,625.00	-303,668.75	1,908,956.25	1,588,000.00	320,956.25	204,749.61
07/01/2033	2,185,156.25	-271,304.69	1,913,851.56	1,589,250.00	324,601.56	199,978.42
07/01/2034	2,148,218.75	-237,376.57	1,910,842.18	1,587,750.00	323,092.18	192,230.05
07/01/2035	2,112,156.25	-202,004.69	1,910,151.56	1,588,500.00	321,651.56	184,817.39
07/01/2036	2,076,625.00	-165,068.75	1,911,556.25	1,586,250.00	325,306.25	180,512.65
07/01/2037	2,036,281.25	-126,448.44	1,909,832.81	1,586,000.00	323,832.81	173,539.30
07/01/2038	1,996,125.00	-86,143.75	1,909,981.25	1,587,500.00	322,481.25	166,895.23
07/01/2039	1,955,812.50	-44,034.38	1,911,778.12	1,585,500.00	326,278.12	163,075.90
	45,279,973.75	-6,804,316.64	38,475,657.11	31,743,500.00	6,732,157.11	4,820,224.81

Savings Summary

PV of savings from cash flow	4,820,224.81
Less: Prior funds on hand	-2,533,622.14
Plus: Refunding funds on hand	2,417.69
Net PV Savings	2,289,020.36

STATE BOARD OF ADMINISTRATION
1801 HERMITAGE BOULEVARD
TALLAHASSEE, FLORIDA 32308

TO: Ash Williams
FROM: Robert Copeland
SUBJECT: Fiscal Sufficiency
DATE: March 15, 2019

APPROVAL OF FISCAL SUFFICIENCY OF AN AMOUNT NOT EXCEEDING $640,000,000 STATE OF FLORIDA, FULL FAITH AND CREDIT, STATE BOARD OF EDUCATION PUBLIC EDUCATION CAPITAL OUTLAY REFUNDING BONDS, 2019 SERIES (TO BE DETERMINED):

The Division of Bond Finance of the State Board of Administration (the "Division"), on behalf of the State Board of Education, has submitted for approval as to fiscal sufficiency a proposal to issue an amount not exceeding $640,000,000 Public Education Capital Outlay Refunding Bonds, 2019 Series (to be determined) (the "Bonds") for the purpose of refunding all or a portion of the outstanding Public Education Capital Outlay Bonds 2006 Series G, 2007 Series G, 2008 Series D, and 2009 Series F Build America Bonds (Federally Taxable-Issuer Subsidy), and to pay certain costs of issuance; provided, however, that none of the said Bonds shall be issued in excess of the amount which can be issued in full compliance with the State Bond Act and other applicable provisions of law, and pursuant to Section 9(a)(2), Article XII of the Constitution of Florida, as amended. The Bonds will be issued in one or more series pursuant to an authorizing resolution adopted by the State Board of Education on July 21, 1992, and the Sixty-seventh Supplemental Authorizing Resolution and a sale resolution anticipated to be adopted by the State Board of Education on March 19, 2019.

The State Board of Education has heretofore issued Public Education Capital Outlay and Public Education Capital Outlay Refunding Bonds, 1999 Series D through 2018 Series C ("the "Outstanding Bonds"). The State Board of Administration has approved the fiscal sufficiency of an amount not exceeding $500,000,000 Public Education Capital Outlay Refunding Bonds, 2019 Series (to be determined) (the "2019 Series A Bonds") at its March 12, 2019, meeting. The proposed Bonds shall be issued on a parity as to lien on and source and security for payment from the Gross Receipts Taxes with the Outstanding Bonds and, when and if issued, the 2019 Series A Bonds.

A study of this proposal and the estimates of revenue expected to accrue indicate that the proposed Bonds are fiscally sufficient and that the proposal will be executed pursuant to the applicable provisions of law.

RECOMMENDATION: It is recommended that the Board approve the proposal outlined above.

cc: Janie knight

A RESOLUTION OF THE STATE BOARD OF ADMINISTRATION APPROVING THE FISCAL SUFFICIENCY OF AN AMOUNT NOT EXCEEDING $640,000,000 STATE OF FLORIDA, FULL FAITH AND CREDIT, STATE BOARD OF EDUCATION PUBLIC EDUCATION CAPITAL OUTLAY REFUNDING BONDS, 2019 SERIES (TO BE DETERMINED)

WHEREAS, the State Board of Education of Florida proposes to issue an amount not exceeding $640,000,000 Public Education Capital Outlay Refunding Bonds, 2019 Series (to be determined) (the “Bonds") for the purpose of refunding all or a portion of the outstanding Public Education Capital Outlay Bonds 2006 Series G, 2007 Series G, 2008 Series D, and 2009 Series F Build America Bonds (Federally Taxable-Issuer Subsidy), and to pay certain costs of issuance; provided, however, that none of said Bonds shall be issued in excess of the amount which can be issued in full compliance with the State Bond Act and other applicable provisions of law, and pursuant to Section 9(a)(2), Article XII of the Constitution of Florida, as amended; and,

WHEREAS, the Bonds will be issued in one or more series pursuant to an authorizing resolution adopted by the State Board of Education on July 21, 1992, and the Sixty-seventh Supplemental Authorizing Resolution and a sale resolution adopted by the State Board of Education on March 19, 2019; and,

WHEREAS, the proposed Bonds shall be secured by a lien upon the Gross Receipts Taxes which are required to be deposited in the Public Education Capital Outlay and Debt Service Trust Fund administered by the State Board of Education of Florida (the "Gross Receipts Taxes"), and the Bonds are additionally secured by a pledge of the full faith and credit of the State of Florida; and,

WHEREAS, the State Board of Education has heretofore issued Public Education Capital Outlay and Public Education Capital Outlay Refunding Bonds, 1999 Series D through 2018 Series C (the “Outstanding Bonds”); and,

WHEREAS, the State Board of Administration has approved the fiscal sufficiency of an amount not exceeding $500,000,000 Public Education Capital Outlay Refunding Bonds, 2019 Series (to be determined) (the “2019 Series A Bonds”) at its March 12, 2019, meeting; and,

WHEREAS, the proposed Bonds shall be issued on a parity as to lien on and source and security for payment from the Gross Receipts Taxes with the Outstanding Bonds and, when and if issued, the 2019 Series A Bonds; and,

WHEREAS, the Division of Bond Finance has furnished sufficient information to enable the State Board of Administration to fulfill its duties pursuant to Section 215.73, Florida Statutes; and,

WHEREAS, the State Board of Administration has relied upon information from others but has not independently verified the accuracy or completeness of such information; and,

WHEREAS, the State Board of Administration does not approve or disapprove the Bonds as an investment and has not passed upon the accuracy or adequacy of the Official Statement; **Now, Therefore,**

BE IT RESOLVED, by the State Board of Administration of Florida, a constitutional body as described in Section 4 of Article IV of the Constitution of the State of Florida, as revised in 1968 and subsequently amended, that pursuant to the requirements of Section 215.73, Florida Statutes, that the proposal of the State Board of Education of Florida to issue an amount not exceeding $640,000,000 Public Education Capital Outlay Refunding Bonds, 2019 Series (to be determined), is hereby approved as to fiscal sufficiency.

ADOPTED April 2, 2019

STATE OF FLORIDA)
:
COUNTY OF LEON)

I, Ashbel C. Williams, Executive Director & CIO of the State Board of Administration of Florida, a constitutional body described in Section 4 of Article IV of the Constitution of the State of Florida, as revised in 1968 and subsequently amended, **DO HEREBY CERTIFY** that the above and foregoing is a true and correct copy of a resolution adopted by said Board at a meeting held April 2, 2019, approving the fiscal sufficiency of an amount not exceeding $640,000,000 State of Florida, Full Faith and Credit, State Board of Education Public Education Capital Outlay Refunding Bonds, 2019 Series (to be determined).

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Board at Tallahassee, Leon County, Florida this 2nd day of April 2019.

____

Ashbel C. Williams, Executive Director & CIO

(SEAL)

J. BEN WATKINS III
DIRECTOR

STATE OF FLORIDA
DIVISION OF BOND FINANCE

March 11, 2019

Mr. Ashbel C. Williams
Executive Director
State Board of Administration
Post Office Box 13300
Tallahassee, Florida 32317-3300

RE: Not Exceeding $640,000,000 State of Florida, Full Faith and Credit, State Board of Education Public Education Capital Outlay Refunding Bonds, 2019 Series (to be determined)

Dear Mr. Williams:

In compliance with Section 215.73, Florida Statutes, the Division of Bond Finance requests State Board of Administration approval as to fiscal sufficiency for the above referenced bond issue. We request fiscal sufficiency approval at your board meeting of April 2, 2019.

The proposed bonds will be issued to refund all or a portion of the outstanding Public Education Capital Outlay Bonds, 2006 Series G, 2007 Series G, 2008 Series D, and 2009 Series F Build America Bonds (Federally Taxable-Issuer Subsidy) and to pay costs associated with the issuance and sale of the proposed bonds. The bonds will only be issued if there is a savings.

The bonds will be payable from gross receipts taxes and are additionally secured by the full faith and credit of the State of Florida. The bonds will be on a parity with the previously issued 1999 Series D through 2018 Series C Bonds and the $500,000,000 PECO refunding bonds which are anticipated to be approved for fiscal sufficiency on March 12, 2019, when and if issued.

The bonds will be issued in one or more series pursuant to an authorizing resolution adopted by the State Board of Education on July 21, 1992, and the Sixty-seventh Supplemental Authorizing Resolution and the sale resolution anticipated to be adopted by the State Board of Education on March 19, 2019.

Enclosed for your review are the following:

Enclosure 1: An estimated coverage table for the program based on outstanding debt service, without consideration of the potential savings from the proposed refunding bonds, and the projected gross receipts tax revenues from the March 1, 2019, Revenue Estimating Conference;

Enclosure 2: An estimated debt service and savings schedule for the proposed refunding bonds;

Enclosure 3: The gross receipts tax estimates from the March 1, 2019, Revenue Estimating Conference;

Enclosure 4: A copy of the Sixty-seventh Supplemental Authorizing Resolution anticipated to be adopted by the State Board of Education on March 19, 2019; and

Enclosure 5: A copy of the sale resolution anticipated to be adopted by the State Board of Education on March 19, 2019.

A draft of the fiscal sufficiency resolution should be sent to Ryan Dugan and Kelsey Manno of this office for review. Should you have any questions, please contact me, Kelsey Manno, or Ryan Dugan at 488-4782. Your consideration in this matter is appreciated.

Very truly yours,

Kimberly Nichols for

J. Ben Watkins III
Director

JBW:km

Enclosures

cc: Robert Copeland

State of Florida, Full Faith and Credit
State Board of Education Public Education Capital Outlay Bonds

Estimated Coverage Table

Fiscal Year	Gross Receipts Taxes[1]	Debt Service on Outstanding PECO Bonds[2]	Subsidy[3]	Net Debt Service	Debt Service Coverage[4]
Historical					
2014	$ 1,005,357,521	$ 921,106,006	$ (11,763,752)	$ 909,342,254	1.11x
2015	1,152,382,082	897,845,110	(11,751,076)	886,094,034	1.30x
2016	1,157,727,036	877,016,703	(11,770,715)	865,245,988	1.34x
2017[5]	1,111,599,286	866,531,343	(11,708,982)	854,822,361	1.30x
2018	1,153,724,902	841,741,455	(11,690,472)	830,050,983	1.39x
Projected					
2019	1,147,770,000	854,423,537	(11,605,600)	842,817,937	1.36x
2020	1,148,860,000	850,326,149	(11,357,932)	838,968,216	1.38x
2021	1,159,220,000	870,164,980	(11,023,487)	859,141,493	1.36x
2022	1,169,720,000	877,681,024	(10,669,972)	867,011,052	1.36x
2023	1,183,180,000	844,500,434	(10,295,204)	834,205,230	1.44x
2024	1,198,360,000	759,698,821	(9,896,791)	749,802,030	1.62x
2025	1,215,590,000	699,274,261	(9,477,245)	689,797,016	1.78x
2026	1,230,810,000	553,249,881	(9,026,906)	544,222,975	2.29x
2027	1,247,390,000	525,224,309	(8,555,247)	516,669,062	2.45x
2028	1,263,700,000	499,681,756	(8,586,631)	491,095,126	2.57x
2029	1,263,700,000	473,068,094	(8,027,736)	465,040,358	2.72x
2030	1,263,700,000	452,313,796	(7,441,255)	444,872,542	2.84x
2031	1,263,700,000	430,657,330	(6,825,999)	423,831,331	2.98x
2032	1,263,700,000	409,881,346	(6,179,159)	403,702,187	3.13x
2033	1,263,700,000	366,293,599	(5,507,864)	360,785,734	3.50x
2034	1,263,700,000	326,206,075	(4,811,301)	321,394,774	3.93x
2035	1,263,700,000	302,844,683	(4,088,353)	298,756,330	4.23x
2036	1,263,700,000	267,894,893	(3,338,210)	264,556,683	4.78x
2037	1,263,700,000	225,872,598	(2,550,034)	223,322,564	5.66x
2038	1,263,700,000	151,309,700	(1,731,643)	149,578,057	8.45x
2039	1,263,700,000	97,221,368	(882,111)	96,339,256	13.12x
2040	1,263,700,000	51,774,063	-	51,774,063	24.41x
2041	1,263,700,000	19,251,113	-	19,251,113	65.64x
2042	1,263,700,000	14,607,050	-	14,607,050	86.51x
2043	1,263,700,000	14,612,750	-	14,612,750	86.48x
2044	1,263,700,000	14,611,300	-	14,611,300	86.49x
2045	1,263,700,000	14,607,300	-	14,607,300	86.51x
2046	1,263,700,000	14,610,200	-	14,610,200	86.49x
2047	1,263,700,000	12,139,000	-	12,139,000	104.10x
2048	1,263,700,000	6,817,200	-	6,817,200	185.37x

[1] Estimates of gross receipts tax collections for Fiscal Years 2019 through 2028 as adopted by the Florida Revenue Estimating Conference held in March 2019. The projections for Fiscal Year 2028 have been held constant for future years; however, no representation is made that the amounts shown will be collected.

[2] Includes debt service through 2018 Series C Refunding Bonds.

[3] Expected federal subsidy payments for Build America Bonds 2006 Series G, 2007 Series G, 2008 Series D and 2009 Series F. The expected subsidy payments through fiscal year 2027 have been reduced by 6.2% from the originally expected amounts to account for the currently expected reductions resulting from sequestration. The actual reductions to future subsidy payments as a result of sequestration are still to be determined.

[4] Coverage based on Net Debt Service.

[5] Gross receipt tax collections in 2017 are incorrectly reported in Enclosure 3 as reported by the Revenue Estimating Conference. The correct collections are reflected in this table.

Enclosure 2

SAVINGS

State of Florida, Full Faith and Credit
State Board of Education Public Education Capital Outlay Refunding Bonds
Series 2019 To Be Determined

Date	Prior Debt Service	Refunding Debt Service	Savings	Present Value to 06/01/2019 @ 3.0190525%
06/01/2020	45,356,702.22	42,192,000.00	3,164,702.22	3,051,096.79
06/01/2021	45,331,002.46	42,164,500.00	3,166,502.46	2,963,588.46
06/01/2022	45,311,204.36	42,153,000.00	3,158,204.36	2,869,356.96
06/01/2023	45,287,833.78	42,124,750.00	3,163,083.78	2,789,783.18
06/01/2024	45,255,984.84	42,098,500.00	3,157,484.84	2,703,351.01
06/01/2025	45,220,806.80	42,067,000.00	3,153,806.80	2,621,207.61
06/01/2026	45,192,495.34	42,038,250.00	3,154,245.34	2,544,798.63
06/01/2027	45,165,471.08	42,014,750.00	3,150,721.08	2,467,534.37
06/01/2028	44,556,599.50	41,448,750.00	3,107,849.50	2,359,257.50
06/01/2029	44,558,651.88	41,449,750.00	3,108,901.88	2,291,040.23
06/01/2030	44,559,472.86	41,453,000.00	3,106,472.86	2,222,326.13
06/01/2031	44,551,855.74	41,445,500.00	3,106,355.74	2,157,324.60
06/01/2032	44,555,581.00	41,444,750.00	3,110,831.00	2,097,358.34
06/01/2033	44,553,890.74	41,447,250.00	3,106,640.74	2,033,461.94
06/01/2034	44,560,273.74	41,449,500.00	3,110,773.74	1,976,932.53
06/01/2035	44,557,654.86	41,448,000.00	3,109,654.86	1,918,832.63
06/01/2036	44,554,532.62	41,449,250.00	3,105,282.62	1,860,606.70
06/01/2037	44,560,776.50	41,454,250.00	3,106,526.50	1,807,467.87
06/01/2038	44,555,907.48	41,453,750.00	3,102,157.48	1,752,794.13
06/01/2039	44,563,206.36	41,448,750.00	3,114,456.36	1,709,058.47
	896,809,904.16	834,245,250.00	62,564,654.16	46,197,178.09

Savings Summary

PV of savings from cash flow	46,197,178.09
Plus: Refunding funds on hand	11,397.35
Net PV Savings	46,208,575.44

Enclosure 3

Gross Receipts Tax
Forecast Comparison
March 1, 2018

Total Collections

	Old Forecast		Legislative Forecast			FEA Forecast			DOR Forecast			New Forecast		
YEAR	$ Millions	% Change	$ Millions	% Change	Difference	$ Millions	% Change	Difference	$ Millions	% Change	Difference	$ Millions	% Change	Difference
FY 94-95	506.84													
FY 95-96	543.13	7.16%												
FY 96-97	572.11	5.34%												
FY 97-98	593.39	3.72%												
FY 98-99	639.27	7.73%												
FY 99-00	669.18	4.68%												
FY 00-01	722.91	8.03%												
FY 01-02	779.49	7.83%												
FY 02-03	786.03	0.84%												
FY 03-04	826.59	5.16%												
FY 04-05	882.15	6.72%												
FY 05-06	975.79	10.61%												
FY 06-07	1067.60	9.41%												
FY 07-08	1125.97	5.47%												
FY 08-09	1126.22	0.02%												
FY 09-10	1097.66	-2.54%												
FY 10-11	1071.45	-2.39%												
FY 11-12	1033.88	-3.51%												
FY 12-13	1003.04	-2.98%												
FY 13-14	1005.36	0.23%												
FY 14-15	1152.38	14.62%												
FY 15-16	1157.73	0.46%												
FY 16-17	1111.61	-3.98%												
FY 17-18	1153.72	3.79%												
FY 18-19	1148.93	-0.42%	1152.23	-0.13%	3.29	1132.88	-1.81%	-16.05	1155.29	0.14%	6.36	1147.77	-0.52%	-1.16
FY 19-20	1150.51	0.14%	1156.78	0.39%	6.27	1128.57	-0.38%	-21.94	1160.27	0.43%	9.76	1148.86	0.09%	-1.65
FY 20-21	1166.51	1.39%	1166.13	0.81%	-0.38	1134.18	0.50%	-32.33	1169.79	0.82%	3.29	1159.22	0.90%	-7.28
FY 21-22	1181.53	1.29%	1175.24	0.78%	-6.29	1141.43	0.64%	-40.10	1181.18	0.97%	-0.35	1169.72	0.91%	-11.81
FY 22-23	1198.62	1.45%	1186.64	0.97%	-11.98	1153.13	1.03%	-45.49	1197.90	1.42%	-0.72	1183.18	1.15%	-15.45
FY 23-24	1217.45	1.57%	1198.95	1.04%	-18.50	1166.77	1.18%	-50.67	1215.45	1.47%	-2.00	1198.36	1.28%	-19.08
FY 24-25	1238.56	1.73%	1212.95	1.17%	-25.61	1181.94	1.30%	-56.62	1233.30	1.47%	-5.25	1215.59	1.44%	-22.97
FY 25-26	1254.57	1.29%	1224.26	0.93%	-30.31	1198.16	1.37%	-56.41	1250.43	1.39%	-4.14	1230.81	1.25%	-23.76
FY 26-27	1272.58	1.44%	1236.05	0.96%	-36.53	1215.33	1.43%	-57.25	1268.86	1.47%	-3.72	1247.39	1.35%	-25.19
FY 27-28	1289.62	1.34%	1247.98	0.97%	-41.64	1232.80	1.44%	-56.82	1286.64	1.40%	-2.98	1263.70	1.31%	-25.92

STATE BOARD OF ADMINISTRATION
1801 HERMITAGE BOULEVARD
TALLAHASSEE, FLORIDA 32308

TO: Ash Williams
FROM: Robert Copeland
SUBJECT: Fiscal Determination
DATE: March 15, 2019

A RESOLUTION OF THE STATE BOARD OF ADMINISTRATION OF FLORIDA MAKING THE FISCAL DETERMINATION IN CONNECTION WITH THE ISSUANCE OF AN AMOUNT NOT EXCEEDING $450,000,000 FLORIDA HOUSING FINANCE CORPORATION HOMEOWNER MORTGAGE REVENUE BONDS, 2019 PHASE ONE (MULTIPLE SERIES TO BE DETERMINED):

The Florida Housing Finance Corporation has submitted for approval as to fiscal determination a proposal to issue an amount not exceeding $450,000,000 Florida Housing Finance Corporation Homeowner Mortgage Revenue Bonds, 2019 Phase One (multiple series to be determined) (the "Bonds") to be used to fund mortgage loans for low, moderate or middle income first-time homebuyers and may provide funds to refund outstanding series of Homeowner Mortgage Revenue Bonds that originally funded mortgage loans for low, moderate or middle income first-time homebuyers.

The Bonds shall be payable as to principal, premium (if any), and interest solely out of revenues and other amounts pledged therefor, and shall not be secured by the full faith and credit of the State of Florida.

RECOMMENDATION: It is recommended that, pursuant to the fiscal determination requirements of Section 16(c) of Article VII of the Constitution of the State of Florida, as revised in 1968 and subsequently amended, and in reliance upon information provided by the Florida Housing Finance Corporation, the Board find and determine that in no state fiscal year will the debt service requirements of the Bonds and all other bonds secured by the same pledged revenues exceed the pledged revenues available for payment of such debt service requirements. The Board does not assume any responsibility for, and makes no warranty (express or implied) with respect to any aspect of this bond issue.

cc: Janie Knight

A RESOLUTION OF THE STATE BOARD OF ADMINISTRATION OF FLORIDA MAKING THE FISCAL DETERMINATION IN CONNECTION WITH THE ISSUANCE OF AN AMOUNT NOT EXCEEDING $450,000,000 FLORIDA HOUSING FINANCE CORPORATION HOMEOWNER MORTGAGE REVENUE BONDS, 2019 PHASE ONE (MULTIPLE SERIES TO BE DETERMINED)

WHEREAS, the Florida Housing Finance Corporation (the "Corporation") proposes to issue an amount not exceeding $450,000,000 Florida Housing Finance Corporation Homeowner Mortgage Revenue Bonds, 2019 Phase One (multiple series to be determined) (the "Bonds") to be used to fund mortgage loans for low, moderate or middle income first-time homebuyers and may provide funds to refund outstanding series of Homeowner Mortgage Revenue Bonds that originally funded mortgage loans for low, moderate or middle income first-time homebuyers; and,

WHEREAS, the Corporation has requested the State Board of Administration of Florida to make the fiscal determination required by Section 420.509, Florida Statutes, as stated in Section 16(c) of Article VII of the Constitution of the State of Florida, as revised in 1968 and subsequently amended (the “Florida Constitution”); and,

WHEREAS, the Bonds shall be secured by a Trust Indenture; and,

WHEREAS, in accordance with Section 420.509, Florida Statutes, the principal of and all interest and any premium on the Bonds shall be payable solely out of revenues and other amounts pledged therefor, as described in the Trust Indenture and other required documents, and shall not be secured by the full faith and credit of the State of Florida; and,

WHEREAS, the cash flow analysis furnished by the Corporation shows that in no State fiscal year will the debt service requirements of the Bonds proposed to be issued and all other bonds secured by the same pledged revenues exceed the pledged revenues available for payment of such debt service requirements; and,

WHEREAS, the Corporation has furnished sufficient information to enable the State Board of Administration of Florida to fulfill its duties pursuant to Section 420.509(2), Florida Statutes; and;

WHEREAS, the Board has relied upon information from others, including the Corporation, but has not independently verified the accuracy or completeness of such information; and,

WHEREAS, the Board’s determination pursuant to Section 16(c) of Article VII of the Florida Constitution and Section 420.509(2), Florida Statutes, is limited to a review of the matters essential to making such determination and the Board does not approve or disapprove of the Bonds as investments and has not passed upon the accuracy or adequacy of the Trust Indenture or any other required documents; **Now, Therefore,**

BE IT RESOLVED, by the State Board of Administration of Florida, a constitutional body described in Section 4 of Article IV of the Constitution of the State of Florida, as revised in 1968 and subsequently amended, that in connection with the issuance of the Florida Housing Finance Corporation Homeowner Mortgage Revenue Bonds, 2019 Phase One (multiple series to be determined), in an amount not exceeding $450,000,000, for the uses and purposes hereinabove set forth, it makes the fiscal determination required by Section 420.509, Florida Statutes.

Accordingly, as required by Section 16(c) of Article VII of the Florida Constitution, the Board finds and determines that in no state fiscal year will the debt service requirements of the Bonds and all other bonds secured by the same pledged revenues exceed the pledged revenues, as defined in Section 420.503, Florida Statutes and described in the Trust Indenture, which are available for payment of such debt service requirements.

ADOPTED April 2, 2019

STATE OF FLORIDA)
:
COUNTY OF LEON)

I, Ashbel C. Williams, Executive Director & CIO of the State Board of Administration of Florida, a constitutional body described in Section 4 of Article IV of the Constitution of the State of Florida, as revised in 1968 and subsequently amended, **DO HEREBY CERTIFY** that the above and foregoing is a true and correct copy of a resolution adopted by said Board at a meeting held April 2, 2019, making the fiscal determination in connection with the issuance of an amount not exceeding $450,000,000 Florida Housing Finance Corporation Homeowner Mortgage Revenue Bonds, 2019 Phase One (multiple series to be determined).

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Board at Tallahassee, Leon County, Florida, this 2nd day of April 2019.

____

Ashbel C. Williams, Executive Director & CIO

(SEAL)

we make housing affordable™
Florida Housing
Finance Corporation
227 North Bronough Street, Suite 5000 • Tallahassee, Florida 32301
850.488.4197 • Fax: 850.488.9809 • www.floridahousing.org

March 8, 2019

Mr. Ash Williams
Executive Director/Chief Investment Officer
State Board of Administration
P.O. Box 13300
Tallahassee, Florida 32317-3300

Subject: $450,000,000 Florida Housing Finance Corporation, Homeowner Mortgage Revenue Bonds (2019 Phase One Bonds [multiple series to be determined])

Dear Mr. Williams:

On behalf of Florida Housing Finance Corporation (Florida Housing), I am submitting Preliminary Cash Flow Analyses for the approval of fiscal determination on the 2019Phase One Bonds as required by statute. These Cash Flow Analyses have been prepared at Florida Housing's direction. Florida Housing may issue the 2019 Phase One Bonds in multiple series; under one or more master indentures; and at various times. In each case, the decision will be based on what is most economically and programmatically advantageous based upon the prevailing market conditions.

It is currently expected that approximately $88.9 million of the $450.00 million of bonds may provide funds to optionally refund multiple series of previously issued Homeowner Mortgage Revenue Bonds that originally funded mortgage loans to low and moderate income first-time homebuyers. These refunding bonds will only be issued if an acceptable level of debt service savings can be achieved. It is also expected that the remaining $361.0million of bonds will be new money issuance used to generate new mortgages that will be pooled into new mortgage backed securities ("MBS"). If the aforementioned refundings are not implemented, the full $450 million may be used to generate new mortgages that will be pooled into MBS.

Florida Housing may issue these bonds under its 1995 master indenture, the New Issue Bond Program (NIBP) master indenture or a newly created master indenture. As stated above, Florida Housing may issue the 2019 Phase One Bonds at one time or in multiple issuances if doing so is deemed advantageous based upon the prevailing market conditions. The cash flow analyses show there are sufficient annual revenues to meet the required debt service on the entire principal amount of the 2019 Phase One Bonds. For purposes of the cash flow analyses submitted here with, the following separate issuance scenarios have been assumed: 1) a combined refunding and new money issuance comprised of (a) the refunding bond issue of $88.9 million and (b) new money bonds of $361.1million; 2) a refunding bond issue of $88.9

million; and 3) $450 million of new money bonds. Per the State Board of Administration's ("SBA") request, we will submit the cash flows separately.

Florida Housing as a matter of long standing policy considers bidding its bonds competitively. Given the complex structure of this bond issue and current market conditions, Caine Mitter & Associates Incorporated ("Caine Mitter"), Florida Housing's independent registered municipal advisor, recommends that Florida Housing offer the 2019 Phase One Bonds through a negotiated sale. A copy of the Caine Mitter method of sale recommendation is appended. Certain parties to the transaction will be or have been selected competitively or through the RFP/RFQ process, including the master mortgage servicer, trustee, rebate analyst, independent registered municipal advisor, bond counsel, special counsel, and underwriter.

Please accept this letter as a request to the State Board of Administration for approval of fiscal determination of the anticipated 2019 Phase One Bonds. The following items are enclosed with this letter:

- Independent Registered Municipal Advisor Method of Sale letter
- Authorizing Board Resolution
- Draft Terms Memorandum and Program summary
- Preliminary Cash Flow Analyses

Please place this request on the April 2, 2019, agenda.

If there is any additional information or explanation needed, please feel free to call on us. The primary point of contact for the Florida Housing Finance Corporation is Melanie Weathers at 488-4197. However, please feel free to contact me for any information needed.

Sincerely,

Angeliki G. Sellers
Comptroller

Enclosures

cc: Sharon Vice
Harold L. "Trey" Price

SECTION 6

FISCAL DETERMINATION COVERAGE: Stand-Alone

FLORIDA HOUSING FINANCE CORPORATION
HOMEOWNER MORTGAGE REVENUE BONDS 2019
PHASE ONE (Multiple Series to be Determined)

FISCAL DETERMINATION COVERAGE - NEW INDENTURE CASHFLOWS
$450,000,000 - NEW MONEY
SEMI-ANNUAL BREAKOUT
0% FHA

PERIOD	GROSS REVENUES (Scheduled)	CAPITALIZED INTEREST DISTRIBUTION	CASH EXPENSES (Debt Service & Expenses)	RECEIPTS/EXPENSES RATIO
01/01/2020	4,601,764.10	5,551,364.65	10,153,128.75	1.00
07/01/2020	13,152,301.26		9,045,296.84	1.45
01/01/2021	13,161,433.90		13,016,929.01	1.01
07/01/2021	13,170,780.88		13,029,322.49	1.01
01/01/2022	13,180,347.40		13,035,441.55	1.01
07/01/2022	13,190,138.52		13,043,671.64	1.01
01/01/2023	13,200,159.51		13,055,645.67	1.01
07/01/2023	13,210,415.67		13,065,237.75	1.01
01/01/2024	13,220,912.63		13,073,428.21	1.01
07/01/2024	13,231,655.99		13,084,253.54	1.01
01/01/2025	13,242,651.62		13,093,585.21	1.01
07/01/2025	13,253,905.51		13,105,347.12	1.01
01/01/2026	13,265,423.47		13,115,518.11	1.01
07/01/2026	13,277,211.61		13,128,022.00	1.01
01/01/2027	13,289,276.77		13,138,780.00	1.01
07/01/2027	13,301,625.21		13,151,012.04	1.01
01/01/2028	13,314,263.38		13,161,329.24	1.01
07/01/2028	13,327,198.34		13,177,096.41	1.01
01/01/2029	13,340,436.88		13,185,744.54	1.01
07/01/2029	13,353,986.34		13,202,669.54	1.01
01/01/2030	13,367,853.88		13,212,718.54	1.01
07/01/2030	13,382,046.83		13,224,954.82	1.01
01/01/2031	13,396,573.22		13,240,309.10	1.01
07/01/2031	13,411,440.56		13,252,672.04	1.01
01/01/2032	13,426,656.80		13,268,040.46	1.01
07/01/2032	13,442,230.37		13,285,324.87	1.01
01/01/2033	13,458,169.38		13,300,435.70	1.01
07/01/2033	13,474,482.86		13,312,349.54	1.01
01/01/2034	13,491,179.20		13,332,062.92	1.01
07/01/2034	13,508,267.37		13,346,049.77	1.01
01/01/2035	13,525,756.81		13,362,392.71	1.01
07/01/2035	13,543,656.86		13,380,004.24	1.01
01/01/2036	13,561,977.07		13,399,774.30	1.01
07/01/2036	13,580,727.58		13,415,592.73	1.01
01/01/2037	13,599,918.05		13,433,455.53	1.01
07/01/2037	13,619,559.18		13,452,274.86	1.01
01/01/2038	13,639,661.46		13,472,929.03	1.01

FLORIDA HOUSING FINANCE CORPORATION
HOMEOWNER MORTGAGE REVENUE BONDS 2019
PHASE ONE (Multiple Series to be Determined)

FISCAL DETERMINATION COVERAGE - NEW INDENTURE CASHFLOWS
$450,000,000 - NEW MONEY
SEMI-ANNUAL BREAKOUT
0% FHA

PERIOD	GROSS REVENUES (Scheduled)	CAPITALIZED INTEREST DISTRIBUTION	CASH EXPENSES (Debt Service & Expenses)	RECEIPTS/EXPENSES RATIO
07/01/2038	13,660,235.48		13,489,330.00	1.01
01/01/2039	13,681,292.65		13,512,462.12	1.01
07/01/2039	13,702,844.16		13,532,185.92	1.01
01/01/2040	13,724,901.46		13,553,253.04	1.01
07/01/2040	13,747,476.73		13,574,552.53	1.01
01/01/2041	13,770,582.03		13,591,973.31	1.01
07/01/2041	13,794,229.75		13,614,517.97	1.01
01/01/2042	13,818,432.55		13,637,968.95	1.01
07/01/2042	13,843,203.66		13,661,229.85	1.01
01/01/2043	13,868,556.13		13,685,189.12	1.01
07/01/2043	13,894,503.76		13,713,742.62	1.01
01/01/2044	13,921,060.71		13,737,679.80	1.01
07/01/2044	13,948,241.14		13,764,343.76	1.01
01/01/2045	13,976,059.57		13,786,136.18	1.01
07/01/2045	14,004,531.02		13,817,051.15	1.01
01/01/2046	14,033,670.99		13,842,776.33	1.01
07/01/2046	14,063,495.16		13,872,305.51	1.01
01/01/2047	14,094,019.31		13,901,426.07	1.01
07/01/2047	14,125,260.15		13,929,031.51	1.01
01/01/2048	14,157,234.37		13,960,488.91	1.01
07/01/2048	14,189,959.24		13,989,069.58	1.01
01/01/2049	14,223,452.31		14,016,664.65	1.01
07/01/2049	14,257,728.82	-	14,047,166.36	1.01
01/01/2050	27,173,297.91		14,076,886.78	1.93
TOTAL	**833,390,315.53**	**5,551,364.65**	**812,060,232.82**	

FLORIDA HOUSING FINANCE CORPORATION
HOMEOWNER MORTGAGE REVENUE BONDS 2019
PHASE ONE (Multiple Series to be Determined)

FISCAL DETERMINATION COVERAGE - NEW INDENTURE CASHFLOWS
$88,945,000 - Refunding
SEMI-ANNUAL BREAKOUT
0% FHA

PERIOD	GROSS REVENUES (Scheduled)	CAPITALIZED INTEREST DISTRIBUTION	CASH EXPENSES (Debt Service & Expenses)	RECEIPTS/EXPENSES RATIO
01/01/2020	3,889,899.64		1,786,765.86	2.18
07/01/2020	2,920,933.79		2,912,953.72	1.00
01/01/2021	2,924,015.84		2,906,758.41	1.01
07/01/2021	2,927,166.56		2,908,434.65	1.01
01/01/2022	2,930,387.56		2,910,018.07	1.01
07/01/2022	2,933,680.42		2,910,118.02	1.01
01/01/2023	2,937,046.82		2,915,138.82	1.01
07/01/2023	2,940,488.58		2,919,128.55	1.01
01/01/2024	2,944,007.33		2,918,014.01	1.01
07/01/2024	2,947,604.91		2,920,659.47	1.01
01/01/2025	2,951,283.27		2,928,320.46	1.01
07/01/2025	2,955,044.21		2,924,773.73	1.01
01/01/2026	2,958,889.77		2,931,012.24	1.01
07/01/2026	2,962,821.83		2,935,966.46	1.01
01/01/2027	2,966,842.52		2,935,596.21	1.01
07/01/2027	2,970,953.90		2,938,631.29	1.01
01/01/2028	2,975,158.16		2,941,406.46	1.01
07/01/2028	2,979,457.44		2,941,970.23	1.01
01/01/2029	2,983,854.06		2,947,144.21	1.01
07/01/2029	2,988,350.19		2,949,046.86	1.01
01/01/2030	2,992,948.37		2,950,705.36	1.01
07/01/2030	2,997,651.02		2,951,210.63	1.02
01/01/2031	3,002,460.50		2,956,382.94	1.02
07/01/2031	3,007,379.47		2,955,395.02	1.02
01/01/2032	3,012,410.45		2,959,155.21	1.02
07/01/2032	3,017,556.20		2,956,588.09	1.02
01/01/2033	3,022,819.43		2,963,761.93	1.02
07/01/2033	3,028,202.94		2,959,593.75	1.02
01/01/2034	3,033,709.73		2,965,169.28	1.02
07/01/2034	3,039,342.61		2,965,589.86	1.02
01/01/2035	3,045,104.60		2,965,499.27	1.03
07/01/2035	3,050,998.92		2,963,995.66	1.03
01/01/2036	3,057,028.78		2,956,779.66	1.03
07/01/2036	3,063,197.28		2,953,144.33	1.04
01/01/2037	3,069,507.92		2,943,793.98	1.04
07/01/2037	3,075,964.05		2,937,822.88	1.05

FLORIDA HOUSING FINANCE CORPORATION
HOMEOWNER MORTGAGE REVENUE BONDS 2019
PHASE ONE (Multiple Series to be Determined)

FISCAL DETERMINATION COVERAGE - NEW INDENTURE CASHFLOWS
$88,945,000 - Refunding
SEMI-ANNUAL BREAKOUT
0% FHA

PERIOD	GROSS REVENUES (Scheduled)	CAPITALIZED INTEREST DISTRIBUTION	CASH EXPENSES (Debt Service & Expenses)	RECEIPTS/EXPENSES RATIO
01/01/2038	3,082,569.22		2,921,225.88	1.06
07/01/2038	3,089,327.04		2,902,894.67	1.06
01/01/2039	3,096,241.28		2,884,149.05	1.07
07/01/2039	3,103,315.59		2,846,783.76	1.09
01/01/2040	2,228,543.87		1,993,668.51	1.12
07/01/2040	2,057,075.79		1,786,182.87	1.15
01/01/2041	1,855,803.90		1,558,285.95	1.19
07/01/2041	1,625,158.27		1,281,934.63	1.27
01/01/2042	1,612,342.83		1,166,620.41	1.38
07/01/2042	1,616,231.06		965,004.52	1.67
01/01/2043	2,528,297.02		388,366.20	6.51
TOTAL	**134,399,074.94**		**125,381,562.04**	

FLORIDA HOUSING FINANCE CORPORATION
HOMEOWNER MORTGAGE REVENUE BONDS 2019
PHASE ONE (Multiple Series to be Determined)

FISCAL DETERMINATION COVERAGE - NEW INDENTURE CASHFLOWS
$450,000,000 -New Money and Refunding
SEMI-ANNUAL BREAKOUT
0% FHA

PERIOD	GROSS REVENUES (Scheduled)	CAPITALIZED INTEREST DISTRIBUTION	CASH EXPENSES (Debt Service & Expenses)	RECEIPTS/EXPENSES RATIO
01/01/2020	3,889,899.64	6,259,332.58	10,149,232.22	1.00
07/01/2020	13,593,657.89	-	9,044,961.22	1.50
01/01/2021	13,604,003.34	-	12,917,708.82	1.05
07/01/2021	13,614,589.36	-	12,881,684.84	1.06
01/01/2022	13,625,421.96	-	12,867,597.05	1.06
07/01/2022	13,636,506.42	-	12,855,088.14	1.06
01/01/2023	13,647,849.02	-	12,840,892.00	1.06
07/01/2023	13,659,455.78	-	12,824,094.97	1.07
01/01/2024	13,671,333.03	-	12,805,464.57	1.07
07/01/2024	13,683,487.11	-	12,783,930.78	1.07
01/01/2025	13,695,924.17	-	12,770,628.51	1.07
07/01/2025	13,708,651.71	-	12,754,166.35	1.07
01/01/2026	13,721,675.97	-	12,725,892.84	1.08
07/01/2026	13,735,004.03	-	12,709,361.45	1.08
01/01/2027	13,748,643.12	-	12,680,701.82	1.08
07/01/2027	13,762,600.90	-	12,662,933.54	1.09
01/01/2028	13,776,884.76	-	12,627,969.87	1.09
07/01/2028	13,791,502.24	-	12,607,776.51	1.09
01/01/2029	13,806,461.36	-	12,582,430.32	1.10
07/01/2029	13,821,770.19	-	12,549,785.60	1.10
01/01/2030	13,837,437.07	-	12,514,989.06	1.11
07/01/2030	13,853,470.52	-	12,476,706.10	1.11
01/01/2031	13,869,879.00	-	12,435,949.50	1.12
07/01/2031	13,886,671.77	-	12,401,702.01	1.12
01/01/2032	13,903,857.75	-	12,364,848.76	1.12
07/01/2032	13,921,446.30	-	12,314,282.30	1.13
01/01/2033	13,939,447.03	-	12,271,010.09	1.14
07/01/2033	13,957,869.64	-	12,213,779.50	1.14
01/01/2034	13,976,724.33	-	12,163,686.57	1.15
07/01/2034	13,996,021.11	-	12,097,794.73	1.16
01/01/2035	14,015,770.50	-	12,038,604.81	1.16
07/01/2035	14,035,983.62	-	11,964,998.80	1.17
01/01/2036	14,056,671.28	-	11,892,971.07	1.18
07/01/2036	14,077,844.78	-	11,806,302.16	1.19
01/01/2037	14,099,515.52	-	11,716,074.98	1.20
07/01/2037	14,121,695.55	-	11,615,981.10	1.22
01/01/2038	14,144,396.92	-	11,506,991.95	1.23

FLORIDA HOUSING FINANCE CORPORATION
HOMEOWNER MORTGAGE REVENUE BONDS 2019
PHASE ONE (Multiple Series to be Determined)

FISCAL DETERMINATION COVERAGE - NEW INDENTURE CASHFLOWS
$450,000,000 -New Money and Refunding
SEMI-ANNUAL BREAKOUT
0% FHA

PERIOD	GROSS REVENUES (Scheduled)	CAPITALIZED INTEREST DISTRIBUTION	CASH EXPENSES (Debt Service & Expenses)	RECEIPTS/EXPENSES RATIO
07/01/2038	14,167,632.34	-	11,387,988.86	1.24
01/01/2039	14,191,414.38	-	11,269,749.30	1.26
07/01/2039	14,215,755.69	-	11,123,258.10	1.28
01/01/2040	13,358,659.97	-	10,972,359.97	1.22
07/01/2040	13,205,286.39	-	10,830,873.15	1.22
01/01/2041	13,022,537.70	-	10,702,341.58	1.22
07/01/2041	12,810,853.57	-	10,571,400.61	1.21
01/01/2042	12,817,448.83	-	10,437,355.13	1.23
07/01/2042	12,841,207.36	-	10,288,519.67	1.25
01/01/2043	12,697,357.87	-	10,115,340.38	1.26
07/01/2043	11,712,952.37	-	9,923,883.70	1.18
01/01/2044	11,296,730.01	-	9,786,658.31	1.15
07/01/2044	11,309,275.90	-	9,665,955.81	1.17
01/01/2045	11,331,613.10	-	9,531,457.87	1.19
07/01/2045	11,354,479.10	-	9,361,837.90	1.21
01/01/2046	11,377,886.50	-	9,153,097.20	1.24
07/01/2046	11,401,848.50	-	8,898,284.43	1.28
01/01/2047	11,426,377.80	-	8,563,723.78	1.33
07/01/2047	11,451,487.90	-	8,118,685.55	1.41
01/01/2048	11,477,192.70	-	7,514,271.15	1.53
07/01/2048	11,503,506.10	-	6,634,563.15	1.73
01/01/2049	11,530,442.60	-	5,261,499.57	2.19
07/01/2049	24,387,222.05	-	269,370.83	90.53
TOTAL	**796,779,193.42**	**6,259,332.58**	**664,821,450.94**	

SECTION 7

FISCAL DETERMINATION COVERAGE: NIBP Indenture

FLORIDA HOUSING FINANCE CORPORATION
Homeowner Mortgage Revenue Bonds
2019 Phase One (Multiple Series to be Determined)

Fiscal Determination Coverage - OPEN INDENTURE Cashflows
NIBP Single Family Indenture and $450 MILLION NEW MONEY
Semi-Annual Breakout
0% FHA

	Cash Flow Report - Column B	*Draw from CAP I Reserve*	*Draw from the Master Revenue Fund of the Master*			*Cashflow Report - Columns C&D*	
Period	**Gross Revenues (Scheduled Receipts)**	**Capitalized Interest Distribution**	**Master Revenue Fund Distribution**	**2019 PHASE ONE - Debt Service & Expenses**	**NIBP INDENTURE Debt Service & Expenses**	**ALL Cash Expenses (Debt Service/Expenses)**	**Receipts / Expenses Ratio**
HISTORICAL INDENTURE CASHFLOWS PRIOR TO ORIGINATION OF 2019 PHASE ONE							
01/01/2018	17,336,420.11				-	-	
07/01/2018	17,700,113.02				14,889,557.37	14,889,557.37	118.88%
01/01/2019	17,512,702.03		-		13,662,878.07	13,662,878.07	128.18%
PROJECTED INDENTURE CASHFLOWS FOLLOWING ORIGINATION OF 2019 PHASE ONE							
07/01/2019	17,529,453.59			-	13,729,033.93	13,729,033.93	127.68%
01/01/2020	22,148,371.09	5,551,365.00	-	10,153,128.75	13,236,759.71	23,389,888.46	118.43%
07/01/2020	30,716,473.01		-	9,045,296.84	13,394,398.78	22,439,695.62	136.88%
01/01/2021	30,743,591.95		-	13,016,929.01	13,151,434.65	26,168,363.66	117.48%
07/01/2021	30,771,357.03		-	13,029,322.49	13,039,794.49	26,069,116.98	118.04%
01/01/2022	30,799,784.27		-	13,035,441.55	12,470,337.86	25,505,779.41	120.76%
07/01/2022	30,828,889.03		-	13,043,671.64	12,257,577.11	25,301,248.74	121.85%
01/01/2023	30,858,688.02		-	13,055,645.67	11,935,129.56	24,990,775.23	123.48%
07/01/2023	30,889,197.87		-	13,065,237.75	11,543,139.28	24,608,377.04	125.52%
01/01/2024	30,920,435.70		-	13,073,428.21	11,118,286.81	24,191,715.02	127.81%
07/01/2024	30,963,318.49		-	13,084,253.54	10,766,813.45	23,851,066.99	129.82%
01/01/2025	30,772,714.48		-	13,093,585.21	10,293,610.02	23,387,195.23	131.58%
07/01/2025	30,653,862.75		-	13,105,347.12	9,982,027.23	23,087,374.34	132.77%
01/01/2026	30,680,567.34		-	13,115,518.11	9,711,903.40	22,827,421.51	134.40%
07/01/2026	30,706,343.63		-	13,128,022.00	9,488,242.16	22,616,264.16	135.77%
01/01/2027	30,690,383.53		-	13,138,780.00	9,142,769.10	22,281,549.09	137.74%
07/01/2027	30,731,134.48		-	13,151,012.04	8,792,331.29	21,943,343.33	140.05%
01/01/2028	30,783,585.99		-	13,161,329.24	7,799,796.58	20,961,125.83	146.86%
07/01/2028	30,825,436.59		-	13,177,096.41	7,436,452.74	20,613,549.16	149.54%
01/01/2029	30,865,344.67		-	13,185,744.54	6,190,210.33	19,375,954.87	159.30%
07/01/2029	30,885,867.55		4,801.64	13,202,669.54	5,140,509.92	18,343,179.47	168.40%
01/01/2030	30,927,011.30		4,812.18	13,212,718.54	5,427,260.46	18,639,979.00	165.94%
07/01/2030	30,964,821.54		4,822.54	13,224,954.82	6,078,841.74	19,303,796.56	160.43%
01/01/2031	31,000,910.66		4,833.13	13,240,309.10	5,872,485.21	19,112,794.31	162.23%
07/01/2031	31,044,405.28		4,843.94	13,252,672.04	5,698,569.20	18,951,241.23	163.84%
01/01/2032	31,088,641.92		4,855.02	13,268,040.46	5,497,779.02	18,765,819.48	165.69%
07/01/2032	31,134,401.19		4,866.34	13,285,324.87	5,321,508.75	18,606,833.62	167.35%
01/01/2033	31,057,499.99		4,687.84	13,300,435.70	5,098,142.14	18,398,577.84	168.83%
07/01/2033	30,879,530.76		3,747.54	13,312,349.54	4,899,690.67	18,212,040.21	169.58%
01/01/2034	30,922,901.96		3,756.70	13,332,062.92	4,691,182.25	18,023,245.17	171.59%
07/01/2034	30,695,619.50		9,607.84	13,346,049.77	4,426,403.10	17,772,452.87	172.77%
01/01/2035	30,518,832.45		24,047.23	13,362,392.71	4,134,019.53	17,496,412.24	174.57%
07/01/2035	30,559,683.11		29,099.81	13,380,004.24	3,858,898.79	17,238,903.03	177.44%
01/01/2036	30,605,001.57		-	13,399,774.30	3,289,073.05	16,688,847.34	183.39%
07/01/2036	30,613,151.38		-	13,415,592.73	2,340,988.92	15,756,581.65	194.29%
01/01/2037	30,640,861.02	-	-	13,433,455.53	1,906,319.66	15,339,775.19	199.75%
07/01/2037	30,695,693.98	-	-	13,452,274.86	1,814,899.67	15,267,174.53	201.06%
01/01/2038	30,751,749.51		-	13,472,929.03	1,671,648.41	15,144,577.44	203.05%
07/01/2038	30,809,521.22		-	13,489,330.00	1,519,361.24	15,008,691.24	205.28%
01/01/2039	30,868,736.49		-	13,512,462.12	1,335,500.92	14,847,963.05	207.90%
07/01/2039	30,839,910.99		-	13,532,185.92	1,086,818.12	14,619,004.05	210.96%
01/01/2040	29,384,095.56		-	13,553,253.04	890,991.41	14,444,244.46	203.43%
07/01/2040	26,797,994.50		-	13,574,552.53	625,598.15	14,200,150.68	188.72%
01/01/2041	24,374,982.27		-	13,591,973.31	270,779.65	13,862,752.96	175.83%
07/01/2041	22,424,749.42		-	13,614,517.97	24,206.57	13,638,724.54	164.42%
01/01/2042	21,473,924.34		-	13,637,968.95	17,878.25	13,655,847.20	157.25%
07/01/2042	20,045,371.71		-	13,661,229.85	13,160.82	13,674,390.67	146.59%
01/01/2043	19,245,544.37		-	13,685,189.12	9,193.18	13,694,382.30	140.54%
07/01/2043	17,808,629.32		-	13,713,742.62	6,634.05	13,720,376.66	129.80%

FLORIDA HOUSING FINANCE CORPORATION
Homeowner Mortgage Revenue Bonds
2019 Phase One (Multiple Series to be Determined)

Fiscal Determination Coverage - OPEN INDENTURE Cashflows
NIBP Single Family Indenture and $450 MILLION NEW MONEY
Semi-Annual Breakout
0% FHA

	Cash Flow Report - Column B	*Draw from CAP I Reserve*	*Draw from the Master Revenue Fund of the Master*			*Cashflow Report - Columns C&D*	
Period	**Gross Revenues (Scheduled Receipts)**	**Capitalized Interest Distribution**	**Master Revenue Fund Distribution**	**2019 PHASE ONE - Debt Service & Expenses**	**NIBP INDENTURE Debt Service & Expenses**	**ALL Cash Expenses (Debt Service/Expenses)**	**Receipts / Expenses Ratio**
01/01/2044	17,497,729.53		-	13,737,679.80	4,339.61	13,742,019.42	127.33%
07/01/2044	16,507,895.19		-	13,764,343.76	2,826.37	13,767,170.13	119.91%
01/01/2045	15,758,045.98		-	13,786,136.18	1,295.22	13,787,431.41	114.29%
07/01/2045	15,330,389.09		-	13,817,051.15	-	13,817,051.15	110.95%
01/01/2046	14,148,281.25		-	13,842,776.33	-	13,842,776.33	102.21%
07/01/2046	14,063,570.16		-	13,872,305.51	-	13,872,305.51	101.38%
01/01/2047	14,094,094.31		-	13,901,426.07	-	13,901,426.07	101.39%
07/01/2047	14,125,335.15		-	13,929,031.51	-	13,929,031.51	101.41%
01/01/2048	14,157,309.37		-	13,960,488.91	-	13,960,488.91	101.41%
07/01/2048	14,190,034.24		-	13,989,069.58	-	13,989,069.58	101.44%
01/01/2049	14,223,527.31		-	14,016,664.65	-	14,016,664.65	101.48%
07/01/2049	14,257,803.82		-	14,047,166.36	-	14,047,166.36	101.50%
01/01/2050	13,732,649.23		344,238.00	14,076,886.78	-	14,076,886.78	100.00%
TOTAL	**$ 1,667,574,878.15**	**$ 5,551,365.00**	**$ 453,019.75**	**$ 812,060,232.82**	**$ 327,009,288.02**	**$ 1,139,069,520.83**	

FLORIDA HOUSING FINANCE CORPORATION
Homeowner Mortgage Revenue Bonds
2019 Phase One (Multiple Series to be Determined)

Fiscal Determination Coverage - OPEN INDENTURE Cashflows
NIBP Single Family Indenture and $88,945,000 NON AMT REFUNDING
Semi-Annual Breakout
0% FHA

	Cash Flow Report - Column B	*Draw from CAP I Reserve*	*Draw from the Master Revenue Fund of the Master*			*Cashflow Report - Columns C&D*	
Period	**Gross Revenues (Scheduled Receipts)**	**Capitalized Interest Distribution**	**Master Revenue Fund Distribution**	**2019 PHASE ONE - Debt Service & Expenses**	**NIBP INDENTURE Debt Service & Expenses**	**ALL Cash Expenses (Debt Service/Expenses)**	**Receipts / Expenses Ratio**
HISTORICAL INDENTURE CASHFLOWS PRIOR TO ORIGINATION OF 2019 PHASE ONE							
01/01/2018	17,336,420.11		-		-	-	
07/01/2018	17,700,113.02		-		14,889,557.37	14,889,557.37	118.88%
01/01/2019	17,512,702.03		-		13,662,878.07	13,662,878.07	128.18%
PROJECTED INDENTURE CASHFLOWS FOLLOWING ORIGINATION OF 2019 PHASE ONE							
07/01/2019	112,265,830.54		-	-	13,632,130.84	13,632,130.84	823.54%
01/01/2020	17,458,351.52	-	-	1,786,765.86	10,797,254.99	12,584,020.85	138.73%
07/01/2020	17,476,222.27		-	2,912,953.72	10,676,366.23	13,589,319.95	128.60%
01/01/2021	17,494,527.97		-	2,906,758.41	10,601,228.21	13,507,986.62	129.51%
07/01/2021	17,513,279.47		-	2,908,434.65	10,525,773.62	13,434,208.28	130.36%
01/01/2022	17,532,487.92		-	2,910,018.07	9,978,633.30	12,888,651.38	136.03%
07/01/2022	17,552,164.45		-	2,910,118.02	9,798,833.21	12,708,951.23	138.11%
01/01/2023	17,572,320.77		-	2,915,138.82	9,525,430.05	12,440,568.88	141.25%
07/01/2023	17,592,968.89		-	2,919,128.55	9,189,193.28	12,108,321.83	145.30%
01/01/2024	17,614,120.76		-	2,918,014.01	8,831,819.77	11,749,833.78	149.91%
07/01/2024	17,643,933.31		-	2,920,659.47	8,557,445.17	11,478,104.65	153.72%
01/01/2025	17,434,911.04		-	2,928,320.46	8,193,211.51	11,121,531.98	156.77%
07/01/2025	17,304,657.76		-	2,924,773.73	8,004,762.09	10,929,535.82	158.33%
01/01/2026	17,319,655.70		-	2,931,012.24	7,828,157.38	10,759,169.62	160.98%
07/01/2026	17,333,636.74		-	2,935,966.46	7,718,479.26	10,654,445.72	162.69%
01/01/2027	17,305,560.05		-	2,935,596.21	7,618,918.41	10,554,514.62	163.96%
07/01/2027	17,331,571.38		-	2,938,631.29	7,452,746.90	10,391,378.19	166.79%
01/01/2028	17,365,092.55		-	2,941,406.46	6,727,634.93	9,669,041.39	179.59%
07/01/2028	17,392,469.32		-	2,941,970.23	6,557,220.47	9,499,190.70	183.09%
01/01/2029	17,418,269.91		-	2,947,144.21	5,158,295.35	8,105,439.56	214.90%
07/01/2029	17,427,003.76		4,801.64	2,949,046.86	4,020,036.39	6,969,083.24	250.13%
01/01/2030	17,455,508.98		4,812.18	2,950,705.36	3,868,597.52	6,819,302.88	256.04%
07/01/2030	17,483,117.17		4,822.54	2,951,210.63	3,685,385.46	6,636,596.10	263.51%
01/01/2031	17,511,577.74		4,833.13	2,956,382.94	3,530,199.39	6,486,582.33	270.04%
07/01/2031	17,540,537.25		4,843.95	2,955,395.02	3,366,678.17	6,322,073.19	277.53%
01/01/2032	17,570,255.81		4,855.02	2,959,155.21	3,198,328.03	6,157,483.25	285.43%
07/01/2032	17,600,893.23		4,866.33	2,956,588.09	3,033,506.23	5,990,094.31	293.91%
01/01/2033	17,508,788.92		4,687.84	2,963,761.93	2,843,517.73	5,807,279.67	301.58%
07/01/2033	17,315,064.29		3,747.55	2,959,593.75	2,667,638.22	5,627,231.97	307.77%
01/01/2034	17,342,424.09		3,756.69	2,965,169.28	2,493,398.70	5,458,567.98	317.78%
07/01/2034	17,098,703.67		9,607.75	2,965,589.86	2,272,251.75	5,237,841.60	326.63%
01/01/2035	16,904,971.88		24,047.09	2,965,499.27	2,024,813.27	4,990,312.54	339.24%
07/01/2035	16,928,495.96		29,099.82	2,963,995.66	1,794,177.57	4,758,173.24	356.39%
01/01/2036	16,956,227.61		-	2,956,779.66	1,290,605.61	4,247,385.27	399.22%
07/01/2036	16,946,162.20		-	2,953,144.33	407,813.19	3,360,957.52	504.21%
01/01/2037	16,955,211.89		-	2,943,793.98	69,785.24	3,013,579.23	562.63%
07/01/2037	16,990,803.99		-	2,937,822.88	64,254.81	3,002,077.69	565.97%
01/01/2038	17,027,260.15		-	2,921,225.88	58,593.86	2,979,819.74	571.42%
07/01/2038	17,064,601.75		-	2,902,894.67	52,799.29	2,955,693.96	577.35%
01/01/2039	17,102,850.60		-	2,884,149.05	46,867.91	2,931,016.96	583.51%
07/01/2039	17,058,670.45		-	2,846,783.76	40,796.47	2,887,580.23	590.76%
01/01/2040	14,698,902.89		-	1,993,668.51	34,581.63	2,028,250.14	724.71%
07/01/2040	11,914,735.44		-	1,786,182.87	28,219.99	1,814,402.86	656.68%
01/01/2041	9,837,421.38		-	1,558,285.95	21,944.88	1,580,230.83	622.53%
07/01/2041	7,717,795.08		-	1,281,934.63	17,420.33	1,299,354.96	593.97%
01/01/2042	6,726,912.36		-	1,166,620.41	13,791.11	1,180,411.52	569.88%
07/01/2042	5,403,480.68		-	965,004.52	11,438.59	976,443.12	553.38%
01/01/2043	5,228,137.07		-	388,366.20	9,056.92	397,423.12	1315.51%
TOTAL	**$ 919,787,783.80**	**$ -**	**$ 108,781.53**	**$ 125,381,562.04**	**$ 246,892,468.71**	**$ 372,274,030.76**	

FLORIDA HOUSING FINANCE CORPORATION
Homeowner Mortgage Revenue Bonds
2019 Phase One (Multiple Series to be Determined)

Fiscal Determination Coverage - OPEN INDENTURE Cashflows
NIBP Single Family Indenture and $450,000,000 NEW MONEY AND NON-AMT REFUNDING
Semi-Annual Breakout
0% FHA

	Cash Flow Report - Column B	*Draw from CAP I Reserve*	*Draw from the Master Revenue Fund of the Master*			*Cashflow Report - Columns C&D*	
Period	**Gross Revenues (Scheduled Receipts)**	**Capitalized Interest Distribution**	**Master Revenue Fund Distribution**	**2019 PHASE ONE - Debt Service & Expenses**	**NIBP INDENTURE Debt Service & Expenses**	**ALL Cash Expenses (Debt Service/Expenses)**	**Receipts / Expenses Ratio**
HISTORICAL INDENTURE CASHFLOWS PRIOR TO ORIGINATION OF 2019 PHASE ONE							
01/01/2018	17,336,420.11		-		-	-	
07/01/2018	17,700,113.02		-		1,786,765.86	14,889,557.37	118.88%
01/01/2019	17,512,702.03		-		2,912,953.72	13,662,878.07	128.18%
PROJECTED INDENTURE CASHFLOWS FOLLOWING ORIGINATION OF 2019 PHASE ONE							
07/01/2019	112,265,830.54		-	-	2,906,758.41	13,632,130.84	823.54%
01/01/2020	17,458,351.52	6,259,333.00	-	10,149,232.22	10,797,254.99	20,946,487.21	113.23%
07/01/2020	28,148,946.37		-	9,044,961.22	10,676,366.23	19,721,327.45	142.73%
01/01/2021	28,174,515.47		-	12,917,708.82	10,601,228.21	23,518,937.03	119.80%
07/01/2021	28,200,702.27		-	12,881,684.84	10,525,773.62	23,407,458.47	120.48%
01/01/2022	28,227,522.32		-	12,867,597.05	9,978,633.30	22,846,230.35	123.55%
07/01/2022	28,254,990.45		-	12,855,088.14	9,798,833.21	22,653,921.35	124.72%
01/01/2023	28,283,122.97		-	12,840,892.00	9,525,430.05	22,366,322.05	126.45%
07/01/2023	28,311,936.09		-	12,824,094.97	9,189,193.28	22,013,288.24	128.61%
01/01/2024	28,341,446.46		-	12,805,464.57	8,831,819.77	21,637,284.34	130.98%
07/01/2024	28,379,815.51		-	12,783,930.78	8,557,445.17	21,341,375.96	132.98%
01/01/2025	28,179,551.94		-	12,770,628.51	8,193,211.51	20,963,840.02	134.42%
07/01/2025	28,058,265.26		-	12,754,166.35	8,004,762.09	20,758,928.45	135.16%
01/01/2026	28,082,441.90		-	12,725,892.84	7,828,157.38	20,554,050.22	136.63%
07/01/2026	28,105,818.94		-	12,709,361.45	7,718,479.26	20,427,840.71	137.59%
01/01/2027	28,087,360.65		-	12,680,701.82	7,618,918.41	20,299,620.23	138.36%
07/01/2027	28,123,218.38		-	12,662,933.54	7,452,746.90	20,115,680.44	139.81%
01/01/2028	28,166,819.15		-	12,627,969.87	6,727,634.93	19,355,604.80	145.52%
07/01/2028	28,204,514.12		-	12,607,776.51	6,557,220.47	19,164,996.99	147.17%
01/01/2029	28,240,877.21		-	12,582,430.32	5,158,295.35	17,740,725.68	159.19%
07/01/2029	28,260,423.76		4,801.64	12,549,785.60	4,020,036.39	16,569,821.99	170.58%
01/01/2030	28,299,997.68		4,812.18	12,514,989.06	3,868,597.52	16,383,586.59	172.76%
07/01/2030	28,338,936.67		4,822.54	12,476,706.10	3,685,385.46	16,162,091.56	175.37%
01/01/2031	28,378,996.24		4,833.13	12,435,949.50	3,530,199.39	15,966,148.89	177.78%
07/01/2031	28,419,829.55		4,843.95	12,401,702.01	3,366,678.17	15,768,380.18	180.26%
01/01/2032	28,461,703.11		4,855.02	12,364,848.76	3,198,328.03	15,563,176.79	182.91%
07/01/2032	28,504,783.33		4,866.33	12,314,282.30	3,033,506.23	15,347,788.52	185.76%
01/01/2033	28,425,416.52		4,687.84	12,271,010.09	2,843,517.73	15,114,527.82	188.10%
07/01/2033	28,244,730.99		3,747.55	12,213,779.50	2,667,638.22	14,881,417.72	189.82%
01/01/2034	28,285,438.69		3,756.69	12,163,686.57	2,493,398.70	14,657,085.27	193.01%
07/01/2034	28,055,382.17		9,607.75	12,097,794.73	2,272,251.75	14,370,046.48	195.30%
01/01/2035	27,875,637.78		24,047.09	12,038,604.81	2,024,813.27	14,063,418.08	198.38%
07/01/2035	27,913,480.66		29,099.82	11,964,998.80	1,794,177.57	13,759,176.37	203.08%
01/01/2036	27,955,870.11		-	11,892,971.07	1,290,605.61	13,183,576.69	212.05%
07/01/2036	27,960,809.70		-	11,806,302.16	407,813.19	12,214,115.35	228.92%
01/01/2037	27,985,219.49		-	11,716,074.98	69,785.24	11,785,860.23	237.45%
07/01/2037	28,036,535.49		-	11,615,981.10	64,254.81	11,680,235.91	240.03%
01/01/2038	28,089,087.85		-	11,506,991.95	58,593.86	11,565,585.81	242.87%
07/01/2038	28,142,907.05		-	11,387,988.86	52,799.29	11,440,788.15	245.99%
01/01/2039	28,198,023.70		-	11,269,749.30	46,867.91	11,316,617.20	249.17%
07/01/2039	28,171,110.55		-	11,123,258.10	40,796.47	11,164,054.56	252.34%
01/01/2040	25,829,018.99		-	10,972,359.97	34,581.63	11,006,941.61	234.66%
07/01/2040	23,062,946.04		-	10,830,873.15	28,219.99	10,859,093.14	212.38%
01/01/2041	21,004,155.18		-	10,702,341.58	21,944.88	10,724,286.47	195.86%
07/01/2041	18,903,490.38		-	10,571,400.61	17,420.33	10,588,820.94	178.52%
01/01/2042	17,932,018.36		-	10,437,355.13	13,791.11	10,451,146.24	171.58%
07/01/2042	16,628,456.98		-	10,288,519.67	11,438.59	10,299,958.26	161.44%
01/01/2043	16,473,454.37		-	10,115,340.38	9,056.92	10,124,397.30	162.71%
07/01/2043	15,495,211.49		-	9,923,883.70	6,628.30	9,930,512.00	156.04%

FLORIDA HOUSING FINANCE CORPORATION
Homeowner Mortgage Revenue Bonds
2019 Phase One (Multiple Series to be Determined)

Fiscal Determination Coverage - OPEN INDENTURE Cashflows
NIBP Single Family Indenture and $450,000,000 NEW MONEY AND NON-AMT REFUNDING
Semi-Annual Breakout
0% FHA

	Cash Flow Report - Column B	*Draw from CAP I Reserve*	*Draw from the Master Revenue Fund of the Master*			*Cashflow Report - Columns C&D*	
Period	**Gross Revenues (Scheduled Receipts)**	**Capitalized Interest Distribution**	**Master Revenue Fund Distribution**	**2019 PHASE ONE - Debt Service & Expenses**	**NIBP INDENTURE Debt Service & Expenses**	**ALL Cash Expenses (Debt Service/Expenses)**	**Receipts / Expenses Ratio**
01/01/2044	14,867,549.80		-	9,786,658.31	4,339.61	9,790,997.92	151.85%
07/01/2044	13,868,929.95		-	9,665,955.81	2,826.37	9,668,782.18	143.44%
01/01/2045	13,113,599.51		-	9,531,457.87	1,295.22	9,532,753.09	137.56%
07/01/2045	12,680,337.17		-	9,361,837.90	-	9,361,837.90	135.45%
01/01/2046	11,492,496.76		-	9,153,097.20	-	9,153,097.20	125.56%
07/01/2046	11,401,923.50		-	8,898,284.43	-	8,898,284.43	128.14%
01/01/2047	11,426,452.80		-	8,563,723.78	-	8,563,723.78	133.43%
07/01/2047	11,451,562.90		-	8,118,685.55	-	8,118,685.55	141.05%
01/01/2048	11,477,267.70		-	7,514,271.15	-	7,514,271.15	152.74%
07/01/2048	11,503,581.10		-	6,634,563.15	-	6,634,563.15	173.39%
01/01/2049	11,530,517.60		-	5,261,499.57	-	5,261,499.57	219.15%
07/01/2049	11,798,759.52		-	269,370.83	-	269,370.83	4380.12%
01/01/2050	1,929,137.70		-	-	-	-	
TOTAL	**$ 1,585,720,471.61**	**$ 6,259,333.00**	**$ 108,781.53**	**$ 664,821,450.94**	**$ 212,329,469.92**	**$ 911,729,009.16**	

SECTION 8

FISCAL DETERMINATION COVERAGE: 1995 Indenture

FLORIDA HOUSING FINANCE CORPORATION
Homeowner Mortgage Revenue Bonds
2019 Phase One (Multiple Series to be Determined)

Fiscal Determination Coverage - OPEN INDENTURE Cashflows
1995 Single Family Indenture and $450,000,000 NEW MONEY
Semi-Annual Breakout
0% FHA

	Cash Flow Report - Column B	*Draw from CAP I Reserve*	*Draw from the Master Revenue Fund of the Master*			*Cashflow Report - Columns C&D*	
Period	**Gross Revenues (Scheduled Receipts)**	**Capitalized Interest Distribution**	**Master Revenue Fund Distribution**	**2019 PHASE ONE - Debt Service & Expenses**	**1995 Indenture - Debt Service & Expenses**	**ALL Cash Expenses (Debt Service/Expenses)**	**Receipts / Expenses Ratio**
HISTORICAL INDENTURE CASHFLOWS PRIOR TO ORIGINATION OF 2019 PHASE ONE							
01/01/2018	703,257.28		-		-	-	
07/01/2018	14,735,850.54	92,194.86	-		14,231,060.87	14,231,060.87	104.19%
01/01/2019	57,377,144.53	291,728.83	137,832.01		11,515,072.31	11,515,072.31	502.01%
PROJECTED INDENTURE CASHFLOWS FOLLOWING ORIGINATION OF 2019 PHASE ONE							
07/01/2019	17,070,095.70	3,468,270.39		-	16,223,276.53	16,223,276.53	126.60%
01/01/2020	23,500,620.17	8,786,278.58	-	10,153,128.75	16,493,326.14	26,646,454.89	121.17%
07/01/2020	38,142,043.31		-	9,045,296.84	19,784,403.15	28,829,699.99	132.30%
01/01/2021	38,126,241.44		-	13,016,929.01	19,770,313.36	32,787,242.37	116.28%
07/01/2021	38,152,486.49		-	13,029,322.49	19,782,828.98	32,812,151.47	116.28%
01/01/2022	38,184,308.39		-	13,035,441.55	19,764,876.19	32,800,317.74	116.41%
07/01/2022	38,227,321.92		-	13,043,671.64	19,742,991.38	32,786,663.01	116.59%
01/01/2023	38,259,831.90		-	13,055,645.67	19,735,993.76	32,791,639.43	116.68%
07/01/2023	38,294,073.12		-	13,065,237.75	19,733,259.79	32,798,497.55	116.76%
01/01/2024	38,329,444.08		-	13,073,428.21	19,710,280.24	32,783,708.45	116.92%
07/01/2024	38,367,152.76		-	13,084,253.54	19,732,566.39	32,816,819.93	116.91%
01/01/2025	38,424,061.32		-	13,093,585.21	19,803,796.29	32,897,381.50	116.80%
07/01/2025	38,465,751.47		-	13,105,347.12	19,793,110.83	32,898,457.95	116.92%
01/01/2026	38,501,279.25		-	13,115,518.11	19,802,990.86	32,918,508.98	116.96%
07/01/2026	38,540,928.97		-	13,128,022.00	19,785,939.76	32,913,961.76	117.10%
01/01/2027	38,582,250.76		-	13,138,780.00	19,778,346.20	32,917,126.20	117.21%
07/01/2027	38,537,807.12		-	13,151,012.04	19,776,112.36	32,927,124.40	117.04%
01/01/2028	38,455,688.77		-	13,161,329.24	19,772,192.69	32,933,521.93	116.77%
07/01/2028	38,499,452.69		-	13,177,096.41	19,775,674.42	32,952,770.84	116.83%
01/01/2029	38,543,845.28		-	13,185,744.54	19,767,028.76	32,952,773.30	116.97%
07/01/2029	38,087,364.55		-	13,202,669.54	19,752,617.81	32,955,287.35	115.57%
01/01/2030	37,595,745.03		-	13,212,718.54	19,697,326.29	32,910,044.83	114.24%
07/01/2030	37,111,055.95		-	13,224,954.82	19,692,171.27	32,917,126.08	112.74%
01/01/2031	36,734,992.06		-	13,240,309.10	19,675,784.79	32,916,093.89	111.60%
07/01/2031	36,568,793.44		-	13,252,672.04	19,667,568.65	32,920,240.68	111.08%
01/01/2032	36,335,396.64		-	13,268,040.46	19,638,169.77	32,906,210.23	110.42%
07/01/2032	36,350,282.09		-	13,285,324.87	19,623,106.55	32,908,431.42	110.46%
01/01/2033	36,394,165.06		-	13,300,435.70	19,601,836.33	32,902,272.03	110.61%
07/01/2033	36,439,919.37		-	13,312,349.54	19,584,107.49	32,896,457.03	110.77%
01/01/2034	36,476,863.87		-	13,332,062.92	19,564,522.48	32,896,585.40	110.88%
07/01/2034	36,523,006.01		-	13,346,049.77	19,533,268.47	32,879,318.24	111.08%
01/01/2035	36,537,183.20		-	13,362,392.71	18,999,644.98	32,362,037.69	112.90%
07/01/2035	36,472,017.42		-	13,380,004.24	18,869,846.99	32,249,851.23	113.09%
01/01/2036	35,833,854.71		-	13,399,774.30	18,637,900.70	32,037,674.99	111.85%
07/01/2036	34,979,282.32		-	13,415,592.73	18,594,020.40	32,009,613.13	109.28%
01/01/2037	34,222,270.49	71.00	-	13,433,455.53	18,232,582.22	31,666,037.75	108.07%
07/01/2037	39,866,104.57	70.00	-	13,452,274.86	17,651,497.65	31,103,772.51	128.17%
01/01/2038	33,666,554.75		-	13,472,929.03	17,535,586.97	31,008,516.00	108.57%
07/01/2038	33,468,969.69		-	13,489,330.00	17,533,357.97	31,022,687.96	107.89%
01/01/2039	33,492,680.18		-	13,512,462.12	17,575,524.65	31,087,986.78	107.74%
07/01/2039	33,000,764.44		-	13,532,185.92	17,598,053.07	31,130,239.00	106.01%
01/01/2040	32,420,886.30		-	13,553,253.04	17,630,162.19	31,183,415.24	103.97%
07/01/2040	32,403,824.88		-	13,574,552.53	17,656,782.34	31,231,334.86	103.75%
01/01/2041	32,459,971.95		-	13,591,973.31	17,486,971.05	31,078,944.36	104.44%
07/01/2041	32,502,934.49		-	13,614,517.97	17,514,760.97	31,129,278.94	104.41%
01/01/2042	32,569,833.02		-	13,637,968.95	17,511,236.28	31,149,205.23	104.56%
07/01/2042	32,620,227.37		-	13,661,229.85	17,515,320.37	31,176,550.21	104.63%
01/01/2043	32,564,095.24		-	13,685,189.12	17,527,237.76	31,212,426.88	104.33%
07/01/2043	32,632,308.39		-	13,713,742.62	17,542,250.93	31,255,993.55	104.40%

FLORIDA HOUSING FINANCE CORPORATION
Homeowner Mortgage Revenue Bonds
2019 Phase One (Multiple Series to be Determined)

Fiscal Determination Coverage - OPEN INDENTURE Cashflows
1995 Single Family Indenture and $450,000,000 NEW MONEY
Semi-Annual Breakout
0% FHA

	Cash Flow Report - Column B	*Draw from CAP I Reserve*	*Draw from the Master Revenue Fund of the Master*			*Cashflow Report - Columns C&D*	
Period	**Gross Revenues (Scheduled Receipts)**	**Capitalized Interest Distribution**	**Master Revenue Fund Distribution**	**2019 PHASE ONE - Debt Service & Expenses**	**1995 Indenture - Debt Service & Expenses**	**ALL Cash Expenses (Debt Service/Expenses)**	**Receipts / Expenses Ratio**
01/01/2044	32,701,041.95		-	13,737,679.80	17,534,706.41	31,272,386.21	104.57%
07/01/2044	32,769,614.94		-	13,764,343.76	17,544,151.79	31,308,495.55	104.67%
01/01/2045	32,841,040.27		-	13,786,136.18	17,310,133.38	31,096,269.57	105.61%
07/01/2045	32,916,998.56		-	13,817,051.15	16,030,765.44	29,847,816.59	110.28%
01/01/2046	31,976,478.51		-	13,842,776.33	15,630,599.71	29,473,376.03	108.49%
07/01/2046	31,730,379.41		713,314.20	13,872,305.51	15,550,541.29	29,422,846.80	110.27%
01/01/2047	31,568,946.99		296,985.51	13,901,426.07	14,726,644.31	28,628,070.38	111.31%
07/01/2047	31,382,388.10		-	13,929,031.51	13,735,364.48	27,664,395.99	113.44%
01/01/2048	30,973,164.93		-	13,960,488.91	9,056,791.58	23,017,280.50	134.56%
07/01/2048	28,361,256.00		-	13,989,069.58	8,030,299.92	22,019,369.50	128.80%
01/01/2049	24,524,503.37		-	14,016,664.65	3,840,892.47	17,857,557.12	137.33%
07/01/2049	23,174,991.41		-	14,047,166.36	2,085,187.16	16,132,353.52	143.66%
01/01/2050	20,750,427.72		-	14,076,886.78	8,740.12	14,085,626.90	147.32%
TOTAL	**$ 2,206,023,516.90**	**$ 12,638,613.67**	**$ 1,148,131.72**	**$ 812,060,232.82**	**$ 1,089,038,357.03**	**$ 1,884,845,729.09**	

FLORIDA HOUSING FINANCE CORPORATION
Homeowner Mortgage Revenue Bonds
2019 Phase One (Multiple Series to be Determined)

Fiscal Determination Coverage - OPEN INDENTURE Cashflows
1995 Single Family Indenture and $88,945,000 NON-AMT Refunding
Semi-Annual Breakout
0% FHA

	Cash Flow Report - Column B	*Draw from CAP I Reserve*	*Draw from the Master Revenue Fund of the Master Indenture*			*Cashflow Report - Columns C&D*	
Period	**Gross Revenues (Scheduled Receipts)**	**Capitalized Interest Distribution**	**Master Revenue Fund Distribution**	**2019 PHASE ONE - Debt Service & Expenses**	**1995 Indenture - Debt Service & Expenses**	**ALL Cash Expenses (Debt Service/Expenses)**	**Receipts / Expenses Ratio**
HISTORICAL INDENTURE CASHFLOWS PRIOR TO ORIGINATION OF 2019 PHASE ONE							
01/01/2018	703,257.28			-	-	-	
07/01/2018	14,735,850.54	92,194.86			14,231,060.87	14,231,060.87	104.19%
01/01/2019	57,377,144.53	291,728.83	137,832.00		11,515,072.31	11,515,072.31	502.01%
PROJECTED INDENTURE CASHFLOWS FOLLOWING ORIGINATION OF 2019 PHASE ONE							
07/01/2019	44,421,501.59	3,468,270.39			16,223,276.53	16,223,276.53	295.19%
01/01/2020	20,617,746.68	3,234,913.93		1,786,765.86	15,271,595.49	17,058,361.34	139.83%
07/01/2020	26,710,355.45			2,912,953.72	18,570,170.27	21,483,123.99	124.33%
01/01/2021	26,687,173.62			2,906,758.41	18,569,201.06	21,475,959.47	124.27%
07/01/2021	26,705,854.95			2,908,434.65	18,589,349.80	21,497,784.46	124.23%
01/01/2022	26,729,924.61			2,910,018.07	18,584,653.67	21,494,671.75	124.36%
07/01/2022	26,764,992.88			2,910,118.02	18,566,091.31	21,476,209.33	124.63%
01/01/2023	26,789,359.73			2,915,138.82	18,573,427.34	21,488,566.17	124.67%
07/01/2023	26,815,255.32	-		2,919,128.55	18,574,955.48	21,494,084.03	124.76%
01/01/2024	26,842,072.88	-		2,918,014.01	18,572,111.92	21,490,125.93	124.90%
07/01/2024	26,870,164.64	-		2,920,659.47	18,599,629.00	21,520,288.47	124.86%
01/01/2025	26,916,357.13	-		2,928,320.46	18,681,964.59	21,610,285.06	124.55%
07/01/2025	26,948,838.50	-		2,924,773.73	18,693,135.65	21,617,909.38	124.66%
01/01/2026	26,974,910.88	-		2,931,012.24	18,710,824.13	21,641,836.37	124.64%
07/01/2026	27,004,897.71	-		2,935,966.46	18,706,746.38	21,642,712.85	124.78%
01/01/2027	27,036,292.18	-		2,935,596.21	18,712,726.59	21,648,322.80	124.89%
07/01/2027	26,981,268.22	-		2,938,631.29	18,729,046.18	21,667,677.47	124.52%
01/01/2028	26,887,870.32	-		2,941,406.46	18,739,698.26	21,681,104.71	124.02%
07/01/2028	26,920,950.76	-		2,941,970.23	18,752,761.85	21,694,732.08	124.09%
01/01/2029	26,954,382.80	-		2,947,144.21	18,759,699.97	21,706,844.18	124.17%
07/01/2029	26,486,687.06	-		2,949,046.86	18,761,009.04	21,710,055.90	122.00%
01/01/2030	25,983,590.29	-		2,950,705.36	18,722,574.39	21,673,279.75	119.89%
07/01/2030	25,487,146.28	-		2,951,210.63	18,730,213.67	21,681,424.30	117.55%
01/01/2031	25,098,997.22	-		2,956,382.94	18,727,638.32	21,684,021.26	115.75%
07/01/2031	24,920,443.03	-		2,955,395.02	18,743,500.77	21,698,895.79	114.85%
01/01/2032	24,674,373.13	-		2,959,155.21	18,729,328.62	21,688,483.84	113.77%
07/01/2032	24,676,288.47	-		2,956,588.09	18,729,760.95	21,686,349.04	113.79%
01/01/2033	24,706,857.06	-		2,963,761.93	18,735,130.81	21,698,892.74	113.86%
07/01/2033	24,738,972.41	-		2,959,593.75	18,729,317.28	21,688,911.04	114.06%
01/01/2034	24,761,943.30	-		2,965,169.28	18,732,916.09	21,698,085.37	114.12%
07/01/2034	24,793,758.61	-		2,965,589.86	18,720,120.17	21,685,710.03	114.33%
01/01/2035	24,793,244.36	-		2,965,499.27	18,716,227.33	21,681,726.60	114.35%
07/01/2035	24,713,041.19	-		2,963,995.66	18,716,918.37	21,680,914.03	113.99%
01/01/2036	24,059,500.58	-		2,956,779.66	18,629,115.31	21,585,894.97	111.46%
07/01/2036	23,189,136.34	-		2,953,144.33	18,586,283.34	21,539,427.67	107.66%
01/01/2037	22,415,942.31	-		2,943,793.98	18,225,924.46	21,169,718.44	105.89%
07/01/2037	28,043,193.91	71.00		2,937,822.88	17,645,951.09	20,583,773.97	136.24%
01/01/2038	21,826,651.51	70.00		2,921,225.88	17,531,184.44	20,452,410.32	106.72%
07/01/2038	21,611,654.02	-		2,902,894.67	17,530,133.29	20,433,027.96	105.77%
01/01/2039	21,638,637.02	-		2,884,149.05	17,573,512.63	20,457,661.68	105.77%
07/01/2039	21,682,626.16	-		2,846,783.76	17,597,268.44	20,444,052.20	106.06%
01/01/2040	20,846,428.02	-		1,993,668.51	17,630,084.44	19,623,752.95	106.23%
07/01/2040	20,712,814.15	-		1,786,182.87	17,656,782.34	19,442,965.21	106.53%
01/01/2041	20,545,193.82	-		1,558,285.95	17,486,971.05	19,045,257.00	107.88%
07/01/2041	20,333,863.01	-		1,281,934.63	17,514,760.97	18,796,695.60	108.18%
01/01/2042	20,363,743.30	-		1,166,620.41	17,511,236.28	18,677,856.68	109.03%
07/01/2042	20,393,254.77	-		965,004.52	17,515,320.37	18,480,324.89	110.35%
01/01/2043	20,147,579.68	-		388,366.20	17,527,237.76	17,915,603.96	112.46%
07/01/2043	18,737,804.63	-		-	17,542,250.93	17,542,250.93	106.82%
01/01/2044	18,779,981.24	-		-	17,534,706.41	17,534,706.41	107.10%
07/01/2044	18,821,373.80	-		-	17,544,151.79	17,544,151.79	107.28%
01/01/2045	18,864,980.70	-		-	17,310,133.38	17,310,133.38	108.98%
07/01/2045	18,912,467.54	-		-	16,030,765.44	16,030,765.44	117.98%
01/01/2046	17,942,807.52	-		-	15,630,599.71	15,630,599.71	114.79%
07/01/2046	17,666,884.25	-	713,314.00	-	15,550,541.29	15,550,541.29	118.20%
01/01/2047	17,474,927.68	-	296,986.00	-	14,726,644.31	14,726,644.31	120.68%
07/01/2047	17,257,127.95	-		-	13,735,364.48	13,735,364.48	125.64%
01/01/2048	16,815,930.56	-		-	9,056,791.58	9,056,791.58	185.67%
07/01/2048	14,171,296.76	-		-	8,030,299.92	8,030,299.92	176.47%
01/01/2049	10,301,051.06	-		-	3,840,892.47	3,840,892.47	268.19%
07/01/2049	8,917,262.59	-		-	2,085,187.16	2,085,187.16	427.65%
TOTAL	**$ 1,489,705,880.50**	**$ 7,087,249.01**	**$ 1,148,132.00**	**$ 125,381,562.04**	**$ 1,071,201,949.55**	**$ 1,196,583,511.59**	

FLORIDA HOUSING FINANCE CORPORATION
Homeowner Mortgage Revenue Bonds
2019 Phase One (Multiple Series to be Determined)

Fiscal Determination Coverage - OPEN INDENTURE Cashflows
1995 Single Family Indenture and $450 MILLION NEW MONEY and NON-AMT Refunding
Semi-Annual Breakout
0% FHA

	Cash Flow Report - Column B	*Draw from CAP I Reserve*	*Draw from the Master Revenue Fund of the Master Indenture*			*Cashflow Report - Columns C&D*	
Period	**Gross Revenues (Scheduled Receipts)**	**Capitalized Interest Distribution**	**Master Revenue Fund Distribution**	**2019 PHASE ONE - Debt Service & Expenses**	**1995 Indenture - Debt Service & Expenses**	**ALL Cash Expenses (Debt Service/Expenses)**	**Receipts / Expenses Ratio**
HISTORICAL INDENTURE CASHFLOWS PRIOR TO ORIGINATION OF 2019 PHASE ONE							
01/01/2018	703,257.28		-	-	-	-	
07/01/2018	14,735,850.54	92,194.86	-		14,231,060.87	14,231,060.87	104.19%
01/01/2019	57,377,144.53	291,728.83	137,832.00		11,515,072.31	11,515,072.31	502.01%
PROJECTED INDENTURE CASHFLOWS FOLLOWING ORIGINATION OF 2019 PHASE ONE							
07/01/2019	44,421,501.59	3,468,270.39	-		16,223,276.53	16,223,276.53	295.19%
01/01/2020	20,617,746.68	9,494,247.00	-	10,149,232.22	15,271,595.49	25,420,827.70	118.45%
07/01/2020	37,383,079.55		-	9,044,961.22	18,570,170.27	27,615,131.49	135.37%
01/01/2021	37,367,161.12		-	12,917,708.82	18,569,201.06	31,486,909.88	118.68%
07/01/2021	37,393,277.75		-	12,881,684.84	18,589,349.80	31,471,034.65	118.82%
01/01/2022	37,424,959.01		-	12,867,597.05	18,584,653.67	31,452,250.72	118.99%
07/01/2022	37,467,818.88		-	12,855,088.14	18,566,091.31	31,421,179.45	119.24%
01/01/2023	37,500,161.93		-	12,840,892.00	18,573,427.34	31,414,319.34	119.37%
07/01/2023	37,534,222.52		-	12,824,094.97	18,574,955.48	31,399,050.45	119.54%
01/01/2024	37,569,398.58		-	12,805,464.57	18,572,111.92	31,377,576.49	119.73%
07/01/2024	37,606,046.84		-	12,783,930.78	18,599,629.00	31,383,559.78	119.83%
01/01/2025	37,660,998.03		-	12,770,628.51	18,681,964.59	31,452,593.10	119.74%
07/01/2025	37,702,446.00		-	12,754,166.35	18,693,135.65	31,447,302.00	119.89%
01/01/2026	37,737,697.08		-	12,725,892.84	18,710,824.13	31,436,716.97	120.04%
07/01/2026	37,777,079.91		-	12,709,361.45	18,706,746.38	31,416,107.83	120.25%
01/01/2027	37,818,092.78		-	12,680,701.82	18,712,726.59	31,393,428.41	120.46%
07/01/2027	37,772,915.22		-	12,662,933.54	18,729,046.18	31,391,979.72	120.33%
01/01/2028	37,689,596.92		-	12,627,969.87	18,739,698.26	31,367,668.13	120.15%
07/01/2028	37,732,995.56		-	12,607,776.51	18,752,761.85	31,360,538.36	120.32%
01/01/2029	37,776,990.10		-	12,582,430.32	18,759,699.97	31,342,130.29	120.53%
07/01/2029	37,320,107.06		-	12,549,785.60	18,761,009.04	31,310,794.64	119.19%
01/01/2030	36,828,078.99		-	12,514,989.06	18,722,574.39	31,237,563.45	117.90%
07/01/2030	36,342,965.78		-	12,476,706.10	18,730,213.67	31,206,919.76	116.46%
01/01/2031	35,966,415.72		-	12,435,949.50	18,727,638.32	31,163,587.82	115.41%
07/01/2031	35,799,735.33		-	12,401,702.01	18,743,500.77	31,145,202.78	114.94%
01/01/2032	35,565,820.43		-	12,364,848.76	18,729,328.62	31,094,177.38	114.38%
07/01/2032	35,580,178.57		-	12,314,282.30	18,729,760.95	31,044,043.25	114.61%
01/01/2033	35,623,484.66		-	12,271,010.09	18,735,130.81	31,006,140.89	114.89%
07/01/2033	35,668,639.11		-	12,213,779.50	18,729,317.28	30,943,096.79	115.27%
01/01/2034	35,704,957.90		-	12,163,686.57	18,732,916.09	30,896,602.66	115.56%
07/01/2034	35,750,437.11		-	12,097,794.73	18,720,120.17	30,817,914.90	116.01%
01/01/2035	35,763,910.26		-	12,038,604.81	18,716,227.33	30,754,832.14	116.29%
07/01/2035	35,698,025.89		-	11,964,998.80	18,716,918.37	30,681,917.17	116.35%
01/01/2036	35,059,143.08		-	11,892,971.07	18,629,115.31	30,522,086.39	114.86%
07/01/2036	34,203,783.84		-	11,806,302.16	18,586,283.34	30,392,585.51	112.54%
01/01/2037	33,445,949.91	71.00	-	11,716,074.98	18,225,924.46	29,941,999.45	111.70%
07/01/2037	39,088,925.41	70.00	-	11,615,981.10	17,645,951.09	29,261,932.19	133.58%
01/01/2038	32,888,479.21		-	11,506,991.95	17,531,184.44	29,038,176.39	113.26%
07/01/2038	32,689,959.32		-	11,387,988.86	17,530,133.29	28,918,122.15	113.04%
01/01/2039	32,733,810.12		-	11,269,749.30	17,573,512.63	28,843,261.93	113.49%
07/01/2039	32,795,066.26		-	11,123,258.10	17,597,268.44	28,720,526.54	114.19%
01/01/2040	31,976,544.12		-	10,972,359.97	17,630,084.44	28,602,444.41	111.80%
07/01/2040	31,861,024.75		-	10,830,873.15	17,656,782.34	28,487,655.49	111.84%
01/01/2041	31,711,927.62		-	10,702,341.58	17,486,971.05	28,189,312.63	112.50%
07/01/2041	31,519,558.31		-	10,571,400.61	17,514,760.97	28,086,161.58	112.22%
01/01/2042	31,568,849.30		-	10,437,355.13	17,511,236.28	27,948,591.41	112.95%
07/01/2042	31,618,231.07		-	10,288,519.67	17,515,320.37	27,803,840.03	113.72%
01/01/2043	31,392,896.98		-	10,115,340.38	17,527,237.76	27,642,578.14	113.57%
07/01/2043	30,450,757.00		-	9,923,883.70	17,542,250.93	27,466,134.63	110.87%
01/01/2044	30,076,711.25		-	9,786,658.31	17,534,706.41	27,321,364.72	110.08%
07/01/2044	30,130,649.70		-	9,665,955.81	17,544,151.79	27,210,107.60	110.73%
01/01/2045	30,196,593.80		-	9,531,457.87	17,310,133.38	26,841,591.25	112.50%
07/01/2045	30,266,946.64		-	9,361,837.90	16,030,765.44	25,392,603.34	119.20%
01/01/2046	29,320,694.02		-	9,153,097.20	15,630,599.71	24,783,696.90	118.31%
07/01/2046	29,068,732.75		713,314.00	8,898,284.43	15,550,541.29	24,448,825.72	121.81%
01/01/2047	28,901,305.48		296,986.00	8,563,723.78	14,726,644.31	23,290,368.09	125.37%
07/01/2047	28,708,615.85		-	8,118,685.55	13,735,364.48	21,854,050.03	131.37%
01/01/2048	28,293,123.26		-	7,514,271.15	9,056,791.58	16,571,062.74	170.74%
07/01/2048	25,674,802.86		-	6,634,563.15	8,030,299.92	14,664,863.07	175.08%
01/01/2049	21,831,493.66		-	5,261,499.57	3,840,892.47	9,102,392.04	239.84%
07/01/2049	20,715,947.12	-	-	269,370.83	2,085,187.16	2,354,557.99	879.82%
01/01/2050	8,946,916.19	-	-	-	8,740.12	8,740.12	102366.03%
TOTAL	**$ 2,149,520,634.09**	**$ 13,346,582.09**	**$ 1,148,132.00**	**$ 664,821,450.94**	**$ 1,071,210,689.67**	**$ 1,736,032,140.61**	

Memo

TO: Ashbel C. Williams, Executive Director & CIO

FROM: Anne Bert, Chief Operating Officer, FHCF

DATE: March 20, 2019

SUBJECT: Cabinet Meeting for April 2, 2019

Request approval of the 2019-2020 Florida Hurricane Catastrophe Fund Reimbursement Premium Formula.

Request authority to file a Notice of Proposed Rule for the Florida Hurricane Catastrophe Fund for Rule 19-8.028, F.A.C., Reimbursement Premium Formula, and authority to file for adoption if no member of the public timely requests a rule hearing or if a hearing is requested but no Notice of Change is needed.

ITEM A. REIMBURSEMENT PREMIUM FORMULA:

BACKGROUND: The Florida Hurricane Catastrophe Fund (FHCF) provides reimbursement to insurers writing residential property insurance in Florida for a portion of their hurricane losses. The FHCF is statutorily required to charge an "actuarially indicated premium" for the coverage provided to the participants pursuant to a premium formula that is developed by an independent consultant and meets specified criteria. <u>The FHCF statute requires that the premium formula be approved by unanimous vote of the Trustees</u>.

In accordance with these statutory requirements, the FHCF has contracted with Paragon Strategic Solutions Inc. to provide the actuarial services necessary to develop the Premium Formula.

EXTERNAL INTEREST: On March 19, 2019, the 2019-2020 Premium Formula was presented to the FHCF Advisory Council. Members of the public were present and also participated by telephone. The Advisory Council voted to recommend approval of the Premium Formula.

ACTIONS REQUESTED: Request approval of the 2019-2020 Florida Hurricane Catastrophe Fund Reimbursement Premium Formula as updated.

ITEM B. REIMBURSEMENT PREMIUM FORMULA (RULE 19-8.028, F.A.C.):

SUMMARY OF RULE CHANGES: The proposed rule adopts the 2019-2020 Premium Formula. In addition, the revised rule deletes language adopted in 2018 providing a “special circumstances” exemption from participation in the FHCF for certain policies solely covering jewelry. This exemption has been superseded by a broader exemption for stand-alone personal property coverage that is included in the 2019-2020 Reimbursement Contract adopted under Rule 19-8.010.

EXTERNAL INTEREST: A rule development workshop was held on March 19, 2019. Representatives of the FHCF attended and presented the current draft of the proposed rule, and members of the public were present and also participated by telephone. The Notice of Development of Rulemaking was published in the *Florida Administrative Register* on March 5, 2019, Vol. 45, No. 44. On March 19, 2019, the proposed changes to Rule 19-8.028, F.A.C., Reimbursement Premium Formula, were presented to the FHCF Advisory Council. Members of the public were present and also participated by telephone. The Advisory Council voted to recommend approval of the Premium Formula, the filing of a Notice of Proposed Rule, and the filing of the Rule for adoption if no member of the public timely requests a rule hearing or if a hearing is requested but no Notice of Change is needed.

ACTION REQUESTED: It is requested that the proposed amendments to this rule along with the incorporated form be presented to the Cabinet Aides on March 27, 2019, and to the State Board of Administration Trustees on April 2, 2019, with a request to approve the filing of this rule for Notice of Proposed Rule and for adoption if no member of the public timely requests a rule hearing or if a hearing is requested but no Notice of Change is needed. A notice of the meeting of the Board will be published in the *Florida Administrative Register* on March 21, 2019, Vol. 45, No. 56.

ATTACHMENTS TO BE INCLUDED WITH SBA AGENDA ITEM A:

- Memorandum dated March 20, 2019, from Anne Bert to Ash Williams regarding the 2019-2020 FHCF Reimbursement Premium Formula

- “Florida Hurricane Catastrophe Fund: 2019 Ratemaking Formula Report Presented to the State Board of Administration of Florida, March 19, 2019”

ATTACHMENTS TO BE INCLUDED WITH SBA AGENDA ITEM B:

- 2019-2020 Contract Year Summary of Changes
- Notice of Proposed Rule
- Notice of Meeting of Board filed in the *Florida Administrative Register*
- Rule 19-8.028, F.A.C., Reimbursement Premium Formula

The rule shows the proposed amendments with new language <u>underscored</u> and deleted language ~~stricken through~~.

Florida Hurricane Catastrophe Fund

Memo

To: Ashbel C. Williams, Executive Director & Chief Investment Officer

From: Anne Bert, Chief Operating Officer -- FHCF

Date: March 20, 2019

Re: SBA Cabinet Agenda April 2, 2019 - The FHCF's 2019-2020 Reimbursement Premium Formula

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There are two Florida Hurricane Catastrophe Fund (FHCF) agenda items for the April 2, 2019, SBA Cabinet meeting related to the FHCF premium formula. These items are as follows:

- Vote to approve the Contract Year 2019-2020 FHCF Reimbursement Premium Formula (unanimous vote of the Trustees required).

- Vote to file a Notice of Proposed Rule (Rule 19-8.028, Florida Administrative Code, 2019 Reimbursement Premium Formula) and to file for adoption if no hearing is timely requested or if a hearing is requested but no Notice of Change is needed.

Statutory Requirements

Under subsection (5) of section 215.555, Florida Statutes:

- The premium formula must be developed by an **independent consultant** selected by the SBA;

- The premium formula must be used to determine the **actuarially indicated** premiums to be paid to the FHCF by participating insurers; and

- The premium formula must be approved by a **unanimous vote** of the Trustees.

Contract Year 2019-2020 Recommended Reimbursement Premium Formula

	2019 Contract Year Modeled	2018 Contract Year Actual
FHCF Coverage		
Industry Retention	$7.422 billion	$7.178 billion
Limit	$17.0 billion	$17.0 billion
Average Coverage	81.629%	73.483%
FHCF Premium Revenue	$1.176 billion	$1.103 billion
Rate Change	-7.43%	-5.20%
Coverage Selection Change	11.08%	-1.40%
Exposure Change	3.72%	4.45%
Premium Change	6.66%	-2.36%
Overall Average Rate Change	2.83%	-6.52%
Exposure Base	$2.360 trillion	$2.275 trillion

Insurers annually select an FHCF coverage percentage of 90%, 75%, or 45%. For the 2019-2020 contract year there was a significant shift to a higher coverage option. Ten participating insurers increased their coverage percentage from 45% to 90%, two participating insurers increased their coverage percentage from 45% to 75%, and two participating insurers reduced their coverage percentage from 90% to 75%. These changes have increased the average coverage percentage for the 2019-2020 FHCF contract year to 81.629% from the 2018-2019 average of 73.483%. Most of this premium and rate increase will be borne by the companies that increased their coverage levels. For the 154 insurers that did not change their coverage percentages from the prior year, the premium formula will calculate rate reductions.

The overall impact to FHCF *rates* is an average **increase of 2.83%** after adjusting for insurer coverage selection changes. Without adjusting for coverage selection changes, the premium formula reflects a rate decrease of 7.43%.The primary factors driving the average *rate* change are:

- Lower loss costs as reflected in the hurricane loss models meeting the most recent (2015) applicable standards of the Florida Commission on Hurricane Loss Projection Methodology.

- The increase in the average coverage selection to 81.629% for the 2019-2020 Contract Year, which is up from 73.483% in 2018-2019.

- A decrease in expenses for the Series 2013A and 2016A pre-event notes. Contract Year 2019-2020 expenses are $26.1 million, down from Contract Year 2018-2019 expenses of $27.7 million. The change is primarily the result of the July 1, 2019 maturation of $550 million of the Series 2016A notes and changes in investment income.

The *premium revenues* are projected at **$1.176 billion,** which is $73 million higher than the actual Contract Year 2018-2019 premium of $1.103 billion. The primary factors affecting the overall increase in *premium revenue* are:

- Average rate increase of 2.83%;

- Growth in exposure of 3.72%; and
- The 11.08% increase in the average coverage selection to 81.629% for the 2019-2020 Contract Year, from 73.483% in 2018-2019.

At this time, no decision has been made regarding the placement of private risk transfer for the 2019-2020 contract year. If none is placed, or there is a change in net reinsurance costs, a table to adjust premium, ceded losses, payout and retention multiples, and the indicated rate change is included in Exhibit XVII.

Premiums paid by insurers to the FHCF represent approximately 10% of the total premium paid for residential property insurance coverage in Florida and the average residential premium is approximately $2,000. Therefore, the increase in FHCF rates could potentially translate to an average premium increase of $17.85 or 0.85% for personal residential homeowners policies. In general, the impact will vary by policyholder, and a policyholder may experience a decrease if their insurance carrier did not change their FHCF coverage selection.

The industry *retention* has increased to $7.422 billion to reflect the percentage growth in exposure, as statutorily required. Individual insurers can trigger FHCF coverage below the industry retention.

The premium formula includes average rate increases and decreases depending on the types of business (i.e., personal lines residential, tenant, condominium unit owner, mobile home, and commercial-habitational). The average rate changes by type of business are as follows:

	A	B	C	D	E
Exh. 2 Sources	Line 48	Line 51	Line 55	Line 1.1	Line 58
Calculations			((1+A)/(1+B))-1		((1+C)/(1+D))-1
Type of Business	**Premium Change**	**Exposure Change**	**Overall Avg. Rate Change**	**Company Selected Coverage Change**	**Avg. Rate Change Unadjusted For Coverage Change**
Residential	7.17%	4.00%	3.05%	9.02%	-5.47%
Tenants	-0.69%	4.00%	-4.50%	0.26%	-4.75%
Condos	4.27%	5.00%	-0.69%	3.90%	-4.42%
Mobile Home	-3.30%	0.00%	-3.30%	0.76%	-4.03%
Commercial	9.16%	0.00%	9.16%	44.16%	-24.28%
Total	**6.66%**	**3.72%**	**2.83%**	**11.08%**	**-7.43%**

The Premium Formula Development Process

The premium formula is detailed in a document provided by Paragon Strategic Solutions Inc. whose actuary, Andrew Rapoport, FCAS, MAAA, serves as the FHCF's independent consultant. The premium formula development process also includes input from other members of Paragon's actuarial team and the actuary member on the FHCF Advisory Council, Floyd Yager. FHCF staff members also participate in order to provide information and monitor the process.

The basic process for developing the premium formula has been in place since 1995. The process involves these steps:

- By September 1 of each year, insurers report their exposure data as of June 30 to the FHCF.

- The exposure data is trended (i.e., adjusted for such factors as exposure growth and changes in construction costs) and given to hurricane modelers to estimate losses.
    - By law, the FHCF must use hurricane models found acceptable by the Florida Commission on Hurricane Loss Projection Methodology "to the extent feasible." In practice, all five models found acceptable by the Commission are used.
    - Five models are used to determine the "average annual hurricane loss." The results from the five models are weighted such that the models with the highest and lowest results count for 5% each, the next-highest and next-lowest count for 20% each, and the model with results in the middle counts for 50%. By limiting the impact of the outliers, this weighting scheme tends to create stability over time. Also, three models are equally weighted and used for allocating loss results by various rating factors.
- Next, the actuary calculates the projected aggregate deductible (known as "retention") for participating insurers. The Contract Year 2019-20120 premium formula uses a projected industry retention of $7.422 billion. The projected retention and coverage percentages are then applied to determine loss costs.
- Adjustments are then made to reflect other costs, including FHCF operating costs, pre-event note expenses and the loss adjustment expense (the statute provides for a loss adjustment expense allowance of 5% of reimbursed losses).
- Rates are then allocated by type of business, territory, construction type, and deductible, and then further adjusted to reflect mitigation classifications (year built, structure opening protection, and roof shape).
- Finally, the statutory cash buildup factor of 25% is applied and provision is made for potential risk-transfer arrangements.

FHCF Coverage Summary

Below is a chart illustrating the liquid resources identified for claims payment and potential bonding requirements for the 2019-2020 contract year, **assuming $3.75 billion in ultimate total losses from Hurricane Irma and $1.45 billion in ultimate total losses for Hurricane Michael.** The 12/31/2019 cash balance of the FHCF is projected to be **$12.36 billion**.

Additional liquidity to enable the FHCF to timely pay losses after a very large event is provided by **$1.65 billion** in pre-event bond proceeds. The final maturity date for these bonds is July 1, 2021.

The **maximum** amount of post-event bonding that would be required to enable the FHCF to meet all contractual obligations is **$4.7 billion**.

Not Drawn to Scale.

2019/2020 Contract Year

Preliminary Estimates

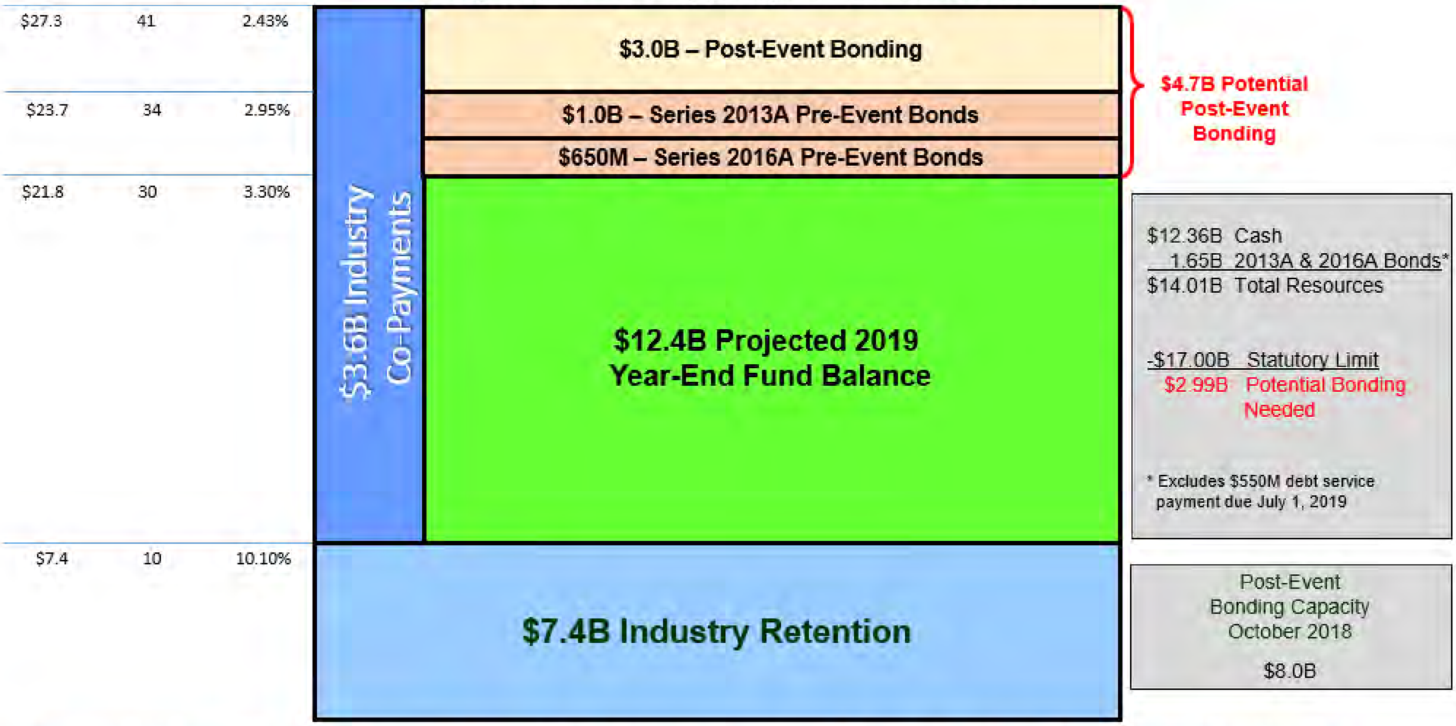
Not Official (For Illustrative Purposes Only)

as of March 8, 2019

$17B FHCF Capacity

(Loss Adjustment Expense 5% allowance is included in the capacity)

Assumption: *Ultimate Losses of $1.45B for Hurricane Michael in 2018*



- Represents industry losses. FHCF probabilities are lower at the top loss levels and higher at the lower loss levels. All insurers would need to reach their maximum coverage limit in order to exhaust the last billion of FHCF Coverage. Insurers can trigger coverage below the industry retention.
- Individual company retentions are their share of the industry retention.

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report

Presented to the
State Board of Administration of Florida
March 19, 2019


Hurricane Michael
Source: NASA

Paragon Strategic Solutions Inc.

PARAGON
an Aon company

March 14, 2019

Enclosed is the Florida Hurricane Catastrophe Fund (FHCF) 2019 Ratemaking Formula Report which will be presented to the FHCF Advisory Council on March 19, 2019. The rates developed in this report assume an FHCF per event insurance industry aggregate retention of $7.422 billion (which applies to a participating insurer's two largest events and drops to 1/3 for all other events) and an FHCF limit level of $17.000 billion.

Also included in this report are windstorm mitigation construction rating factor relativities, as well as formulas to adjust the presented rates for any additional pre-event financing or changes to the reinsurance structure should they become applicable subsequent to the presentation of this report.

Distribution and Use

The attached report was prepared for the use of the State Board of Administration of Florida for the sole purpose of developing a formula for determining the actuarially indicated premium to be paid by individual companies for the FHCF for the 2019 contract year as specified by Section 215.555, Florida Statutes. The data, assumptions, methodology and results in this report may not be appropriate for other than the intended use. We recommend that any party using this report have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

Discussion of report limitations, including scope, data sources and variability of projections, can be found in Exhibit 1, Part III of the report.

A copy of the report will be available on the web site of the FHCF.

Sincerely,

Andrew J. Rapoport

Andrew J. Rapoport, FCAS, MAAA
Managing Director and Actuary
Paragon Strategic Solutions Inc.

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I

Florida Hurricane Catastrophe Fund

2019 Ratemaking Formula Report
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Executive Summary

1. **Rates:** The Florida Hurricane Catastrophe Fund (FHCF) overall average rate change for the 2019-2020 (2019) Contract Year, after adjusting for company coverage selection changes, is projected to be a 2.83% increase. Paragon recommends an average 7.43% decrease in FHCF rates, based on coverage under Section 215.555, Florida Statutes.
2. **Coverage, Layer, and Retention Changes:**
   a. The average coverage for 2019, based on 2018 market shares and 2019 coverage selections, is projected to be 81.629%, compared to 73.483% for 2018 (an 11% increase).

   b. The increase in the average FHCF coverage selection generates the 2019 FHCF layer of $20.826 billion, compared to the 2018 layer of $23.135 billion.

   c. The projected loss retention for 2019 is $7.422 billion compared to the 2018 retention of $7.178 Billion.
3. **Premium Change**: FHCF premium will increase by $73 million (driven primarily by company coverage selection changes) from $1.103 billion to $1.176 billion based on the overall average rate change.

	2019 Contract Year Modeled	2018 Contract Year Actual	2018 Contract Year Modeled Updated 06/13/2018
FHCF Coverage			
Industry Retention	$7.422 billion	$7.178 billion	$7.255 billion
Limit	$17 billion	$17 billion	$17 billion
Average Coverage	81.629%	73.483%	73.121%
FHCF Layer	$20.826 billion	$23.135 billion	$23.349 billion
FHCF Premium	$1.176 billion	$1.103 billion	$1.109 billion
Rate Change	-7.43%	-5.20%	-2.56%
Coverage Selection Change	11.08%	-1.40%	-1.88%
Exposure Change	3.72%	4.45%	2.83%
Premium Change	6.66%	-2.36%	-1.70%
Overall Average Rate Change	2.83%	-6.52%	-4.40%
Projected Payout Multiple	14.4518	15.4136	15.3247
90% Retention Multiple	5.7226	5.3135	5.3135
Exposure Base	$2.360 trillion	$2.275 trillion	$2.238 trillion
Overall FHCF Rate/$1,000 Exp.	0.4985	0.4848	0.4956

Part I: The Ratemaking Process

Overview

The rates in this report are developed for the limits and retentions, as specified by Section 215.555, Florida Statutes, for the Florida Hurricane Catastrophe Fund (FHCF) 2019 Contract Year. Paragon recommends an average 7.43% decrease in FHCF rates for the 2019 Contract Year based on a $17.000 billion coverage limit and a $7.422 billion per event retention, which drops to $2.474 billion for the third largest and subsequent events (1/3 of $7.422 billion). Companies that did not change their coverage selections will generally have rate decreases. After adjusting for changes in company coverage selections, the overall average FHCF rate change is projected to be an increase of 2.83%.

This rating formula will produce an estimated $1.176 billion in total FHCF premium compared to $1.103 billion in FHCF premium for the 2018 Contract Year. The increase in overall premium is projected to be 6.66% and is based on a rate decrease of 7.43%, an increase in coverage level of 11.1% and projected growth in exposure of 3.72%. After adjusting for the shift in company coverage selections towards 90%, the overall average rate change is projected to be an increase of 2.83%. There is no change in the statutory mandated cash build up factor of 25% from 2018 to 2019. This premium estimate assumes the same reinsurance structure of $1 billion excess of $10.5 billion as 2018 with no change in ceded premium or losses. Exhibit XVII provides the methodology for adjusting 2019 rates for potential changes in reinsurance structure and contracted reinsurance premium should the actual FHCF reinsurance structure differ from the assumed structure used in this rating formula.

For 2019, FHCF coverage is a limit of $17.000 billion excess of $7.422 billion. There are two major factors affecting the FHCF layer of coverage for the 2019 Contract Year:

1. Pursuant to Section 215.555, Florida Statutes, the industry retention is equal to $4.5 billion adjusted for the increase in reported exposure from 2004 through 2017. As exposures have grown 64.9% over this period, the modeled retention for 2019 is $7.422 billion.
2. Pursuant to Section 215.555, Florida Statutes, the FHCF limit is equal to $17.000 billion until there is sufficient estimated claims-paying capacity to fund $17.000 billion of loss in subsequent Contract Years. As the State Board of Administration of Florida (SBA) has not made this determination, the FHCF limit for 2019 is $17.000 billion.

The above changes will vary by deductible, construction, and territory. In 2017, we modified the methodology used in the previous ten years to develop territory relativities. To improve stability in ZIP Code rating groups, the new methodology will shift a ZIP Code to a different rating territory only if the indication is for a shift of two or more rating territories or if the indicated shift of one rating territory is consistent for three years. 2019 is the third year of this new methodology.

Type of Business Allocation

The following table shows the components of the indicated premium changes by type of business.

	A	B	C	D	E
Exh. 2 Sources	Line 48	Line 51	Line 55	Line 1.1	Line 58
Calculations			((1+A)/(1+B))-1		((1+C)/(1+D))-1
Type of Business	**Premium Change**	**Exposure Change**	**Overall Avg. Rate Change**	**Company Selected Coverage Change**	**Avg. Rate Change Unadjusted For Coverage Change**
Residential	7.17%	4.00%	3.05%	9.02%	-5.47%
Tenants	-0.69%	4.00%	-4.50%	0.26%	-4.75%
Condos	4.27%	5.00%	-0.69%	3.90%	-4.42%
Mobile Home	-3.30%	0.00%	-3.30%	0.76%	-4.03%
Commercial	9.16%	0.00%	9.16%	44.16%	-24.28%
Total	**6.66%**	**3.72%**	**2.83%**	**11.08%**	**-7.43%**

Territory Changes

The 2019 recommended territories, like the 2018 FHCF territories, are based on analysis of losses in the FHCF coverage as modeled by AIR Worldwide Corporation (AIR), Corelogic-EQECAT (Corelogic), and Risk Management Solutions (RMS). The relationship between lowest rate and highest rate is approximately 1:37, similar to 2018. As was done last year, this ratio was adjusted to accurately reflect the indicated loss costs for territory 1. Indicated territory changes were tempered so that ZIP Codes would only shift one territory up or down if the indication was for a shift of two or more territories or if there has been an indicated one territory shift consistently for three years. With 2019 being the third year of the new methodology, 583 zip codes shifted down one territory, most due to 3-year indications of one territory shift.

Premium Summary

We project premium, exposure, and retention changes as follows:

Exposure Growth (2018 to 2019)	3.72%
Retention	$7.422 billion
Premium – 2018 (as of 10/29/18)	$1.103 billion
Premium – 2019 (Projected)	$1.176 billion

Use of Five Models Found Acceptable by the Florida Commission on Hurricane Loss Projection Methodology

For 2019, a weighting of five models found acceptable by the Florida Commission on Hurricane Loss Projection Methodology as of December 1, 2018 was used for aggregate results. The five models were AIR, Corelogic, RMS, Applied Research Associates (ARA), and the Florida Public Model (FPM). Model results were compared in detail to construct an industry distribution of losses by size. For the industry aggregate basis, consistent with the weighting methodology used in all years when the FHCF had five models, 5%, 20%, 50%, 20%, and 5% weights were applied to the models ranked from lowest to highest based on annual expected aggregate FHCF losses.

In 2019, all 5 models meet the 2015 standards. Four out of five models produced lower loss cost indications than in 2018 ratemaking, and therefore the 5-model weighted indication was lower.

For analysis of detailed allocation to type of business, territory, construction, and deductible, and for special coverage questions, three models (AIR, Corelogic, and RMS) were used for all types of business. Model results were compared in detail and 1/3 weight was given to each model for all types of business.

Summary of Changes to the 2019 Ratemaking Formula

The changes that occurred in the 2019 ratemaking formula include:

1. The 2018 average coverage selection was 73.483%. The projected 2019 average coverage is 81.629% based on March 1, 2019 selections and adjustments for rating mitigation factor changes. This change reduces the size of the 100% FHCF layer. While FHCF rates by coverage decrease by 7.43% compared to 2018 rates, the overall average FHCF rate increases by 2.83% due to the shift in coverage selections towards 90%.
2. The projected exposure trend increased from 2.83% in 2018 to 3.72% in 2019. The methodology for allocating trend was modified this year to recognize that most of the increase in exposure will be due to new construction. The change in distribution of exposure by age of home moderates the growth in modeled loss due to the projected increase in exposure.
3. The modeling for the 2019 per company retention limit adjustment is based on the average of the AIR and RMS models. The change in this adjustment factor this year produced a decrease in projected losses of $3.7 million.
4. Expenses for 2013A and 2016A pre-event notes decreased from $27.7 million in 2018 to $26.1 million in 2019 due mainly to the maturation of $550 million of 2016A notes.
5. Operating expenses are projected to increase by $0.9 million from $7.9 million in 2018 to $8.8 million in 2019.

6. Estimated reinsurance premium and ceded losses were included in this year's rate indication presentation based on 2018 projected ceded premium and ceded losses for the $1 billion excess of $10.5 billion layer. A table to adjust premium, ceded losses, payout and retention multiples, and the indicated rate change is included in Exhibit XVII to accommodate any reinsurance purchase changes subsequent to the presentation of the 2019 Ratemaking Formula Report.

Details of the overall changes can be found in Exhibit II, which contains the following exhibits:

1. Summary of 2019 Rate Calculation;
2. Adjustment to Exposure Base and Summary of Rate Change;
3. Summary of Results; and
4. Historical Comparison of Exposures, Premiums, and Rates.

Details of the Ratemaking Process

This ratemaking formula for the FHCF is based on Section 215.555, Florida Statutes. We have followed the same basic process used since 1995. Legislation enacted in 2005 (Chapter 2005-111, Laws of Florida, CS/SBN 1486) addressed retention in multiple-event seasons by creating a per event retention that applies to a participating insurer's two largest events and drops to 1/3 for all other events. This drop-down coverage has again been incorporated into the 2019 rates.

A. Trend

For 2019 ratemaking, we reviewed construction data indices from Marshall & Swift and the actual exposures by coverage reported to the FHCF from 1995 to 2018. The Marshall & Swift construction indices for the Southeast were up 5.0% in 2018 compared to down 2.8% in 2017 as of October. Countrywide indices were up 4.5% compared to up 2.9% the prior year.

Our selection of exposure and risk count trends for 2019 was based predominantly on the last three years of historical FHCF data. The table below displays the last five years of annual growth in exposure and risks. In making selections, the FHCF trend data was benchmarked against the indications generated from the Marshall & Swift construction indices.

Historical FHCF exposure and risk counts can be found in Exhibit III. Note that the trended exposure data in Exhibit III is based on exposure reported to the FHCF as of 10/29/2018. This data was used in the catastrophe modeling process.

For 2019, the exposure trending process was refined to focus on new construction. For residential, tenants, and condominium unit owners, trends in unit counts were mainly applied to newer construction (year built 2012 and subsequent) and older year built counts were assumed to have minimal to negative trends. Exposure trends were also mainly allocated to newer construction (year built 2012 and subsequent), with trend levels closer to inflation changes for older construction. Using this approach, the overall trended FHCF exposures better reflect the improvement in damageability levels due to new construction.

Annual Growth in Exposure and Risk Counts Reported by FHCF Participating Insurers as of 10/29/2018

	Residential		Tenants		Condominiums		Mobile Homes		Commercial	
	Exposure	Risk Count	Exposure	Risk Count	Exposure	Risk Count	Exposure	Risk Count	Exposure	Risk Count
2013-2014	1.6%	0.3%	7.3%	12.0%	2.1%	0.8%	-3.7%	-1.0%	-4.3%	-5.1%
2014-2015	2.1%	0.0%	1.3%	12.2%	2.0%	0.8%	-5.8%	-7.9%	-9.8%	-7.2%
2015-2016	3.9%	1.3%	12.0%	10.3%	5.1%	3.2%	0.6%	-1.8%	-6.5%	-6.5%
2016-2017	2.8%	0.8%	9.1%	12.0%	3.9%	1.4%	1.4%	-1.1%	-3.8%	-4.5%
2017-2018	4.6%	1.7%	2.8%	-4.2%	5.9%	2.3%	2.5%	-0.5%	2.2%	0.3%
Selected	4.0%	1.0%	4.0%	4.0%	5.0%	2.0%	0.0%	0.0%	0.0%	0.0%

B. Insurance Industry Aggregate Retention for Ratemaking Purposes (Exhibit IV)

For development of this premium formula, it is necessary to assume a projected aggregate insurance industry retention to estimate losses in the aggregate layer of coverage.

Section 215.555, Florida Statutes, specifies the calculation of the retention multiple for each participating insurer. The numerator of the retention multiple is $4.5 billion adjusted by the percentage growth in FHCF covered exposure from 2004 to the Contract Year two years prior to the current year. The historical exposure for 2017 was $2,178.2 billion (as of 10/29/2018) as compared to $1,320.6 billion in 2004. The percent adjustment is 64.9%, so the numerator of the retention multiple is $7.422 billion (rounded to the nearest million).

The denominator of the retention multiple is the projected total FHCF reimbursement premium assuming all participating insurers have selected the 90% coverage option. Retention multiples by coverage % are displayed below.

Coverage %	90%	75%	45%
Retention Multiple	5.7226	6.8671	11.4452

Each participating insurer's provisional retention is the retention multiple (adjusted for coverage selection) times its provisional premium. An insurer's actual retention is the retention multiple times its actual premium.

Based on the above calculation, the retention multiple numerator of $7.422 billion is used as the insurance industry aggregate retention for simulating losses in the aggregate layer of coverage. This value is equivalent to the sum of retentions for all insurers.

Since 2003, 100% of all FHCF premiums are calculated based on the premium formula rates applied to individual company exposures. This is called Section I premium. Section II premium refers to a premium calculated from exposure under covered polices that would require individual ratemaking, with each policy risk modeled and rated individually by company. There is currently no Section II exposure and therefore no Section II premium. The Section I insurance industry aggregate retention is $7.422 billion (based on 100% of projected premium) and the Section II aggregate retention is $0 (based on 0% of projected premium.)

C. **Industry Excess Layer** (Exhibit IV)

Under Section 215.555(4)(c)1, Florida Statutes, "The contract shall also provide that the obligation of the board with respect to all contracts covering a particular contract year shall not exceed the actual claims-paying capacity of the fund up to a limit of $17 billion for that contract year, unless the board determines that there is sufficient estimated claims-paying capacity to provide $17 billion of capacity for the current contract year and an additional $17 billion of capacity for subsequent contract years."

As the board has made no such determination regarding capacity in excess of $17 billion, the limit for the 2019 Contract Year is $17 billion. This $17 billion represents the total capacity at selected coverage levels for loss and loss adjustment expense. Loss adjustment expense is statutorily set at 5% of losses recoverable from the FHCF. Participating insurers report only losses and do not report loss adjustment expenses.

The loss and loss expense limit of $17 billion is first divided by 1.05 to produce a loss only limit of $16,190,476,190. This limit is then split between Sections I and II based on trended actual premium at current selected coverage levels. We view this as the best indicator of expected losses in the layer. Based on this split, 100% of the $16,190,476,190 limit is in Section I. This value is the Section I loss only limit.

The next step is to gross up the limit for coverage level. The 2018 average coverage level is 73.483%, which produced the actual 2018 100% loss limit of $22,032,878,037. Final 2019 company coverage selections as of March 1, 2019 produced an average coverage level of 81.629% based on 2018 company market shares and rating group definitions. The 2018 market shares were then adjusted to 2019 rating group definitions, resulting in a projected 2019 coverage level of 81.629%.

Finally, the FHCF limit is grossed up for the 2019 projected average coverage level of 81.629% to get the 100% loss limit of $19,834,264,237. The top end of the loss only layer is then an estimated projected aggregate retention of $7,422,000,000 for ratemaking purposes plus this limit, which equals $27,256,264,237.

In summary, for Section I and II loss only modeling purposes we use the following layer:

81.629% of $19,834,264,237 xs $7,422,000,000

For publication purposes, the Sections I and II loss and loss adjustment expense layer is:

81.629% of $20,825,977,449 xs $7,422,000,000

The simulations produced by the modelers are for producing manual rates per $1,000 of exposure under covered policies. The rates resulting from such simulations are referred to as Section I rates.

D. Industry Detail Exposure Data

Actual 2018 industry FHCF exposures for buildings, contents, and appurtenant structures were summarized by:

1. Type of Business (residential, tenants, condominium unit owners, mobile home, commercial habitational);
2. ZIP Code;
3. Construction/Tie-Down Type; and
4. Deductible.

For modeling, we used data as of 6/30/2018 as reported through 10/29/2018 by 163 of 163 companies reporting FHCF Section I exposure for the 2018 year. This data was trended one year as described in Section A. Exhibit III contains trended control totals of the FHCF exposures used in the modeling process.

E. Modeling Assumption and Data Changes: Combining Five Models - AIR, Corelogic, RMS, ARA & FPM

Table of Models Used to Calculate Overall Industry Losses

Model	2006-2007	2008-2019
AIR	X	X
ARA	X	X
Corelogic	X	X
RMS	X	X
FPM		X

The table above lists the models that were used to calculate the overall FHCF losses by year. Only models that had been found acceptable by the Florida Commission on Hurricane Loss Projection Methodology as of December 1 of the prior year were used in that year's ratemaking session.

In 2019, all 5 models meet the 2015 standards. Four out of five models produced lower loss cost indications than in 2018 ratemaking, and therefore the 5-model weighted indication was lower.

All five of the modelers produce a distribution of industry-wide losses based on trended reported exposures by type of business, deductible, construction, and ZIP Code. The AIR model produces a listing of losses for 50,000 simulated years while the FPM model losses are based on 58,000 simulated years. The ARA model produced a listing of losses for 250,000 simulated years. The other models produce a listing of losses by size with assigned annual frequencies. Since 2008, demand surge has been modeled directly by each of the accepted modelers. Adjustments to these loss distributions are described in the next section.

Exposure data for invalid ZIP Codes was provided to the modelers who then modeled such exposure at the county level. Less than 0.01% of total reported exposure comes from invalid ZIP Codes, which are either ZIP Codes that are located outside of the state of Florida or are ZIP Codes that the U.S.

Postal Service does not recognize or has decommissioned. In the latter case, the FHCF continues to produce rates for such codes for several years in order to give companies time to update their data.

Paragon used the results from each modeler to produce industry-wide gross (that is, net of policy deductibles and after application of policy limits) annual expected losses by type of business and to produce industry-wide FHCF excess losses for all coverages combined. Data from the modelers was combined by giving weights of 5%, 20%, 50%, 20%, and 5% to the model results from lowest to highest. A weighted loss distribution is included in Exhibit V.

The FHCF weighted loss curve in Exhibit V is developed solely for estimating excess hurricane losses within the FHCF layer. Estimates of losses above the FHCF layer were not taken into consideration in developing the curve. Shifts in modeler weights within the FHCF loss layer may have an amplified impact on loss estimates above the FHCF layer.

Although it is not used for ratemaking purposes, we have included an additional loss distribution based on uniform modeler weights (20% / 20% / 20% / 20% / 20%) in Exhibit V. Over time this curve may show greater stability for losses above the FHCF layer. As stated in our disclaimer in Part III herein, we recommend that any party using this report have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

Table of Models Used for Classifications

Model	2006-2008	2009-2012	2013-2019
AIR	X	X	X
Corelogic	X	X	X
RMS	X	X	X
FPM		X	

Three of the modelers ran our 2018 Contract Year trended exposures through their models and provided more detailed outputs (i.e., losses by ZIP Code, construction, and deductible codes for each type of business) that were used to update the class plan relativities. We used a straight average of the indicated loss costs for each rating cell as a basis in order to populate our class plan with rates. Details of the allocation of rates to type of business, deductible, construction, and territory are described in Part III.

Exhibit V contains tables and graphs of modeled loss severity distributions:

1. Gross Loss per Event;
2. Excess Retention Aggregate;
3. Single Event FHCF Liabilities; and
4. FHCF Layer Aggregate.

F. Losses in the Layer at Coverage Percent

The limit for the 2019 Contract Year is $17 billion. Because the size of the excess layer is dependent on the average coverage selections of all the FHCF participating insurers, losses must be modeled after coverage selection. Coverage percentage varies by type of business, so modeled losses need to also reflect this variation. As a result, we start with the allocation to type of business and apply the coverage percentages to the layered loss (a method used consistently since 2001). We calculate the overall rates and premiums at the different coverage percentages at the end of the calculations.

Excess losses are allocated to type of business based on their adjusted gross losses. The allocations are adjusted so that no type of business has an overall rate change exceeding 15% in any one year, prior to legislated rate changes. This allocation appears in line 9 of the summary in Exhibit II. See Exhibit VI for additional details.

G. Adjustments to Modeled Losses

- **Law and Ordinance Coverage**
- **Aggregate Wind Deductible Adjustment**

These adjustments are similar to the adjustments made in the 2018 ratemaking formula.

The projected industry retention was applied to the adjusted modeled losses to estimate the FHCF excess losses. Details on the Law and Ordinance adjustments discussed here are presented in Exhibit VII. The overall increase in modeled gross losses due to these adjustments is 4.29%, compared to an increase of 4.28% in 2018.

Law and Ordinance Coverage

Law and ordinance coverage provides extra limit for Coverage A (building) in the case where additional rebuilding costs are incurred in order to comply with local laws and ordinances.

We again recommend the FHCF continue to use the factor of 4.86% of residential modeled losses. We assume most companies charge approximately 3% of premium for law and ordinance coverage. We assume approximately 45% of the losses that would generate law and ordinance losses would be FHCF hurricane losses and 25% of the base premium is FHCF premium, so 3% x (45%/25%) = 5.4%. We also assume that only 90% of all residential policies will have this coverage in place at the time of a hurricane loss. Then the loading to FHCF residential modeled losses would be 5.4% x 90% = 4.86%. See Exhibit VII for additional details.

Aggregate Wind Deductible Adjustment

Under Section 627.701, Florida Statutes, residential property insurance policies issued on or after May 1, 2005 must have hurricane deductibles that apply on an annual, rather than a per-event, basis. Insurers may apply the “other perils” deductible or any amount remaining from the hurricane deductible, whichever is greater, to a loss for a second hurricane and each subsequent hurricane that year.

The loss events were adjusted to account for this change in loss exposure. Adjustment factors by type of business were developed. Exhibit VII details the derivation of these factors. The take-up ratio only impacts the commercial type of business as only these policyholders have the option of having an annual hurricane deductible. The adjusted load was then weighted with the adjusted load from 2018 giving 33% weight and 67% weight to 2019. The selected adjustment factor is the rounded value of the weighted load after the “take-up” modification.

H. Adjustments for Per Company Limits and Retentions

In this year’s ratemaking report Paragon has updated the adjustment to expected losses for individual company limits, retentions and coverage based on information from an analysis based on detailed loss projections run by Paragon from the RMS and AIR model runs used for 2019 ratemaking. The average of the results from the two separate analyses is -.3910%. Weighting this result against the prior adjustment factor of 0.2987% (2/3 current indication, 1/3 prior selection), we recommend a factor of -0.1611%. To summarize the approach, using the same exposure inputs and assumptions used by AIR and RMS, Paragon generated files of simulated Florida statewide gross hurricane losses. Average gross losses were first adjusted by type of business for AIR and RMS to match the average gross loss generated by the five models used in FHCF ratemaking. Each simulated gross loss was then allocated to ZIP Code and type of business. Next, FHCF market shares were applied by ZIP Code and company (based on 2018 FHCF premium) to allocate each simulated gross loss to all the FHCF companies. Simulated gross losses for each individual company were then summed and applied the companies’ projected retention, limit, and coverage percentage (based on 2018 FHCF premium market shares and 2019 selected coverages) to generate company FHCF losses. These were summed by simulated event to get FHCF total loss by event. Paragon summed losses by simulated year applying aggregate limits and impact of retention drop downs. Separately for the AIR and RMS runs, the average annual FHCF loss based individual company losses was compared to the average annual FHCF loss based on industry total losses, retention, limit and coverage percentage.

The average of the resulting adjustment factors was -0.3910% indicating, on an average basis, the two approaches generate almost identical results.

Using this more detailed approach, we also observe that there is significant variability between industry gross losses and FHCF layer losses. This variability cannot be determined when using industry gross losses, limits, and retentions to calculate FHCF layered losses. One observation is that the return time for the FHCF to exhaust its total capacity is longer than the value based on industry gross losses. Another observation is that due to increased market share of a single FHCF participating insurer in specific parts of the state, losses in areas where that insurer has very limited market share cannot generate full capacity FHCF layer losses. On the other hand, in parts of the state where one member company has significant market share, that company's retention becomes the effective retention for the industry on storm tracks in that area.

The current and prior special analyses indications can be found in Exhibit VIII.

The shape of the exceedance curves presented in Exhibits V and VIII are different, but the overall expected values of the FHCF loss layers are very similar. The Exhibit VIII curve is the more appropriate curve to use for analysis of interval FHCF losses within the FHCF layer because it more realistically recognizes the impact of company exposure distributions, retentions, and limits. Therefore, Exhibit VIII is used for analysis of expected FHCF losses offset by potential risk transfer options in section P below.

I. Other Post-Model Adjustments: (5%)

There are a few coverages that may appear on some FHCF covered policies that are not explicitly modeled in the FHCF's requested simulation. These coverages include guaranteed replacement cost, inflation guard, and reimbursable amounts paid as fees on behalf of or inuring to the benefit of a policyholder. We do not believe there is sufficient FHCF exposure from these coverages to justify additional administrative reporting and modeling at this time, but we do believe it is appropriate to load for these coverages in the post model adjustment.

Consistent with prior years, we recommend judgmentally increasing the modeled excess loss costs by 5% for all types of business to account for these coverages and other factors that are not directly included in the modeled loss results.

J. Investment Income Credit – Eliminated in 2012

Since 2012, the FHCF has not used investment income in current year rates. Exhibit IX contains the following tables:

1. FHCF rate of return history;
2. Graph of Interest Rate Assumption; and
3. FHCF Financial Statement Investment Income.

There are three reasons that the use of an investment income credit in FHCF ratemaking is not appropriate and has been discontinued at this time.

First, the FHCF investment credit is based on anticipated future long term retained investment income. The amount of anticipated future investment income assumes the FHCF would maintain a stable structure in perpetuity. Since the FHCF's inception, Florida statutes have been revised and FHCF coverage layers have changed resulting in lower return times and less investment income than originally projected in prior contract year ratemaking.

Second, during periods of sharp interest rate drops such as after 2000 and 2008 the FHCF will need rate increases due to reductions in the investment credit. These rate increases reduce FHCF long term rate stability.

Third, when investment income is used for providing a credit to current year rates, the same investment income cannot be used for mitigation funds appropriated by the legislature. During the years when an investment income credit was used, the premium formula required a matrix to adjust final rates to cover the potential FHCF for FHCF mitigation appropriations which were usually not finalized until the end of the legislative session after the premium formula had been approved. This approach also causes potential instability in FHCF rates. During years when no investment credit is included in the premium formula, the investment income can be used for mitigation appropriation without impacting FHCF rates.

For the three reasons above, we have discontinued the use of the investment credit in the FHCF ratemaking formula.

K. Operating Expenses and Mitigation Funding

Operating expenses of $8,796,525 are based on an estimate of 2019 fiscal year operating expenses provided by the SBA. This value is an increase of $864,248 from the 2018 Contract Year projected expense of $7,932,277.

Per section J, the estimated mitigation funding target underlying the rates is set at zero since no investment income will be used to reduce 2019 rates. Pursuant to Section 215.555, Florida Statutes, the minimum appropriation is $10 million, and the maximum appropriation is 35% of the prior fiscal year's investment income. In 2018, the Florida legislature appropriated $13.5 million for mitigation. For the 2019-2020 FHCF contract year, the calculated maximum amount subject to mitigation appropriation will be 35% of $201,443,000 which equals $70,505,050. Appropriation of mitigation funding will not affect the FHCF rates in 2019.

L. Pre-Event Notes Expense

This year's estimate of $26.1 million is the sum of the projected cost estimates for 2013A and 2016A pre-event notes. This estimate includes the net carrying cost and a judgmental loading for potential asset loss during the Contract Year. The 2019 carrying cost estimates are provided by the FHCF's Financial Advisor, Raymond James & Associates. Raymond James' cost estimate is the projected difference between the interest payments to note holders and the investment income on the note proceeds during the 2019 Contract Year (see Exhibit X).

A 0.3% judgmental loading (based on historical FHCF information) is added to the carrying cost for potential asset loss during the Contract Year. The sum of this loading is $5.1 million. The loading for the 2013A notes is $3.0 million (0.3% of $1.00 billion). $500 million of the 2013A notes came due on 7/1/2018 so the value of the 2013A notes will be $1 billion for the entire 12 months of the 2019 contract year. $550 million of the 2016A notes will come due on 07/1/2019 so the remaining value of the 2016A notes will be $650 million for the last 11 months of the 2019 contract year. The loading for the 2016A notes is $2.1 million (0.3% of $0.7 billion).

Should the SBA authorize additional expenditure for pre-event notes during the 2019 Contract Year, the rates, retention multiples, and payout multiple should be modified using the factors provided in Exhibit XI.

M. Premium Credits (Windstorm Mitigation Construction Credits)

We are using the same approach to windstorm mitigation construction factors as we used in the 2018 Ratemaking Formula Report, including the incorporation of factors for the following mitigation features recognized since 2012*:*

Type of Business	***Year Built***	***Structure Opening Protection***	***Roof Shape***
Commercial Residential	*X*	*X*	*X*
Residential	*X*	*X*	*X*
Mobile Home			
Tenants	*X*	*X*	*X*
Condominium Owners	*X*	*X*	*X*

The proposed rate factors associated with each variable are shown in Exhibit XIV. We propose that these be applied to calculate the final rate for any covered policy subject to the following:

- Year built, structure opening protection, and roof shape factors be applied multiplicatively;
- The combined factor for any risk will not be capped;
- Every risk will be evaluated for its rating factor; and
- A final factor will be applied by type of business so that the indicated premium levels for each type of business are achieved.

Exhibit XII includes:

1. Calculation of actual 2018 premium credits/surcharges;
2. 2018 distribution of credits/surcharges; and
3. 2018 distribution of exposure and counts by rating region and type of business.

N. Section II (Excess) Adjustment

We included $0 of Section II premium, based on the fact that there was no Section II exposure reported in 2018. Section II premium covers policies that require individual rating procedures. These exposures would be modeled and rated individually by company.

O. Adjustment for Updated Exposures

In the past, we have included an adjustment for change in premiums and exposures between November of the prior year and February of the current year. This change does not affect rate changes but should improve the accuracy of projected premium. For this year, there was no material change to FHCF exposure, so an adjustment was not included.

P. Risk Transfer Options

The rates presented in this report include a loading for the cost of risk transfer for a ceded layer of $1 billion excess of $10.5 billion, the same as the reinsurance structure used in the 2018 FHCF premium formula. The ceded premium is set equal to the 2018 initial premium of $63.0 million and projected ceded losses of $28.2 million.

The final FHCF 2019 risk transfer structure and cost has not been determined at the time of this report presentation. Should the FHCF enter into a risk transfer arrangement, the cost shall be determined based on the actual ceded layer selected and contracted initial reinsurance premium. The 2019 FHCF premium rates and factors would be adjusted accordingly, by the formula specified in Exhibit XVII.

The estimates for FHCF loss credits are based on the average of 2019 AIR and RMS data distributions in Exhibit VIII. Exhibit XVII is based on the same loss severity distribution and displays probability of exceedance for specific FHCF layers with the adjustments to the FHCF loss layer level prior to fixed expenses. These values are used to illustrate a range of potential risk transfer structures and costs in Exhibit XVII. The details of the formula calculation, along with potential revised factors, are provided in Exhibit XVII.

The Net Risk Transfer Cost Premium in Exhibit XVII and the Estimated Additional Annual Cost of Pre-Event Notes in Exhibit XI are additive in their impact on FHCF premium and rates. Retention and Projected Payout Multiples can be adjusted with interpolation based on the sum of the combined impact on FHCF premiums.

Part II: Allocation of Premium

Within a type of business, premium is allocated to territory, construction, and deductible based on a set of relativities. This is the same process that has been used since the creation of the 2001 rates. In all cases, the relativities recommended for 2019 have been adjusted so that none of them has changed by more than 15%. In 2019, the allocation process for territories was changed as described below. There were no other significant changes in the allocation process for 2019. Following is an overview of the FHCF rating classifications and the entire allocation process.

Overview of the Rating Classifications

1. Type of Business

The actuarially indicated FHCF premium is allocated first among the five types of business: commercial, residential, mobile home, tenants, and condominium unit owners. This allocation is based on the hurricane catastrophe modeling. For each modeled event, the proportion of FHCF layer losses allocated to each type of business is identical to the allocation of gross losses from that event. This process incorporates the varying weighted average coverage selection of each type of business. This approach produces indicated allocations, which are then adjusted so that no type of business has an indicated rate change of more than 15%. Actual allocations can be found in Exhibit VI.

2. Territorial Definitions

Since 2001, the FHCF revises rating territories using information from three hurricane models: AIR, Corelogic, and RMS. Territory definitions are based on excess layer loss costs, as they are indicative of what insurers might recover from the FHCF. Actual changes to territories are tempered each year to minimize the magnitude of rate changes. For 2019, indicated territories have been recalculated for each ZIP Code using the latest data from these models.

In order to increase rating stability, the FHCF territory tempering method was changed in 2017. Review of past FHCF rating history shows that there have been many years when there were large numbers of ZIP Codes shifting one territory in a year and then shifting back one territory the following year (see Exhibit XVIII). Starting in 2017 a ZIP Code is shifted by one territory to a new territory only if the indication is for a shift of two or more territories or a shift of one territory has been consistent for three years. 2019 being the third year of the new methodology, 583 zip codes shifted down one territory, most due to 3-year indications of one territory shift.

3. Construction

In 2018, FHCF data was collected for four residential, seven commercial, and three mobile home construction types. Tenants and condominium unit owners exposures have the same construction classes as commercial. The mobile home codes relate to the extent of their tie downs and their compliance with Federal Housing and Urban Development building codes that went into effect in July 1994.

4. Deductibles

The rates proposed are for the same sets of deductibles as for 2018. Relativities for each deductible vary by type of business. As with construction relativities, changes in deductible relativities were limited to changing no more than 15%.

General Overview of the Rate Allocation Process

Construction Classes

Relativities between the most common construction within a type of business and the other construction types were calculated using AIR, Corelogic, and RMS generated ZIP Code level loss costs. The indicated relativities were selected, except that they were limited to changing from the 2018 relativities by no more than 15%.

Rates for unknown construction are calculated using the same method as other construction types, not to exceed the highest rate for all known constructions in the same type of business.

Rating Region (Territory) Definition

To begin the process this year, we identified the 1,457 ZIP Codes for which rates would be produced. These are the currently valid U.S. Postal Service ZIP Codes in Florida, plus some recently deactivated ZIP Codes for which we continue to produce rates. We identified 928 of the ZIP Codes that had at least $30 million of total exposure. The remaining 529 ZIP Codes were mapped to these 928 ZIP Codes by location. Most of these 529 ZIP Codes were exclusively post office boxes. They inherited their territory from the territory of the ZIP Code to which they were mapped. The purpose of this step was to avoid trying to assign ZIP Codes to territories if they had very little exposure. When a ZIP Code has no frame exposure, for example, the models produce a 0.00 loss cost. To avoid these problems and to increase the reliability of the modeled losses, this mapping technique was employed.

In order to define territories, residential base deductible ZIP Code level loss costs to the FHCF layer were used. The excess loss costs from three models (AIR, Corelogic, and RMS) were averaged and then weighted by the amount of construction in the three classes: frame, masonry, and masonry veneer. Together, these constructions account for over 99% of residential exposure. The result was a weighted average loss cost for each ZIP Code.

The ZIP Codes were ranked by weighted average loss cost and partitioned into 25 territories, or rating regions. We set the relativities between rating regions ahead of time, and then fit the ZIP Codes to these values. This enabled a more consistent spread of values between the highest and lowest rates. In keeping with past rates, the ratio of the rates in the highest and lowest regions was set at 35:1. Subject to these guidelines, statistical methods were used to maximize the differences between regions and minimize the variation within a region. This same procedure was performed for this year's rates. Subsequently, we judgmentally adjusted the territory 1 loss cost down to better reflect actual indications for territory 1. This adjustment had the effect of changing the ratio to approximately 37:1.

We tempered the change in territory from 2018 to 2019 by limiting the territory movement to no more than one from its 2018 territory assignment and only if there is an indication of a movement of two or more territories. This change has been made in 2019 to increase stability of territory definitions.

The proposed (tempered) territories, or rating groups, are presented in Exhibit XIII. Exhibit XV shows exposure and counts by territory. Exhibit XIX displays the proposed territories as maps.

Production of Rates

The total FHCF losses have been allocated to five types of business (Exhibit VI). Within each, construction and deductible relativities have been calculated. In this process, ZIP Code level modeled loss costs were combined using a straight average. Relativities between territories were determined in the territorial definition process.

An overall premium adjustment factor was calculated for each type of business, so that the modeled exposure, when rated using 90% coverage rates, produced the desired total premium for each type of business. In this last step, the premium required was adjusted to the 90% coverage level.

Rates for 75% and 45% coverage level were calculated as 75/90ths and 45/90ths, respectively, of the 90% coverage rates.

The proposed rates produced for the base set of deductibles are found in Exhibit XIV.

Exhibit XV shows exposure and counts by territory.

Exhibit XVI compares rate changes for Residential Masonry (2% Deductible) by rating region across the state before application of windstorm mitigation credits.

The rates that are published in these exhibits are base rates. To calculate the final rate for an insured risk, one must take into consideration the relativities applicable for the three construction characteristics:

Preliminary factor = (year built factor) x (roof shape factor) x (opening protection factor)

2019 mitigation factors do not have a cap. Prior to 2014 the preliminary factor was tempered by minimum and maximum caps. In 2014 we removed the cap of plus or minus 30% to unlimited due to increased credibility in reported company data.

Actual factor = Preliminary Factor.

A small on balance factor is applied so that the final rates will produce the indicated FHCF reimbursement premium levels by type of business.

Final rate = (Base rate) x (actual factor) x (on balance factor).

All rate factors for the windstorm mitigation construction rating classifications and the on balance factor are shown in Exhibit XIV.

Part III: Limitations

Scope

This report was prepared for the use of the State Board of Administration of Florida (SBA) for the sole purpose of developing a formula for determining the actuarially indicated premium to be paid by individual companies for the Florida Hurricane Catastrophe Fund (FHCF) for the 2019 Contract Year as specified by Section 215.555, Florida Statutes. The formula must be approved by unanimous vote of the SBA Trustees and they may, at any time, revise the formula pursuant to the procedure provided in Section 215.555(5)(b), Florida Statutes.

The rates in this report are developed for the limits and retentions specified by Section 215.555, Florida Statutes, for the 2019 Contract Year. No adjustments have been made to reflect availability of FHCF financial capacity during and subsequent to the 2019 Contract Year.

Actual coverage provided by the FHCF for the 2019 Contract Year is subject to modification due to legislative, judicial, or regulatory actions. Except where explicitly noted, such modifications are not considered in this report.

Data Sources

In developing the 2019 FHCF ratemaking formula, we have relied on the following data from various sources:

1. FHCF 2018 Contract Year exposure data as of 10/29/2018 as reported by 163 FHCF companies and compiled by Paragon. This data has not been fully audited yet and could be subject to variability in terms of amounts and classifications of exposure data.
2. Historical FHCF exposure data from prior years, subject to audit by FHCF auditors and compiled by Paragon.
3. Projections of 2019 season hurricane losses prepared by AIR, ARA, Corelogic, FPM, and RMS for use in determining overall expected industry losses. All loss projections are based on catastrophe models that have been accepted by the Florida Commission on Hurricane Loss Projection Methodology as of December 1, 2018.
4. Allocations of projected 2019 season hurricane losses prepared by AIR, Corelogic, and RMS for use in developing various rating classifications.
5. Special analyses of mitigation rating factors prepared by AIR, ARA, Corelogic and RMS.
6. Special analyses of projected hurricane losses by county by ARA, Corelogic and RMS.
7. Special analyses of projected hurricane losses by ZIP Code by Paragon using AIR and RMS models.
8. Historical FHCF investment returns as reported by the SBA.
9. Industry residential construction cost trends for Florida and the United States as developed by Marshall & Swift.
10. Estimates of projected FHCF operating expenses by FHCF staff.
11. Estimates of projected net expenses for 2013A and 2016A Pre-Event Notes by Raymond James and Associates.

We have not audited or verified the sources of the data and information. If the underlying data or information is inaccurate or incomplete, the results of our formula report may be impacted.

Variability of Results

Ratemaking is the projection of future losses and expenses and their relationship to future exposures. The projected rates contained in the attached report represent our best professional judgment. In property catastrophe reinsurance, actual losses are likely to vary from expected losses. The degree of variation could be substantial and could be in either direction from estimates. There is also significant potential for future variability in projections of expenses and exposures.

Distribution and Use

This report was prepared for the use of the SBA for the sole purpose of developing a formula for determining the actuarially indicated premium to be paid by individual companies for the FHCF for the 2019 Contract Year as specified by Section 215.555, Florida Statutes. The data, assumptions, methodology, and results in this report may not be appropriate for other than the intended use. We recommend that any party using this report have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

A copy of this report will be available on the web site of the FHCF.

EXHIBIT

II

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Summary of Rate Calculation

Section I : Retention, Attachment and Coverage		Residential	Tenants	Condos	Mobile Home	Commercial	Total		
Coverage Avg. % as of 10/29/2018		73.993%	79.646%	79.668%	88.930%	59.764%	73.483%	(0.9)	
Coverage Avg. % as of 03/01/2019		80.669%	79.851%	82.779%	89.607%	86.159%	81.629%	(1)	
Coverage Change		9.023%	0.257%	3.905%	0.760%	44.164%	11.085%	(1.1)	
Retention	7,422,000,000							(2)	
Loss Only Limit	19,834,264,237							(3)	
Retention + Limit	27,256,264,237							(4)	(2)+(3)
Loss and LAE at Coverage Limit	17,000,000,000							(5)	(3)*total(1)*1.05
Section I		Residential	Tenants	Condos	Mobile Home	Commercial	Total		
Gross Losses at 100% Unadjusted		2,466,214,333	20,623,676	202,377,656	105,354,929	312,082,182	3,106,652,776	(6)	
Gross Losses at 100% Adjusted*		2,597,910,179	20,633,988	202,640,746	105,839,562	312,768,763	3,239,793,238	(7)	
% Adjustment		5.340%	0.050%	0.130%	0.460%	0.220%	4.286%	(8)	(7)/(6) - 1
* Adjustment includes factors for law and ordinance coverage and annual aggregate deductibles.									
Allocation of Excess Loss to Type of Business at Coverage Level		80.972%	0.718%	6.481%	3.664%	8.164%	100.000%	(9)	[Alloc of Excess Losses] (7)
Excess Losses and LAE at Coverage		682,806,404	6,057,461	54,653,485	30,899,896	68,845,723	843,262,971	(10)	(9)*total(10)
Per Company Analysis Factors									
Retention Adjustment								(11)	(11 Factor)*(10)
Limit Adjustment								(14)	(14 Factor)*(10)
Combined Retention and Limit Adjustment	-0.161%	-1,099,901	-9,758	-88,039	-49,775	-110,900	-1,358,373	(15)	(15 Factor)*(10)
Total Loss After Per Company Analysis Factors		681,706,503	6,047,704	54,565,447	30,850,121	68,734,823	841,904,597	(16)	(10)+(15)
Post Model Adjustment Factors		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	(17)	
		34,085,325	302,385	2,728,272	1,542,506	3,436,741	42,095,230	(18)	(17)*(16)
Total Gross Excess Loss and LAE		715,791,828	6,350,089	57,293,719	32,392,627	72,171,564	883,999,827	(19)	(18)+(16)
Special Adjustments									
Investment Income	0.000%	0	0	0	0	0	0	(20)	(20 Factor)*(19)
Ceded Loss & LAE ($1 B xs. $10.5 B)	-3.192%	-22,849,865	-202,711	-1,828,959	-1,034,054	-2,303,897	-28,219,485	(21)	Estimated Ceded Losses from 2018 Exhibit II line 21
Total Special Adjustment	-3.192%	-22,849,865	-202,711	-1,828,959	-1,034,054	-2,303,897	-28,219,485	(22)	(20)+(21)
Net Loss & LAE Prior to Expense Loadings and Credits (Base Prem)		692,941,963	6,147,378	55,464,760	31,358,574	69,867,667	855,780,342	(23)	(19)+(22)
Fixed Expense Loadings									
Operating Expense	1.028%	7,122,717	63,189	570,120	322,333	718,166	8,796,525	(24a)	SBA Operating Expenses
2016A Note Expense	1.062%	7,356,500	65,263	588,832	332,913	741,738	9,085,246	(24b)	Debt Service Payment & Held Asset Risk Charge
2013A Note Expense	1.986%	13,765,230	122,117	1,101,803	622,935	1,387,915	17,000,000	(24c)	Debt Service Payment & Held Asset Risk Charge
Mitigation Funding	0.000%	0	0	0	0	0	0	(25)	Paid from Investment Income (not from premium)
Offset for Premium Credits and Adjustments		0	0	0	0	0	0	(26)	-((1+(33))*(1+(37))-1)*((24a+24b+24c+24d)+(25))/((1+(33))*(1+(37))
Total Fixed Expense Loadings	4.076%	28,244,447	250,568	2,260,754	1,278,181	2,847,820	34,881,771	(27)	(24a)+(24b)+(24c)+(24d)+(25)+(26)
2019 Section I Base Premium at Coverage Level prior to Cash Build Up		721,186,410	6,397,947	57,725,515	32,636,755	72,715,487	890,662,113	(34)	

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Section I: Adjustment to 10/29/2018 Exposure Base And Summary of Rate Change

				Residential	Tenants	Condos	Mobile Home	Commercial	Total		
Adjustment for Change in Reportings 10/29/2018 to 10/29/2018											
2018 Section I Base Premium		as of 10/29/2018		888,739,645	8,508,465	73,115,114	44,576,276	87,981,236	1,102,920,735	(35)	
	(Net of Credits)	as of 10/29/2018		888,739,645	8,508,465	73,115,114	44,576,276	87,981,236	1,102,920,735	(36)	
		Change		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	(37)	(36)/(35) - 1
2018 Section I Exposure		as of 10/29/2018		1,960,950,683,223	28,254,287,214	102,304,393,979	27,056,757,709	156,590,097,051	2,275,156,219,176	(38)	
	(All ZIP Codes)	as of 10/29/2018		1,960,950,683,223	28,254,287,214	102,304,393,979	27,056,757,709	156,590,097,051	2,275,156,219,176	(39)	
		Change		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	(40)	(39)/(38) - 1
Exposure Trend (2018 to 2019)				4.00%	4.00%	5.00%	0.00%	0.00%	3.72%	(41)	
2019 Section I Exposure				2,039,332,026,649	29,383,506,469	107,419,773,869	27,056,757,709	156,590,097,051	2,359,782,161,747	(42)	(1+(41))*(39)
2019 Section I Actuarially Indicated Base Premium at Coverage Level				721,186,410	6,397,947	57,725,515	32,636,755	72,715,487	890,662,113	(43)	(34)
2019 Section I Actuarially Indicated Base Premium at Cov. Level Adj. For Reporting Change				721,186,410	6,397,947	57,725,515	32,636,755	72,715,487	890,662,113	(43.01)	(1+(37))*(43)
Cash Build-up Factor											
2019 Adjusted Sect. I Base Premium at Coverage at 2019 Cash Build-up Level			25%	901,483,013	7,997,433	72,156,893	40,795,944	90,894,359	1,113,327,641	(45)	(43.01)*1.25
Variable Expense Loading											
Reinsurance	Factor		5.659%	51,012,323	452,552	4,083,150	2,308,525	5,143,450	63,000,000	(45a)	(45)*(1/(1-Reins %))
2019 Section I Base Premium at Coverage with Cash Build-up & Variable Expenses			5.3557%	952,495,336	8,449,985	76,240,044	43,104,469	96,037,808	1,176,327,641	(45b)	(45)+(45a)

Summary of Section I , Premium, Exposure and Rate Change

			Residential	Tenants	Condos	Mobile Home	Commercial	Total		
Base Premium (25% CB)	2018	as of 10/29/2018	888,739,645	8,508,465	73,115,114	44,576,276	87,981,236	1,102,920,735	(46)	(36)
	2019		952,495,336	8,449,985	76,240,044	43,104,469	96,037,808	1,176,327,641	(47)	
	Change		7.17%	-0.69%	4.27%	-3.30%	9.16%	6.66%	(48)	((47)/(46))-1
Exposure	2018	as of 10/29/2018	1,960,950,683,223	28,254,287,214	102,304,393,979	27,056,757,709	156,590,097,051	2,275,156,219,176	(49)	(39)
	2019		2,039,332,026,649	29,383,506,469	107,419,773,869	27,056,757,709	156,590,097,051	2,359,782,161,747	(50)	(42)
	Change		4.00%	4.00%	5.00%	0.00%	0.00%	3.72%	(51)	((50)/(49))-1
Rate (at 25% CB)	2018	as of 10/29/2018	0.4532	0.3011	0.7147	1.6475	0.5619	0.4848	(52)	1000*(46)/(49)
	2019		0.4671	0.2876	0.7097	1.5931	0.6133	0.4985	(53)	1000*(47)/(50)
	Change		3.05%	-4.50%	-0.69%	-3.30%	9.16%	2.83%	(54)	((53)/(52))-1
Rate at 25% CB	2019		0.4671	0.2876	0.7097	1.5931	0.6133	0.4985	(54.01)	
Overall Rate Change			3.05%	-4.50%	-0.69%	-3.30%	9.16%	2.83%	(55)	('1000*(45b)/(50))/(52))-1
Rates at 90% (Unadjusted for Coverage Level)										
	2018		0.5513	0.3403	0.8074	1.6673	0.8461	0.5937	(56)	((52)*(.9/(0.9))
	2019		0.5211	0.3241	0.7716	1.6001	0.6407	0.5496	(57)	((53)*(.9/(1))
Rate Change Unadjusted for Coverage Level			-5.47%	-4.75%	-4.42%	-4.03%	-24.28%	-7.43%	(58)	((57)/(56))-1

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Summary of Results

		Retention	Limit	Residential	Tenants	Condos	Mobile Home	Commercial	Total		
Premium											
Section I: Basic Cov.				952,495,336	8,449,985	76,240,044	43,104,469	96,037,808	1,176,327,641	(69)	(45b)
Section I: Extended Cov.				-	-	-	-	-	-	(70)	There is no Extended Coverage Charge for Citizens
Section I: Subtotal		7,422,000,000	17,000,000,000	952,495,336	8,449,985	76,240,044	43,104,469	96,037,808	1,176,327,641	(71)	(70)+(69)
Section II		0	0	0	0	0	0	0	0	(72)	There is no Section II exposure
Total		7,422,000,000	17,000,000,000	952,495,336	8,449,985	76,240,044	43,104,469	96,037,808	1,176,327,641	(73)	(71)+(72)
Coverage %				80.669%	79.851%	82.779%	89.607%	86.159%	81.629%	(74)	(1)
Projected Payout Multiple			14.4518								(73Limit)/(73total prem)
Retention Multiples		100%	5.1503	1,180,750,100	10,582,196	92,100,213	48,104,078	111,466,155	1,441,068,996	(75)	(73ret)/(73 tot prem)*(74tot)/100%)
		90%	5.7226	1,062,675,090	9,523,976	82,890,192	43,293,670	100,319,540	1,296,962,096	(76)	(73ret)/(73 tot prem)*(74tot)/90%)
		75%	6.8671	885,562,575	7,936,647	69,075,160	36,078,058	83,599,617	1,080,801,747	(77)	(73ret)/(73 tot prem)*(74tot)/75%)
		45%	11.4452	531,337,545	4,761,988	41,445,096	21,646,835	50,159,770	648,481,048	(78)	(73ret)/(73 tot prem)*(74tot)/45%)
Sect. I Projected Exposure			2019	2,039,332,026,649	29,383,506,469	107,419,773,869	27,056,757,709	156,590,097,051	2,359,782,161,747	(79)	(49)
Sect. I Avg. Basic Rates		100%		0.5790	0.3601	0.8574	1.7779	0.7118	0.6107	(80)	1000*(69)/(79)*((100%/(74))
		90%		0.5211	0.3241	0.7716	1.6001	0.6407	0.5496	(81)	1000*(69)/(79)*((90%/(74))
		75%		0.4342	0.2701	0.6430	1.3334	0.5339	0.4580	(82)	1000*(69)/(79)*((75%/(74))
		45%		0.2605	0.1621	0.3858	0.8001	0.3203	0.2748	(83)	1000*(69)/(79)*((45%/(74))
		Average Coverage		0.4671	0.2876	0.7097	1.5931	0.6133	0.4985	(84)	1000*(69)/(79) or (52)
Overall Section I Rate Change											
		Total Premium	2018	888,739,645	8,508,465	73,115,114	44,576,276	87,981,236	1,102,920,735	(85)	(45)
			2019	952,495,336	8,449,985	76,240,044	43,104,469	96,037,808	1,176,327,641	(86)	(73)
		Total Exposure	2018	1,960,950,683,223	28,254,287,214	102,304,393,979	27,056,757,709	156,590,097,051	2,275,156,219,176	(87)	(48)
			2019	2,039,332,026,649	29,383,506,469	107,419,773,869	27,056,757,709	156,590,097,051	2,359,782,161,747	(88)	(49)
		Average Rate (000s)	2018	0.4532	0.3011	0.7147	1.6475	0.5619	0.4848	(89)	1000*(85)/(87)
			2019	0.4671	0.2876	0.7097	1.5931	0.6133	0.4985	(90)	1000*(86)/(88)
		Overall Rate Change		3.05%	-4.50%	-0.69%	-3.30%	9.16%	2.83%	(91)	(90)/(89) - 1
		Rates at 90% (Unadjusted for Coverage Level)	2018	0.5513	0.3403	0.8074	1.6673	0.8461	0.5937	(92)	(56)
			2019	0.5211	0.3241	0.7716	1.6001	0.6407	0.5496	(93)	(57)
		Rate Change Unadjusted for Coverage Level		-5.47%	-4.75%	-4.42%	-4.03%	-24.28%	-7.43%	(94)	(57)/(56)-1

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Section I: Historical Exposures and Premiums

Section I Exposures (as of 10/29/2018)

		Residential	Tenants*	Condo-Owners	Mobile Home	Commercial	Total
2009		$1,815,472,177,828	$17,345,852,866	$84,198,948,574	$36,761,961,986	$212,460,681,802	$2,166,239,623,056
2010		$1,817,662,481,519	$17,569,203,805	$83,886,023,190	$35,542,039,480	$209,853,976,263	$2,164,513,724,257
2011		$1,777,677,567,002	$18,329,345,968	$84,448,798,032	$33,837,366,975	$203,072,396,562	$2,117,365,474,539
2012		$1,742,101,137,356	$19,311,739,294	$84,152,063,133	$31,569,203,791	$199,076,994,510	$2,076,211,138,084
2013		$1,692,585,905,910	$20,716,140,015	$84,939,169,492	$28,539,351,997	$197,362,838,239	$2,024,143,405,653
2014		$1,719,567,803,513	$22,229,245,146	$86,702,102,354	$27,474,291,575	$188,824,739,041	$2,044,798,181,629
2015		$1,754,969,315,990	$22,508,843,627	$88,453,721,949	$25,877,523,024	$170,243,010,515	$2,062,052,415,105
2016		$1,822,895,641,425	$25,213,767,240	$92,927,887,318	$26,037,614,203	$159,161,191,747	$2,126,236,101,933
2017		$1,874,498,279,897	$27,496,647,636	$96,596,492,932	$27,496,647,636	$153,185,395,027	$2,178,173,258,579
2018		$1,960,950,683,223	$28,254,287,214	$102,304,393,979	$27,056,757,709	$156,590,097,051	$2,275,156,219,176
2019	(Proj.)	$2,039,332,026,649	$29,383,506,469	$107,419,773,869	$27,056,757,709	$156,590,097,051	$2,359,782,161,747
2020							

Section I Premiums (as of 10/29/2018)

		Residential	Tenants*	Condo-Owners	Mobile Home	Commercial	Total
2009		$821,700,186	$6,499,295	$52,307,156	$39,714,714	$155,523,244	$1,075,744,595
2010		$859,864,344	$6,502,492	$51,872,015	$43,539,127	$153,444,469	$1,115,222,446
2011		$880,754,111	$6,505,495	$53,683,414	$45,968,427	$150,384,875	$1,137,296,322
2012		$981,901,520	$8,032,833	$60,505,008	$43,863,584	$167,063,181	$1,261,366,127
2013		$977,906,580	$9,143,951	$64,528,991	$37,315,378	$175,438,169	$1,264,333,070
2014		$981,990,781	$10,188,137	$66,375,860	$35,208,908	$173,880,302	$1,267,643,988
2015		$975,194,503	$9,276,293	$67,838,597	$34,674,641	$128,846,280	$1,215,830,315
2016		$909,067,322	$8,944,937	$68,539,686	$39,405,140	$110,550,511	$1,136,507,596
2017		$912,346,334	$9,222,487	$70,559,111	$43,558,988	$93,885,222	$1,129,572,141
2018		$888,739,645	$8,508,465	$73,115,114	$44,576,276	$87,981,236	$1,102,920,735
2019	(Proj.)	$952,495,336	$8,449,985	$76,240,044	$43,104,469	$96,037,808	$1,176,327,641
2020							

Section I Average Rates (per $1000)

		Residential	Tenants*	Condo-Owners	Mobile Home	Commercial	Total
2009		0.4526	0.3747	0.6212	1.0803	0.7320	0.4966
2010		0.4731	0.3701	0.6184	1.2250	0.7312	0.5152
2011		0.4955	0.3549	0.6357	1.3585	0.7405	0.5371
2012		0.5636	0.4160	0.7190	1.3894	0.8392	0.6075
2013		0.5778	0.4414	0.7597	1.3075	0.8889	0.6246
2014		0.5711	0.4583	0.7656	1.2815	0.9209	0.6199
2015		0.5557	0.4121	0.7669	1.3400	0.7568	0.5896
2016		0.4987	0.3548	0.7376	1.5134	0.6946	0.5345
2017		0.4867	0.3354	0.7305	1.5842	0.6129	0.5186
2018		0.4532	0.3011	0.7147	1.6475	0.5619	0.4848
2019	(Proj.)	0.4671	0.2876	0.7097	1.5931	0.6133	0.4985

Percent Change in Rates

	Residential	Tenants*	Condo-Owners	Mobile Home	Commercial	Total
2009-10	4.52%	-1.22%	-0.46%	13.39%	-0.11%	3.75%
2010-11	4.73%	-4.10%	2.80%	10.90%	1.28%	4.25%
2011-12	13.76%	17.20%	13.10%	2.28%	13.32%	13.11%
2012-13	2.51%	6.12%	5.66%	-5.90%	5.93%	2.81%
2013-14	-1.16%	3.84%	0.77%	-1.99%	3.59%	-0.75%
2014-15	-2.70%	-10.08%	0.18%	4.56%	-17.81%	-4.89%
2015-16	-10.25%	-13.92%	-3.83%	12.94%	-8.23%	-9.35%
2016-17	-2.40%	-5.46%	-0.96%	4.68%	-11.76%	-2.98%
2017-18	-6.88%	-10.22%	-2.16%	4.00%	-8.33%	-6.52%
2018-19	3.05%	-4.50%	-0.69%	-3.30%	9.16%	2.83%

Historical Rates as Percent of 2019 Rates

	Residential	Tenants*	Condo-Owners	Mobile Home	Commercial	Total
2009	97%	130%	88%	68%	119%	100%
2010	101%	129%	87%	77%	119%	103%
2011	106%	123%	90%	85%	121%	108%
2012	121%	145%	101%	87%	137%	122%
2013	124%	153%	107%	82%	145%	125%
2014	122%	159%	108%	80%	150%	124%
2015	119%	143%	108%	84%	123%	118%
2016	107%	123%	104%	95%	113%	107%
2017	104%	117%	103%	99%	100%	104%
2018	97%	105%	101%	103%	92%	97%
2019	100%	100%	100%	100%	100%	100%

Historical Rate on Line (Mandatory Coverage only)

	Limit($B)	Total
2009	17.175	6.3%
2010	17.000	6.6%
2011	17.000	6.7%
2012	17.000	7.4%
2013	17.000	7.4%
2014	17.000	7.5%
2015	17.000	7.2%
2016	17.000	6.7%
2017	17.000	6.6%
2018	17.000	6.5%
2019	17.000	6.9%

*Includes Inland Marine/Stand Alone & Other Contents Type Policies

EXHIBIT

III

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Control Totals By Type

Type	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Commercial	147,990	2.1%	$156,590,097,051	$1,058,113	6.6%
Residential	4,525,822	65.0%	$2,039,332,026,649	$450,599	86.4%
Mobile Home	332,699	4.8%	$27,056,757,709	$81,325	1.1%
Tenants	1,072,602	15.4%	$29,383,506,469	$27,395	1.2%
Condominium Unit Owners	882,774	12.7%	$107,419,773,869	$121,684	4.6%
Total	6,961,887	100.0%	$2,359,782,161,747	$338,957	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Commercial Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Frame	30,942	20.9%	$19,538,968,343	$631,471	12.5%
Masonry	105,845	71.5%	$77,340,378,039	$730,695	49.4%
Masonry with Reinforced Concrete Roof	6,311	4.3%	$17,356,782,351	$2,750,243	11.1%
Superior	835	0.6%	$6,219,453,248	$7,448,447	4.0%
Superior with Reinforced Concrete Roof	1,931	1.3%	$35,724,762,042	$18,500,654	22.8%
Masonry Veneer	95	0.1%	$51,394,478	$540,995	0.0%
Unknown/Non Mobile Home Default	2,031	1.4%	$358,358,550	$176,444	0.2%
Total	147,990	100.0%	$156,590,097,051	$1,058,113	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Residential Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Frame	987,289	21.8%	$415,076,672,358	$420,421	20.4%
Masonry	3,228,847	71.3%	$1,468,879,057,485	$454,924	72.0%
Masonry Veneer	282,336	6.2%	$148,367,973,043	$525,501	7.3%
Unknown/Non Mobile Home Default	27,350	0.6%	$7,008,323,763	$256,246	0.3%
Total	4,525,822	100.0%	$2,039,332,026,649	$450,599	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Mobile Home Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Mobile Home - Fully Tied Down, Mfg before 7/13/94	171,690	51.6%	$10,271,649,621	$59,827	38.0%
Mobile Home - Fully Tied Down, Mfg on or after 7/13/94	152,182	45.7%	$16,033,164,242	$105,355	59.3%
Mobile Home - Other Than Fully Tied Down or Unknown	8,827	2.7%	$751,943,846	$85,187	2.8%
Total	332,699	100.0%	$27,056,757,709	$81,325	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Tenants Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Frame	173,126	16.1%	$4,254,468,595	$24,574	14.5%
Masonry	212,094	19.8%	$7,161,856,133	$33,767	24.4%
Masonry with Reinforced Concrete Roof	750	0.1%	$115,217,602	$153,623	0.4%
Superior	7,907	0.7%	$401,047,277	$50,721	1.4%
Superior with Reinforced Concrete Roof	864	0.1%	$95,931,866	$111,032	0.3%
Masonry Veneer	17,945	1.7%	$625,412,009	$34,852	2.1%
Unknown/Non Mobile Home Default	659,916	61.5%	$16,729,572,987	$25,351	56.9%
Total	1,072,602	100.0%	$29,383,506,469	$27,395	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Condominium Unit Owners Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Frame	92,986	10.5%	$9,786,686,934	$105,249	9.1%
Masonry	497,643	56.4%	$50,398,430,742	$101,274	46.9%
Masonry with Reinforced Concrete Roof	78,537	8.9%	$12,428,959,304	$158,256	11.6%
Superior	73,125	8.3%	$10,939,501,649	$149,600	10.2%
Superior with Reinforced Concrete Roof	112,251	12.7%	$20,759,464,579	$184,938	19.3%
Masonry Veneer	7,406	0.8%	$839,658,820	$113,375	0.8%
Unknown/Non Mobile Home Default	20,826	2.4%	$2,267,071,841	$108,858	2.1%
Total	882,774	100.0%	$107,419,773,869	$121,684	100.0%

Trended Commercial Control Totals By Deductible Code

Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
CA ($0 to $2,500)	215	0.1%	$362,821,110	$1,687,540	0.2%
CB ($2,501 to $7,500)	98	0.1%	$43,712,583	$446,047	0.0%
CC ($7,501 to $15,000)	114	0.1%	$107,845,724	$946,015	0.1%
CD ($15,001 to $50,000)	300	0.2%	$191,503,003	$638,343	0.1%
C1 (1%)	9,253	6.3%	$8,843,773,729	$955,774	5.6%
C2 (2%)	26,852	18.1%	$36,297,344,870	$1,351,756	23.2%
C3 (3%)	60,379	40.8%	$64,140,940,298	$1,062,305	41.0%
C4 (4%)	22	0.0%	$323,433,878	$14,701,540	0.2%
C5 (5%)	31,378	21.2%	$29,314,936,143	$934,251	18.7%
C6 (6%)	336	0.2%	$370,482,681	$1,102,627	0.2%
C7 (7%)	3	0.0%	$33,804,432	$11,268,144	0.0%
C8 (8%)	0	0.0%	$0	$0	0.0%
C9 (9%)	8	0.0%	$5,450,400	$681,300	0.0%
C0 (10%)	19,032	12.9%	$16,554,048,200	$869,801	10.6%
Total	147,990	100.0%	$156,590,097,051	$1,058,113	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Residential Control Totals By Deductible Code

Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
RM ($0)	23,048	0.5%	$1,047,485,449	$45,448	0.1%
RA ($1 to $500)	158,905	3.5%	$58,380,266,394	$367,391	2.9%
RB ($501 to $1,500)	31,309	0.7%	$17,183,460,998	$548,835	0.8%
RC ($1,501 to $2,500)	3,290	0.1%	$1,162,546,217	$353,358	0.1%
RD (Greater Than $2,500)	3,205	0.1%	$2,382,457,927	$743,357	0.1%
R1 (1%)	19,694	0.4%	$11,868,735,101	$602,657	0.6%
R2 (2%)	3,902,952	86.2%	$1,756,032,170,692	$449,924	86.1%
R3 (3%)	33,364	0.7%	$12,725,017,505	$381,400	0.6%
R4 (4%)	3,166	0.1%	$2,178,294,289	$688,027	0.1%
R5 (5%)	307,892	6.8%	$148,933,010,459	$483,718	7.3%
R6 (6%)	1	0.0%	$3,675,360	$3,675,360	0.0%
R7 (7%)	2	0.0%	$5,966,114	$2,983,057	0.0%
R8 (8%)	47	0.0%	$40,332,029	$858,128	0.0%
R9 (9%)	0	0.0%	$0	$0	0.0%
R0 (10% to 14%)	37,666	0.8%	$24,800,880,937	$658,442	1.2%
RZ (15% or Greater)	1,281	0.0%	$2,587,727,178	$2,020,084	0.1%
Total	4,525,822	100.0%	$2,039,332,026,649	$450,599	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Mobile Home Control Totals By Deductible Code

Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
MM ($0)	193	0.1%	$1,451,110	$7,519	0.0%
MA ($1 to $250)	1,243	0.4%	$14,300,995	$11,505	0.1%
MB ($251 to $500)	127,733	38.4%	$8,495,724,665	$66,512	31.4%
MC (Greater Than $500)	7,053	2.1%	$658,740,973	$93,399	2.4%
M1 (1%)	149	0.0%	$18,209,289	$122,210	0.1%
M2 (2%)	113,058	34.0%	$12,158,070,286	$107,538	44.9%
M3 (3%)	193	0.1%	$15,775,794	$81,740	0.1%
M4 (4%)	14	0.0%	$761,650	$54,404	0.0%
M5 (5%)	71,941	21.6%	$5,091,220,292	$70,769	18.8%
M6 (6%)	9	0.0%	$675,800	$75,089	0.0%
M7 (7%)	0	0.0%	$0	$0	0.0%
M8 (8%)	0	0.0%	$0	$0	0.0%
M9 (9%)	1	0.0%	$70,000	$70,000	0.0%
M0 (10% or Greater)	11,112	3.3%	$601,756,855	$54,154	2.2%
Total	332,699	100.0%	$27,056,757,709	$81,325	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Tenants Control Totals By Deductible Code

Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
RM ($0)	232,263	21.7%	$5,907,575,551	$25,435	20.1%
RA ($1 to $500)	458,955	42.8%	$12,885,574,107	$28,076	43.9%
RB ($501 to $1,500)	280,155	26.1%	$6,640,020,121	$23,701	22.6%
RC ($1,501 to $2,500)	1,763	0.2%	$82,756,025	$46,940	0.3%
RD (Greater Than $2,500)	2,351	0.2%	$95,682,269	$40,699	0.3%
R1 (1%)	54	0.0%	$6,831,811	$126,515	0.0%
R2 (2%)	85,520	8.0%	$3,372,841,590	$39,439	11.5%
R3 (3%)	8	0.0%	$425,155	$53,144	0.0%
R4 (4%)	2	0.0%	$43,797	$21,899	0.0%
R5 (5%)	7,572	0.7%	$288,647,454	$38,120	1.0%
R6 (6%)	0	0.0%	$0	$0	0.0%
R7 (7%)	0	0.0%	$0	$0	0.0%
R8 (8%)	0	0.0%	$0	$0	0.0%
R9 (9%)	0	0.0%	$0	$0	0.0%
R0 (10% to 14%)	3,812	0.4%	$87,871,771	$23,051	0.3%
RZ (15% or Greater)	147	0.0%	$15,236,818	$103,652	0.1%
Total	1,072,602	100.0%	$29,383,506,469	$27,395	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Trended Condominium Unit Owners Control Totals By Deductible Code

Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
RM ($0)	4,008	0.5%	$180,818,968	$45,115	0.2%
RA ($1 to $500)	246,482	27.9%	$18,846,875,776	$76,463	17.5%
RB ($501 to $1,500)	99,044	11.2%	$12,379,121,505	$124,986	11.5%
RC ($1,501 to $2,500)	15,107	1.7%	$2,350,997,318	$155,623	2.2%
RD (Greater Than $2,500)	3,067	0.3%	$877,830,730	$286,218	0.8%
R1 (1%)	340	0.0%	$84,668,215	$249,024	0.1%
R2 (2%)	448,954	50.9%	$61,594,176,370	$137,195	57.3%
R3 (3%)	617	0.1%	$131,117,973	$212,509	0.1%
R4 (4%)	195	0.0%	$33,202,043	$170,267	0.0%
R5 (5%)	51,607	5.8%	$8,718,715,276	$168,944	8.1%
R6 (6%)	0	0.0%	$0	$0	0.0%
R7 (7%)	0	0.0%	$0	$0	0.0%
R8 (8%)	33	0.0%	$6,252,212	$189,461	0.0%
R9 (9%)	2	0.0%	$967,412	$483,706	0.0%
R0 (10% to 14%)	12,433	1.4%	$1,651,422,020	$132,826	1.5%
RZ (15% or Greater)	885	0.1%	$563,608,051	$636,845	0.5%
Total	882,774	100.0%	$107,419,773,869	$121,684	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/18)

Trended Exposures and Risks from Invalid ZIP Codes

	Invalid ZIP Code Data			Valid Zip Code Data		
Type	**Units**	**Exposure**	**Average**	**Units**	**Exposure**	**Average**
Commercial	1	$475,000	$475,000	147,989	156,589,622,051	$1,058,117
Residential	44	$17,387,761	$395,176	4,525,778	2,039,314,638,888	$450,600
Mobile Home	80	$3,909,609	$48,870	332,619	27,052,848,100	$81,333
Tenants	52	$935,922	$17,999	1,072,550	29,382,570,547	$27,395
Condo Owners	18	$1,015,353	$56,409	882,756	107,418,758,516	$121,686
Total	195	$23,723,645	$121,660	6,961,692	$2,359,758,438,102	$338,963

	All Data			% from Invalid ZIP Codes	
Type	**Units**	**Exposure**	**Average**	**Units**	**Exposure**
Commercial	147,990	$156,590,097,051	$1,058,113	0.00%	0.00%
Residential	4,525,822	$2,039,332,026,649	$450,599	0.00%	0.00%
Mobile Home	332,699	$27,056,757,709	$81,325	0.02%	0.01%
Tenants/Other	1,072,602	$29,383,506,469	$27,395	0.00%	0.00%
Condo Owners	882,774	$107,419,773,869	$121,684	0.00%	0.00%
Total	6,961,887	$2,359,782,161,747	$338,957	0.00%	0.00%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Exposures, Unit Counts and Averages
As of 10/29/18

Exposures ($)

	Commercial	Residential*	Mobile Home	Stand Alone I.M.**	Total
1994	250,798,066,574	573,595,663,128	27,708,002,887	N/A	852,101,732,589
1995	72,259,223,184	647,611,806,441	27,471,321,323	N/A	747,342,350,948
1996	72,045,415,920	655,747,424,327	26,641,265,399	N/A	754,434,105,646
1997	67,060,941,081	665,706,907,693	27,603,802,377	N/A	760,371,651,151
1998	62,406,306,257	679,581,831,252	28,500,346,256	N/A	770,488,483,765
1999	62,310,422,803	707,168,630,617	29,321,225,365	N/A	798,800,278,785
2000	80,327,371,492	771,151,251,493	29,805,027,583	N/A	881,283,650,568
2001	95,903,685,545	795,830,648,826	30,336,699,432	N/A	922,071,033,803
2002	113,055,152,173	948,240,567,004	34,158,045,008	4,649,506,167	1,100,103,270,352
2003	122,711,546,221	1,027,400,432,961	34,109,501,584	8,307,577,221	1,192,529,057,987
2004	120,567,809,498	1,155,969,925,095	35,014,550,966	9,090,209,248	1,320,642,494,807
2005	125,518,806,067	1,354,455,492,240	36,309,216,467	10,602,304,913	1,526,885,819,687
2006	136,340,614,829	1,617,264,717,950	38,069,099,793	N/A	1,791,674,432,572
2007	186,827,864,101	1,798,433,070,223	37,500,069,047	N/A	2,022,761,003,371
2008	197,900,227,178	1,880,244,332,666	37,368,104,549	N/A	2,115,512,664,393
2009	212,460,681,802	1,917,016,979,268	36,761,961,986	N/A	2,166,239,623,056
2010	209,853,976,263	1,919,117,708,514	35,542,039,480	N/A	2,164,513,724,257
2011	203,072,396,562	1,880,455,711,002	33,837,366,975	N/A	2,117,365,474,539
2012	199,076,994,510	1,845,564,939,783	31,569,203,791	N/A	2,076,211,138,084
2013	197,362,838,239	1,798,241,215,417	28,539,351,997	N/A	2,024,143,405,653
2014	188,824,739,041	1,828,499,151,013	27,474,291,575	N/A	2,044,798,181,629
2015	170,243,010,515	1,865,931,881,566	25,877,523,024	N/A	2,062,052,415,105
2016	159,161,191,747	1,941,037,295,983	26,037,614,203	N/A	2,126,236,101,933
2017	153,185,395,027	1,998,591,420,465	26,396,443,087	N/A	2,178,173,258,579
2018	156,590,097,051	2,091,509,364,416	27,056,757,709	N/A	2,275,156,219,176

Annual Change (%)**
Exposures

	Commercial	Residential*	Mobile Home	Stand Alone I.M.**	Total
1994-1995	NA	12.9	(0.9)	N/A	N/A
1995-1996	(0.3)	1.3	(3.0)	N/A	0.9
1996-1997	(6.9)	1.5	3.6	N/A	0.8
1997-1998	(6.9)	2.1	3.2	N/A	1.3
1998-1999	(0.2)	4.1	2.9	N/A	3.7
1999-2000	28.9	9.0	1.7	N/A	10.3
2000-2001	19.4	3.2	1.8	N/A	4.6
2001-2002	17.9	19.2	12.6	N/A	19.3
2002-2003	8.5	8.3	(0.1)	78.7	8.4
2003-2004	(1.7)	12.5	2.7	9.4	10.7
2004-2005	4.1	17.2	3.7	16.6	15.6
2005-2006	8.6	19.4	4.8	N/A	17.3
2006-2007	37.0	11.2	(1.5)	N/A	12.9
2007-2008	5.9	4.5	(0.4)	N/A	4.6
2008-2009	7.4	2.0	(1.6)	N/A	2.4
2009-2010	(1.2)	0.1	(3.3)	N/A	(0.1)
2010-2011	(3.2)	(2.0)	(4.8)	N/A	(2.2)
2011-2012	(2.0)	(1.9)	(6.7)	N/A	(1.9)
2012-2013	(0.9)	(2.6)	(9.6)	N/A	(2.5)
2013-2014	(4.3)	1.7	(3.7)	N/A	1.0
2014-2015	(9.8)	2.0	(5.8)	N/A	0.8
2015-2016	(6.5)	4.0	0.6	N/A	3.1
2016-2017	(3.8)	3.0	1.4	N/A	2.4
2017-2018	2.2	4.6	2.5	N/A	4.5
Avg. 95-18	4.0	5.4	0.0	N/A	5.1

Unit Counts

	Commercial	Residential*	Mobile Home	Stand Alone I.M.**	Total
1994	667,009	4,523,478	630,092	N/A	5,820,579
1995	217,433	4,662,527	629,593	N/A	5,509,553
1996	232,810	4,589,144	590,981	N/A	5,412,935
1997	199,267	4,722,716	601,167	N/A	5,523,150
1998	171,866	4,695,966	598,446	N/A	5,466,278
1999	132,195	4,627,958	607,162	N/A	5,367,315
2000	120,422	4,820,714	606,046	N/A	5,547,182
2001	167,961	4,877,216	593,148	N/A	5,638,325
2002	190,197	4,889,766	591,094	174,492	5,845,549
2003	179,954	4,885,715	577,547	348,037	5,991,253
2004	152,720	4,998,614	562,979	327,482	6,041,795
2005	145,657	5,229,215	544,433	336,976	6,256,281
2006	141,782	5,742,372	522,009	N/A	6,406,163
2007	193,852	5,768,968	490,926	N/A	6,453,746
2008	186,851	5,736,170	481,647	N/A	6,404,668
2009	195,884	5,757,481	468,744	N/A	6,422,109
2010	194,310	5,767,950	452,889	N/A	6,415,149
2011	193,114	5,784,513	434,355	N/A	6,411,982
2012	190,172	5,776,731	402,738	N/A	6,369,641
2013	187,504	5,794,914	377,877	N/A	6,360,295
2014	178,004	5,896,356	374,055	N/A	6,448,415
2015	165,116	5,998,865	344,350	N/A	6,508,331
2016	154,414	6,170,343	338,035	N/A	6,662,792
2017	210,470	6,331,735	334,307	N/A	6,876,512
2018	147,990	6,382,809	332,699	N/A	6,863,498

Unit Counts

	Commercial	Residential*	Mobile Home	Stand Alone I.M.**	Total
1994-1995	NA	3.1	(0.1)	N/A	N/A
1995-1996	7.1	(1.6)	(6.1)	N/A	(1.8)
1996-1997	(14.4)	2.9	1.7	N/A	2.0
1997-1998	(13.8)	(0.6)	(0.5)	N/A	(1.0)
1998-1999	(23.1)	(1.4)	1.5	N/A	(1.8)
1999-2000	(8.9)	4.2	(0.2)	N/A	3.4
2000-2001	39.5	1.2	(2.1)	N/A	1.6
2001-2002	13.2	0.3	(0.3)	N/A	3.7
2002-2003	(5.4)	(0.1)	(2.3)	99.5	2.5
2003-2004	(15.1)	2.3	(2.5)	(5.9)	0.8
2004-2005	(4.6)	4.6	(3.3)	2.9	3.6
2005-2006	(2.7)	9.8	(4.1)	N/A	2.4
2006-2007	36.7	0.5	(6.0)	N/A	0.7
2007-2008	(3.6)	(0.6)	(1.9)	N/A	(0.8)
2008-2009	4.8	0.4	(2.7)	N/A	0.3
2009-2010	(0.8)	0.2	(3.4)	N/A	(0.1)
2010-2011	(0.6)	0.3	(4.1)	N/A	(0.0)
2011-2012	(1.5)	(0.1)	(7.3)	N/A	(0.7)
2012-2013	(1.4)	0.3	(6.2)	N/A	(0.1)
2013-2014	(5.1)	1.8	(1.0)	N/A	1.4
2014-2015	(7.2)	1.7	(7.9)	N/A	0.9
2015-2016	(6.5)	2.9	(1.8)	N/A	2.4
2016-2017	36.3	2.6	(1.1)	N/A	3.2
2017-2018	(29.7)	0.8	(0.5)	N/A	(0.2)
Avg. 95-18	(0.3)	1.4	(2.7)	N/A	1.0

Averages ($)

	Commercial	Residential*	Mobile Home	Stand Alone I.M.**	Total
1994	376,004	126,804	43,975	N/A	146,395
1995	332,329	138,897	43,633	N/A	135,645
1996	309,460	142,891	45,080	N/A	139,376
1997	336,538	140,958	45,917	N/A	137,670
1998	363,110	144,716	47,624	N/A	140,953
1999	471,352	152,804	48,292	N/A	148,827
2000	667,049	159,966	49,179	N/A	158,871
2001	570,988	163,173	51,145	N/A	163,536
2002	594,411	193,924	57,788	26,646	188,195
2003	681,905	210,287	59,059	23,870	199,045
2004	789,470	231,258	62,195	27,758	218,584
2005	861,742	259,017	66,692	31,463	244,056
2006	961,621	281,637	72,928	N/A	279,680
2007	963,765	311,743	76,386	N/A	313,424
2008	1,059,134	327,787	77,584	N/A	330,308
2009	1,084,625	332,961	78,427	N/A	337,310
2010	1,079,996	332,721	78,478	N/A	337,407
2011	1,051,567	325,085	77,903	N/A	330,220
2012	1,046,826	319,483	78,386	N/A	325,954
2013	1,052,579	310,314	75,526	N/A	318,247
2014	1,060,789	310,107	73,450	N/A	317,101
2015	1,031,051	311,047	75,149	N/A	316,833
2016	1,030,743	314,575	77,026	N/A	319,121
2017	727,825	315,647	78,959	N/A	316,756
2018	1,058,113	327,679	81,325	N/A	331,486

Averages

	Commercial	Residential*	Mobile Home	Stand Alone I.M.**	Total
1994-1995	NA	9.5	(0.8)	N/A	N/A
1995-1996	(6.9)	2.9	3.3	N/A	2.8
1996-1997	8.8	(1.4)	1.9	N/A	(1.2)
1997-1998	7.9	2.7	3.7	N/A	2.4
1998-1999	29.8	5.6	1.4	N/A	5.6
1999-2000	41.5	4.7	1.8	N/A	6.7
2000-2001	(14.4)	2.0	4.0	N/A	2.9
2001-2002	4.1	18.8	13.0	N/A	15.1
2002-2003	14.7	8.4	2.2	(10.4)	5.8
2003-2004	15.8	10.0	5.3	16.3	9.8
2004-2005	9.2	12.0	7.2	13.3	11.7
2005-2006	11.6	8.7	9.4	N/A	14.6
2006-2007	0.2	10.7	4.7	N/A	12.1
2007-2008	9.9	5.1	1.6	N/A	5.4
2008-2009	2.4	1.6	1.1	N/A	2.1
2009-2010	(0.4)	(0.1)	0.1	N/A	0.0
2010-2011	(2.6)	(2.3)	(0.7)	N/A	(2.1)
2011-2012	(0.5)	(1.7)	0.6	N/A	(1.3)
2012-2013	0.5	(2.9)	(3.6)	N/A	(2.4)
2013-2014	0.8	(0.1)	(2.7)	N/A	(0.4)
2014-2015	(2.8)	0.3	2.3	N/A	(0.1)
2015-2016	(0.0)	1.1	2.5	N/A	0.7
2016-2017	(29.4)	0.3	2.5	N/A	(0.7)
2017-2018	45.4	3.8	3.0	N/A	4.7
Avg. 95-18	6.3	3.9	2.8	N/A	4.1

* Includes Residential, Tenants, and Condominium Unit Owner policies.

**2002 was the first year Stand Alone Inland Marine data was reported. Stand Alone Inland Marine was defined as inland marine policies not associated with the policy that covers the main building/structure.
In 2003, it was referred to as "Stand Alone/Contents Type Policies" and also included scheduled personal property written under attachments, endorsements, and riders.
In 2004, it was referred to as "Other Contents Policies or Endorsements."
In 2006, it was removed.

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Commercial Totals By Mitigation Features

Mitigation Feature	**Units**	**Percent of Units**	**Primary Exposure**	**Average Exposure**	**Percent of Exposure**
YEAR BUILT					
Unknown	1,723	1.2%	$463,361,205	$268,927	0.3%
1994 or Earlier	103,185	69.7%	$92,385,614,460	$895,340	59.0%
1995-2001	13,964	9.4%	$16,729,685,876	$1,198,058	10.7%
2002-2011	24,310	16.4%	$38,331,137,768	$1,576,764	24.5%
2012 or Later	4,808	3.2%	$8,680,297,742	$1,805,386	5.5%
TOTAL	147,990	100.0%	$156,590,097,051	$1,058,113	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	134,640	91.0%	$122,188,523,532	$907,520	78.0%
Credit is Given to Policyholder	13,350	9.0%	$34,401,573,519	$2,576,897	22.0%
TOTAL	147,990	100.0%	$156,590,097,051	$1,058,113	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	48,217	32.6%	$38,571,619,672	$799,959	24.6%
Gable, Other, or Unknown	99,773	67.4%	$118,018,477,379	$1,182,870	75.4%
TOTAL	147,990	100.0%	$156,590,097,051	$1,058,113	100.0%

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Residential Totals By Mitigation Features

Mitigation Feature	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
YEAR BUILT					
Unknown	7,718	0.2%	$1,672,624,631	$216,717	0.1%
1994 or Earlier	2,535,583	56.0%	$948,540,212,457	$374,092	46.5%
1995-2001	621,378	13.7%	$322,793,280,147	$519,480	15.8%
2002-2011	945,248	20.9%	$511,333,454,277	$540,952	25.1%
2012 or Later	415,895	9.2%	$254,992,455,137	$613,117	12.5%
TOTAL	4,525,822	100.0%	$2,039,332,026,649	$450,599	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	3,735,873	82.5%	$1,546,404,210,495	$413,934	75.8%
Credit is Given to Policyholder	789,949	17.5%	$492,927,816,154	$624,000	24.2%
TOTAL	4,525,822	100.0%	$2,039,332,026,649	$450,599	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	1,457,704	32.2%	$816,078,750,668	$559,838	40.0%
Gable, Other, or Unknown	3,068,118	67.8%	$1,223,253,275,981	$398,698	60.0%
TOTAL	4,525,822	100.0%	$2,039,332,026,649	$450,599	100.0%

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Mobile Home Totals By Mitigation Features

Mitigation Feature	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
YEAR BUILT					
Unknown or Mobile Home	332,699	100.0%	$27,056,757,709	$81,325	100.0%
1994 or Earlier	0	0.0%	$0	$0	0.0%
1995-2001	0	0.0%	$0	$0	0.0%
2002 or Later	0	0.0%	$0	$0	0.0%
TOTAL	332,699	100.0%	$27,056,757,709	$81,325	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	332,683	100.0%	$27,055,943,432	$81,326	100.0%
Credit is Given to Policyholder	16	0.0%	$814,277	$0	0.0%
TOTAL	332,699	100.0%	$27,056,757,709	$81,325	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	28	0.0%	$444,751	$15,884	0.0%
Gable, Other, or Unknown	332,671	100.0%	$27,056,312,958	$81,331	100.0%
TOTAL	332,699	100.0%	$27,056,757,709	$81,325	100.0%

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Tenants Totals By Mitigation Features

Mitigation Feature	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
YEAR BUILT					
Unknown	456,274	42.5%	$9,992,725,686	$21,901	34.0%
1994 or Earlier	264,161	24.6%	$7,925,409,915	$30,002	27.0%
1995-2001	91,501	8.5%	$2,930,004,957	$32,022	10.0%
2002-2011	139,191	13.0%	$5,005,936,713	$35,965	17.0%
2012 or Later	121,475	11.3%	$3,529,429,198	$29,055	12.0%
TOTAL	1,072,602	100.0%	$29,383,506,469	$27,395	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	1,063,648	99.2%	$28,729,303,016	$27,010	97.8%
Credit is Given to Policyholder	8,954	0.8%	$654,203,453	$73,063	2.2%
TOTAL	1,072,602	100.0%	$29,383,506,469	$27,395	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	69,371	6.5%	$2,334,745,068	$33,656	7.9%
Gable, Other, or Unknown	1,003,231	93.5%	$27,048,761,401	$26,962	92.1%
TOTAL	1,072,602	100.0%	$29,383,506,469	$27,395	100.0%

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2019 Ratemaking Formula Report
2018 Reported Exposures as of 10/29/18 (Trended to 6/30/19)

Condominium Unit Owners Totals By Mitigation Features

Mitigation Feature	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
YEAR BUILT					
Unknown	4,154	0.5%	$375,662,824	$90,434	0.3%
1994 or Earlier	580,898	65.8%	$56,090,324,168	$96,558	52.2%
1995-2001	92,623	10.5%	$14,635,201,830	$158,008	13.6%
2002-2011	174,889	19.8%	$28,980,306,024	$165,707	27.0%
2012 or Later	30,210	3.4%	$7,338,279,023	$242,909	6.8%
TOTAL	882,774	100.0%	$107,419,773,869	$121,684	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	752,663	85.3%	$75,691,353,976	$100,565	70.5%
Credit is Given to Policyholder	130,111	14.7%	$31,728,419,893	$243,857	29.5%
TOTAL	882,774	100.0%	$107,419,773,869	$121,684	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	121,155	13.7%	$17,109,219,852	$141,218	15.9%
Gable, Other, or Unknown	761,619	86.3%	$90,310,554,017	$118,577	84.1%
TOTAL	882,774	100.0%	$107,419,773,869	$121,684	100.0%

EXHIBIT

IV

Florida Hurricane Catastrophe Fund
2019 Calculation of Layer of Coverage
Using 2018 FHCF Premium and Exposure Data as of 10/29/2018

Type of Business	Coverage Option	Total Insured Risks	Total Exposure	Gross FHCF Premium	Net FHCF Premium	Net FHCF Prem at 100%
Section I						
1	45%	95,549	96,995,601,910	40,949,477	44,510,652	98,912,559
1	75%	0	0	0	0	0
1	90%	52,441	59,594,495,141	49,280,728	43,470,585	48,300,650
2	45%	1,210,662	624,205,704,624	194,473,539	182,589,743	405,754,985
2	75%	204,405	99,314,524,934	54,957,623	48,389,812	64,519,750
2	90%	3,072,954	1,237,430,453,665	656,040,821	657,760,089	730,844,544
3	45%	8,351	532,507,310	535,868	535,868	1,190,818
3	75%	33	553,850	1,090	1,090	1,453
3	90%	324,315	26,523,696,549	44,039,318	44,039,318	48,932,575
4	45%	249,645	8,014,202,832	1,132,734	1,095,253	2,433,896
4	75%	5,116	144,655,745	56,532	54,062	72,082
4	90%	773,331	20,095,428,637	7,508,601	7,359,150	8,176,833
6	45%	150,199	21,910,718,302	9,919,776	8,538,627	18,974,727
6	75%	67,454	5,508,672,524	3,757,414	4,715,218	6,286,958
6	90%	649,043	74,885,003,153	60,719,545	59,861,268	66,512,520
Section II						
1	45%		0	0	0	0
1	75%		0	0	0	0
1	90%		0	0	0	0
Section I Totals						
1	xx	147,990	156,590,097,051	90,230,205	87,981,236	147,213,209
2	xx	4,488,021	1,960,950,683,223	905,471,983	888,739,645	1,201,119,278
3	xx	332,699	27,056,757,709	44,576,276	44,576,276	50,124,846
4	xx	1,028,092	28,254,287,214	8,697,867	8,508,465	10,682,811
6	xx	866,696	102,304,393,979	74,396,736	73,115,114	91,774,205
xx	45%	1,714,406	751,658,734,978	247,011,394	237,270,143	527,266,985
xx	75%	277,008	104,968,407,053	58,772,659	53,160,182	70,880,243
xx	90%	4,872,084	1,418,529,077,145	817,589,013	812,490,410	902,767,122
Section I Total		6,863,498	2,275,156,219,176	1,123,373,066	1,102,920,735	1,500,914,349
Section II Total*		0	0	0	0	0
Grand Total		6,863,498	2,275,156,219,176	1,123,373,066	1,102,920,735	1,500,914,349

* We last had a very small amount of Section II exposure in 2002.

Weighted Average Coverage Multiples - Section I Only

		Risks	Exposure	For Exh II Ratemaking Premium
1	Commercial	0.60946	0.62126	0.59764
2	Residential	0.77178	0.74916	0.73993
3	Mobile Home	0.88869	0.89114	0.88930
4	Tenants	0.78998	0.77159	0.79646
6	Condos	0.81034	0.79555	0.79668
	Total	0.78154	0.74441	0.73483

Weighted Average Coverage Multiple - Sections I and II

Total	0.78154	0.74441	0.73483

Florida Hurricane Catastrophe Fund
2019 Calculation of Layer of Coverage
Using 2018 FHCF Premium and Exposure Data as of 10/29/2018

1. Calculate Section I and II Retention

Historical Exposure

		Data as of 10/29/2018	Estimate of Missing Data	Total	
2004	Total	1,320,642,494,807	-	1,320,642,494,807	
2017	Total	2,178,173,258,579	-	2,178,173,258,579	

Growth in exposure, 2004 to 2017	64.933%		[1a]
Base FHCF Retention	4,500,000,000		[1b]
2018 Retention (Actual, based on premiums paid)	7,177,627,072		
2019 Target Retention	7,421,978,092	Change 2018 to 2019	[1c]=(1+[1a])x[1b]
2019 Selected Retention	7,422,000,000	3.40%	[1d]=[1c], rnd'd to $M

2. Allocate Retention to Sections I and II

2018 Net Full Coverage FHCF Premium (ie at 100%)				
	Section I	1,500,914,349	100.000%	[2a]
	Section II	-	0.000%	[2b]
	Total	1,500,914,349	100.000%	[2c]=[2a]+[2b]

Note: Allocate Retention based on ***full coverage*** *premium, which is the best indicator of expected ground-up losses*

2019 Selected Retention (using full coverage FHCF premium for weighting)				
	Section I	7,422,000,000	100.000%	[2d]
	Section II	-	0.000%	[2e]
	Total	7,422,000,000	100.000%	[2f]=[2d]+[2e]

3. Calculate FHCF Limit

Estimated Claims Paying Capacity Average $22,000,000,000 [3a]
Source: Raymond James: FHCF Estimated Claims Paying Capacity, Oct. 9, 2018 Page 13

Dollar growth in cash balance over prior calendar year				
Cash Balance @12/31/2017	$ 12,900,000,000			[3b]
Est Cash Balance @ 12/31/2018	$ 11,000,000,000			[3c}
Change in Cash Balance	$ (1,900,000,000)			[3d]=[3c]-[3b]
2018 Statutory Maximum Coverage Limit		17,000,000,000		[3e]=[3g prior year]
2019 Statutory Coverage Limit Prior to Change in Cash Balance Limit		17,000,000,000		[3f]=17Billion + .5*(max(3a-$34 billio
2019 Statutory Coverage Limit		$ 17,000,000,000	0.00%	[3g]=[3e]+min([3f]-[3e],max([3d],0))

Florida Hurricane Catastrophe Fund
2019 Calculation of Layer of Coverage
Using 2018 FHCF Premium and Exposure Data as of 10/29/2018

4. Allocate Limit to Sections I and II

Total FHCF Capacity		17,000,000,000		[4a]
	Pure Loss	16,190,476,190		[4b] = [4a]/1.05
	Loss Adjustment Expenses	809,523,810		[4c] = [4a] - [4b]
Actual Coverage FHCF Premium				
	Section I	1,102,920,735	100.000%	[4d]
	Section II	-	0.000%	[4e]
	Total	1,102,920,735	100.000%	[4f]=[4d]+[4e]

Note: Allocate Limit based on ***actual*** *premium, which is the best indicator of expected FHCF losses.*

Sections I and II Limit Allocations

	Pure loss	LAE	Total
Section I	16,190,476,190	809,523,810	17,000,000,000
Section II	-	-	-
Total	16,190,476,190	809,523,810	17,000,000,000

5. FHCF Layer Structure for Sections I and II

Section I

	Based on 2018 Selections	Based on 2019 Selections	
Retention	7,422,000,000	7,422,000,000	[5a] = [2d]
Pure Loss Limit Available	16,190,476,190	16,190,476,190	[5b] from Part 3
Total Limit Available	17,000,000,000	17,000,000,000	[5c] from Part 3
Wtd Average Coverage	73.483%	81.629%	[5d]
Top of Loss Layer	29,454,878,037	27,256,264,237	[5e]=[5a]+[5b]/[5d]

Layer used for modeled losses: 81.629% of $19,834,264,237 xs $7,422,000,000
(Modeled losses are Section I losses only, no LAE)

Sections I and II

	2018 Selections	2019 Selections	
Retention	7,422,000,000	7,422,000,000	[5f] = [2f]
Pure Loss Limit Available	16,190,476,190	16,190,476,190	[5g] from Part 3
Total Limit Available	17,000,000,000	17,000,000,000	[5h] from Part 3
Wtd Average Coverage	73.483%	81.629%	[5i]
Top of Loss Layer	29,454,878,037	27,256,264,237	[5j]=[5f]+[5g]/[5i]

Layer used for FHCF publications:
Loss only: 81.629% of $19,834,264,237 xs $7,422,000,000
Loss + LAE: 81.629% of $20,825,977,449 xs $7,422,000,000

EXHIBIT

V

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Modeled Adjusted Loss Severity Distributions

Summary

	Size of Event(s)	Probability	Return Time (Years)	5 Year Probability	10 Year Probability
Single Event					
Attach industry retention	$7,422,000,000	10.10%	9.9	41.27%	65.50%
Exhaust FHCF Projected Cash Balance	$12,288,469,194	3.24%	30.9	15.17%	28.03%
Exhaust FHCF Projected Cash Balance and Pre-Event Notes	$13,938,469,194	2.89%	34.6	13.64%	25.42%
Exhaust Estimated Claims Paying Capacity	$17,000,000,000	2.37%	42.2	11.31%	21.34%
Exhaust FHCF limit	$17,000,000,000	2.37%	42.2	11.31%	21.34%
Annual Aggregate					
Exhaust FHCF Projected Cash Balance	$12,288,469,194	3.30%	30.3	15.44%	28.50%
Exhaust FHCF Projected Cash Balance and Pre-Event Notes	$13,938,469,194	2.95%	33.9	13.92%	25.90%
Exhaust Estimated Claims Paying Capacity	$17,000,000,000	2.43%	41.1	11.60%	21.85%
Exhaust FHCF limit	$17,000,000,000	2.43%	41.1	11.60%	21.85%

Expected Annual Losses	
Adjusted Gross losses at 100% coverage	$3,239,793,238
Loss to Mandatory FHCF layer, at actual coverage	
Loss only	$803,107,591
Loss + LAE	$843,262,971

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Modeled Adjusted Loss Severity Distributions

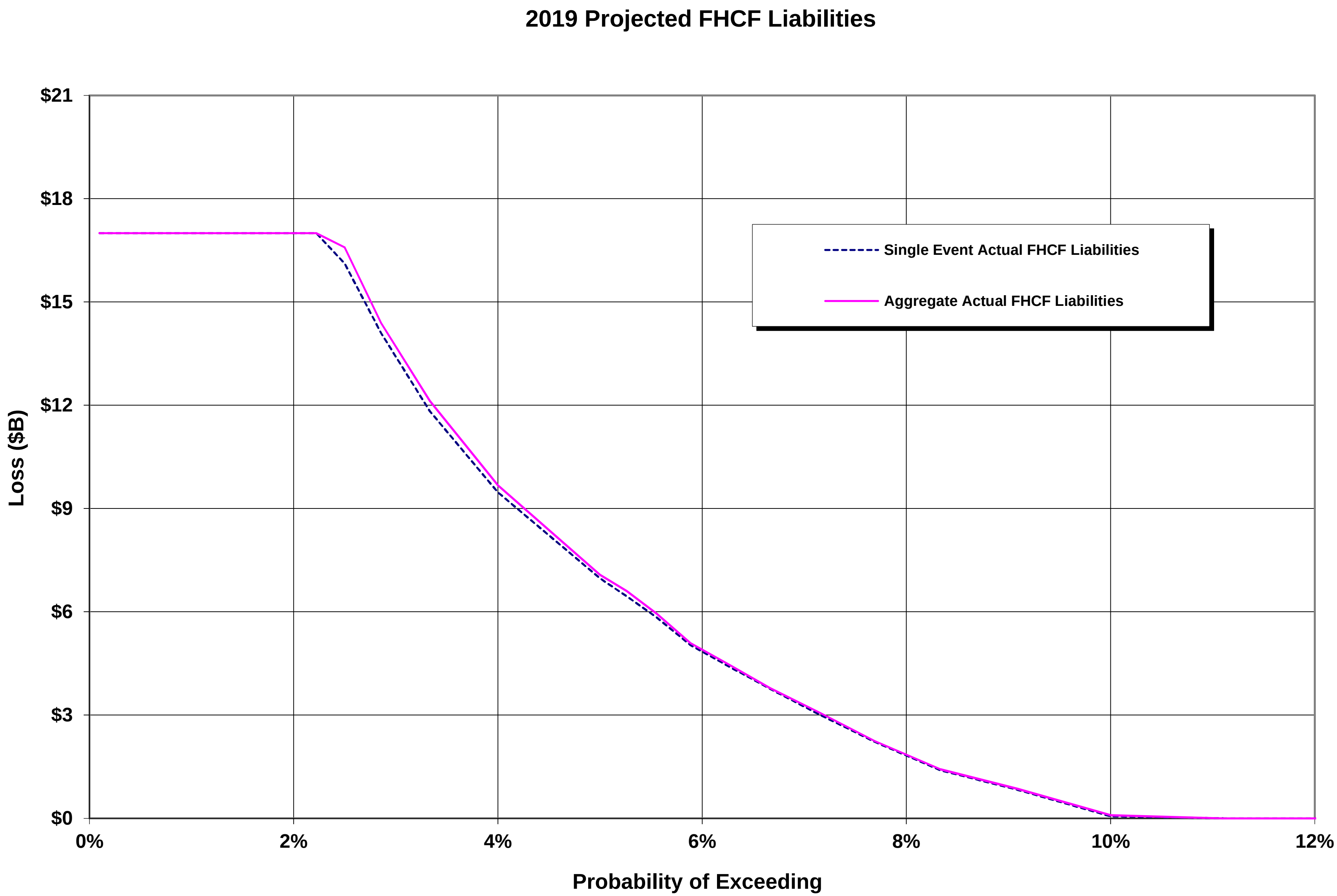
Traditional FHCF Only Layer

Return Time	Probability of Exceedance	Uniform Weighted Section I Gross Per Event (100% Coverage, no LAE)	FHCF Layer Weighted Section I Gross Per Event (100% Coverage, no LAE)	Section I Excess Retention Aggregate (100% Coverage, no LAE)	Single Event FHCF Layer Liabilities	Aggregate FHCF Layer Liabilities
1000	0.0010	$115,215,870,491	$117,870,379,794	$114,004,008,019	$17,000,000,000	$17,000,000,000
900	0.0011	$112,002,326,016	$113,391,522,964	$108,563,070,980	$17,000,000,000	$17,000,000,000
800	0.0013	$108,622,488,054	$110,386,002,962	$104,440,869,568	$17,000,000,000	$17,000,000,000
700	0.0014	$103,186,707,290	$104,933,193,441	$100,291,233,077	$17,000,000,000	$17,000,000,000
600	0.0017	$99,987,044,524	$99,987,044,524	$93,680,275,248	$17,000,000,000	$17,000,000,000
500	0.0020	$94,063,260,972	$93,691,774,186	$87,792,052,490	$17,000,000,000	$17,000,000,000
400	0.0025	$86,984,966,891	$85,639,514,732	$80,683,935,318	$17,000,000,000	$17,000,000,000
300	0.0033	$77,750,422,023	$75,375,397,228	$69,618,589,857	$17,000,000,000	$17,000,000,000
250	0.0040	$72,911,984,197	$69,091,486,200	$63,485,031,782	$17,000,000,000	$17,000,000,000
200	0.0050	$66,289,543,932	$63,288,009,862	$57,160,157,588	$17,000,000,000	$17,000,000,000
150	0.0067	$58,859,145,460	$55,725,991,458	$49,210,707,391	$17,000,000,000	$17,000,000,000
100	0.0100	$48,734,916,446	$45,419,501,151	$38,912,874,387	$17,000,000,000	$17,000,000,000
90	0.0111	$45,884,398,906	$42,698,289,116	$36,471,255,550	$17,000,000,000	$17,000,000,000
80	0.0125	$42,718,504,980	$40,259,285,779	$33,783,149,893	$17,000,000,000	$17,000,000,000
70	0.0143	$39,803,417,693	$37,257,367,632	$30,587,227,540	$17,000,000,000	$17,000,000,000
65	0.0154	$37,961,121,732	$35,988,797,059	$29,103,216,112	$17,000,000,000	$17,000,000,000
60	0.0167	$36,364,977,177	$34,106,496,601	$27,436,270,439	$17,000,000,000	$17,000,000,000
55	0.0182	$34,454,521,002	$32,212,214,812	$25,447,697,346	$17,000,000,000	$17,000,000,000
50	0.0200	$32,411,685,643	$30,235,987,765	$23,563,095,713	$17,000,000,000	$17,000,000,000
45	0.0222	$30,164,303,364	$28,451,480,964	$21,420,703,046	$17,000,000,000	$17,000,000,000
40	0.0250	$27,915,013,527	$26,231,087,081	$19,349,136,649	$16,121,317,965	$16,584,195,870
35	0.0286	$25,285,914,744	$23,866,619,413	$16,791,662,424	$14,094,726,513	$14,392,177,991
30	0.0333	$22,575,818,457	$21,220,308,594	$14,148,170,814	$11,826,566,556	$12,126,434,385
25	0.0400	$19,564,199,878	$18,469,673,352	$11,285,074,732	$9,468,989,862	$9,672,467,209
20	0.0500	$16,340,538,322	$15,554,855,623	$8,254,010,171	$6,970,691,926	$7,074,533,809
19	0.0526	$15,592,687,610	$14,947,689,395	$7,703,925,053	$6,450,288,157	$6,603,054,408
18	0.0556	$14,903,086,062	$14,226,693,602	$6,933,459,520	$5,832,320,768	$5,942,686,375
17	0.0588	$14,130,007,849	$13,299,416,279	$5,946,786,259	$5,037,548,938	$5,097,006,130
16	0.0625	$13,271,230,997	$12,594,282,051	$5,239,774,580	$4,433,176,538	$4,491,024,562
15	0.0667	$12,431,873,760	$11,809,361,805	$4,415,013,035	$3,760,419,332	$3,784,119,274
14	0.0714	$11,567,439,752	$10,953,531,438	$3,596,978,845	$3,026,884,876	$3,082,980,021
13	0.0769	$10,682,701,507	$10,013,200,633	$2,617,464,837	$2,220,924,872	$2,243,435,990
12	0.0833	$9,702,643,083	$9,048,012,126	$1,667,096,317	$1,393,659,266	$1,428,872,635
11	0.0909	$8,769,675,811	$8,390,223,862	$996,427,762	$829,867,216	$854,040,854
10	0.1000	$7,871,349,492	$7,495,261,066	$100,359,194	$62,792,252	$86,018,129
9	0.1111	$6,850,230,218	$6,647,472,106	$0	$0	$0
8	0.1250	$5,920,663,158	$5,825,366,781	$0	$0	$0
7	0.1429	$4,878,042,065	$4,922,408,323	$0	$0	$0
6	0.1667	$3,712,332,233	$3,788,666,824	$0	$0	$0
5	0.2000	$2,530,804,325	$2,569,342,102	$0	$0	$0
4	0.2500	$1,454,794,922	$1,544,917,759	$0	$0	$0
3	0.3333	$531,487,799	$575,503,008	$0	$0	$0

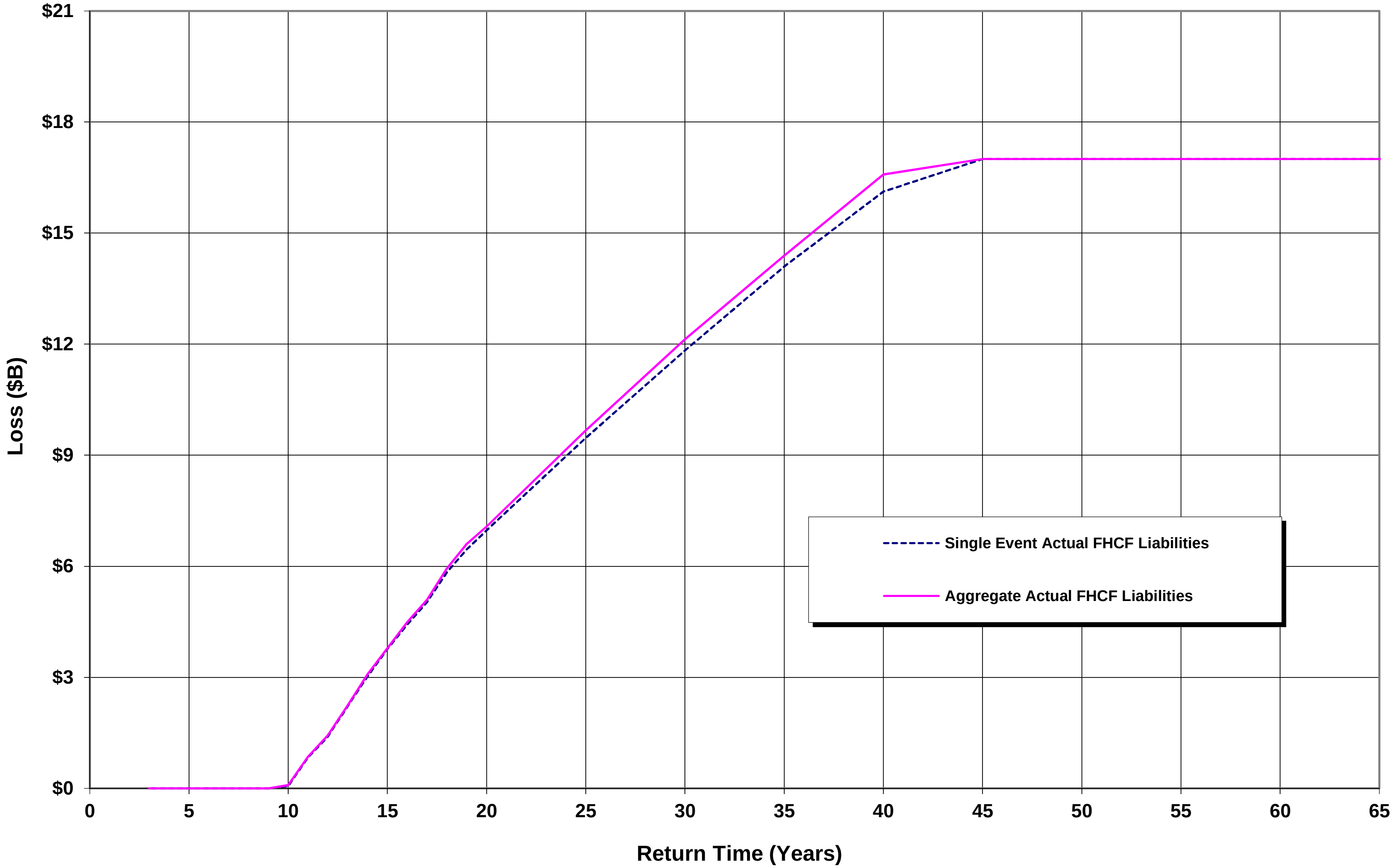
Notes:

Aggregate FHCF Liabilities include Sections I, II and LAE, and are at weighted average coverage.

2019 severity distributions based on AIR, EQE, RMS, ARA and FPM models.


2019 Projected FHCF Liabilities
Single Event Actual FHCF Liabilities
Aggregate Actual FHCF Liabilities
Loss ($B)
$21
$18
$15
$12
$9
$6
$3
$0
0%
2%
4%
6%
8%
10%
12%
Probability of Exceeding

2019 Projected FHCF Liabilities



EXHIBIT

VI

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Allocation of Excess Losses to Type of Business at Coverage Level

		Evaluated	Residential	Tenants	Condos	Mobile Home	Commercial	Total
(1)	Coverage Selection by Type of Business	10/29/2018	73.993%	79.646%	79.668%	88.930%	59.764%	73.483%
(2)	Coverage Selection by Type of Business	03/01/2019	80.669%	79.851%	82.779%	89.607%	86.159%	81.629%
(3)	Allocation of XS Loss Using 100% Adjusted Gross Losses		80.19%	0.64%	6.25%	3.27%	9.65%	100.00%
(4)	Allocation of XS Loss at Coverage Level (2) x (3)		64.69%	0.51%	5.18%	2.93%	8.32%	81.63%
(5)	Allocation of XS Loss at Cov. Level to Type of Business (4)/Total(4)		79.24%	0.62%	6.34%	3.59%	10.19%	99.99%
(6)	Balance Adjustment to Allocation (5)/Total (5)		79.26%	0.62%	6.34%	3.59%	10.19%	100.00%
(7)	Selected Allocation of XS Loss at Coverage Level for Ratemaking		80.97%	0.72%	6.48%	3.66%	8.16%	100.00%
(8)	Rate Change by Type of Business		3.05%	-4.50%	-0.69%	-3.30%	9.16%	2.83%

EXHIBIT

VII

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Law and Ordinance Adjustment Factors

FHCF Premium as a Percentage of Base Premium

Distribution of Premium	Expenses	Liability	Non-hurr. Property	Hurricane Outside FHCF Layer	Hurricane Within FHCF Layer [*]	Total
Commercial Habitational	30%	10%	10%	33%	17%	100%
Residential	30%	10%	10%	33%	17%	100%
Mobile Home	30%	10%	10%	33%	17%	100%
Tenants	30%	10%	10%	33%	17%	100%
Condo-Owners	30%	10%	10%	33%	17%	100%

% of Law and Ordinance Premium Applicable to FHCF Layer

	Expenses	Liability	Non-hurr. Property	Hurricane Outside FHCF Layer	Hurricane Within FHCF Layer [**]	Total
Commercial Habitational	0%	0%	10%	60%	30%	100%
Residential	0%	0%	10%	60%	30%	100%
Mobile Home	0%	0%	10%	60%	30%	100%
Tenants	0%	0%	10%	60%	30%	100%
Condo-Owners	0%	0%	10%	60%	30%	100%

Selections for 2019 Ratemaking

Type of Business	% of Base Premium for Law and Ordinance Coverage [1] Insurer Survey	% of Law and Ordinance Premium Applicable to FHCF Layer [2] = [**]	FHCF Premium as a Percentage of Base Premium [3] = [*]	Law and Ordinance Premium as a Percentage of Base Premium [4] = [1] x [2]/[3]	Percent of Policies with Coverage [5] Insurer Survey	Implied Law and Ordinance Adjustment Factors [6] = [4] x [5]	Selected Law and Ordinance Adjustment Factors [7]
Commercial Habitational	6.50%	30.00%	16.67%	11.70%	5%	0.59%	0.00%
Residential	3.00%	30.00%	16.67%	5.40%	95%	5.13%	4.86%
Mobile Home	0.00%	30.00%	16.67%	0.00%	0%	0.00%	0.00%
Tenants	0.00%	30.00%	16.67%	0.00%	50%	0.00%	0.00%
Condo-Owners	0.00%	30.00%	16.67%	0.00%	65%	0.00%	0.00%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Wind Deductible Adjustment Factor

Calculation of Loading Factor to Adjust Modeled Losses for the Impact of Aggregate Wind Deductibles

Type of Business	(1) Per Event Deductibles	(2) Annual Wind Deductible + AOP Deductible	(3) Ratio	(4) Implied Load	(5) Take-up Rate	(6) 2019 Adjusted Load	(7) 2018 Adjusted Load	(8) 2018/2019 Weighted Load	(9) 2019 Selected Load
Commercial Residential	334,509,143	335,982,277	1.00440	0.440%	50%	0.220%	0.210%	0.217%	0.220%
Residential	2,739,647,702	2,752,307,672	1.00462	0.462%	100%	0.462%	0.471%	0.465%	0.460%
Mobile Home	161,619,207	162,365,677	1.00462	0.462%	100%	0.462%	0.454%	0.459%	0.460%
Tenants	32,460,649	32,476,886	1.00050	0.050%	100%	0.050%	0.052%	0.051%	0.050%
Condo	229,486,725	229,780,559	1.00128	0.128%	100%	0.128%	0.126%	0.127%	0.130%
Total	3,497,723,426	3,512,913,071	1.00434						

Notes:
AIR Deliverable 2 is per event, AIR Deliverable 5 is aggregate
(1) Based on AIR study (Deliverable 2) completed in 2019
(2) Based on AIR study (Deliverable 5) completed in 2019
(3) = (2) / (1)
(4) = (3) - 1
(5) Judgmentally Selected
(6) = (4) * (5)
(7) Indication in 2018
(8) = (6)*2/3+(7)*1/3

EXHIBIT

VIII

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
AIR and RMS 2019 Retention Limit Analyses: Adjustment to Expected FHCF Layer Losses
Coverage Selections as of 03/01/2019

		2019 (WTD)	RMS Adjusted Aggregate Run	AIR Adjusted Aggregate Run	Average RMS AIR Adjusted Aggregate Runs	RMS/WTD	AIR/WTD	AVE/WTD	
1	Wtd Ave. Expected Gross Loss Adjusted	3,239,793,238	3,253,814,462	3,239,791,086	3,246,802,774	100.433%	100.000%	100.216%	2019 Ex. 2 (7)
2	Expected FHCF Wtd Ave.Aggregate Layer Loss and LAE at Coverage Level	843,262,971	827,097,375	805,541,162	816,319,268	98.083%	95.527%	96.805%	2019 Ex. 2 (10)
2a	Expected FHCF RMS Aggregate Layer Loss and LAE at Coverage Level Using Company Limits, Retentions		843,167,116	783,088,252	813,127,684				
3	Model Adjustment Factor		1.019429081	0.972126925	0.996090275				(2a)/(2)
4	Indicated Adjustment Factor		1.943%	-2.787%	-0.3910%	(3)-1.00			Weights 67%
5	Prior Selected Factor (2018)				0.2987%				33%
6	Current Year Selected Factor Weighted (2/3 Indicated , 1/3 Prior)				-0.1611%				2019 Ex. 2 (15)

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Retention and Limit Adjustment Factor Calculation History

Year	Indicated	Selected	Modeler Data
2013	-1.9000%	-0.7347%	ARA
2014	0.3103%	-0.0371%	RMS
2015	0.3103%	-0.0371%	RMS (prior year , no update)
2016	0.0298%	0.0075%	AIR,RMS run by Paragon
2017	0.8549%	0.5724%	AIR,RMS run by Paragon
2018	0.1618%	0.2987%	AIR,RMS run by Paragon
2019	-0.3910%	-0.1611%	AIR,RMS run by Paragon

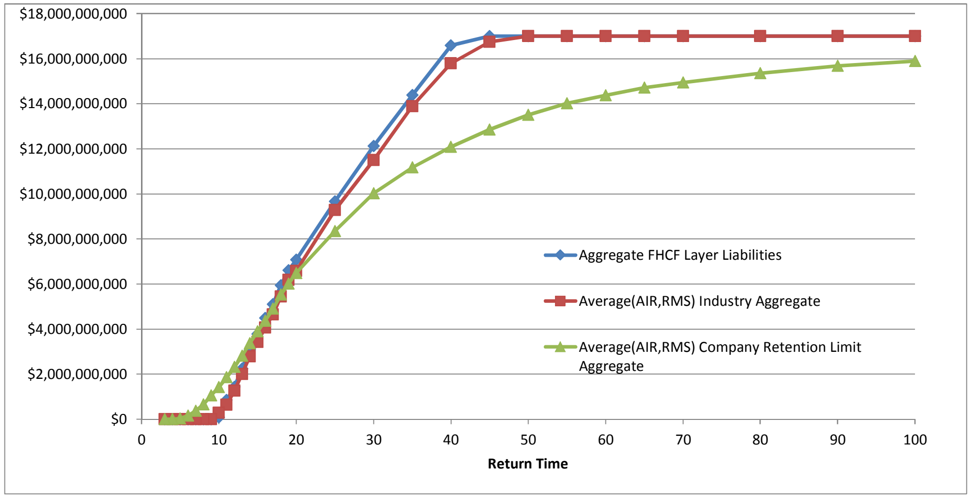
Florida Hurricane Catastrophe Fund 2019 Ratemaking Formula Report
Average (AIR,RMS) Modeled Adjusted Loss Severity Distributions
Coverage Selections Data as of 03/01/2019

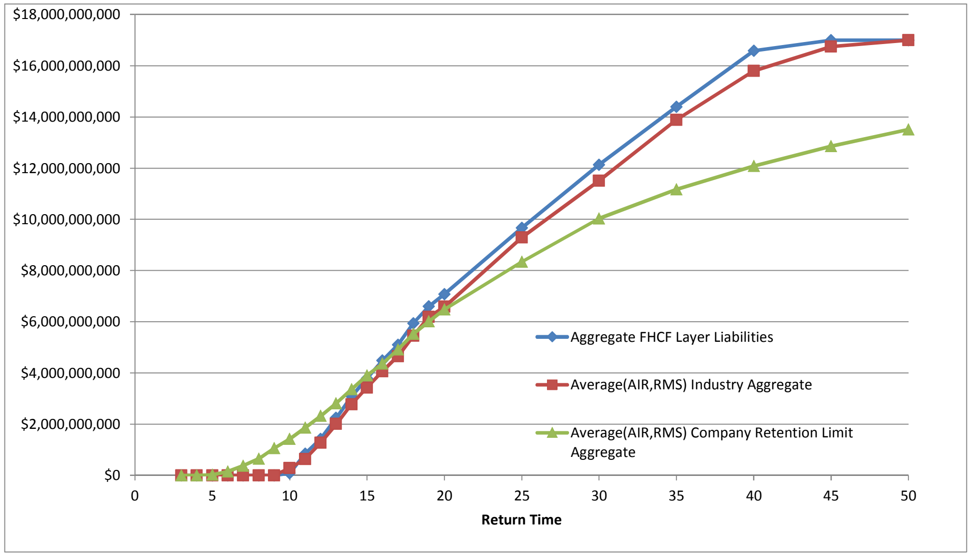
					Traditional FHCF Only Layer				
Return Time	Probability of Exceedance	Uniform Weighted Section I Gross Per Event (100% Coverage, no LAE)	FHCF Layer Weighted Section I Gross Per Event (100% Coverage, no LAE)	Section I Excess Retention Aggregate (100% Coverage, no LAE)	Single Event FHCF Layer Liabilities	Aggregate FHCF Layer Liabilities	FHCF Layer adj Average (AIR,RMS) Section I Gross Annual (100% Coverage, no LAE)	Average(AIR,RMS) Industry Aggregate	Average(AIR,RMS) Company Retention Limit Aggregate
1000	0.0010	$115,215,870,491	$117,870,379,794	$114,004,008,019	$17,000,000,000	$17,000,000,000	124,761,818,582	17,000,000,000	16,997,263,617
900	0.0011	$112,002,326,016	$113,391,522,964	$108,563,070,980	$17,000,000,000	$17,000,000,000	122,454,651,062	17,000,000,000	16,995,872,230
800	0.0013	$108,622,488,054	$110,386,002,962	$104,440,869,568	$17,000,000,000	$17,000,000,000	117,700,343,541	17,000,000,000	16,994,223,535
700	0.0014	$103,186,707,290	$104,933,193,441	$100,291,233,077	$17,000,000,000	$17,000,000,000	111,835,420,359	17,000,000,000	16,991,647,842
600	0.0017	$99,987,044,524	$99,987,044,524	$93,680,275,248	$17,000,000,000	$17,000,000,000	106,339,560,711	17,000,000,000	16,983,362,650
500	0.0020	$94,063,260,972	$93,691,774,186	$87,792,052,490	$17,000,000,000	$17,000,000,000	98,591,894,039	17,000,000,000	16,972,690,693
400	0.0025	$86,984,966,891	$85,639,514,732	$80,683,935,318	$17,000,000,000	$17,000,000,000	90,113,556,386	17,000,000,000	16,948,155,473
300	0.0033	$77,750,422,023	$75,375,397,228	$69,618,589,857	$17,000,000,000	$17,000,000,000	80,756,429,112	17,000,000,000	16,876,488,648
250	0.0040	$72,911,984,197	$69,091,486,200	$63,485,031,782	$17,000,000,000	$17,000,000,000	74,932,453,306	17,000,000,000	16,830,894,175
200	0.0050	$66,289,543,932	$63,288,009,862	$57,160,157,588	$17,000,000,000	$17,000,000,000	68,607,693,797	17,000,000,000	16,705,753,492
150	0.0067	$58,859,145,460	$55,725,991,458	$49,210,707,391	$17,000,000,000	$17,000,000,000	59,691,903,179	17,000,000,000	16,472,125,452
100	0.0100	$48,734,916,446	$45,419,501,151	$38,912,874,387	$17,000,000,000	$17,000,000,000	48,620,018,346	17,000,000,000	15,889,426,271
90	0.0111	$45,884,398,906	$42,698,289,116	$36,471,255,550	$17,000,000,000	$17,000,000,000	46,028,323,913	17,000,000,000	15,679,234,807
80	0.0125	$42,718,504,980	$40,259,285,779	$33,783,149,893	$17,000,000,000	$17,000,000,000	42,805,283,874	17,000,000,000	15,347,968,073
70	0.0143	$39,803,417,693	$37,257,367,632	$30,587,227,540	$17,000,000,000	$17,000,000,000	39,325,599,325	17,000,000,000	14,939,824,605
65	0.0154	$37,961,121,732	$35,988,797,059	$29,103,216,112	$17,000,000,000	$17,000,000,000	37,214,426,098	17,000,000,000	14,719,953,341
60	0.0167	$36,364,977,177	$34,106,496,601	$27,436,270,439	$17,000,000,000	$17,000,000,000	35,539,721,036	17,000,000,000	14,368,644,499
55	0.0182	$34,454,521,002	$32,212,214,812	$25,447,697,346	$17,000,000,000	$17,000,000,000	33,811,128,616	17,000,000,000	14,012,390,765
50	0.0200	$32,411,685,643	$30,235,987,765	$23,563,095,713	$17,000,000,000	$17,000,000,000	32,197,115,055	17,000,000,000	13,511,361,768
45	0.0222	$30,164,303,364	$28,451,480,964	$21,420,703,046	$17,000,000,000	$17,000,000,000	30,183,032,264	16,745,169,680	12,855,966,972
40	0.0250	$27,915,013,527	$26,231,087,081	$19,349,136,649	$16,121,317,965	$16,584,195,870	27,745,826,143	15,792,935,866	12,080,018,421
35	0.0286	$25,285,914,744	$23,866,619,413	$16,791,662,424	$14,094,726,513	$14,392,177,991	25,296,788,145	13,887,618,534	11,169,796,011
30	0.0333	$22,575,818,457	$21,220,308,594	$14,148,170,814	$11,826,566,556	$12,126,434,385	22,497,625,110	11,505,583,761	10,025,533,760
25	0.0400	$19,564,199,878	$18,469,673,352	$11,285,074,732	$9,468,989,862	$9,672,467,209	19,594,354,622	9,289,219,337	8,342,101,743
20	0.0500	$16,340,538,322	$15,554,855,623	$8,254,010,171	$6,970,691,926	$7,074,533,809	16,499,053,208	6,583,683,908	6,478,017,081
19	0.0526	$15,592,687,610	$14,947,689,395	$7,703,925,053	$6,450,288,157	$6,603,054,408	15,732,044,937	6,184,899,725	6,015,607,892
18	0.0556	$14,903,086,062	$14,226,693,602	$6,933,459,520	$5,832,320,768	$5,942,686,375	15,002,583,917	5,447,933,435	5,525,219,324
17	0.0588	$14,130,007,849	$13,299,416,279	$5,946,786,259	$5,037,548,938	$5,097,006,130	14,283,397,291	4,650,962,570	4,910,860,461
16	0.0625	$13,271,230,997	$12,594,282,051	$5,239,774,580	$4,433,176,538	$4,491,024,562	13,351,754,851	4,066,338,165	4,362,282,738
15	0.0667	$12,431,873,760	$11,809,361,805	$4,415,013,035	$3,760,419,332	$3,784,119,274	12,515,679,324	3,423,115,588	3,901,046,519
14	0.0714	$11,567,439,752	$10,953,531,438	$3,596,978,845	$3,026,884,876	$3,082,980,021	11,752,888,369	2,779,415,619	3,364,682,515
13	0.0769	$10,682,701,507	$10,013,200,633	$2,617,464,837	$2,220,924,872	$2,243,435,990	10,889,731,591	2,005,332,968	2,808,767,057
12	0.0833	$9,702,643,083	$9,048,012,126	$1,667,096,317	$1,393,659,266	$1,428,872,635	10,003,368,964	1,268,311,342	2,318,269,921
11	0.0909	$8,769,675,811	$8,390,223,862	$996,427,762	$829,867,216	$854,040,854	9,137,474,647	632,939,227	1,864,926,622
10	0.1000	$7,871,349,492	$7,495,261,066	$100,359,194	$62,792,252	$86,018,129	8,183,392,897	281,939,123	1,424,004,706
9	0.1111	$6,850,230,218	$6,647,472,106	$0	$0	$0	7,321,723,314	-	1,056,216,697
8	0.1250	$5,920,663,158	$5,825,366,781	$0	$0	$0	6,281,349,220	-	648,924,603
7	0.1429	$4,878,042,065	$4,922,408,323	$0	$0	$0	5,369,917,446	-	368,524,155
6	0.1667	$3,712,332,233	$3,788,666,824	$0	$0	$0	4,324,727,266	-	151,981,889
5	0.2000	$2,530,804,325	$2,569,342,102	$0	$0	$0	3,018,306,355	-	26,145,633
4	0.2500	$1,454,794,922	$1,544,917,759	$0	$0	$0	1,810,864,790	-	773,965
3	0.3333	$531,487,799	$575,503,008	$0	$0	$0	729,639,816	-	-

Aggregate FHCF Liabilities include Sections I, II and LAE, and are at weighted average coverage.
2019 Severity distributions based on AIR, EQE, RMS, ARA and FPM models.

FHCF: Adjusted Curve for Company Retentions and Limits

Based on Average (AIR, RMS) 2019 Analysis





EXHIBIT

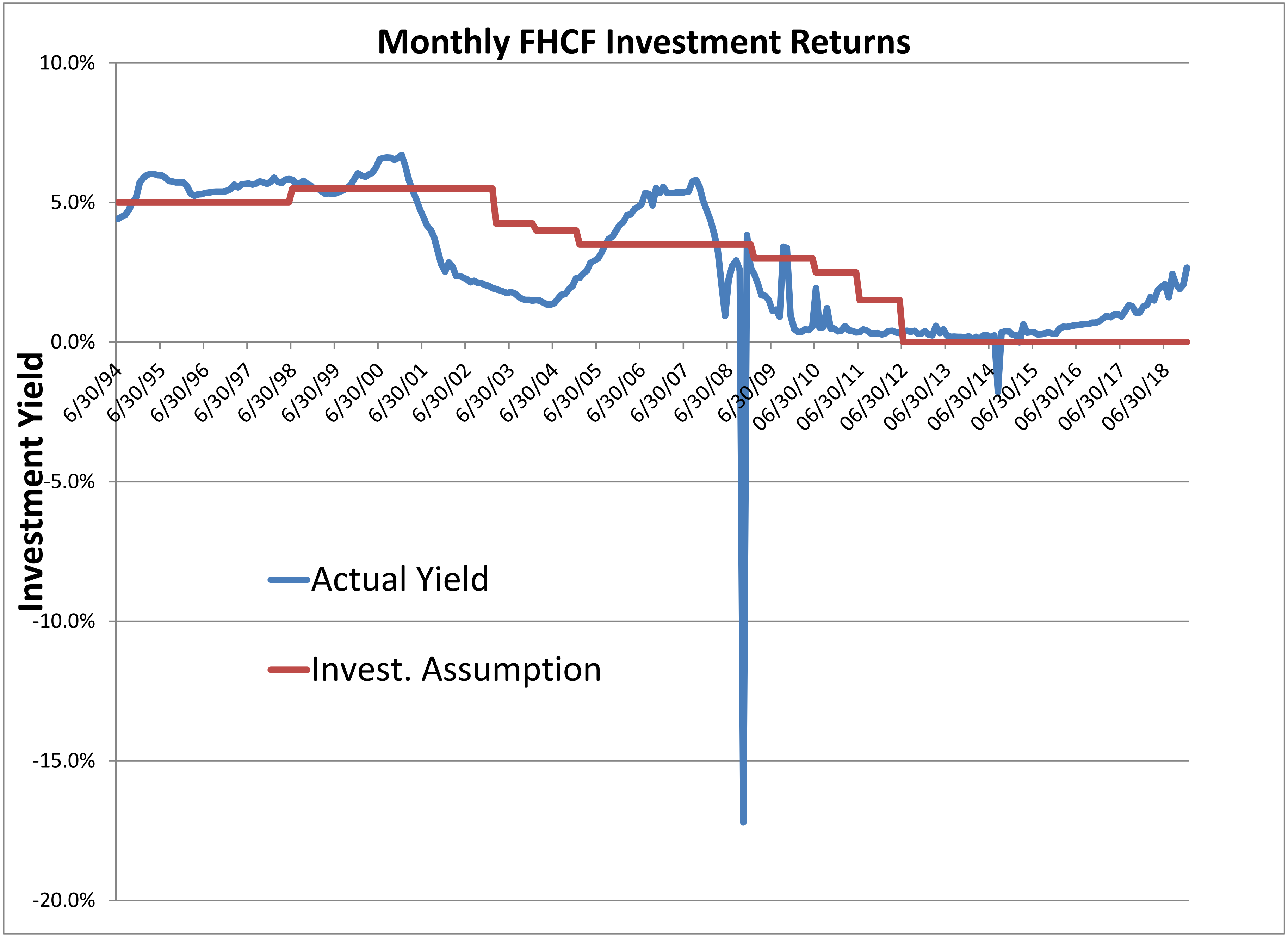
IX

Florida Hurricane Catastrophe Fund
Monthly Investment Return History
Most Recent Five Years

	Month Ending	FHCF Rate of Return	12 Month Rolling Average		Month Ending	FHCF Rate of Return	12 Month Rolling Average
1	01/31/14	0.10		31	07/31/16	0.63	0.46
2	02/28/14	0.18		32	08/31/16	0.65	0.49
3	03/31/14	0.11		33	09/30/16	0.65	0.52
4	04/30/14	0.24		34	10/31/16	0.69	0.55
5	05/31/14	0.24		35	11/30/16	0.69	0.58
6	06/30/14	0.17		36	12/31/16	0.75	0.62
7	07/31/14	0.23		37	01/31/17	0.85	0.65
8	08/31/14	-1.79		38	02/28/17	0.93	0.68
9	09/30/14	0.35		39	03/31/17	0.89	0.71
10	10/31/14	0.39		40	04/30/17	1.00	0.74
11	11/30/14	0.39		41	05/31/17	1.00	0.78
12	12/31/14	0.26	0.07	42	06/30/17	0.91	0.80
13	01/31/15	0.25	0.09	43	07/31/17	1.10	0.84
14	02/28/15	-0.01	0.07	44	08/31/17	1.32	0.90
15	03/31/15	0.64	0.11	45	09/30/17	1.29	0.95
16	04/30/15	0.34	0.12	46	10/31/17	1.06	0.98
17	05/31/15	0.36	0.13	47	11/30/17	1.06	1.01
18	06/30/15	0.35	0.15	48	12/31/17	1.27	1.06
19	07/31/15	0.27	0.15	49	01/31/18	1.33	1.10
20	08/31/15	0.28	0.32	50	02/28/18	1.62	1.15
21	09/30/15	0.31	0.32	51	03/31/18	1.49	1.20
22	10/31/15	0.34	0.32	52	04/30/18	1.86	1.28
23	11/30/15	0.30	0.31	53	05/31/18	1.97	1.36
24	12/31/15	0.30	0.31	54	06/30/18	2.07	1.45
25	01/31/16	0.49	0.33 *	55	07/31/18	1.61	1.50
26	02/29/16	0.55	0.38	56	08/31/18	2.44	1.59
27	03/31/16	0.54	0.37	57	09/30/18	2.08	1.65
28	04/30/16	0.57	0.39	58	10/31/18	1.90	1.72
29	05/31/16	0.60	0.41	59	11/30/18	2.05	1.81
30	06/30/16	0.60	0.43	60	12/31/18	2.66	1.92

RM Report	Average
1 year	1.92
2 year	1.49
3 year	1.20
4 year	0.98
5 year	0.80
Incept to date	2.82

* Return values prior to 01/31/2016 were based on original cost. Values 01/31/2016 and subsequent are based on amortized cost, which is consistent with FHCF investment policy.



Monthly FHCF Investment Returns
10.0%
5.0%
0.0%
-5.0%
-10.0%
-15.0%
-20.0%
Investment Yield
6/30/94
6/30/95
6/30/96
6/30/97
6/30/98
6/30/99
6/30/00
6/30/01
6/30/02
6/30/03
6/30/04
6/30/05
6/30/06
6/30/07
6/30/08
6/30/09
06/30/10
06/30/11
06/30/12
06/30/13
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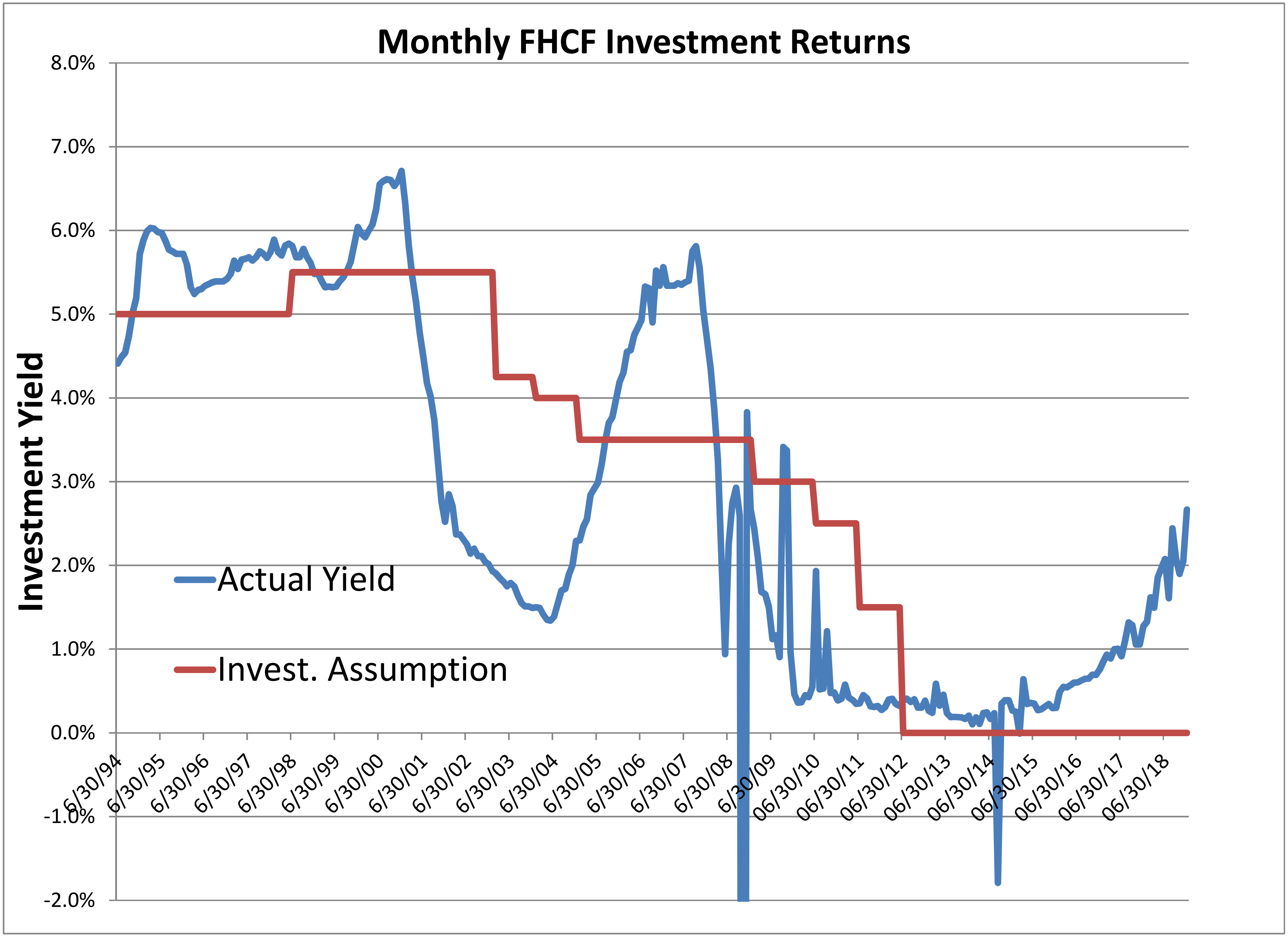
06/30/15
06/30/16
06/30/17
06/30/18
Actual Yield
Invest. Assumption



Monthly FHCF Investment Returns
Investment Yield
8.0%
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
-1.0%
-2.0%
Actual Yield
Invest. Assumption
6/30/94
6/30/95
6/30/96
6/30/97
6/30/98
6/30/99
6/30/00
6/30/01
6/30/02
6/30/03
6/30/04
6/30/05
6/30/06
6/30/07
6/30/08
6/30/09
06/30/10
06/30/11
06/30/12
06/30/13
06/30/14
06/30/15
06/30/16
06/30/17
06/30/18

FHCF INVESTMENT INCOME*

(Excludes Finance Corporation)

	Year	Investment Income	35% of Investment Income
1	June 30, 1995	20,183,000	7,064,050
2	June 30, 1996	46,379,000	16,232,650
3	June 30, 1997	74,425,000	26,048,750
4	June 30, 1998	109,979,000	38,492,650
5	June 30, 1999	132,516,000	46,380,600
6	June 30, 2000	173,839,000	60,843,650
7	June 30, 2001	220,915,000	77,320,250
8	June 30, 2002	122,535,000	42,887,250
9	June 30, 2003	104,939,000	36,728,650
10	June 30, 2004	58,127,000	20,344,450
11	June 30, 2005	108,672,000	38,035,200
12	June 30, 2006	103,175,000	36,111,250
13	June 30, 2007	36,065,000	12,622,750
14	June 30, 2008	46,816,000	16,385,600
15	June 30, 2009	7,803,000	2,731,050
16	June 30, 2010	54,298,000	19,004,300
17	June 30, 2011	29,983,000	10,494,050
18	June 30, 2012	26,634,000	9,321,900
19	June 30, 2013	34,636,000	12,122,600
20	June 30, 2014	19,086,000	6,680,100
20	June 30, 2015	29,009,000	10,153,150
21	June 30, 2016	56,143,000	19,650,050
22	June 30, 2017	109,450,000	38,307,500
23	June 30, 2018	201,443,000	70,505,050
		$1,927,050,000	$674,467,500

*Source: FHCF Audited Financial Statements

Note: 1997 was the first year of mitigation funding.

F.S. 215.555(7)(c) Each fiscal year, the Legislature shall appropriate from the investment income of the Florida Hurricane Catastrophe Fund an amount no less than $10 million and no more than 35 percent of the investment income based upon the most recent fiscal year-end audited financial statements for the purpose of providing funding for local governments, state agencies, public and private educational institutions, and nonprofit organizations to support programs intended to improve hurricane preparedness, reduce potential losses in the event of a hurricane, provide research into means to reduce such losses, educate or inform the public as to means to reduce hurricane losses, assist the public in determining the appropriateness of particular upgrades to structures or in the financing of such upgrades, or protect local infrastructure from potential damage from a hurricane. Moneys shall first be available for appropriation under this paragraph in fiscal year 1997-1998. Moneys in excess of the $10 million specified in this paragraph shall not be available for appropriation under this paragraph if the State Board of Administration finds that an appropriation of investment income from the fund would jeopardize the actuarial soundness of the fund.

EXHIBIT

X

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Pre-Event Note Expense Loading
Contract Term : 6/01/2019 to 5/31/2020

		2013A Projected Debt Service	2016A Projected Debt Service	Total Debt Service Net Cost
1	Reimbursement Deposit Premium	14,000,000	7,000,000	21,000,000
2	Average Market Value	1,000,000,000	695,081,967	1,695,081,967
3	Exp. Default Loading %	0.3%	0.3%	
4	Exp. Default Cost (2)*(3)	3,000,000	2,085,246	5,085,246
5	Total Projected Liquidity Facility Cost (1)+(4)	17,000,000	9,085,246	26,085,246

Notes
- This method uses values projected by the FHCF's Financial Advisor, Raymond James (01/18/2019 for 2013A); (1/18/2019 for 2016A); plus a judgmental loading for potential asset loss.
- $550 million of $1.2 billion 2016A Bonds come due on 7/1/2019.

EXHIBIT

XI

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Additional Pre-Event Note Options

1	Est. FHCF Premium (with cash build up)	1,176,327,641	Exhibit 2, Line 73	
2	Cash Build-up Factor	25%		
3	Limit	$17,000,000,000	Projected Payout Multiple	14.4518
4	Retention	$7,422,000,000	Retention Multiple 100%	5.1503
5	Coverage %	81.629%	Retention Multiple 90%	5.7226
			Retention Multiple 75%	6.8671
			Retention Multiple 45%	11.4452

	Est. Additional Annual Cost	Change in Cost + Cash Build-up	Impact on Rate	Projected Payout Multiple	Retention Multiple 90%	Retention Multiple 75%	Retention Multiple 45%
1	At Current Level Costs	0	0.00%	14.4518	5.7226	6.8671	11.4452
2	5,000,000	6,250,000	0.53%	14.3754	5.6924	6.8308	11.3847
3	10,000,000	12,500,000	1.06%	14.2998	5.6624	6.7949	11.3249
4	15,000,000	18,750,000	1.59%	14.2250	5.6328	6.7594	11.2656
5	20,000,000	25,000,000	2.13%	14.1510	5.6035	6.7242	11.2070
6	25,000,000	31,250,000	2.66%	14.0778	5.5745	6.6894	11.1490
7	30,000,000	37,500,000	3.19%	14.0053	5.5458	6.6550	11.0916
8	35,000,000	43,750,000	3.72%	13.9335	5.5174	6.6209	11.0348
9	40,000,000	50,000,000	4.25%	13.8625	5.4893	6.5871	10.9786
10	45,000,000	56,250,000	4.78%	13.7922	5.4614	6.5537	10.9229
11	50,000,000	62,500,000	5.31%	13.7227	5.4339	6.5207	10.8678
12	55,000,000	68,750,000	5.84%	13.6538	5.4066	6.4879	10.8132
13	60,000,000	75,000,000	6.38%	13.5856	5.3796	6.4555	10.7592

EXHIBIT

XII

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 FHCF Reimbursement Premium Credits as of 10/29/18

	2018 FHCF Premium (Base Premium)					
	Commercial	**Residential**	**Mobile Home**	**Tenants**	**Condo-Owners**	**Total**
Total Gross FHCF Premium	$90,230,205	$905,471,983	$44,576,276	$8,697,867	$74,396,736	$1,123,373,066
FHCF Premium Credits/Debits	-$2,248,968	-$16,732,339	$0	-$189,402	-$1,281,622	-$20,452,331
Net FHCF Premium	$87,981,236	$888,739,645	$44,576,276	$8,508,465	$73,115,114	$1,102,920,735

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 FHCF Reimbursement Premium Credits as of 10/29/18

	Percent of Gross Premium					
	Commercial	**Residential**	**Mobile Home**	**Tenants**	**Condo-Owners**	**Total**
Total Gross FHCF Premium	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FHCF Premium Credits/Debits	-2.49%	-1.85%	0.00%	-2.18%	-1.72%	-1.82%
Net FHCF Premium	97.51%	98.15%	100.00%	97.82%	98.28%	98.18%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 FHCF Reimbursement Premium Credits as of 10/29/18

	2018 FHCF Exposure					
	Commercial	**Residential**	**Mobile Home**	**Tenants**	**Condo-Owners**	**Total**
Total Exposure	$156,590,097,051	$1,960,950,683,223	$27,056,757,709	$28,254,287,214	$102,304,393,979	$2,275,156,219,176
Debit = 30% or greater	$69,110,302,156	$606,710,620,295	$0	$6,915,774,879	$38,774,632,925	$721,511,330,255
20%<Debit<30%	$0	$276,001,358,802	$0	$0	$0	$276,001,358,802
15%<Debit<20%	$14,279,154,814	$0	$0	$0	$4,593,521,317	$18,872,676,131
10%<Debit<15%	$8,661,343,939	$0	$0	$937,984,818	$0	$9,599,328,757
5%<Debit <10%	$0	$0	$0	$10,061,272,323	$9,796,912,007	$19,858,184,330
0%<Debit<=5%	$0	$0	$114,201,943	$0	$0	$114,201,943
No Credit/Debit	$0	$2	$26,942,555,766	$1	$0	$26,942,555,769
0%<Credit<=5%	$82,080	$49,230,549,544	$0	$0	$0	$49,230,631,624
5%<Credit<10%	$798,092,676	$4,152,487	$0	$0	$0	$802,245,163
10%<Credit<15%	$0	$120,981,171,941	$0	$0	$31,859,282	$121,013,031,223
15%<Credit<20%	$0	$0	$0	$85,480,232	$8,480,475,462	$8,565,955,694
20%<Credit<30%	$6,825,295,806	$0	$0	$2,554,978,179	$0	$9,380,273,985
Credit =30% or greater	$56,915,825,580	$908,022,830,152	$0	$7,698,796,782	$40,626,992,986	$1,013,264,445,500

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 FHCF Reimbursement Premium Credits as of 10/29/18

	Percent of Total Exposure					
	Commercial	**Residential**	**Mobile Home**	**Tenants**	**Condo-Owners**	**Total**
Total Exposure	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Debit = 30% or greater	44.13%	30.94%	0.00%	24.48%	37.90%	31.71%
20%<Debit<30%	0.00%	14.07%	0.00%	0.00%	0.00%	12.13%
15%<Debit<20%	9.12%	0.00%	0.00%	0.00%	4.49%	0.83%
10%<Debit<15%	5.53%	0.00%	0.00%	3.32%	0.00%	0.42%
5%<Debit <10%	0.00%	0.00%	0.00%	35.61%	9.58%	0.87%
0%<Debit<=5%	0.00%	0.00%	0.42%	0.00%	0.00%	0.01%
No Credit/Debit	0.00%	0.00%	99.58%	0.00%	0.00%	1.18%
0%<Credit<=5%	0.00%	2.51%	0.00%	0.00%	0.00%	2.16%
5%<Credit<10%	0.51%	0.00%	0.00%	0.00%	0.00%	0.04%
10%<Credit<15%	0.00%	6.17%	0.00%	0.00%	0.03%	5.32%
15%<Credit<20%	0.00%	0.00%	0.00%	0.30%	8.29%	0.38%
20%<Credit<30%	4.36%	0.00%	0.00%	9.04%	0.00%	0.41%
Credit =30% or greater	36.35%	46.31%	0.00%	27.25%	39.71%	44.54%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 FHCF Reimbursement Premium Credits as of 10/29/18

	2018 FHCF Risk Counts					
	Commercial	**Residential**	**Mobile Home**	**Tenants**	**Condo-Owners**	**Total**
Total Risk Counts	147,990	4,488,021	332,699	1,028,092	866,696	6,863,498
Debit = 30% or greater	77,021	1,810,798	0	229,355	461,866	2,579,040
20%<Debit<30%	0	671,275	0	0	0	671,275
15%<Debit<20%	24,182	0	0	0	49,167	73,349
10%<Debit<15%	2,599	0	0	34,246	0	36,845
5%<Debit <10%	0	0	0	457,140	58,777	515,917
0%<Debit<=5%	0	0	1,419	0	0	1,419
No Credit/Debit	0	1	331,280	1	0	331,282
0%<Credit<=5%	1	70,790	0	0	0	70,791
5%<Credit<10%	1,105	13	0	0	0	1,118
10%<Credit<15%	0	275,223	0	0	321	275,544
15%<Credit<20%	0	0	0	1,452	67,299	68,751
20%<Credit<30%	6,039	0	0	81,843	0	87,882
Credit =30% or greater	37,043	1,659,921	0	224,055	229,266	2,150,285

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 FHCF Reimbursement Premium Credits as of 10/29/18

	Percent of All Risks					
	Commercial	**Residential**	**Mobile Home**	**Tenants**	**Condo-Owners**	**Total**
Total Risk Counts	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Debit = 30% or greater	52.04%	40.35%	0.00%	22.31%	53.29%	37.58%
20%<Debit<30%	0.00%	14.96%	0.00%	0.00%	0.00%	9.78%
15%<Debit<20%	16.34%	0.00%	0.00%	0.00%	5.67%	1.07%
10%<Debit<15%	1.76%	0.00%	0.00%	3.33%	0.00%	0.54%
5%<Debit <10%	0.00%	0.00%	0.00%	44.46%	6.78%	7.52%
0%<Debit<=5%	0.00%	0.00%	0.43%	0.00%	0.00%	0.02%
No Credit/Debit	0.00%	0.00%	99.57%	0.00%	0.00%	4.83%
0%<Credit<=5%	0.00%	1.58%	0.00%	0.00%	0.00%	1.03%
5%<Credit<10%	0.75%	0.00%	0.00%	0.00%	0.00%	0.02%
10%<Credit<15%	0.00%	6.13%	0.00%	0.00%	0.04%	4.01%
15%<Credit<20%	0.00%	0.00%	0.00%	0.14%	7.77%	1.00%
20%<Credit<30%	4.08%	0.00%	0.00%	7.96%	0.00%	1.28%
Credit =30% or greater	25.03%	36.99%	0.00%	21.79%	26.45%	31.33%

EXHIBIT

XIII

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2019 County Rating Groups

County	Dominant Group	Other Groups	County	Dominant Group	Other Groups
ALACHUA	1		LAKE	3	1,2,4
BAKER	1		LEE	7	6,8,9,10,11,12,13,14,15,16,17
BAY	6	1,2,3,4,7,8,10	LEON	1	
BRADFORD	1		LEVY	2	1,3,5
BREVARD	6	4,5,7,8,9,11,12,14	LIBERTY	1	
BROWARD	11	8,9,10,12,13,14,17,19,20,21,22,23	MADISON	1	
CALHOUN	1		MANATEE	5	6,7,8,9,13,14
CHARLOTTE	6	5,7,8,9,12	MARION	2	1
CITRUS	2		MARTIN	17	10,13,14,16,18
CLAY	1		MIAMI-DADE	12	11,13,14,15,16,17,18,19,20,21,22,23,24,25
COLLIER	10	7,8,9,11,14,15,16,17	MONROE	20	18,23,24,25
COLUMBIA	1		NASSAU	1	2
DESOTO	5		OKALOOSA	2	1,5,6,7,9,10
DIXIE	1	2,4	OKEECHOBEE	7	10
DUVAL	1	3	ORANGE	3	2,4,5
ESCAMBIA	8	1,2,3,4,5,6,7,9,10,11	OSCEOLA	3	5
FLAGLER	5	1,2,3	PALM BEACH	11	9,10,12,13,14,15,16,17,18,19,20,21,22
FRANKLIN	4	6	PASCO	4	3,5,6,7
GADSDEN	1		PINELLAS	6	4,5,7,8,9,10,11,12,13
GILCHRIST	1		POLK	4	3,5
GLADES	7		PUTNAM	1	2
GULF	6	1	SAINT JOHNS	1	2,3,4
HAMILTON	1		SAINT LUCIE	9	8,10,11,12,13,15,18
HARDEE	4		SANTA ROSA	3	2,8,10,11,13
HENDRY	6	10	SARASOTA	10	5,6,7,8,9,11
HERNANDO	3	2,4,5	SEMINOLE	2	3
HIGHLANDS	5	6	SUMTER	2	3
HILLSBOROUGH	4	3,5,6,7,8,9,10	SUWANNEE	1	
HOLMES	1		TAYLOR	1	
INDIAN RIVER	11	6,8,9,12,15,16	UNION	1	
JACKSON	1		VOLUSIA	2	3,4,5,6,7,8
JEFFERSON	1		WAKULLA	1	3
LAFAYETTE	1		WALTON	2	1,3,7,10,11
			WASHINGTON	1	2,8

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County Rating Regions

County Number	County Name	2019 Region
1	ALACHUA	1
3	BAKER	1
5	BAY	5
7	BRADFORD	1
9	BREVARD	7
11	BROWARD	13
13	CALHOUN	1
15	CHARLOTTE	7
17	CITRUS	2
19	CLAY	1
21	COLLIER	11
23	COLUMBIA	1
27	DE SOTO	5
29	DIXIE	1
31	DUVAL	1
33	ESCAMBIA	6
35	FLAGLER	3
37	FRANKLIN	6
39	GADSDEN	1
41	GILCHRIST	1
43	GLADES	7
45	GULF	5
47	HAMILTON	1
49	HARDEE	4
51	HENDRY	8
53	HERNANDO	3
55	HIGHLANDS	5
57	HILLSBOROUGH	5
59	HOLMES	1
61	INDIAN RIVER	12
63	JACKSON	1
65	JEFFERSON	1
67	LAFAYETTE	1
69	LAKE	3

County Number	County Name	2019 Region
71	LEE	8
73	LEON	1
75	LEVY	2
77	LIBERTY	1
79	MADISON	1
81	MANATEE	6
83	MARION	2
85	MARTIN	14
86	MIAMI-DADE	16
87	MONROE	22
89	NASSAU	2
91	OKALOOSA	6
93	OKEECHOBEE	9
95	ORANGE	3
97	OSCEOLA	4
99	PALM BEACH	14
101	PASCO	4
103	PINELLAS	8
105	POLK	4
107	PUTNAM	1
109	SAINT JOHNS	2
111	SAINT LUCIE	10
113	SANTA ROSA	7
115	SARASOTA	8
117	SEMINOLE	2
119	SUMTER	2
121	SUWANNEE	1
123	TAYLOR	1
125	UNION	1
127	VOLUSIA	3
129	WAKULLA	1
131	WALTON	7
133	WASHINGTON	1

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2019 Rating Group Definitions by Group

Group 1	32003	32079	32210	32302	32352	32465	32658
235 Zips	32006	32081	32211	32303	32353	32535	32662
	32008	32083	32212	32304	32355	32538	32664
	32009	32087	32214	32305	32356	32567	32666
	32011	32091	32216	32306	32357	32601	32667
	32013	32092	32217	32307	32358	32603	32669
	32024	32094	32218	32308	32359	32604	32680
	32025	32096	32219	32309	32360	32605	32681
	32026	32097	32220	32310	32361	32606	32686
	32030	32099	32221	32311	32362	32607	32693
	32033	32102	32222	32312	32395	32608	32694
	32038	32110	32223	32313	32399	32609	32697
	32040	32113	32224	32314	32420	32610	34488
	32041	32134	32225	32315	32421	32611	
	32042	32138	32226	32316	32422	32612	
	32043	32140	32229	32317	32423	32614	
	32044	32145	32231	32318	32424	32615	
	32046	32147	32232	32321	32425	32616	
	32050	32148	32234	32324	32426	32617	
	32052	32160	32235	32326	32427	32618	
	32053	32177	32236	32327	32428	32619	
	32054	32178	32238	32330	32430	32622	
	32055	32182	32239	32331	32431	32626	
	32056	32185	32241	32332	32432	32627	
	32058	32187	32244	32333	32438	32628	
	32059	32189	32245	32334	32440	32631	
	32060	32192	32246	32336	32442	32633	
	32061	32193	32247	32337	32443	32634	
	32062	32201	32254	32340	32445	32635	
	32063	32202	32255	32341	32446	32640	
	32064	32203	32256	32343	32447	32641	
	32065	32204	32257	32344	32448	32643	
	32066	32205	32258	32345	32449	32644	
	32067	32206	32259	32347	32455	32653	
	32068	32207	32260	32348	32460	32654	
	32071	32208	32277	32350	32463	32655	
	32073	32209	32301	32351	32464	32656	

Group 2	32007	32180	32663	32728	32791	34442	34477
142 Zips	32034	32181	32668	32730	32792	34445	34478
	32035	32183	32683	32733	32793	34446	34479
	32086	32190	32696	32736	32795	34447	34480
	32095	32195	32701	32738	32799	34448	34481
	32105	32433	32702	32739	32817	34449	34482
	32111	32434	32706	32744	32867	34450	34483
	32112	32435	32707	32745	33521	34451	34484
	32124	32462	32708	32746	33538	34452	34487
	32128	32466	32713	32750	34420	34453	34489
	32130	32531	32714	32752	34421	34460	34491
	32131	32536	32715	32753	34423	34461	34492
	32133	32537	32716	32762	34428	34464	34601
	32139	32539	32718	32763	34429	34465	34636
	32157	32564	32719	32764	34430	34470	34661
	32158	32565	32720	32765	34431	34471	34785
	32159	32568	32721	32767	34432	34472	
	32162	32570	32722	32774	34433	34473	
	32163	32621	32723	32776	34434	34474	
	32164	32639	32724	32779	34436	34475	
	32179	32648	32725	32784	34441	34476	

Group 3	32004	32572	32794	32828	32878	33647	34713
165 Zips	32082	32577	32798	32829	32885	33687	34714
	32084	32583	32801	32830	32886	33688	34731
	32085	32703	32802	32831	32891	33810	34734
	32129	32704	32803	32832	32896	33836	34736
	32137	32709	32804	32833	33513	33837	34737
	32168	32710	32805	32835	33514	33848	34741
	32174	32712	32806	32836	33523	33849	34742
	32227	32726	32807	32837	33537	33858	34745
	32228	32727	32808	32839	33544	33868	34747
	32233	32732	32809	32853	33549	33896	34748
	32240	32735	32810	32854	33559	33897	34749
	32250	32747	32811	32855	33565	34498	34753
	32266	32751	32812	32856	33585	34602	34758
	32346	32756	32814	32857	33592	34603	34759
	32403	32757	32816	32858	33593	34604	34761
	32404	32766	32818	32859	33594	34605	34762
	32409	32768	32819	32860	33595	34608	34786
	32439	32771	32820	32861	33596	34609	34788
	32444	32772	32821	32862	33597	34613	34789
	32530	32773	32822	32868	33613	34614	34797
	32533	32777	32824	32869	33617	34639	
	32560	32789	32825	32872	33618	34654	
	32571	32790	32826	32877	33620	34705	

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2019 Rating Group Definitions by Group

Group 4	32080	32526	33526	33576	33809	33854	34611
140 Zips	32114	32534	33527	33579	33811	33855	34637
	32116	32559	33530	33583	33812	33856	34638
	32117	32692	33539	33584	33813	33859	34655
	32119	32754	33540	33587	33815	33860	34669
	32120	32775	33541	33612	33820	33863	34685
	32121	32778	33542	33624	33823	33867	34688
	32122	32796	33543	33625	33830	33873	34711
	32123	32815	33545	33626	33831	33877	34712
	32125	32827	33547	33637	33835	33880	34715
	32127	32926	33548	33682	33838	33881	34729
	32132	32927	33550	33689	33839	33882	34743
	32141	32959	33556	33694	33840	33883	34744
	32173	33503	33558	33801	33841	33884	34746
	32175	33508	33563	33802	33844	33885	34755
	32198	33509	33564	33803	33845	33888	34756
	32322	33510	33566	33804	33846	33890	34771
	32323	33511	33567	33805	33847	33898	34772
	32405	33524	33569	33806	33850	34606	34773
	32509	33525	33574	33807	33851	34610	34787

Group 5	32135	32783	33633	33827	34202	34267	34684
82 Zips	32136	32907	33635	33834	34203	34268	34690
	32142	32910	33660	33843	34204	34269	34692
	32143	33568	33661	33853	34211	34286	34739
	32514	33571	33662	33865	34212	34288	34740
	32578	33573	33673	33870	34219	34289	34760
	32580	33578	33674	33871	34232	34291	34769
	32588	33598	33680	33872	34235	34607	34770
	32625	33603	33761	33875	34240	34653	34777
	32759	33604	33782	33938	34251	34656	34778
	32780	33610	33825	33954	34265	34677	
	32781	33614	33826	34201	34266	34680	

Group 6	32176	32899	33575	33663	33769	33935	34287
108 Zips	32328	32904	33586	33672	33771	33952	34290
	32401	32908	33601	33675	33773	33953	34292
	32402	32909	33602	33677	33780	33960	34652
	32406	32922	33605	33684	33781	33966	34667
	32410	32923	33607	33685	33852	33975	34668
	32412	32924	33615	33716	33857	33980	34673
	32456	32934	33619	33732	33862	33982	34674
	32457	32948	33622	33742	33876	33983	34679
	32505	32953	33623	33758	33906	33994	34682
	32506	32954	33630	33759	33916	34208	34683
	32511	32955	33631	33760	33917	34222	34695
	32512	32956	33634	33763	33918	34233	
	32516	33534	33646	33764	33920	34241	
	32542	33570	33650	33765	33927	34243	
	32547	33572	33655	33766	33930	34270	

Group 7	32115	32579	33733	33909	33950	34120	34250
67 Zips	32118	32940	33762	33910	33951	34143	34278
	32126	33471	33777	33911	33955	34205	34691
	32170	33609	33778	33912	33971	34206	34697
	32320	33702	33784	33913	33972	34220	34698
	32329	33709	33901	33915	33976	34221	34972
	32407	33713	33902	33919	33990	34234	34973
	32417	33714	33903	33944	33991	34237	
	32459	33729	33905	33948	34117	34238	
	32504	33730	33907	33949	34119	34249	

Group 8	32169	32566	33679	33904	33973	34260	34945
50 Zips	32413	32591	33710	33914	33974	34264	34986
	32437	32935	33743	33928	33981	34281	
	32501	32936	33755	33929	33993	34282	
	32503	32966	33756	33936	34116	34293	
	32513	33076	33757	33965	34135	34660	
	32523	33606	33770	33967	34142	34681	
	32524	33629	33779	33970	34207	34689	

Group 9	32507	32911	32969	33681	33908	34239	34987
50 Zips	32508	32912	32970	33703	33947	34272	34988
	32548	32919	33028	33704	34104	34274	
	32549	32941	33082	33734	34109	34275	
	32901	32950	33412	33740	34114	34280	
	32902	32952	33478	33772	34209	34953	
	32905	32967	33608	33774	34210	34983	
	32906	32968	33611	33775	34224	34984	

Group 10	32408	32569	33411	33621	34113	34231	34956
52 Zips	32411	33029	33413	33701	34133	34236	34974
	32461	33063	33414	33711	34137	34276	34981
	32520	33318	33421	33731	34138	34277	34990
	32540	33322	33440	33747	34139	34284	
	32541	33327	33467	33767	34141	34285	
	32544	33345	33470	33776	34229	34951	
	32563	33351	33616	34110	34230	34954	

Group 11	32502	32965	33073	33321	33428	33473	34134
66 Zips	32521	32978	33075	33324	33430	33493	34136
	32522	33016	33077	33328	33437	33497	34223
	32550	33025	33093	33329	33446	33705	34242
	32562	33055	33097	33338	33448	33707	34295
	32937	33065	33198	33359	33449	33712	34947
	32949	33066	33313	33388	33454	33785	
	32957	33067	33317	33415	33459	33786	
	32958	33068	33319	33417	33463	34105	
	32962	33071	33320	33418	33472	34112	

Group 12	32903	33011	33056	33183	33325	33488	33744
54 Zips	32920	33012	33084	33184	33330	33496	33922
	32925	33013	33102	33222	33331	33498	33945
	32960	33015	33112	33247	33355	33706	33946
	32961	33017	33122	33266	33433	33708	34952
	32964	33024	33152	33283	33434	33736	34985
	32976	33026	33166	33314	33482	33738	
	33010	33027	33175	33323	33484	33741	

Group 13	32561	33054	33169	33192	33326	34215	34991
38 Zips	33002	33069	33172	33193	33332	34216	34997
	33014	33072	33174	33199	33442	34218	
	33018	33081	33178	33265	33458	34228	
	33021	33083	33186	33269	33715	34946	
	33023	33165	33188	33309	33956	34982	

Group 14	32931	33144	33177	33299	33336	33931	34994
26 Zips	32932	33147	33182	33310	33340	33932	34995
	32951	33167	33185	33311	33409	34108	
	33126	33173	33196	33312	33436	34217	

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Group 15	32971	33114	33168	33242	33420	33476	34950
32 Zips	33030	33116	33176	33255	33438	33957	34979
	33034	33134	33187	33406	33445	34103	
	33035	33142	33194	33410	33461	34140	
	33090	33155	33234	33416	33466	34948	

Group 16	32963	33033	33125	33179	33455	34101	34107
19 Zips	33031	33039	33150	33238	33475	34102	
	33032	33092	33170	33422	33921	34106	

Group 17	33060	33143	33243	33335	33427	34146
29 Zips	33061	33157	33257	33407	33474	34957
	33064	33162	33307	33424	33486	34958
	33074	33164	33315	33425	33924	34992
	33135	33197	33334	33426	34145	

Group 18	33042	33146	33191	33404	33481
23 Zips	33043	33156	33245	33419	34949
	33127	33161	33261	33431	34996
	33136	33189	33280	33462	
	33145	33190	33403	33465	

Group 19	33004	33133	33153	33303	33401	33443	33477
19 Zips	33020	33137	33233	33305	33408	33468	
	33022	33138	33301	33394	33441	33469	

Group 20	33040	33101	33128	33195	33296	33405	33499
19 Zips	33041	33106	33158	33206	33302	33444	
	33045	33124	33181	33256	33304	33487	

Group 21	33008	33051	33131	33306	33339	33402	33483
19 Zips	33009	33052	33132	33308	33346	33435	
	33050	33130	33231	33316	33348	33480	

Group 22	33062	33163	33429	33460
8 Zips	33129	33180	33432	33464

Group 23	33001	33019	33154	33160
4 Zips				
Group 24	33036	33119	33140	33239
7 Zips	33037	33139	33141	
Group 25	33070	33109	33149	
3 Zips				

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2019 Rating Group Definitions by ZIP Code

ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group
32003	1	32102	1	32181	2	32258	1
32004	3	32105	2	32182	1	32259	1
32006	1	32110	1	32183	2	32260	1
32007	2	32111	2	32185	1	32266	3
32008	1	32112	2	32187	1	32277	1
32009	1	32113	1	32189	1	32301	1
32011	1	32114	4	32190	2	32302	1
32013	1	32115	7	32192	1	32303	1
32024	1	32116	4	32193	1	32304	1
32025	1	32117	4	32195	2	32305	1
32026	1	32118	7	32198	4	32306	1
32030	1	32119	4	32201	1	32307	1
32033	1	32120	4	32202	1	32308	1
32034	2	32121	4	32203	1	32309	1
32035	2	32122	4	32204	1	32310	1
32038	1	32123	4	32205	1	32311	1
32040	1	32124	2	32206	1	32312	1
32041	1	32125	4	32207	1	32313	1
32042	1	32126	7	32208	1	32314	1
32043	1	32127	4	32209	1	32315	1
32044	1	32128	2	32210	1	32316	1
32046	1	32129	3	32211	1	32317	1
32050	1	32130	2	32212	1	32318	1
32052	1	32131	2	32214	1	32320	7
32053	1	32132	4	32216	1	32321	1
32054	1	32133	2	32217	1	32322	4
32055	1	32134	1	32218	1	32323	4
32056	1	32135	5	32219	1	32324	1
32058	1	32136	5	32220	1	32326	1
32059	1	32137	3	32221	1	32327	1
32060	1	32138	1	32222	1	32328	6
32061	1	32139	2	32223	1	32329	7
32062	1	32140	1	32224	1	32330	1
32063	1	32141	4	32225	1	32331	1
32064	1	32142	5	32226	1	32332	1
32065	1	32143	5	32227	3	32333	1
32066	1	32145	1	32228	3	32334	1
32067	1	32147	1	32229	1	32336	1
32068	1	32148	1	32231	1	32337	1
32071	1	32157	2	32232	1	32340	1
32073	1	32158	2	32233	3	32341	1
32079	1	32159	2	32234	1	32343	1
32080	4	32160	1	32235	1	32344	1
32081	1	32162	2	32236	1	32345	1
32082	3	32163	2	32238	1	32346	3
32083	1	32164	2	32239	1	32347	1
32084	3	32168	3	32240	3	32348	1
32085	3	32169	8	32241	1	32350	1
32086	2	32170	7	32244	1	32351	1
32087	1	32173	4	32245	1	32352	1
32091	1	32174	3	32246	1	32353	1
32092	1	32175	4	32247	1	32355	1
32094	1	32176	6	32250	3	32356	1
32095	2	32177	1	32254	1	32357	1
32096	1	32178	1	32255	1	32358	1
32097	1	32179	2	32256	1	32359	1
32099	1	32180	2	32257	1	32360	1

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2019 Rating Group Definitions by ZIP Code

ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group
32361	1	32502	11	32601	1	32704	3
32362	1	32503	8	32603	1	32706	2
32395	1	32504	7	32604	1	32707	2
32399	1	32505	6	32605	1	32708	2
32401	6	32506	6	32606	1	32709	3
32402	6	32507	9	32607	1	32710	3
32403	3	32508	9	32608	1	32712	3
32404	3	32509	4	32609	1	32713	2
32405	4	32511	6	32610	1	32714	2
32406	6	32512	6	32611	1	32715	2
32407	7	32513	8	32612	1	32716	2
32408	10	32514	5	32614	1	32718	2
32409	3	32516	6	32615	1	32719	2
32410	6	32520	10	32616	1	32720	2
32411	10	32521	11	32617	1	32721	2
32412	6	32522	11	32618	1	32722	2
32413	8	32523	8	32619	1	32723	2
32417	7	32524	8	32621	2	32724	2
32420	1	32526	4	32622	1	32725	2
32421	1	32530	3	32625	5	32726	3
32422	1	32531	2	32626	1	32727	3
32423	1	32533	3	32627	1	32728	2
32424	1	32534	4	32628	1	32730	2
32425	1	32535	1	32631	1	32732	3
32426	1	32536	2	32633	1	32733	2
32427	1	32537	2	32634	1	32735	3
32428	1	32538	1	32635	1	32736	2
32430	1	32539	2	32639	2	32738	2
32431	1	32540	10	32640	1	32739	2
32432	1	32541	10	32641	1	32744	2
32433	2	32542	6	32643	1	32745	2
32434	2	32544	10	32644	1	32746	2
32435	2	32547	6	32648	2	32747	3
32437	8	32548	9	32653	1	32750	2
32438	1	32549	9	32654	1	32751	3
32439	3	32550	11	32655	1	32752	2
32440	1	32559	4	32656	1	32753	2
32442	1	32560	3	32658	1	32754	4
32443	1	32561	13	32662	1	32756	3
32444	3	32562	11	32663	2	32757	3
32445	1	32563	10	32664	1	32759	5
32446	1	32564	2	32666	1	32762	2
32447	1	32565	2	32667	1	32763	2
32448	1	32566	8	32668	2	32764	2
32449	1	32567	1	32669	1	32765	2
32455	1	32568	2	32680	1	32766	3
32456	6	32569	10	32681	1	32767	2
32457	6	32570	2	32683	2	32768	3
32459	7	32571	3	32686	1	32771	3
32460	1	32572	3	32692	4	32772	3
32461	10	32577	3	32693	1	32773	3
32462	2	32578	5	32694	1	32774	2
32463	1	32579	7	32696	2	32775	4
32464	1	32580	5	32697	1	32776	2
32465	1	32583	3	32701	2	32777	3
32466	2	32588	5	32702	2	32778	4
32501	8	32591	8	32703	3	32779	2

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2019 Rating Group Definitions by ZIP Code

ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group
32780	5	32861	3	32964	12	33062	22
32781	5	32862	3	32965	11	33063	10
32783	5	32867	2	32966	8	33064	17
32784	2	32868	3	32967	9	33065	11
32789	3	32869	3	32968	9	33066	11
32790	3	32872	3	32969	9	33067	11
32791	2	32877	3	32970	9	33068	11
32792	2	32878	3	32971	15	33069	13
32793	2	32885	3	32976	12	33070	25
32794	3	32886	3	32978	11	33071	11
32795	2	32891	3	33001	23	33072	13
32796	4	32896	3	33002	13	33073	11
32798	3	32899	6	33004	19	33074	17
32799	2	32901	9	33008	21	33075	11
32801	3	32902	9	33009	21	33076	8
32802	3	32903	12	33010	12	33077	11
32803	3	32904	6	33011	12	33081	13
32804	3	32905	9	33012	12	33082	9
32805	3	32906	9	33013	12	33083	13
32806	3	32907	5	33014	13	33084	12
32807	3	32908	6	33015	12	33090	15
32808	3	32909	6	33016	11	33092	16
32809	3	32910	5	33017	12	33093	11
32810	3	32911	9	33018	13	33097	11
32811	3	32912	9	33019	23	33101	20
32812	3	32919	9	33020	19	33102	12
32814	3	32920	12	33021	13	33106	20
32815	4	32922	6	33022	19	33109	25
32816	3	32923	6	33023	13	33112	12
32817	2	32924	6	33024	12	33114	15
32818	3	32925	12	33025	11	33116	15
32819	3	32926	4	33026	12	33119	24
32820	3	32927	4	33027	12	33122	12
32821	3	32931	14	33028	9	33124	20
32822	3	32932	14	33029	10	33125	16
32824	3	32934	6	33030	15	33126	14
32825	3	32935	8	33031	16	33127	18
32826	3	32936	8	33032	16	33128	20
32827	4	32937	11	33033	16	33129	22
32828	3	32940	7	33034	15	33130	21
32829	3	32941	9	33035	15	33131	21
32830	3	32948	6	33036	24	33132	21
32831	3	32949	11	33037	24	33133	19
32832	3	32950	9	33039	16	33134	15
32833	3	32951	14	33040	20	33135	17
32835	3	32952	9	33041	20	33136	18
32836	3	32953	6	33042	18	33137	19
32837	3	32954	6	33043	18	33138	19
32839	3	32955	6	33045	20	33139	24
32853	3	32956	6	33050	21	33140	24
32854	3	32957	11	33051	21	33141	24
32855	3	32958	11	33052	21	33142	15
32856	3	32959	4	33054	13	33143	17
32857	3	32960	12	33055	11	33144	14
32858	3	32961	12	33056	12	33145	18
32859	3	32962	11	33060	17	33146	18
32860	3	32963	16	33061	17	33147	14

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2019 Rating Group Definitions by ZIP Code

ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group
33149	25	33245	18	33388	11	33465	18
33150	16	33247	12	33394	19	33466	15
33152	12	33255	15	33401	19	33467	10
33153	19	33256	20	33402	21	33468	19
33154	23	33257	17	33403	18	33469	19
33155	15	33261	18	33404	18	33470	10
33156	18	33265	13	33405	20	33471	7
33157	17	33266	12	33406	15	33472	11
33158	20	33269	13	33407	17	33473	11
33160	23	33280	18	33408	19	33474	17
33161	18	33283	12	33409	14	33475	16
33162	17	33296	20	33410	15	33476	15
33163	22	33299	14	33411	10	33477	19
33164	17	33301	19	33412	9	33478	9
33165	13	33302	20	33413	10	33480	21
33166	12	33303	19	33414	10	33481	18
33167	14	33304	20	33415	11	33482	12
33168	15	33305	19	33416	15	33483	21
33169	13	33306	21	33417	11	33484	12
33170	16	33307	17	33418	11	33486	17
33172	13	33308	21	33419	18	33487	20
33173	14	33309	13	33420	15	33488	12
33174	13	33310	14	33421	10	33493	11
33175	12	33311	14	33422	16	33496	12
33176	15	33312	14	33424	17	33497	11
33177	14	33313	11	33425	17	33498	12
33178	13	33314	12	33426	17	33499	20
33179	16	33315	17	33427	17	33503	4
33180	22	33316	21	33428	11	33508	4
33181	20	33317	11	33429	22	33509	4
33182	14	33318	10	33430	11	33510	4
33183	12	33319	11	33431	18	33511	4
33184	12	33320	11	33432	22	33513	3
33185	14	33321	11	33433	12	33514	3
33186	13	33322	10	33434	12	33521	2
33187	15	33323	12	33435	21	33523	3
33188	13	33324	11	33436	14	33524	4
33189	18	33325	12	33437	11	33525	4
33190	18	33326	13	33438	15	33526	4
33191	18	33327	10	33440	10	33527	4
33192	13	33328	11	33441	19	33530	4
33193	13	33329	11	33442	13	33534	6
33194	15	33330	12	33443	19	33537	3
33195	20	33331	12	33444	20	33538	2
33196	14	33332	13	33445	15	33539	4
33197	17	33334	17	33446	11	33540	4
33198	11	33335	17	33448	11	33541	4
33199	13	33336	14	33449	11	33542	4
33206	20	33338	11	33454	11	33543	4
33222	12	33339	21	33455	16	33544	3
33231	21	33340	14	33458	13	33545	4
33233	19	33345	10	33459	11	33547	4
33234	15	33346	21	33460	22	33548	4
33238	16	33348	21	33461	15	33549	3
33239	24	33351	10	33462	18	33550	4
33242	15	33355	12	33463	11	33556	4
33243	17	33359	11	33464	22	33558	4

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2019 Rating Group Definitions by ZIP Code

ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group
33559	3	33631	6	33747	10	33840	4
33563	4	33633	5	33755	8	33841	4
33564	4	33634	6	33756	8	33843	5
33565	3	33635	5	33757	8	33844	4
33566	4	33637	4	33758	6	33845	4
33567	4	33646	6	33759	6	33846	4
33568	5	33647	3	33760	6	33847	4
33569	4	33650	6	33761	5	33848	3
33570	6	33655	6	33762	7	33849	3
33571	5	33660	5	33763	6	33850	4
33572	6	33661	5	33764	6	33851	4
33573	5	33662	5	33765	6	33852	6
33574	4	33663	6	33766	6	33853	5
33575	6	33672	6	33767	10	33854	4
33576	4	33673	5	33769	6	33855	4
33578	5	33674	5	33770	8	33856	4
33579	4	33675	6	33771	6	33857	6
33583	4	33677	6	33772	9	33858	3
33584	4	33679	8	33773	6	33859	4
33585	3	33680	5	33774	9	33860	4
33586	6	33681	9	33775	9	33862	6
33587	4	33682	4	33776	10	33863	4
33592	3	33684	6	33777	7	33865	5
33593	3	33685	6	33778	7	33867	4
33594	3	33687	3	33779	8	33868	3
33595	3	33688	3	33780	6	33870	5
33596	3	33689	4	33781	6	33871	5
33597	3	33694	4	33782	5	33872	5
33598	5	33701	10	33784	7	33873	4
33601	6	33702	7	33785	11	33875	5
33602	6	33703	9	33786	11	33876	6
33603	5	33704	9	33801	4	33877	4
33604	5	33705	11	33802	4	33880	4
33605	6	33706	12	33803	4	33881	4
33606	8	33707	11	33804	4	33882	4
33607	6	33708	12	33805	4	33883	4
33608	9	33709	7	33806	4	33884	4
33609	7	33710	8	33807	4	33885	4
33610	5	33711	10	33809	4	33888	4
33611	9	33712	11	33810	3	33890	4
33612	4	33713	7	33811	4	33896	3
33613	3	33714	7	33812	4	33897	3
33614	5	33715	13	33813	4	33898	4
33615	6	33716	6	33815	4	33901	7
33616	10	33729	7	33820	4	33902	7
33617	3	33730	7	33823	4	33903	7
33618	3	33731	10	33825	5	33904	8
33619	6	33732	6	33826	5	33905	7
33620	3	33733	7	33827	5	33906	6
33621	10	33734	9	33830	4	33907	7
33622	6	33736	12	33831	4	33908	9
33623	6	33738	12	33834	5	33909	7
33624	4	33740	9	33835	4	33910	7
33625	4	33741	12	33836	3	33911	7
33626	4	33742	6	33837	3	33912	7
33629	8	33743	8	33838	4	33913	7
33630	6	33744	12	33839	4	33914	8

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2019 Rating Group Definitions by ZIP Code

ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group	ZIP Code	2019 Group
33915	7	34107	16	34239	9	34453	2
33916	6	34108	14	34240	5	34460	2
33917	6	34109	9	34241	6	34461	2
33918	6	34110	10	34242	11	34464	2
33919	7	34112	11	34243	6	34465	2
33920	6	34113	10	34249	7	34470	2
33921	16	34114	9	34250	7	34471	2
33922	12	34116	8	34251	5	34472	2
33924	17	34117	7	34260	8	34473	2
33927	6	34119	7	34264	8	34474	2
33928	8	34120	7	34265	5	34475	2
33929	8	34133	10	34266	5	34476	2
33930	6	34134	11	34267	5	34477	2
33931	14	34135	8	34268	5	34478	2
33932	14	34136	11	34269	5	34479	2
33935	6	34137	10	34270	6	34480	2
33936	8	34138	10	34272	9	34481	2
33938	5	34139	10	34274	9	34482	2
33944	7	34140	15	34275	9	34483	2
33945	12	34141	10	34276	10	34484	2
33946	12	34142	8	34277	10	34487	2
33947	9	34143	7	34278	7	34488	1
33948	7	34145	17	34280	9	34489	2
33949	7	34146	17	34281	8	34491	2
33950	7	34201	5	34282	8	34492	2
33951	7	34202	5	34284	10	34498	3
33952	6	34203	5	34285	10	34601	2
33953	6	34204	5	34286	5	34602	3
33954	5	34205	7	34287	6	34603	3
33955	7	34206	7	34288	5	34604	3
33956	13	34207	8	34289	5	34605	3
33957	15	34208	6	34290	6	34606	4
33960	6	34209	9	34291	5	34607	5
33965	8	34210	9	34292	6	34608	3
33966	6	34211	5	34293	8	34609	3
33967	8	34212	5	34295	11	34610	4
33970	8	34215	13	34420	2	34611	4
33971	7	34216	13	34421	2	34613	3
33972	7	34217	14	34423	2	34614	3
33973	8	34218	13	34428	2	34636	2
33974	8	34219	5	34429	2	34637	4
33975	6	34220	7	34430	2	34638	4
33976	7	34221	7	34431	2	34639	3
33980	6	34222	6	34432	2	34652	6
33981	8	34223	11	34433	2	34653	5
33982	6	34224	9	34434	2	34654	3
33983	6	34228	13	34436	2	34655	4
33990	7	34229	10	34441	2	34656	5
33991	7	34230	10	34442	2	34660	8
33993	8	34231	10	34445	2	34661	2
33994	6	34232	5	34446	2	34667	6
34101	16	34233	6	34447	2	34668	6
34102	16	34234	7	34448	2	34669	4
34103	15	34235	5	34449	2	34673	6
34104	9	34236	10	34450	2	34674	6
34105	11	34237	7	34451	2	34677	5
34106	16	34238	7	34452	2	34679	6

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2019 Rating Group Definitions by ZIP Code

ZIP Code	2019 Group	ZIP Code	2019 Group
34680	5	34945	8
34681	8	34946	13
34682	6	34947	11
34683	6	34948	15
34684	5	34949	18
34685	4	34950	15
34688	4	34951	10
34689	8	34952	12
34690	5	34953	9
34691	7	34954	10
34692	5	34956	10
34695	6	34957	17
34697	7	34958	17
34698	7	34972	7
34705	3	34973	7
34711	4	34974	10
34712	4	34979	15
34713	3	34981	10
34714	3	34982	13
34715	4	34983	9
34729	4	34984	9
34731	3	34985	12
34734	3	34986	8
34736	3	34987	9
34737	3	34988	9
34739	5	34990	10
34740	5	34991	13
34741	3	34992	17
34742	3	34994	14
34743	4	34995	14
34744	4	34996	18
34745	3	34997	13
34746	4		
34747	3		
34748	3		
34749	3		
34753	3		
34755	4		
34756	4		
34758	3		
34759	3		
34760	5		
34761	3		
34762	3		
34769	5		
34770	5		
34771	4		
34772	4		
34773	4		
34777	5		
34778	5		
34785	2		
34786	3		
34787	4		
34788	3		
34789	3		
34797	3		

EXHIBIT

XIV

PROPOSED FHCF 2019 Commercial Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 90%

Deductible: 3%

ZIP Code Group	Frame	Masonry Veneer	Masonry	Masonry with Reinforced Concrete Roof Deck	Superior	Superior with Reinforced Concrete Roof Deck	Non-MH Default and Unknown
1	0.0918	0.0862	0.0695	0.0547	0.0419	0.0330	0.0637
2	0.1729	0.1624	0.1309	0.1030	0.0788	0.0622	0.1199
3	0.2497	0.2345	0.1889	0.1487	0.1138	0.0897	0.1731
4	0.3282	0.3083	0.2484	0.1956	0.1496	0.1180	0.2276
5	0.4089	0.3840	0.3094	0.2436	0.1863	0.1470	0.2836
6	0.4919	0.4620	0.3723	0.2931	0.2242	0.1768	0.3412
7	0.5776	0.5425	0.4371	0.3441	0.2632	0.2076	0.4006
8	0.6663	0.6258	0.5042	0.3970	0.3036	0.2395	0.4621
9	0.7584	0.7122	0.5739	0.4518	0.3456	0.2726	0.5259
10	0.8543	0.8023	0.6465	0.5090	0.3893	0.3070	0.5925
11	0.9546	0.8965	0.7224	0.5688	0.4350	0.3431	0.6620
12	1.0599	0.9955	0.8021	0.6315	0.4830	0.3809	0.7351
13	1.1710	1.0997	0.8861	0.6977	0.5336	0.4209	0.8121
14	1.2885	1.2102	0.9751	0.7677	0.5872	0.4631	0.8936
15	1.4136	1.3276	1.0697	0.8422	0.6442	0.5081	0.9803
16	1.5472	1.4531	1.1708	0.9218	0.7051	0.5561	1.0730
17	1.6907	1.5879	1.2794	1.0073	0.7705	0.6077	1.1725
18	1.8455	1.7333	1.3965	1.0996	0.8411	0.6633	1.2799
19	2.0133	1.8909	1.5235	1.1996	0.9175	0.7236	1.3963
20	2.1961	2.0626	1.6619	1.3085	1.0008	0.7893	1.5230
21	2.3961	2.2504	1.8132	1.4276	1.0920	0.8612	1.6618
22	2.6160	2.4569	1.9796	1.5586	1.1922	0.9402	1.8142
23	2.8587	2.6849	2.1633	1.7032	1.3028	1.0274	1.9826
24	3.1278	2.9376	2.3669	1.8636	1.4254	1.1242	2.1692
25	3.4273	3.2188	2.5935	2.0420	1.5619	1.2318	2.3769

PROPOSED FHCF 2019 Commercial Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 75%

Deductible: 3%

ZIP Code Group	Frame	Masonry Veneer	Masonry	Masonry with Reinforced Concrete Roof Deck	Superior	Superior with Reinforced Concrete Roof Deck	Non-MH Default and Unknown
1	0.0765	0.0719	0.0579	0.0456	0.0349	0.0275	0.0531
2	0.1441	0.1354	0.1091	0.0859	0.0657	0.0518	0.1000
3	0.2080	0.1954	0.1574	0.1240	0.0948	0.0748	0.1443
4	0.2735	0.2569	0.2070	0.1630	0.1247	0.0983	0.1897
5	0.3408	0.3200	0.2579	0.2030	0.1553	0.1225	0.2363
6	0.4099	0.3850	0.3102	0.2442	0.1868	0.1473	0.2843
7	0.4813	0.4521	0.3642	0.2868	0.2194	0.1730	0.3338
8	0.5552	0.5215	0.4202	0.3308	0.2530	0.1996	0.3851
9	0.6320	0.5935	0.4782	0.3765	0.2880	0.2271	0.4383
10	0.7119	0.6686	0.5387	0.4242	0.3244	0.2559	0.4937
11	0.7955	0.7471	0.6020	0.4740	0.3625	0.2859	0.5517
12	0.8833	0.8296	0.6684	0.5263	0.4025	0.3175	0.6126
13	0.9758	0.9165	0.7384	0.5814	0.4447	0.3507	0.6767
14	1.0738	1.0085	0.8126	0.6398	0.4894	0.3859	0.7447
15	1.1780	1.1063	0.8914	0.7019	0.5368	0.4234	0.8170
16	1.2894	1.2109	0.9757	0.7682	0.5876	0.4634	0.8942
17	1.4089	1.3232	1.0662	0.8394	0.6421	0.5064	0.9771
18	1.5379	1.4444	1.1638	0.9163	0.7009	0.5527	1.0666
19	1.6778	1.5757	1.2696	0.9996	0.7646	0.6030	1.1636
20	1.8301	1.7188	1.3849	1.0904	0.8340	0.6577	1.2692
21	1.9968	1.8753	1.5110	1.1897	0.9100	0.7177	1.3848
22	2.1800	2.0474	1.6497	1.2989	0.9935	0.7835	1.5119
23	2.3823	2.2374	1.8027	1.4194	1.0857	0.8562	1.6521
24	2.6065	2.4480	1.9724	1.5530	1.1879	0.9368	1.8077
25	2.8561	2.6824	2.1613	1.7017	1.3016	1.0265	1.9807

PROPOSED FHCF 2019 Commercial Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 45%

Deductible: 3%

ZIP Code Group	Frame	Masonry Veneer	Masonry	Masonry with Reinforced Concrete Roof Deck	Superior	Superior with Reinforced Concrete Roof Deck	Non-MH Default and Unknown
1	0.0459	0.0431	0.0347	0.0274	0.0209	0.0165	0.0318
2	0.0865	0.0812	0.0654	0.0515	0.0394	0.0311	0.0600
3	0.1248	0.1172	0.0945	0.0744	0.0569	0.0449	0.0866
4	0.1641	0.1541	0.1242	0.0978	0.0748	0.0590	0.1138
5	0.2045	0.1920	0.1547	0.1218	0.0932	0.0735	0.1418
6	0.2460	0.2310	0.1861	0.1465	0.1121	0.0884	0.1706
7	0.2888	0.2712	0.2185	0.1721	0.1316	0.1038	0.2003
8	0.3331	0.3129	0.2521	0.1985	0.1518	0.1197	0.2310
9	0.3792	0.3561	0.2869	0.2259	0.1728	0.1363	0.2630
10	0.4271	0.4012	0.3232	0.2545	0.1947	0.1535	0.2962
11	0.4773	0.4483	0.3612	0.2844	0.2175	0.1715	0.3310
12	0.5300	0.4977	0.4010	0.3158	0.2415	0.1905	0.3675
13	0.5855	0.5499	0.4430	0.3488	0.2668	0.2104	0.4060
14	0.6443	0.6051	0.4875	0.3839	0.2936	0.2316	0.4468
15	0.7068	0.6638	0.5348	0.4211	0.3221	0.2540	0.4902
16	0.7736	0.7266	0.5854	0.4609	0.3526	0.2780	0.5365
17	0.8454	0.7939	0.6397	0.5037	0.3853	0.3038	0.5863
18	0.9228	0.8666	0.6983	0.5498	0.4205	0.3316	0.6399
19	1.0067	0.9454	0.7618	0.5998	0.4588	0.3618	0.6981
20	1.0981	1.0313	0.8309	0.6542	0.5004	0.3946	0.7615
21	1.1981	1.1252	0.9066	0.7138	0.5460	0.4306	0.8309
22	1.3080	1.2284	0.9898	0.7793	0.5961	0.4701	0.9071
23	1.4294	1.3424	1.0816	0.8516	0.6514	0.5137	0.9913
24	1.5639	1.4688	1.1834	0.9318	0.7127	0.5621	1.0846
25	1.7136	1.6094	1.2968	1.0210	0.7810	0.6159	1.1884

PROPOSED FHCF 2019 Residential Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 90%

Deductible: 2%

ZIP Code Group	Frame	Masonry Veneer	Masonry	Non-MH Default Unknown
1	0.1033	0.0968	0.0775	0.1032
2	0.1945	0.1824	0.1460	0.1944
3	0.2808	0.2632	0.2108	0.2806
4	0.3691	0.3461	0.2772	0.3689
5	0.4598	0.4312	0.3453	0.4596
6	0.5532	0.5187	0.4154	0.5529
7	0.6496	0.6091	0.4877	0.6492
8	0.7493	0.7026	0.5626	0.7489
9	0.8528	0.7996	0.6404	0.8524
10	0.9607	0.9008	0.7214	0.9602
11	1.0735	1.0066	0.8061	1.0730
12	1.1920	1.1176	0.8950	1.1914
13	1.3168	1.2347	0.9888	1.3162
14	1.4490	1.3587	1.0881	1.4483
15	1.5897	1.4905	1.1937	1.5889
16	1.7400	1.6314	1.3065	1.7391
17	1.9013	1.7827	1.4277	1.9004
18	2.0754	1.9460	1.5584	2.0744
19	2.2641	2.1229	1.7001	2.2630
20	2.4697	2.3157	1.8545	2.4685
21	2.6946	2.5266	2.0234	2.6933
22	2.9419	2.7584	2.2090	2.9404
23	3.2148	3.0143	2.4140	3.2133
24	3.5175	3.2981	2.6412	3.5157
25	3.8542	3.6138	2.8941	3.8523

PROPOSED FHCF 2019 Residential Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 75%

Deductible: 2%

ZIP Code Group	Frame	Masonry Veneer	Masonry	Non-MH Default Unknown
1	0.0861	0.0807	0.0646	0.0860
2	0.1621	0.1520	0.1217	0.1620
3	0.2340	0.2194	0.1757	0.2338
4	0.3076	0.2884	0.2310	0.3074
5	0.3832	0.3593	0.2877	0.3830
6	0.4610	0.4323	0.3462	0.4608
7	0.5413	0.5075	0.4065	0.5410
8	0.6244	0.5855	0.4689	0.6241
9	0.7107	0.6664	0.5336	0.7103
10	0.8006	0.7507	0.6012	0.8002
11	0.8946	0.8388	0.6717	0.8942
12	0.9933	0.9314	0.7459	0.9928
13	1.0974	1.0289	0.8240	1.0968
14	1.2075	1.1322	0.9067	1.2069
15	1.3247	1.2421	0.9947	1.3241
16	1.4500	1.3595	1.0888	1.4493
17	1.5844	1.4856	1.1897	1.5837
18	1.7295	1.6216	1.2987	1.7287
19	1.8868	1.7691	1.4168	1.8859
20	2.0581	1.9297	1.5454	2.0571
21	2.2455	2.1055	1.6861	2.2444
22	2.4516	2.2987	1.8408	2.4504
23	2.6790	2.5119	2.0116	2.6777
24	2.9312	2.7484	2.2010	2.9298
25	3.2119	3.0115	2.4117	3.2103

PROPOSED FHCF 2019 Residential Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 45%

Deductible: 2%

ZIP Code Group	Frame	Masonry Veneer	Masonry	Non-MH Default Unknown
1	0.0516	0.0484	0.0388	0.0516
2	0.0972	0.0912	0.0730	0.0972
3	0.1404	0.1316	0.1054	0.1403
4	0.1846	0.1730	0.1386	0.1845
5	0.2299	0.2156	0.1726	0.2298
6	0.2766	0.2594	0.2077	0.2765
7	0.3248	0.3045	0.2439	0.3246
8	0.3746	0.3513	0.2813	0.3745
9	0.4264	0.3998	0.3202	0.4262
10	0.4804	0.4504	0.3607	0.4801
11	0.5368	0.5033	0.4030	0.5365
12	0.5960	0.5588	0.4475	0.5957
13	0.6584	0.6173	0.4944	0.6581
14	0.7245	0.6793	0.5440	0.7242
15	0.7948	0.7453	0.5968	0.7944
16	0.8700	0.8157	0.6533	0.8696
17	0.9507	0.8914	0.7138	0.9502
18	1.0377	0.9730	0.7792	1.0372
19	1.1321	1.0615	0.8501	1.1315
20	1.2348	1.1578	0.9272	1.2342
21	1.3473	1.2633	1.0117	1.3466
22	1.4709	1.3792	1.1045	1.4702
23	1.6074	1.5072	1.2070	1.6066
24	1.7587	1.6490	1.3206	1.7579
25	1.9271	1.8069	1.4470	1.9262

PROPOSED FHCF 2019 Mobile Home Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 90%

Deductible: $251 - $500

ZIP Code Group	Fully Tied Down -- Manufactured Prior to 7/13/94	Fully Tied Down -- Manufactured On or After 7/13/94	Other than Fully Tied Unknown
1	0.4337	0.4243	0.6068
2	0.8168	0.7991	1.1428
3	1.1790	1.1535	1.6497
4	1.5501	1.5166	2.1689
5	1.9311	1.8893	2.7020
6	2.3232	2.2730	3.2506
7	2.7279	2.6689	3.8167
8	3.1467	3.0786	4.4027
9	3.5815	3.5040	5.0111
10	4.0346	3.9473	5.6450
11	4.5083	4.4108	6.3079
12	5.0057	4.8974	7.0038
13	5.5301	5.4104	7.7375
14	6.0854	5.9537	8.5144
15	6.6760	6.5315	9.3407
16	7.3071	7.1490	10.2238
17	7.9847	7.8120	11.1719
18	8.7158	8.5272	12.1949
19	9.5084	9.3026	13.3038
20	10.3716	10.1472	14.5116
21	11.3163	11.0714	15.8332
22	12.3546	12.0873	17.2860
23	13.5009	13.2088	18.8899
24	14.7717	14.4521	20.6680
25	16.1861	15.8358	22.6469

PROPOSED FHCF 2019 Mobile Home Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 75%

Deductible: $251 - $500

ZIP Code Group	Fully Tied Down -- Manufactured Prior to 7/13/94	Fully Tied Down -- Manufactured On or After 7/13/94	Other than Fully Tied Unknown
1	0.3614	0.3536	0.5057
2	0.6806	0.6659	0.9523
3	0.9825	0.9613	1.3747
4	1.2918	1.2638	1.8074
5	1.6093	1.5745	2.2516
6	1.9360	1.8941	2.7088
7	2.2732	2.2241	3.1806
8	2.6222	2.5655	3.6689
9	2.9846	2.9200	4.1759
10	3.3621	3.2894	4.7042
11	3.7569	3.6756	5.2566
12	4.1714	4.0812	5.8365
13	4.6084	4.5087	6.4479
14	5.0711	4.9614	7.0953
15	5.5633	5.4429	7.7839
16	6.0892	5.9575	8.5198
17	6.6540	6.5100	9.3099
18	7.2632	7.1060	10.1624
19	7.9237	7.7522	11.0865
20	8.6430	8.4560	12.0930
21	9.4302	9.2262	13.1944
22	10.2955	10.0727	14.4050
23	11.2508	11.0073	15.7416
24	12.3098	12.0434	17.2233
25	13.4884	13.1965	18.8724

PROPOSED FHCF 2019 Mobile Home Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 45%

Deductible: $251 - $500

ZIP Code Group	Fully Tied Down -- Manufactured Prior to 7/13/94	Fully Tied Down -- Manufactured On or After 7/13/94	Other than Fully Tied Unknown
1	0.2168	0.2122	0.3034
2	0.4084	0.3996	0.5714
3	0.5895	0.5768	0.8248
4	0.7751	0.7583	1.0844
5	0.9656	0.9447	1.3510
6	1.1616	1.1365	1.6253
7	1.3639	1.3344	1.9084
8	1.5733	1.5393	2.2014
9	1.7908	1.7520	2.5056
10	2.0173	1.9736	2.8225
11	2.2542	2.2054	3.1539
12	2.5029	2.4487	3.5019
13	2.7651	2.7052	3.8687
14	3.0427	2.9768	4.2572
15	3.3380	3.2657	4.6704
16	3.6535	3.5745	5.1119
17	3.9924	3.9060	5.5860
18	4.3579	4.2636	6.0974
19	4.7542	4.6513	6.6519
20	5.1858	5.0736	7.2558
21	5.6581	5.5357	7.9166
22	6.1773	6.0436	8.6430
23	6.7505	6.6044	9.4450
24	7.3859	7.2260	10.3340
25	8.0930	7.9179	11.3234

PROPOSED FHCF 2019 Tenants Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 90%

Deductible: $1 - $500

ZIP Code Group	Frame	Masonry Veneer	Masonry	Masonry with Reinforced Concrete Roof Deck	Superior	Superior with Reinforced Concrete Roof Deck	Non-MH Default and Unknown
1	0.0565	0.0543	0.0430	0.0365	0.0289	0.0252	0.0418
2	0.1063	0.1023	0.0810	0.0688	0.0543	0.0475	0.0788
3	0.1535	0.1477	0.1170	0.0993	0.0784	0.0686	0.1137
4	0.2018	0.1941	0.1538	0.1306	0.1031	0.0902	0.1495
5	0.2514	0.2419	0.1916	0.1627	0.1285	0.1123	0.1862
6	0.3024	0.2910	0.2304	0.1957	0.1546	0.1352	0.2241
7	0.3551	0.3417	0.2706	0.2298	0.1815	0.1587	0.2631
8	0.4096	0.3941	0.3121	0.2651	0.2093	0.1831	0.3035
9	0.4662	0.4486	0.3553	0.3017	0.2383	0.2084	0.3454
10	0.5252	0.5053	0.4002	0.3399	0.2684	0.2347	0.3891
11	0.5869	0.5646	0.4472	0.3798	0.2999	0.2623	0.4348
12	0.6516	0.6269	0.4965	0.4217	0.3330	0.2912	0.4827
13	0.7199	0.6926	0.5485	0.4659	0.3679	0.3217	0.5333
14	0.7921	0.7622	0.6036	0.5126	0.4049	0.3540	0.5869
15	0.8690	0.8361	0.6622	0.5624	0.4441	0.3884	0.6438
16	0.9512	0.9152	0.7248	0.6156	0.4861	0.4251	0.7047
17	1.0394	1.0000	0.7920	0.6726	0.5312	0.4645	0.7700
18	1.1346	1.0916	0.8645	0.7342	0.5799	0.5070	0.8405
19	1.2377	1.1909	0.9432	0.8010	0.6326	0.5531	0.9170
20	1.3501	1.2990	1.0288	0.8737	0.6900	0.6034	1.0002
21	1.4731	1.4173	1.1225	0.9533	0.7529	0.6583	1.0913
22	1.6082	1.5473	1.2255	1.0408	0.8219	0.7187	1.1915
23	1.7575	1.6909	1.3392	1.1373	0.8982	0.7854	1.3020
24	1.9229	1.8501	1.4652	1.2444	0.9828	0.8593	1.4246
25	2.1070	2.0272	1.6055	1.3635	1.0768	0.9416	1.5610

PROPOSED FHCF 2019 Tenants Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 75%

Deductible: $1 - $500

ZIP Code Group	Frame	Masonry Veneer	Masonry	Masonry with Reinforced Concrete Roof Deck	Superior	Superior with Reinforced Concrete Roof Deck	Non-MH Default and Unknown
1	0.0470	0.0453	0.0358	0.0304	0.0240	0.0210	0.0349
2	0.0886	0.0852	0.0675	0.0573	0.0453	0.0396	0.0656
3	0.1279	0.1231	0.0975	0.0828	0.0654	0.0572	0.0948
4	0.1682	0.1618	0.1281	0.1088	0.0859	0.0751	0.1246
5	0.2095	0.2016	0.1596	0.1356	0.1071	0.0936	0.1552
6	0.2520	0.2425	0.1920	0.1631	0.1288	0.1126	0.1867
7	0.2959	0.2847	0.2255	0.1915	0.1512	0.1322	0.2192
8	0.3413	0.3284	0.2601	0.2209	0.1745	0.1525	0.2529
9	0.3885	0.3738	0.2960	0.2514	0.1986	0.1736	0.2878
10	0.4377	0.4211	0.3335	0.2832	0.2237	0.1956	0.3242
11	0.4891	0.4705	0.3727	0.3165	0.2499	0.2186	0.3623
12	0.5430	0.5224	0.4138	0.3514	0.2775	0.2427	0.4023
13	0.5999	0.5772	0.4571	0.3882	0.3066	0.2681	0.4444
14	0.6601	0.6351	0.5030	0.4272	0.3374	0.2950	0.4891
15	0.7242	0.6968	0.5518	0.4687	0.3701	0.3236	0.5365
16	0.7927	0.7626	0.6040	0.5130	0.4051	0.3542	0.5872
17	0.8662	0.8334	0.6600	0.5605	0.4427	0.3871	0.6417
18	0.9455	0.9097	0.7204	0.6119	0.4832	0.4225	0.7005
19	1.0314	0.9924	0.7860	0.6675	0.5272	0.4609	0.7641
20	1.1251	1.0825	0.8573	0.7281	0.5750	0.5028	0.8335
21	1.2276	1.1811	0.9354	0.7944	0.6274	0.5486	0.9094
22	1.3402	1.2894	1.0212	0.8673	0.6850	0.5989	0.9929
23	1.4645	1.4091	1.1160	0.9478	0.7485	0.6545	1.0850
24	1.6024	1.5417	1.2210	1.0370	0.8190	0.7161	1.1871
25	1.7558	1.6893	1.3379	1.1363	0.8974	0.7847	1.3008

PROPOSED FHCF 2019 Tenants Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 45%

Deductible: $1 - $500

ZIP Code Group	Frame	Masonry Veneer	Masonry	Masonry with Reinforced Concrete Roof Deck	Superior	Superior with Reinforced Concrete Roof Deck	Non-MH Default and Unknown
1	0.0282	0.0272	0.0215	0.0183	0.0144	0.0126	0.0209
2	0.0532	0.0511	0.0405	0.0344	0.0272	0.0238	0.0394
3	0.0767	0.0738	0.0585	0.0497	0.0392	0.0343	0.0569
4	0.1009	0.0971	0.0769	0.0653	0.0516	0.0451	0.0747
5	0.1257	0.1209	0.0958	0.0813	0.0642	0.0562	0.0931
6	0.1512	0.1455	0.1152	0.0979	0.0773	0.0676	0.1120
7	0.1775	0.1708	0.1353	0.1149	0.0907	0.0793	0.1315
8	0.2048	0.1971	0.1561	0.1325	0.1047	0.0915	0.1517
9	0.2331	0.2243	0.1776	0.1509	0.1191	0.1042	0.1727
10	0.2626	0.2527	0.2001	0.1699	0.1342	0.1174	0.1945
11	0.2934	0.2823	0.2236	0.1899	0.1500	0.1311	0.2174
12	0.3258	0.3135	0.2483	0.2108	0.1665	0.1456	0.2414
13	0.3599	0.3463	0.2743	0.2329	0.1840	0.1609	0.2667
14	0.3961	0.3811	0.3018	0.2563	0.2024	0.1770	0.2934
15	0.4345	0.4181	0.3311	0.2812	0.2221	0.1942	0.3219
16	0.4756	0.4576	0.3624	0.3078	0.2431	0.2125	0.3523
17	0.5197	0.5000	0.3960	0.3363	0.2656	0.2323	0.3850
18	0.5673	0.5458	0.4323	0.3671	0.2899	0.2535	0.4203
19	0.6189	0.5954	0.4716	0.4005	0.3163	0.2766	0.4585
20	0.6751	0.6495	0.5144	0.4369	0.3450	0.3017	0.5001
21	0.7365	0.7086	0.5612	0.4766	0.3764	0.3292	0.5457
22	0.8041	0.7737	0.6127	0.5204	0.4110	0.3594	0.5957
23	0.8787	0.8455	0.6696	0.5687	0.4491	0.3927	0.6510
24	0.9614	0.9250	0.7326	0.6222	0.4914	0.4297	0.7123
25	1.0535	1.0136	0.8028	0.6818	0.5384	0.4708	0.7805

PROPOSED FHCF 2019 Condominium Unit Owners Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 90%

Deductible: $1 - $500

ZIP Code Group	Frame	Masonry Veneer	Masonry	Masonry with Reinforced Concrete Roof Deck	Superior	Superior with Reinforced Concrete Roof Deck	Non-MH Default and Unknown
1	0.1155	0.1000	0.0841	0.0603	0.0534	0.0399	0.0778
2	0.2176	0.1884	0.1585	0.1135	0.1006	0.0751	0.1465
3	0.3141	0.2719	0.2287	0.1639	0.1453	0.1084	0.2115
4	0.4130	0.3575	0.3007	0.2154	0.1910	0.1425	0.2780
5	0.5145	0.4454	0.3746	0.2684	0.2379	0.1775	0.3464
6	0.6189	0.5358	0.4507	0.3229	0.2863	0.2135	0.4167
7	0.7267	0.6291	0.5292	0.3791	0.3361	0.2507	0.4893
8	0.8383	0.7257	0.6105	0.4373	0.3877	0.2892	0.5644
9	0.9541	0.8260	0.6948	0.4977	0.4413	0.3292	0.6424
10	1.0748	0.9305	0.7827	0.5607	0.4971	0.3708	0.7236
11	1.2010	1.0397	0.8746	0.6265	0.5555	0.4144	0.8086
12	1.3335	1.1544	0.9711	0.6957	0.6168	0.4601	0.8978
13	1.4732	1.2754	1.0728	0.7685	0.6814	0.5083	0.9919
14	1.6212	1.4034	1.1805	0.8457	0.7498	0.5593	1.0915
15	1.7785	1.5396	1.2951	0.9278	0.8226	0.6136	1.1974
16	1.9466	1.6852	1.4176	1.0155	0.9003	0.6716	1.3106
17	2.1272	1.8415	1.5490	1.1097	0.9838	0.7339	1.4321
18	2.3219	2.0101	1.6909	1.2113	1.0739	0.8011	1.5633
19	2.5331	2.1928	1.8446	1.3214	1.1716	0.8739	1.7054
20	2.7630	2.3919	2.0121	1.4414	1.2779	0.9533	1.8602
21	3.0147	2.6098	2.1953	1.5727	1.3943	1.0401	2.0297
22	3.2913	2.8492	2.3968	1.7170	1.5223	1.1355	2.2159
23	3.5967	3.1136	2.6191	1.8763	1.6635	1.2409	2.4215
24	3.9352	3.4067	2.8657	2.0529	1.8201	1.3577	2.6494
25	4.3120	3.7329	3.1401	2.2495	1.9944	1.4877	2.9031

PROPOSED FHCF 2019 Condominium Unit Owners Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 75%

Deductible: $1 - $500

ZIP Code Group	Frame	Masonry Veneer	Masonry	Masonry with Reinforced Concrete Roof Deck	Superior	Superior with Reinforced Concrete Roof Deck	Non-MH Default and Unknown
1	0.0963	0.0833	0.0701	0.0502	0.0445	0.0332	0.0648
2	0.1813	0.1570	0.1320	0.0946	0.0839	0.0626	0.1221
3	0.2617	0.2266	0.1906	0.1365	0.1211	0.0903	0.1762
4	0.3441	0.2979	0.2506	0.1795	0.1592	0.1187	0.2317
5	0.4287	0.3711	0.3122	0.2236	0.1983	0.1479	0.2886
6	0.5158	0.4465	0.3756	0.2691	0.2385	0.1779	0.3472
7	0.6056	0.5243	0.4410	0.3159	0.2801	0.2089	0.4077
8	0.6986	0.6047	0.5087	0.3644	0.3231	0.2410	0.4703
9	0.7951	0.6883	0.5790	0.4148	0.3677	0.2743	0.5353
10	0.8957	0.7754	0.6522	0.4673	0.4143	0.3090	0.6030
11	1.0009	0.8664	0.7288	0.5221	0.4629	0.3453	0.6738
12	1.1113	0.9620	0.8093	0.5797	0.5140	0.3834	0.7482
13	1.2277	1.0628	0.8940	0.6405	0.5678	0.4236	0.8266
14	1.3510	1.1695	0.9838	0.7048	0.6248	0.4661	0.9095
15	1.4821	1.2830	1.0793	0.7732	0.6855	0.5113	0.9978
16	1.6222	1.4043	1.1813	0.8462	0.7503	0.5597	1.0922
17	1.7726	1.5345	1.2909	0.9247	0.8199	0.6116	1.1934
18	1.9349	1.6750	1.4090	1.0094	0.8949	0.6676	1.3027
19	2.1109	1.8274	1.5372	1.1012	0.9763	0.7283	1.4212
20	2.3025	1.9933	1.6767	1.2012	1.0649	0.7944	1.5502
21	2.5122	2.1748	1.8294	1.3106	1.1619	0.8667	1.6914
22	2.7427	2.3744	1.9973	1.4308	1.2685	0.9463	1.8466
23	2.9972	2.5947	2.1826	1.5636	1.3863	1.0341	2.0179
24	3.2794	2.8389	2.3881	1.7107	1.5167	1.1314	2.2079
25	3.5933	3.1107	2.6167	1.8745	1.6620	1.2397	2.4193

PROPOSED FHCF 2019 Condominium Unit Owners Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per $1000 of Exposure

Coverage Level: 45%

Deductible: $1 - $500

ZIP Code Group	Frame	Masonry Veneer	Masonry	Masonry with Reinforced Concrete Roof Deck	Superior	Superior with Reinforced Concrete Roof Deck	Non-MH Default and Unknown
1	0.0578	0.0500	0.0421	0.0301	0.0267	0.0199	0.0389
2	0.1088	0.0942	0.0792	0.0568	0.0503	0.0375	0.0732
3	0.1570	0.1360	0.1144	0.0819	0.0726	0.0542	0.1057
4	0.2065	0.1787	0.1504	0.1077	0.0955	0.0712	0.1390
5	0.2572	0.2227	0.1873	0.1342	0.1190	0.0887	0.1732
6	0.3095	0.2679	0.2254	0.1614	0.1431	0.1068	0.2083
7	0.3634	0.3146	0.2646	0.1896	0.1681	0.1254	0.2446
8	0.4191	0.3628	0.3052	0.2187	0.1939	0.1446	0.2822
9	0.4771	0.4130	0.3474	0.2489	0.2206	0.1646	0.3212
10	0.5374	0.4652	0.3913	0.2804	0.2486	0.1854	0.3618
11	0.6005	0.5199	0.4373	0.3133	0.2777	0.2072	0.4043
12	0.6668	0.5772	0.4856	0.3478	0.3084	0.2300	0.4489
13	0.7366	0.6377	0.5364	0.3843	0.3407	0.2541	0.4959
14	0.8106	0.7017	0.5903	0.4229	0.3749	0.2797	0.5457
15	0.8892	0.7698	0.6476	0.4639	0.4113	0.3068	0.5987
16	0.9733	0.8426	0.7088	0.5077	0.4502	0.3358	0.6553
17	1.0636	0.9207	0.7745	0.5548	0.4919	0.3669	0.7161
18	1.1610	1.0050	0.8454	0.6056	0.5370	0.4005	0.7816
19	1.2665	1.0964	0.9223	0.6607	0.5858	0.4370	0.8527
20	1.3815	1.1960	1.0060	0.7207	0.6390	0.4766	0.9301
21	1.5073	1.3049	1.0977	0.7863	0.6972	0.5200	1.0148
22	1.6456	1.4246	1.1984	0.8585	0.7611	0.5678	1.1079
23	1.7983	1.5568	1.3096	0.9381	0.8318	0.6204	1.2107
24	1.9676	1.7033	1.4328	1.0264	0.9100	0.6788	1.3247
25	2.1560	1.8664	1.5700	1.1247	0.9972	0.7438	1.4516

Florida Hurricane Catastrophe Fund

2019 Ratemaking Formula Report

Windstorm Mitigation Construction Rating Classification Factors

To Calculate the Final FHCF Rate for a risk:

Preliminary factor = (year built factor) x (roof shape factor) x (opening protection factor)
Capped factor = Preliminary Factor*

Final rate = (Base rate) x (Capped factor) x (On balance factor)

**Capped factor = 100% of Preliminary Factor (i.e. no cap in current factors)*

Rating Factor	Description	Type of Business				
		Commercial	Residential	Mobile Home	Tenants	Condos
Year Built	2012 or later	0.3916	0.4407	1.0000	0.4648	0.4430
	2002 - 2011	0.4153	0.4731	1.0000	0.4949	0.4685
	1995-2001	0.6373	0.7467	1.0000	0.7682	0.7356
	1994 or Earlier	1.2883	1.4456	1.0000	1.4525	1.3714
	Unknown or Mobile Home	1.0635	1.0513	1.0000	1.0833	1.0430
Roof Shape	Hip, Mansard, or Pyramid	0.8622	0.8446	1.0000	0.7909	0.8035
	Gable, Other or Unknown	1.0440	1.1206	1.0000	1.0211	1.0378
Opening Protection	Structure Opening Protection**	0.8110	0.8501	1.0000	0.7479	0.7997
	No Structure Opening Protection	1.0576	1.0975	1.0000	1.0115	1.1168
On Balance Factor		0.9779	0.9647	1.0000	0.9954	0.9800

**Structure Opening Protection Credit requires that primary policy has structure opening protection credit.

`

EXHIBIT

XV

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 FHCF Exposure and Risks as of 10/29/18 (Trended to 6/30/19)

	Total Exposure ($)					
2019 FHCF Rating Region	**Commercial**	**Residential**	**Mobile Home**	**Tenants**	**Condominium-Owners**	**Total**
1	4,924,108,222	227,614,358,694	5,292,119,375	3,691,080,701	3,030,532,004	244,552,198,996
2	2,587,874,541	200,459,550,635	3,666,484,031	2,305,320,266	2,857,209,974	211,876,439,447
3	9,635,780,444	304,879,032,439	4,031,974,738	5,000,708,585	6,299,113,465	329,846,609,671
4	3,927,433,408	212,701,946,573	4,905,378,841	2,474,678,830	2,823,215,795	226,832,653,447
5	5,040,141,614	104,551,888,793	1,891,680,094	1,393,783,945	3,328,082,048	116,205,576,494
6	6,618,437,756	113,358,189,416	2,181,871,309	1,922,561,231	4,503,720,508	128,584,780,220
7	10,243,918,628	112,460,631,145	1,382,057,176	1,309,026,783	7,470,215,502	132,865,849,234
8	6,508,281,344	104,926,472,202	545,216,569	1,214,389,963	5,282,700,152	118,477,060,230
9	7,596,358,083	89,117,011,118	522,706,435	1,141,855,690	5,847,160,573	104,225,091,899
10	10,308,696,506	96,715,662,532	848,971,998	1,331,451,675	8,083,431,301	117,288,214,012
11	18,770,708,551	120,330,724,155	325,061,506	1,788,363,849	10,349,408,834	151,564,266,895
12	10,503,033,761	73,096,836,296	683,986,240	958,699,080	4,886,713,873	90,129,269,250
13	9,870,257,064	55,818,231,370	187,059,289	692,047,256	4,585,633,740	71,153,228,719
14	5,736,470,512	36,556,333,890	275,469,487	428,116,997	4,263,412,026	47,259,802,912
15	3,897,095,571	31,646,667,985	58,086,103	440,268,974	3,070,690,697	39,112,809,330
16	2,311,532,521	30,108,374,994	52,349,758	282,671,748	1,684,454,914	34,439,383,935
17	3,649,110,287	30,746,436,770	59,597,452	419,428,658	2,373,383,757	37,247,956,924
18	3,063,052,672	24,546,717,959	45,076,691	379,004,461	2,377,451,397	30,411,303,180
19	5,491,242,102	20,635,036,417	12,346,476	629,777,716	4,459,574,276	31,227,976,987
20	1,991,226,976	9,513,464,850	9,278,071	296,022,807	1,589,812,910	13,399,805,614
21	8,765,672,440	18,594,649,514	49,017,897	556,973,719	6,164,872,000	34,131,185,570
22	4,311,099,174	7,232,600,607	-	288,981,999	3,851,960,833	15,684,642,613
23	4,913,742,298	3,711,982,628	1,761,370	166,692,888	3,679,925,459	12,474,104,643
24	4,150,614,715	7,801,744,680	22,814,801	216,102,948	3,057,713,119	15,248,990,263
25	1,774,207,861	2,207,480,987	6,392,002	55,495,700	1,499,384,712	5,542,961,262
Total	$156,590,097,051	$2,039,332,026,649	$27,056,757,709	$29,383,506,469	$107,419,773,869	$2,359,782,161,747
1-5	$26,115,338,229	$1,050,206,777,134	$19,787,637,079	$14,865,572,327	$18,338,153,286	$1,129,313,478,055
6-10	$41,275,692,317	$516,577,966,413	$5,480,823,487	$6,919,285,342	$31,187,228,036	$601,440,995,595
11-15	$48,777,565,459	$317,448,793,696	$1,529,662,625	$4,307,496,156	$27,155,859,170	$399,219,377,106
16-20	$16,506,164,558	$115,550,030,990	$178,648,448	$2,006,905,390	$12,484,677,254	$146,726,426,640
21-25	$23,915,336,488	$39,548,458,416	$79,986,070	$1,284,247,254	$18,253,856,123	$83,081,884,351
	% of Total within Type of Business					
1-5	16.7%	51.5%	73.1%	50.6%	17.1%	47.9%
6-10	26.4%	25.3%	20.3%	23.5%	29.0%	25.5%
11-15	31.1%	15.6%	5.7%	14.7%	25.3%	16.9%
16-20	10.5%	5.7%	0.7%	6.8%	11.6%	6.2%
21-25	15.3%	1.9%	0.3%	4.4%	17.0%	3.5%
	% of Total within Territory					
Total	6.6%	86.4%	1.1%	1.2%	4.6%	100.0%
1-5	2.3%	93.0%	1.8%	1.3%	1.6%	100.0%
6-10	6.9%	85.9%	0.9%	1.2%	5.2%	100.0%
11-15	12.2%	79.5%	0.4%	1.1%	6.8%	100.0%
16-20	11.2%	78.8%	0.1%	1.4%	8.5%	100.0%
21-25	28.8%	47.6%	0.1%	1.5%	22.0%	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 FHCF Exposure and Risks as of 10/29/18 (Trended to 6/30/19)

2019 FHCF Rating Region	Total Risks					
	Commercial	**Residential**	**Mobile Home**	**Tenants**	**Condominium-Owners**	**Total**
1	4,636	531,913	63,811	145,906	26,835	773,101
2	3,348	469,551	43,424	83,456	24,627	624,406
3	9,709	659,264	47,853	194,614	54,450	965,890
4	5,675	501,359	59,174	94,396	26,711	687,315
5	10,086	253,752	23,254	54,285	31,810	373,187
6	9,026	293,368	28,937	80,047	45,899	457,277
7	12,587	248,807	17,277	47,007	66,706	392,384
8	9,134	233,206	8,401	43,016	46,616	340,373
9	10,162	194,851	7,444	39,624	48,893	300,974
10	9,927	187,266	9,763	43,899	64,051	314,906
11	18,089	238,895	4,391	61,821	108,926	432,122
12	9,039	159,514	7,300	32,859	55,864	264,576
13	8,250	138,658	2,654	27,424	47,740	224,726
14	5,522	92,412	3,734	16,242	31,739	149,649
15	4,303	71,137	961	13,708	20,631	110,740
16	2,061	46,014	759	6,393	10,109	65,336
17	3,357	68,438	964	15,321	21,275	109,355
18	2,159	45,291	691	11,973	18,961	79,075
19	3,573	32,221	204	18,621	28,355	82,974
20	1,217	18,548	234	9,541	9,942	39,482
21	2,591	17,104	755	15,352	39,370	75,172
22	1,171	11,047	-	7,573	21,962	41,753
23	675	3,865	45	3,907	14,743	23,235
24	1,435	7,081	532	4,872	14,016	27,936
25	258	2,260	137	745	2,543	5,943
Total	147,990	4,525,822	332,699	1,072,602	882,774	6,961,887
1-5	33,454	2,415,839	237,516	572,657	164,433	3,423,899
6-10	50,836	1,157,498	71,822	253,593	272,165	1,805,914
11-15	45,203	700,616	19,040	152,054	264,900	1,181,813
16-20	12,367	210,512	2,852	61,849	88,642	376,222
21-25	6,130	41,357	1,469	32,449	92,634	174,039
	% of Total within Type of Business					
1-5	22.6%	53.4%	71.4%	53.4%	18.6%	49.2%
6-10	34.4%	25.6%	21.6%	23.6%	30.8%	25.9%
11-15	30.5%	15.5%	5.7%	14.2%	30.0%	17.0%
16-20	8.4%	4.7%	0.9%	5.8%	10.0%	5.4%
21-25	4.1%	0.9%	0.4%	3.0%	10.5%	2.5%
	% of Total within Territory					
Total	2.1%	65.0%	4.8%	15.4%	12.7%	100.0%
1-5	1.0%	70.6%	6.9%	16.7%	4.8%	100.0%
6-10	2.8%	64.1%	4.0%	14.0%	15.1%	100.0%
11-15	3.8%	59.3%	1.6%	12.9%	22.4%	100.0%
16-20	3.3%	56.0%	0.8%	16.4%	23.6%	100.0%
21-25	3.5%	23.8%	0.8%	18.6%	53.2%	100.0%

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
2018 FHCF Exposure and Risks as of 10/29/18 (Trended to 6/30/19)

	Averages				
2019 FHCF Rating Region	**Commercial**	**Residential**	**Mobile Home**	**Tenants**	**Condominium-Owners**
1	1,062,146	427,917	82,934	25,298	112,932
2	772,961	426,918	84,435	27,623	116,019
3	992,459	462,454	84,258	25,696	115,686
4	692,059	424,251	82,898	26,216	105,695
5	499,717	412,024	81,349	25,675	104,624
6	733,264	386,403	75,401	24,018	98,122
7	813,849	451,999	79,994	27,847	111,987
8	712,534	449,930	64,899	28,231	113,324
9	747,526	457,360	70,218	28,817	119,591
10	1,038,450	516,461	86,958	30,330	126,203
11	1,037,686	503,697	74,029	28,928	95,013
12	1,161,969	458,247	93,697	29,176	87,475
13	1,196,395	402,560	70,482	25,235	96,054
14	1,038,839	395,580	73,773	26,359	134,327
15	905,669	444,869	60,443	32,118	148,839
16	1,121,559	654,331	68,972	44,216	166,629
17	1,087,015	449,260	61,823	27,376	111,557
18	1,418,737	541,978	65,234	31,655	125,386
19	1,536,872	640,422	60,522	33,821	157,276
20	1,636,177	512,911	39,650	31,026	159,909
21	3,383,123	1,087,152	64,924	36,280	156,588
22	3,681,554	654,712	-	38,160	175,392
23	7,279,618	960,409	39,142	42,665	249,605
24	2,892,414	1,101,786	42,885	44,356	218,159
25	6,876,775	976,761	46,657	74,491	589,613
Total	$1,058,113	$450,599	$81,325	$27,395	$121,684
1-5	$780,634	$434,717	$83,311	$25,959	$111,524
6-10	$811,938	$446,288	$76,311	$27,285	$114,589
11-15	$1,079,078	$453,100	$80,339	$28,329	$102,514
16-20	$1,334,694	$548,900	$62,640	$32,448	$140,844
21-25	$3,901,360	$956,270	$54,449	$39,577	$197,054

EXHIBIT

XVI

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report Valid Zip Codes
2019 Residential Masonry Base Premium (2% Deductible) Comparison
Prior to Application of Premium Credits/Surcharges

% Change in Rates

Maximum Decrease **-46.83%**
Minimum Decrease **20.93%**

Threshold From	To	Count of ZIP Codes	Percentage of Zip Codes in Group	Residential Exposure (in 000's)	Percentage of Res Exposure in Group	Residential Exposure Risk Counts (Houses)	Percentage of Risk Counts in Group
Less Than	-15%	280	19.22%	365,453,409	20.81%	835,041	21.40%
-15%	-10%	303	20.80%	379,351,948	21.60%	863,713	22.13%
-10%	-5%	0	0.00%	-	0.00%	-	0.00%
-5%	0%	553	37.95%	589,670,288	33.58%	1,230,342	31.52%
0%	5%	313	21.48%	417,677,838	23.79%	966,753	24.77%
5%	10%	4	0.27%	1,435	0.00%	6	0.00%
10%	15%	1	0.07%	804,529	0.05%	659	0.02%
Greater Than	15%	3	0.21%	3,057,218	0.17%	6,399	0.16%
		1457	**100.00%**	**1,756,016,666**	**100.00%**	**3,902,913**	**100.00%**
New ZIP Codes in 2019		0	0.00%	-	0.00%	-	0.00%
		1457	**100.00%**	**1,756,016,666**	**100.00%**	**3,902,913**	**100.00%**

$ Change in Rates

Maximum Decrease **($128.77)**
Minimum Decrease **$52.25**

Premium Threshold* From	To	Count of ZIP Codes	Percentage of Zip Codes in Group	Residential Exposure (in 000's)	Percentage of Res Exposure in Group	Residential Exposure Risk Counts (Houses)	Percentage of Risk Counts in Group
-$115	-$80	11	0.75%	7,164,373	0.41%	12,804	0.33%
-$80	-$40	144	9.88%	187,412,733	10.67%	419,011	10.74%
-$40	-$10	595	40.84%	681,243,812	38.79%	1,517,198	38.87%
-$10	$0	385	26.42%	458,628,601	26.12%	980,025	25.11%
$0	$10	313	21.48%	417,677,838	23.79%	966,753	24.77%
$10	$20	0	0.00%	-	0.00%	-	0.00%
$20	$30	0	0.00%	-	0.00%	-	0.00%
$30	$40	9	0.62%	3,889,308	0.22%	7,122	0.18%
		1457	**100.00%**	**1,756,016,666**	**100.00%**	**3,902,913**	**100.00%**
New ZIP Codes in 2019		0	0.00%	-	0.00%	-	0.00%
		1457	**100.00%**	**1,756,016,666**	**100.00%**	**3,902,913**	**100.00%**

***Exposure Assumptions**

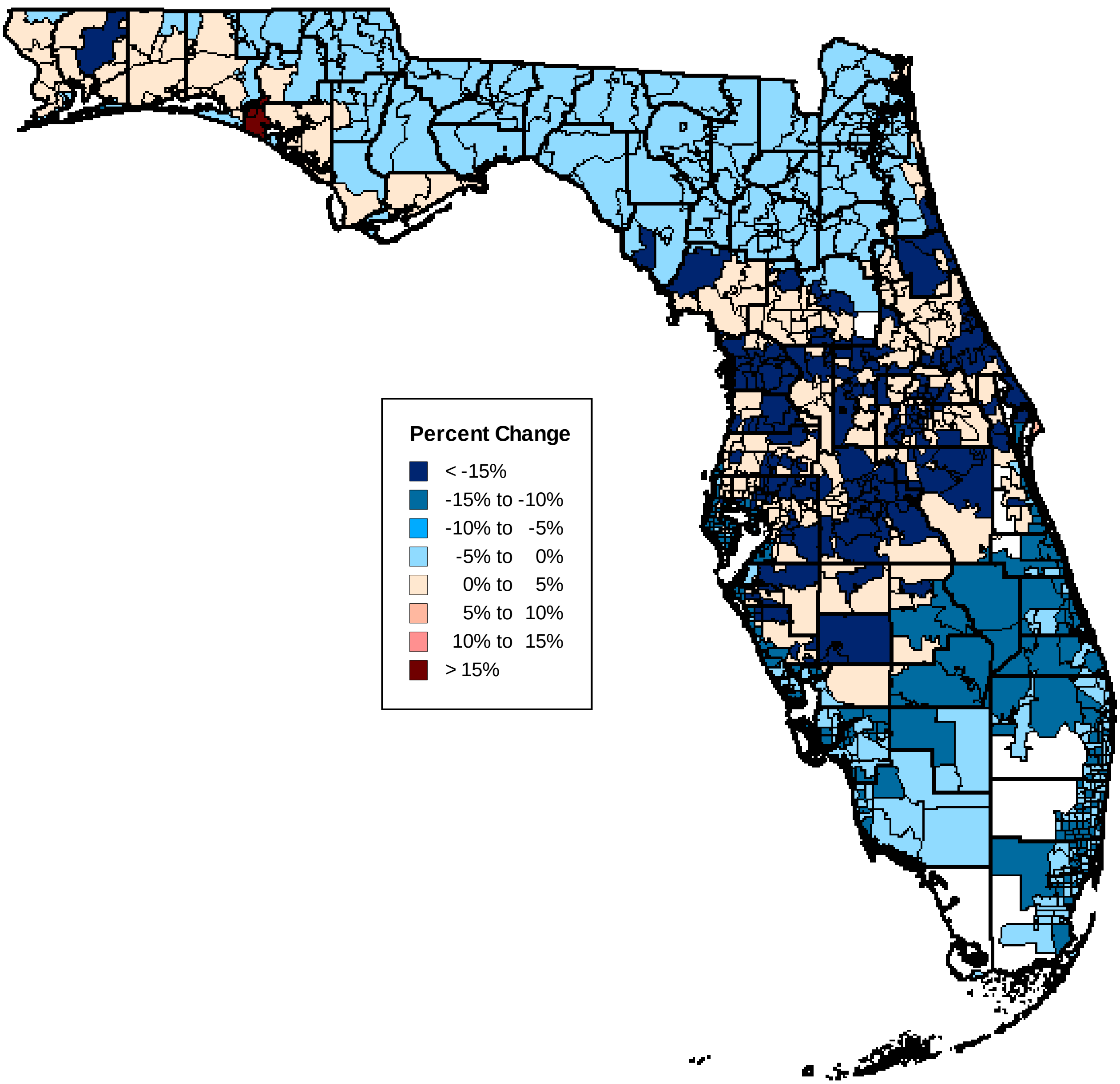
Coverages:	$	265	Building Value
(in thousands)	$	26	Appurtenant Structures
	$	132	Contents
	$	26	Additional Living Expense
	$	450	FHCF Exposure

Paragon Strategic Solutions Inc.
Updated 06/13/2018

Florida Hurricane Catastrophe Fund

Proposed 2019 Percentage Rate Change by 5-Digit ZIP Code

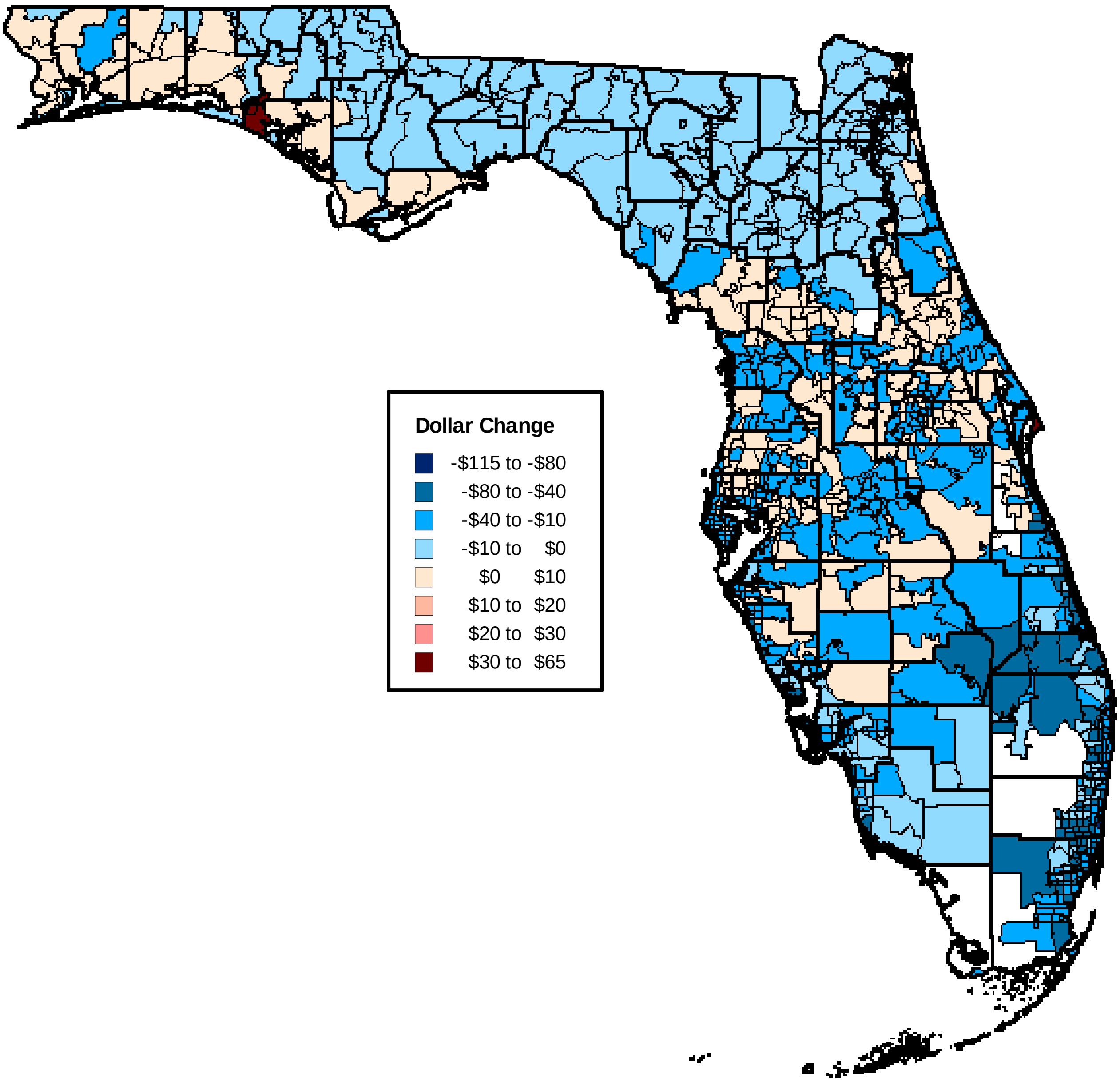
Entire State



Florida Hurricane Catastrophe Fund

Proposed 2019 Dollar Rate Change by 5-Digit ZIP Code

Entire State



EXHIBIT

XVII

Florida Hurricane Catastrophe Fund
2019 Ratemaking Premium Formula Report
Exhibit XVII - Risk Transfer Options Formula

The rates presented in this report include a loading for the cost of risk transfer for the $1 billion excess of $10.5 billion layer, assuming reinsurance premium equal to the 2018 initial premium of $63.0 million. Should the FHCF enter into a different risk transfer arrangement, the impact of the cost shall be determined, and the 2019-2020 FHCF premium rates and factors would be accordingly adjusted, by using the formula specified in this Exhibit.

The estimates for FHCF loss credits are based on the average of the AIR and RMS data distributions in Exhibit VIII. Exhibit XVII is based on the same loss severity distribution and displays probability of exceedance for specific FHCF layers with the adjustments to the FHCF loss layer level prior to fixed expenses. These values are used to illustrate a range of potential risk transfer structures, costs and factors in the tables of this exhibit.

To adjust the FHCF premium/rates to account for the impact of a future risk transfer arrangement, if any, the rates presented in this 2019 Ratemaking Formula Report would be adjusted by a Risk Transfer Adjustment Factor (RTAF):

Amended FHCF Rate = Original FHCF Rate x RTAF

The details of the formula calculation are provided below.

Definitions

1. Amended FHCF Rate: Original FHCF Rate x RTAF
2. Amended FHCF Rate Change: FHCF Current Rate Change x RTAF
3. Amended FHCF Projected Payout Multiple: FHCF Current Projected Payout Multiple/RTAF
4. Amended FHCF Retention Multiple: FHCF Current Retention Multiple/RTAF
5. AP = Amended FHCF Premium: OP x RTAF
6. CBF: Cash Build-up Factor [25% for the 2019 Contract Year]
7. ELC: Expected Loss Credit
8. NRCP: Net Risk Transfer Cost Premium = (RTC - (ELC x (1+CBF))
9. OP = Original FHCF Premium: $1,176,327,641 for the 2019 Contract Year [Exh. II, line 73]
10. ONRCP: = Original Net Risk Transfer Cost Premium = Reinsurance [Exh. II, line 45a] – (ceded loss and lae [Exh. II, line 21] x (1+CBF)) = $63,000,000 – ($28,219,485 x 1.25) = $27,725,644
11. RTAF = (OP – ONRCP + NRCP) / OP
12. RTC: Risk Transfer Costs

Calculation of the Expected Loss Credit (ELC)

The ELC is calculated, based on the Modeled Adjusted Loss Severity Distributions in Exhibit XVII, as ELC = ((P(LA) + P(LE)/2)) x (LE – LA)) x TUP, whereas:

1. LA: Layer Attachment
2. LE: Layer Exhaustion
3. P(LA): probability of exceedance for Layer Attachment
4. P(LE): probability of exceedance for Layer Exhaustion
5. TUP: True Up Factor = FHCF Losses Prior to special adjustments and expenses (Exh. II, Line 19) / Exh. XVII total expected losses (no LAE, Adj.) = $883,999,827/ $815,771,194 = 1.08363697323

Example of RTAF Calculation

Risk Transfer of $500 million excess of $11.5 billion purchased for 5% Rate on Line ($25 million)

- RTC = 25,000,000
- Layer Attachment: $11,500,000,000, P(LA) = 2.72875%
- Layer Exhaustion: $12,000,000,000, P(LE) = 2.53400%
- ELC = ((.0272875 +0.0253400)/2) x ($12,000,000,000 -$11,500,000,000)) x 1.08363697323 = $14,257,276
- NRCP = $25,000,000 - ($14,257,276 x 1.25) = $7,178,405

RTAF = ($1,176,327,641 - $27,725,644 + $7,178,405) / $1,176,327,641 = 0.98253272

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Expected Loss and Premium by Layer
Based on Avg. (AIR, RMS) 2018 Trended Zip Code Loss Data and 2019 Per Company Estimated Limits and Retentions

Aggregate FHCF Loss Level	Return Time	Prob(Exceed)	Expected Loss Company Ret, Lim	Adjust to Total Gross Loss and LAE (Expected Loss Credits)
0	3.3	30.29350%	2,567,975	2,782,753
10,000,000	4.7	21.06600%	17,329,950	18,779,375
100,000,000	5.7	17.44500%	24,619,312	26,678,397
250,000,000	6.5	15.38075%	35,934,688	38,940,156
500,000,000	7.5	13.36700%	61,335,625	66,465,551
1,000,000,000	9.0	11.16725%	99,993,750	108,356,925
2,000,000,000	11.3	8.83150%	81,395,000	88,202,631
3,000,000,000	13.4	7.44750%	69,857,500	75,700,170
4,000,000,000	15.3	6.52400%	61,727,500	66,890,201
5,000,000,000	17.2	5.82150%	55,540,000	60,185,197
6,000,000,000	18.9	5.28650%	50,035,000	54,219,776
7,000,000,000	21.2	4.72050%	44,752,500	48,495,464
8,000,000,000	23.6	4.23000%	39,767,500	43,093,533
9,000,000,000	26.9	3.72350%	35,366,250	38,324,176
10,000,000,000	29.9	3.34975%	16,259,375	17,619,260
10,500,000,000	31.7	3.15400%	15,160,625	16,428,614
11,000,000,000	34.4	2.91025%	14,097,500	15,276,572
11,500,000,000	36.6	2.72875%	13,156,875	14,257,276
12,000,000,000	39.5	2.53400%	12,192,500	13,212,244
12,500,000,000	42.7	2.34300%	11,286,875	12,230,875
13,000,000,000	46.0	2.17175%	10,466,875	11,342,293
13,500,000,000	49.6	2.01500%	9,560,625	10,360,247
14,000,000,000	55.3	1.80925%	8,594,375	9,313,183
14,500,000,000	61.4	1.62850%	7,602,500	8,238,350
15,000,000,000	70.8	1.41250%	6,510,000	7,054,477
15,500,000,000	83.9	1.19150%	2,842,813	3,080,577
15,750,000,000	92.4	1.08275%	2,506,563	2,716,204
16,000,000,000	108.4	0.92250%	2,120,000	2,297,310
16,250,000,000	129.3	0.77350%	3,190,740	3,457,604
16,999,000,000	1,273.9	0.07850%	404	438
17,000,000,000	44,444.4	0.00225%		
Total			815,771,194	883,999,827
True Up Factor				1.08363697323
Average AIR,RMS detail modeled expected losses			813,127,684	

Paragon Strategic Solutions Inc.

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Risk Transfer Estimated Cost and Rate Impact
Based on Avg. (AIR, RMS) 2018 Trended Zip Code Loss Data and 2019 Per Company Estimated Limits and Retentions

Aggregate

Reinsurance Attachment	$10,500,000,000	Limit	$17,000,000,000	Projected Payout Multiple	14.8006
FHCF Premium with Cash Build Up	$1,148,601,998	Retention	$7,422,000,000	Retention Multiple 100%	5.2747
Cash Build Up Factor	25%	Coverage %	81.629%	Retention Multiple 90%	5.8607
				Retention Multiple 75%	7.0329
Rate Change	0.41%	2018 Model Net Rein	$27,725,644	Retention Multiple 45%	11.7215

Risk Transfer Premiums Gross

Limit	Expected Loss Credit	Risk Transfer Rate on Line 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$16,428,614	$20,000,000	$22,500,000	$25,000,000	$27,500,000	$30,000,000	$32,500,000	$35,000,000	$37,500,000	$40,000,000
$1,000,000,000	$31,705,186	$40,000,000	$45,000,000	$50,000,000	$55,000,000	$60,000,000	$65,000,000	$70,000,000	$75,000,000	$80,000,000
$1,500,000,000	$45,962,462	$60,000,000	$67,500,000	$75,000,000	$82,500,000	$90,000,000	$97,500,000	$105,000,000	$112,500,000	$120,000,000
$2,000,000,000	$59,174,706	$80,000,000	$90,000,000	$100,000,000	$110,000,000	$120,000,000	$130,000,000	$140,000,000	$150,000,000	$160,000,000

Risk Transfer Dollar Impact on Premiums

Limit	Expected Loss Credit	Net Risk Transfer Cost Premium 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$16,428,614	($535,767)	$1,964,233	$4,464,233	$6,964,233	$9,464,233	$11,964,233	$14,464,233	$16,964,233	$19,464,233
$1,000,000,000	$31,705,186	$368,517	$5,368,517	$10,368,517	$15,368,517	$20,368,517	$25,368,517	$30,368,517	$35,368,517	$40,368,517
$1,500,000,000	$45,962,462	$2,546,922	$10,046,922	$17,546,922	$25,046,922	$32,546,922	$40,046,922	$47,546,922	$55,046,922	$62,546,922
$2,000,000,000	$59,174,706	$6,031,617	$16,031,617	$26,031,617	$36,031,617	$46,031,617	$56,031,617	$66,031,617	$76,031,617	$86,031,617

Risk Transfer % Impact on Rates

Limit	Expected Loss Credit	FHCF Rate Impact 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$16,428,614	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%	1.3%	1.5%	1.7%
$1,000,000,000	$31,705,186	0.0%	0.5%	0.9%	1.3%	1.8%	2.2%	2.6%	3.1%	3.5%
$1,500,000,000	$45,962,462	0.2%	0.9%	1.5%	2.2%	2.8%	3.5%	4.1%	4.8%	5.4%
$2,000,000,000	$59,174,706	0.5%	1.4%	2.3%	3.1%	4.0%	4.9%	5.7%	6.6%	7.5%

Risk Transfer: Revised Rate Change

Limit	Expected Loss Credit	FHCF Revised Rate Change 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$16,428,614	0.36%	0.58%	0.80%	1.02%	1.23%	1.45%	1.67%	1.89%	2.11%
$1,000,000,000	$31,705,186	0.44%	0.88%	1.31%	1.75%	2.19%	2.62%	3.06%	3.50%	3.94%
$1,500,000,000	$45,962,462	0.63%	1.29%	1.94%	2.60%	3.25%	3.91%	4.56%	5.22%	5.87%
$2,000,000,000	$59,174,706	0.93%	1.81%	2.68%	3.56%	4.43%	5.31%	6.18%	7.05%	7.93%

Projected Payout Multiple

Limit	Revised Payout Mutiples 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	14.8075	14.7753	14.7433	14.7114	14.6796	14.6480	14.6165	14.5852	14.5540
$1,000,000,000	14.7959	14.7317	14.6682	14.6052	14.5427	14.4808	14.4194	14.3585	14.2981
$1,500,000,000	14.7679	14.6723	14.5779	14.4847	14.3928	14.3020	14.2123	14.1237	14.0363
$2,000,000,000	14.7233	14.5969	14.4726	14.3504	14.2303	14.1122	13.9960	13.8817	13.7693

Retention Multiple 90%

Limit	Revised Retention Multiple 90% 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	5.8635	5.8507	5.8380	5.8254	5.8128	5.8003	5.7879	5.7754	5.7631
$1,000,000,000	5.8589	5.8335	5.8083	5.7834	5.7586	5.7341	5.7098	5.6857	5.6618
$1,500,000,000	5.8478	5.8099	5.7726	5.7357	5.6992	5.6633	5.6278	5.5927	5.5581
$2,000,000,000	5.8301	5.7801	5.7309	5.6825	5.6349	5.5881	5.5421	5.4969	5.4524

Retention Multiple 75%

Limit	Revised Retention Multiple 75% 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	7.0362	7.0209	7.0057	6.9905	6.9754	6.9604	6.9454	6.9305	6.9157
$1,000,000,000	7.0306	7.0002	6.9700	6.9400	6.9103	6.8809	6.8517	6.8228	6.7941
$1,500,000,000	7.0173	6.9719	6.9271	6.8828	6.8391	6.7959	6.7533	6.7112	6.6697
$2,000,000,000	6.9961	6.9361	6.8770	6.8190	6.7619	6.7058	6.6506	6.5962	6.5428

Retention Multiple 45%

Limit	Revised Retention Multiple 45% 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	11.7269	11.7015	11.6761	11.6508	11.6257	11.6006	11.5757	11.5509	11.5262
$1,000,000,000	11.7177	11.6669	11.6166	11.5667	11.5172	11.4682	11.4196	11.3713	11.3235
$1,500,000,000	11.6955	11.6198	11.5451	11.4713	11.3985	11.3266	11.2555	11.1854	11.1162
$2,000,000,000	11.6602	11.5601	11.4617	11.3650	11.2698	11.1763	11.0843	10.9937	10.9047

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Risk Transfer Estimated Cost and Rate Impact
Based on Avg. (AIR, RMS) 2018 Trended Zip Code Loss Data and 2019 Per Company Estimated Limits and Retentions

Aggregate

Reinsurance Attachment	$11,000,000,000	Limit	$17,000,000,000	Projected Payout Multiple	14.8006
FHCF Premium with Cash Build Up	$1,148,601,998	Retention	$7,422,000,000	Retention Multiple 100%	5.2747
Cash Build Up Factor	25%	Coverage %	81.629%	Retention Multiple 90%	5.8607
				Retention Multiple 75%	7.0329
Rate Change	0.41%			Retention Multiple 45%	11.7215

Risk Transfer Premiums Gross		Risk Transfer Rate on Line								
Limit	Expected Loss Credit	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$15,276,572	$20,000,000	$22,500,000	$25,000,000	$27,500,000	$30,000,000	$32,500,000	$35,000,000	$37,500,000	$40,000,000
$1,000,000,000	$29,533,848	$40,000,000	$45,000,000	$50,000,000	$55,000,000	$60,000,000	$65,000,000	$70,000,000	$75,000,000	$80,000,000
$1,500,000,000	$42,746,092	$60,000,000	$67,500,000	$75,000,000	$82,500,000	$90,000,000	$97,500,000	$105,000,000	$112,500,000	$120,000,000
$2,000,000,000	$54,976,967	$80,000,000	$90,000,000	$100,000,000	$110,000,000	$120,000,000	$130,000,000	$140,000,000	$150,000,000	$160,000,000

Risk Transfer Dollar Impact on Premiums										
Limit		Net Risk Transfer Cost Premium								
	Expected Loss Credit	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$15,276,572	$904,285	$3,404,285	$5,904,285	$8,404,285	$10,904,285	$13,404,285	$15,904,285	$18,404,285	$20,904,285
$1,000,000,000	$29,533,848	$3,082,689	$8,082,689	$13,082,689	$18,082,689	$23,082,689	$28,082,689	$33,082,689	$38,082,689	$43,082,689
$1,500,000,000	$42,746,092	$6,567,385	$14,067,385	$21,567,385	$29,067,385	$36,567,385	$44,067,385	$51,567,385	$59,067,385	$66,567,385
$2,000,000,000	$54,976,967	$11,278,791	$21,278,791	$31,278,791	$41,278,791	$51,278,791	$61,278,791	$71,278,791	$81,278,791	$91,278,791

Risk Transfer % Impact on Rates										
Limit		FHCF Rate Impact								
	Expected Loss Credit	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$15,276,572	0.1%	0.3%	0.5%	0.7%	0.9%	1.2%	1.4%	1.6%	1.8%
$1,000,000,000	$29,533,848	0.3%	0.7%	1.1%	1.6%	2.0%	2.4%	2.9%	3.316%	3.8%
$1,500,000,000	$42,746,092	0.6%	1.2%	1.9%	2.5%	3.2%	3.8%	4.5%	5.1%	5.8%
$2,000,000,000	$54,976,967	1.0%	1.9%	2.7%	3.6%	4.5%	5.3%	6.2%	7.1%	7.9%

Risk Transfer: Revised Rate Change										
Limit		FHCF Revised Rate Change								
	Expected Loss Credit	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$15,276,572	0.49%	0.70%	0.92%	1.14%	1.36%	1.58%	1.80%	2.02%	2.23%
$1,000,000,000	$29,533,848	0.68%	1.11%	1.55%	1.99%	2.42%	2.86%	3.30%	3.74%	4.17%
$1,500,000,000	$42,746,092	0.98%	1.64%	2.29%	2.95%	3.60%	4.26%	4.91%	5.57%	6.23%
$2,000,000,000	$54,976,967	1.39%	2.27%	3.14%	4.02%	4.89%	5.76%	6.64%	7.51%	8.39%

Projected Payout Multiple	Revised Payout Mutiples								
Limit	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	14.7890	14.7569	14.7249	14.6931	14.6614	14.6299	14.5985	14.5672	14.5360
$1,000,000,000	14.7610	14.6972	14.6339	14.5712	14.5090	14.4474	14.3862	14.3256	14.2655
$1,500,000,000	14.7165	14.6215	14.5278	14.4353	14.3439	14.2537	14.1647	14.0767	13.9898
$2,000,000,000	14.6567	14.5314	14.4082	14.2871	14.1681	14.0510	13.9358	13.8225	13.7110

Retention Multiple 90%	Revised Retention Multiple 90%								
Limit	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	5.8561	5.8434	5.8308	5.8182	5.8056	5.7931	5.7807	5.7683	5.7560
$1,000,000,000	5.8451	5.8198	5.7947	5.7699	5.7453	5.7209	5.6967	5.6727	5.6489
$1,500,000,000	5.8274	5.7898	5.7527	5.7161	5.6799	5.6442	5.6089	5.5741	5.5397
$2,000,000,000	5.8037	5.7541	5.7054	5.6574	5.6103	5.5639	5.5183	5.4734	5.4293

Retention Multiple 75%	Revised Retention Multiple 75%								
Limit	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	7.0274	7.0121	6.9969	6.9818	6.9667	6.9518	6.9368	6.9220	6.9072
$1,000,000,000	7.0141	6.9837	6.9537	6.9239	6.8943	6.8650	6.8360	6.8072	6.7786
$1,500,000,000	6.9929	6.9478	6.9033	6.8593	6.8159	6.7730	6.7307	6.6889	6.6476
$2,000,000,000	6.9645	6.9050	6.8464	6.7889	6.7323	6.6767	6.6219	6.5681	6.5151

Retention Multiple 45%	Revised Retention Multiple 45%								
Limit	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	11.7123	11.6868	11.6615	11.6363	11.6112	11.5863	11.5614	11.5366	11.5120
$1,000,000,000	11.6901	11.6396	11.5895	11.5398	11.4906	11.4417	11.3933	11.3453	11.2977
$1,500,000,000	11.6548	11.5797	11.5054	11.4322	11.3598	11.2884	11.2178	11.1482	11.0794
$2,000,000,000	11.6075	11.5083	11.4107	11.3148	11.2205	11.1278	11.0366	10.9468	10.8586

Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Risk Transfer Estimated Cost and Rate Impact
Based on Avg. (AIR, RMS) 2018 Trended Zip Code Loss Data and 2019 Per Company Estimated Limits and Retentions

Aggregate

Reinsurance Attachment	$11,500,000,000	Limit	$17,000,000,000	Projected Payout Multiple	14.8006
FHCF Premium with Cash Build Up	$1,148,601,998	Retention	$7,422,000,000	Retention Multiple 100%	5.2747
Cash Build Up Factor	25%	Coverage %	81.629%	Retention Multiple 90%	5.8607
				Retention Multiple 75%	7.0329
Rate Change	0.41%			Retention Multiple 45%	11.7215

Risk Transfer Premiums Gross

Limit	Expected Loss Credit	Risk Transfer Rate on Line 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$14,257,276	$20,000,000	$22,500,000	$25,000,000	$27,500,000	$30,000,000	$32,500,000	$35,000,000	$37,500,000	$40,000,000
$1,000,000,000	$27,469,520	$40,000,000	$45,000,000	$50,000,000	$55,000,000	$60,000,000	$65,000,000	$70,000,000	$75,000,000	$80,000,000
$1,500,000,000	$39,700,395	$60,000,000	$67,500,000	$75,000,000	$82,500,000	$90,000,000	$97,500,000	$105,000,000	$112,500,000	$120,000,000
$2,000,000,000	$51,042,688	$80,000,000	$90,000,000	$100,000,000	$110,000,000	$120,000,000	$130,000,000	$140,000,000	$150,000,000	$160,000,000

Risk Transfer Dollar Impact on Premiums

Limit	Expected Loss Credit	Net Risk Transfer Cost Premium 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$14,257,276	$2,178,405	$4,678,405	$7,178,405	$9,678,405	$12,178,405	$14,678,405	$17,178,405	$19,678,405	$22,178,405
$1,000,000,000	$27,469,520	$5,663,100	$10,663,100	$15,663,100	$20,663,100	$25,663,100	$30,663,100	$35,663,100	$40,663,100	$45,663,100
$1,500,000,000	$39,700,395	$10,374,506	$17,874,506	$25,374,506	$32,874,506	$40,374,506	$47,874,506	$55,374,506	$62,874,506	$70,374,506
$2,000,000,000	$51,042,688	$16,196,640	$26,196,640	$36,196,640	$46,196,640	$56,196,640	$66,196,640	$76,196,640	$86,196,640	$96,196,640

Risk Transfer % Impact on Rates

Limit	Expected Loss Credit	FHCF Rate Impact 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$14,257,276	0.2%	0.4%	0.6%	0.8%	1.1%	1.3%	1.5%	1.7%	1.9%
$1,000,000,000	$27,469,520	0.5%	0.9%	1.4%	1.8%	2.2%	2.7%	3.1%	3.540%	4.0%
$1,500,000,000	$39,700,395	0.9%	1.6%	2.2%	2.9%	3.5%	4.2%	4.8%	5.5%	6.1%
$2,000,000,000	$51,042,688	1.4%	2.3%	3.2%	4.0%	4.9%	5.8%	6.6%	7.5%	8.4%

Risk Transfer: Revised Rate Change

Limit	Expected Loss Credit	FHCF Revised Rate Change 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	$14,257,276	0.60%	0.82%	1.03%	1.25%	1.47%	1.69%	1.91%	2.13%	2.35%
$1,000,000,000	$27,469,520	0.90%	1.34%	1.78%	2.21%	2.65%	3.09%	3.52%	3.96%	4.40%
$1,500,000,000	$39,700,395	1.31%	1.97%	2.63%	3.28%	3.94%	4.59%	5.25%	5.90%	6.56%
$2,000,000,000	$51,042,688	1.82%	2.70%	3.57%	4.45%	5.32%	6.19%	7.07%	7.94%	8.82%

Projected Payout Multiple

Limit	Revised Payout Mutiples 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	14.7726	14.7406	14.7087	14.6769	14.6453	14.6138	14.5825	14.5513	14.5202
$1,000,000,000	14.7280	14.6645	14.6015	14.5390	14.4771	14.4158	14.3549	14.2945	14.2347
$1,500,000,000	14.6681	14.5738	14.4807	14.3888	14.2980	14.2084	14.1199	14.0325	13.9461
$2,000,000,000	14.5948	14.4706	14.3484	14.2283	14.1102	13.9941	13.8798	13.7674	13.6568

Retention Multiple 90%

Limit	Revised Retention Multiple 90% 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	5.8496	5.8370	5.8243	5.8118	5.7993	5.7868	5.7744	5.7620	5.7497
$1,000,000,000	5.8320	5.8068	5.7819	5.7572	5.7327	5.7083	5.6842	5.6604	5.6367
$1,500,000,000	5.8083	5.7709	5.7341	5.6977	5.6617	5.6262	5.5912	5.5566	5.5224
$2,000,000,000	5.7792	5.7301	5.6817	5.6341	5.5874	5.5414	5.4961	5.4516	5.4078

Retention Multiple 75%

Limit	Revised Retention Multiple 75% 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	7.0196	7.0044	6.9892	6.9741	6.9591	6.9441	6.9293	6.9144	6.8997
$1,000,000,000	6.9984	6.9682	6.9383	6.9086	6.8792	6.8500	6.8211	6.7924	6.7640
$1,500,000,000	6.9699	6.9251	6.8809	6.8372	6.7941	6.7515	6.7094	6.6679	6.6269
$2,000,000,000	6.9351	6.8761	6.8180	6.7610	6.7048	6.6497	6.5954	6.5419	6.4894

Retention Multiple 45%

Limit	Revised Retention Multiple 45% 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
$500,000,000	11.6993	11.6739	11.6487	11.6235	11.5985	11.5736	11.5488	11.5240	11.4994
$1,000,000,000	11.6640	11.6137	11.5638	11.5143	11.4653	11.4167	11.3685	11.3207	11.2733
$1,500,000,000	11.6166	11.5419	11.4681	11.3953	11.3234	11.2525	11.1824	11.1131	11.0448
$2,000,000,000	11.5585	11.4601	11.3634	11.2683	11.1747	11.0828	10.9923	10.9032	10.8157

EXHIBIT

XVIII

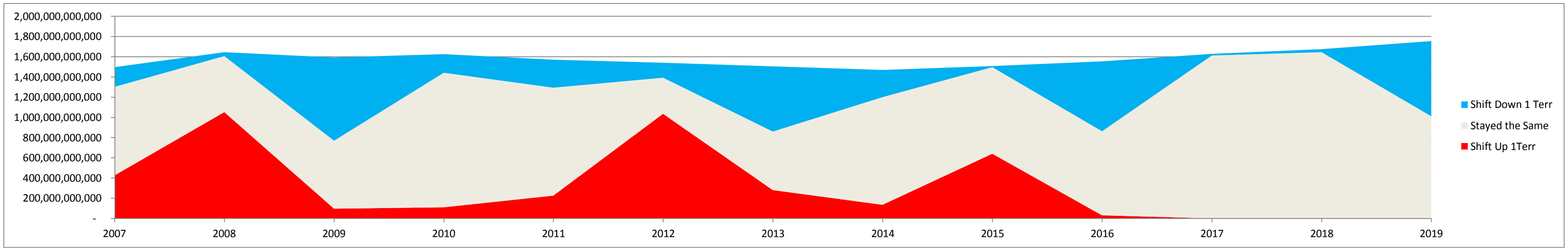
Florida Hurricane Catastrophe Fund
2019 Ratemaking Formula Report
Summary of Changes in Zip Codes 2007 to 2019

The table below outlines how theZip Codes, after tempering, have moved relative to the prior year's territory allocations.
Columns in yellow highlight years when large numbers of zip code changes were reversed in the following year.
2017 and 2018 indicated shifts were not implemented, except if the indication was for a change of two or more territories.
2019 indicated shifts were implemented if the one year indication was for a change of two or more territories or the 3 year average indication was one or more territories.

	Zip Count	Zip Count	Zip Count	Zip Count	Zip Count	Zip Count	Zip Count	Zip Count	Zip Count	Zip Count	Zip Count	Zip Count	Zip Count
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Shift Up 1Terr	415	848	117	136	244	884	286	153	615	58	5	0	8
Stayed the Same	913	579	641	1182	935	394	610	1042	796	660	1429	1438	866
Shift Down 1 Terr	143	47	707	146	286	187	569	271	54	743	29	23	583
Grand Total	1471	1474	1465	1464	1465	1465	1465	1466	1465	1461	1463	1461	1457

The table below outlined how the Modeled Residential exposure, after tempering, has moved relative to last year's territory allocations.
2017 and 2018 indicated shifts were not implemented, except if the indication was for a change of two or more territories.

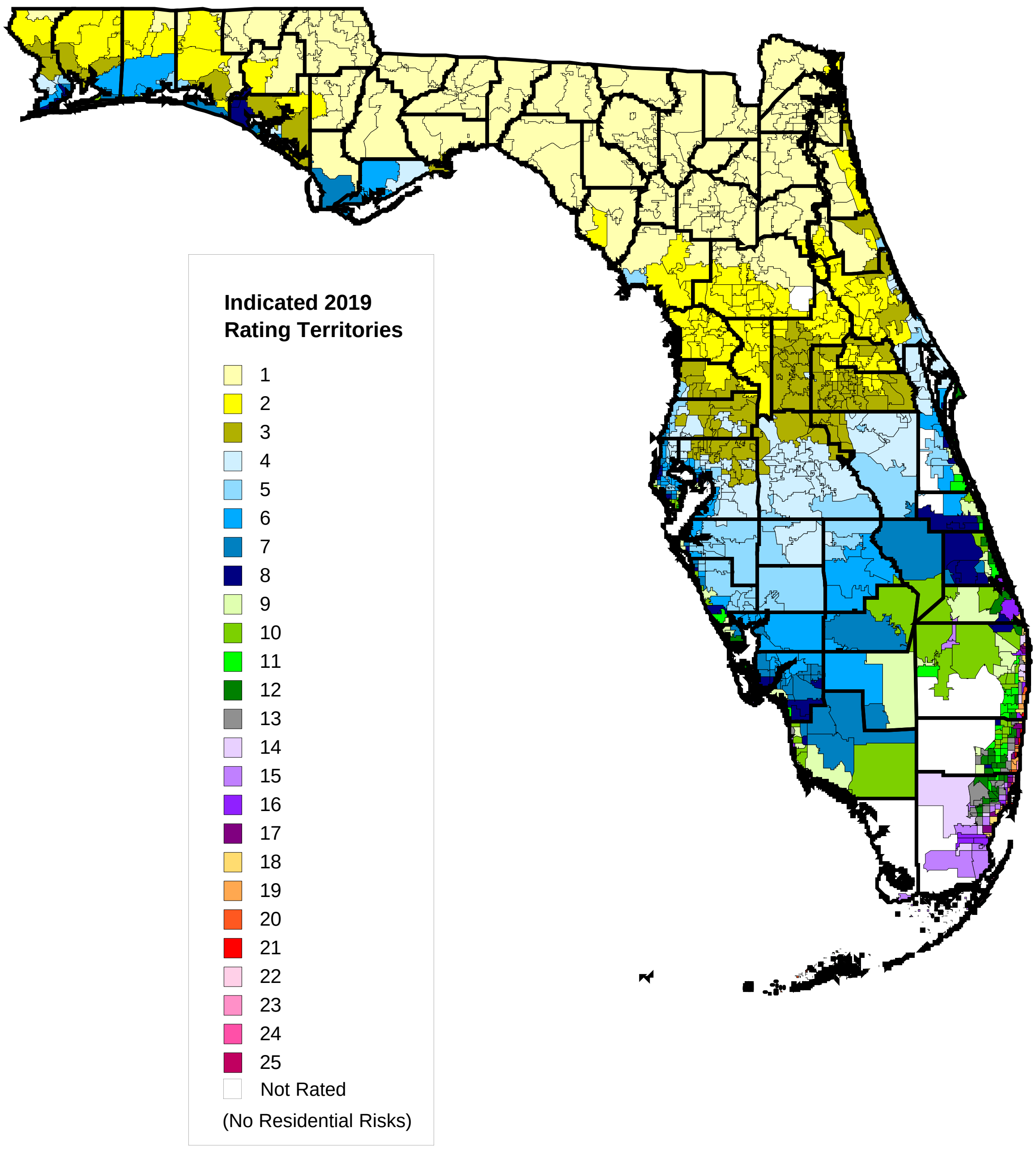
	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure	Residential Exposure
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Shift Up 1Terr	424,239,189,098	1,052,071,843,315	95,153,867,703	110,793,850,670	225,354,576,503	1,034,102,124,911	279,982,310,693	133,372,324,850	638,038,689,041	30,355,393,045	120,301,968	-	3,863,182,393
Stayed the Same	876,709,520,929	552,189,825,165	675,246,787,074	1,329,194,622,054	1,068,072,705,322	357,624,555,304	578,054,403,377	1,064,750,757,567	857,963,061,092	830,059,146,159	1,609,421,358,880	1,643,489,426,318	1,007,348,125,861
Shift Down 1 Terr	194,377,582,850	39,769,466,565	821,485,686,346	183,788,837,645	275,251,133,171	149,042,393,925	646,657,288,762	271,116,842,049	9,470,255,881	691,630,004,707	18,497,846,898	30,552,736,945	744,805,357,599
Grand Total	1,495,326,292,877	1,644,031,135,044	1,591,886,341,123	1,623,777,310,369	1,568,678,414,996	1,540,769,074,140	1,504,694,002,832	1,469,239,924,466	1,505,472,006,014	1,552,044,543,911	1,628,039,507,746	1,674,042,163,263	1,756,016,665,853



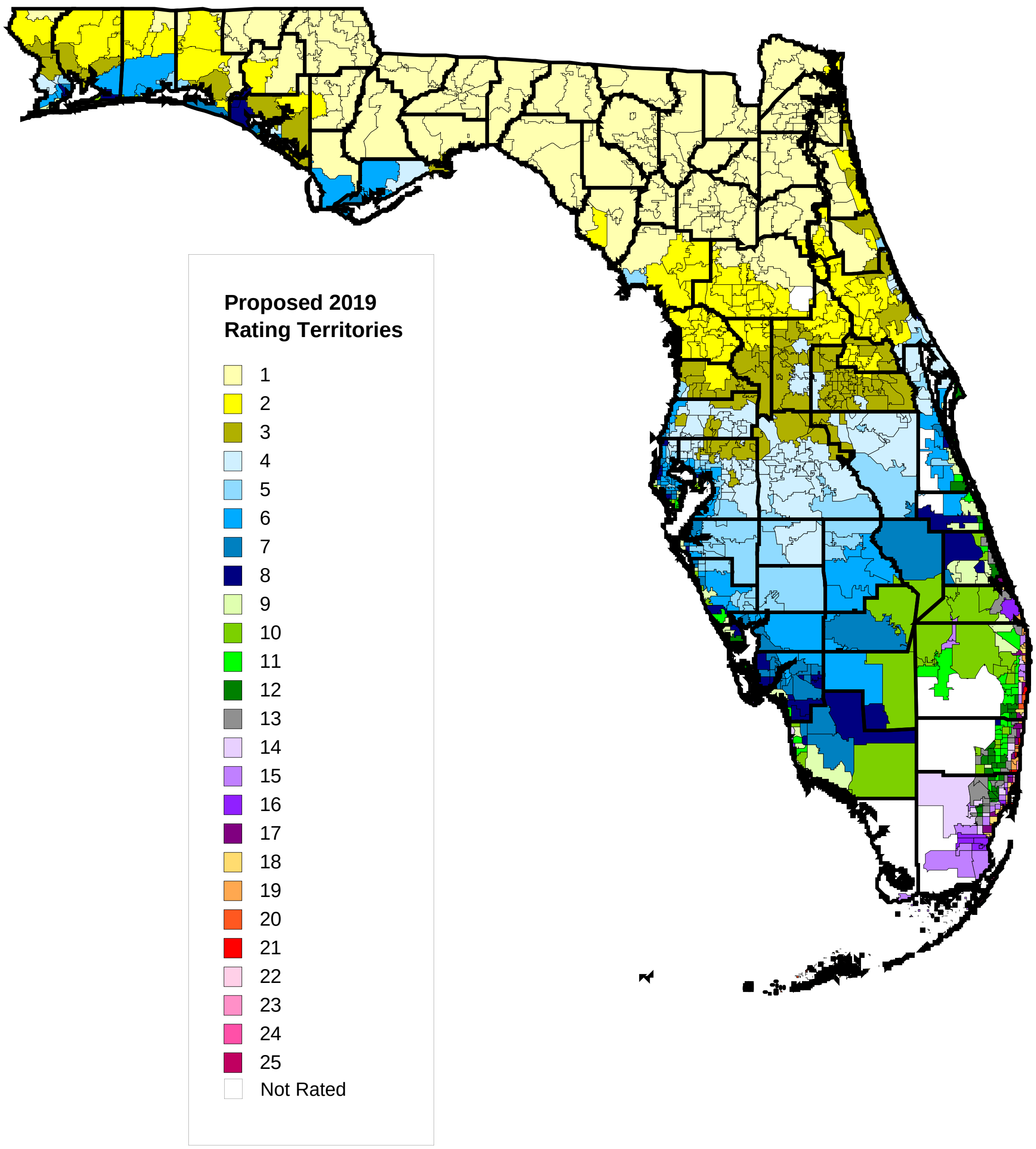
EXHIBIT

XIX

Florida Hurricane Catastrophe Fund
Indicated 2019 Rating Territories by 5-Digit ZIP Code
Entire State



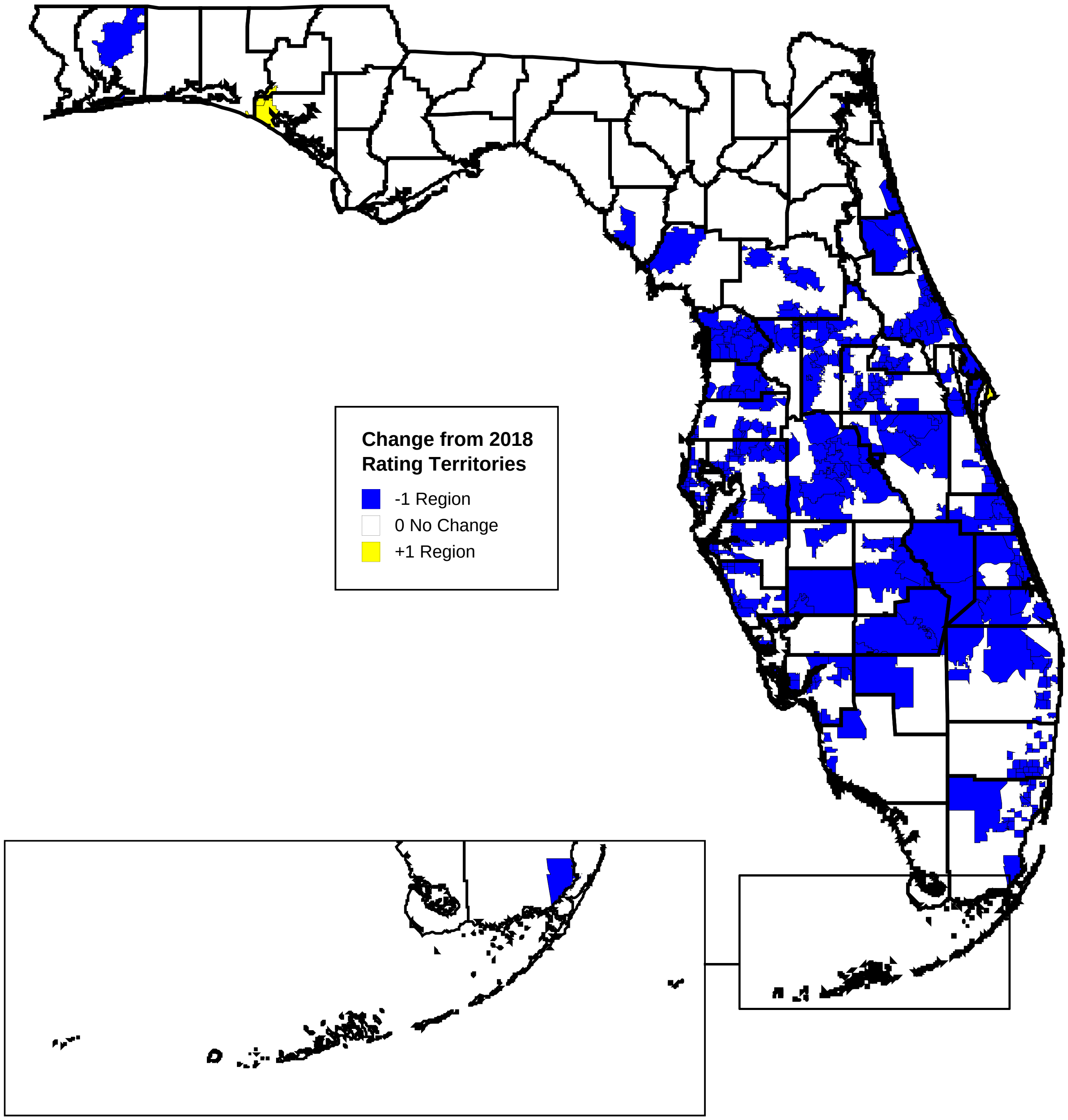
Florida Hurricane Catastrophe Fund
Proposed 2019 Rating Territories by 5-Digit ZIP Code
Entire State



Florida Hurricane Catastrophe Fund

Proposed 2019 Rating Territories by 5-Digit ZIP Code

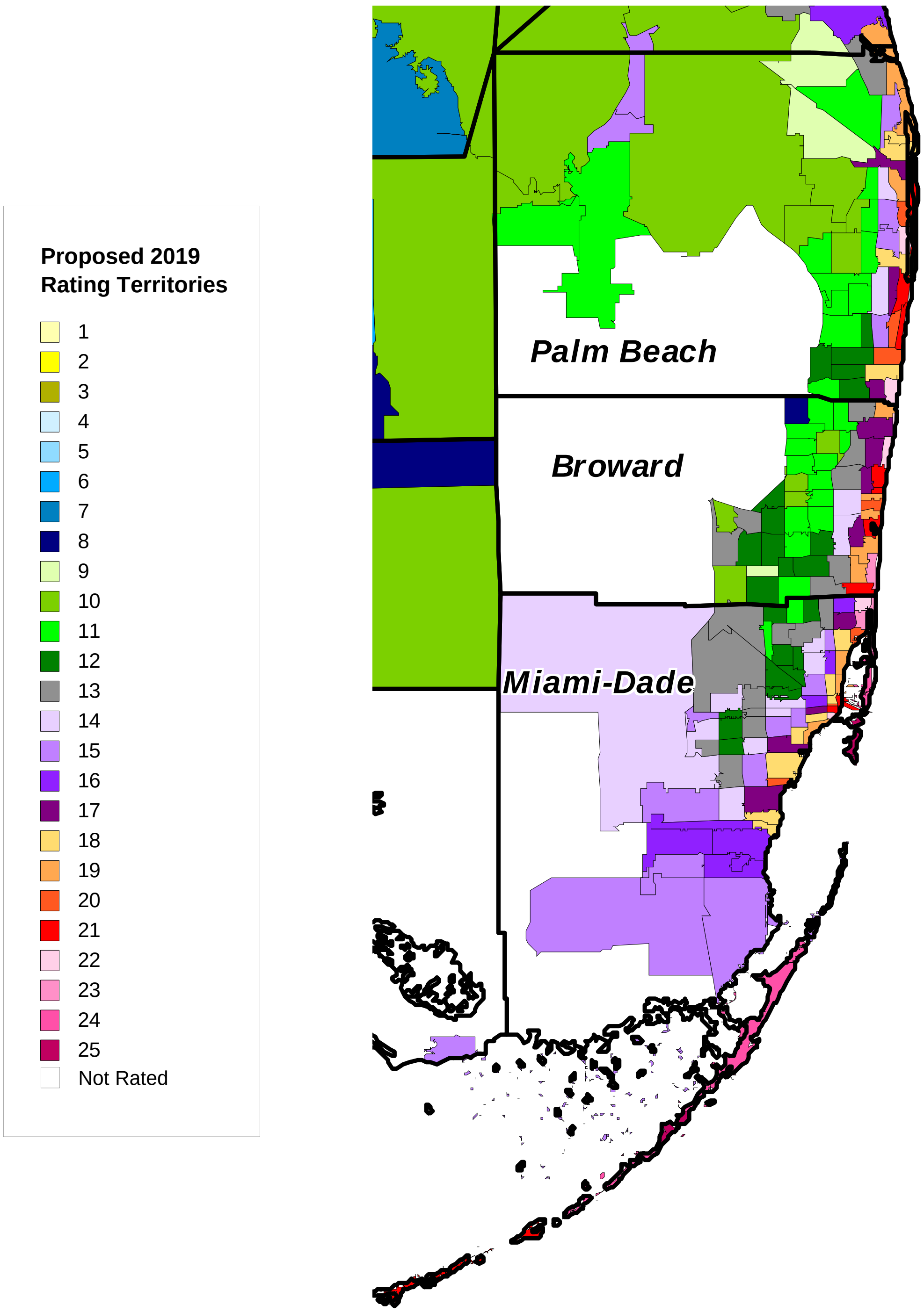
Entire State - Change From 2018 Territories



Florida Hurricane Catastrophe Fund

Proposed 2019 Rating Territories by 5-Digit ZIP Code

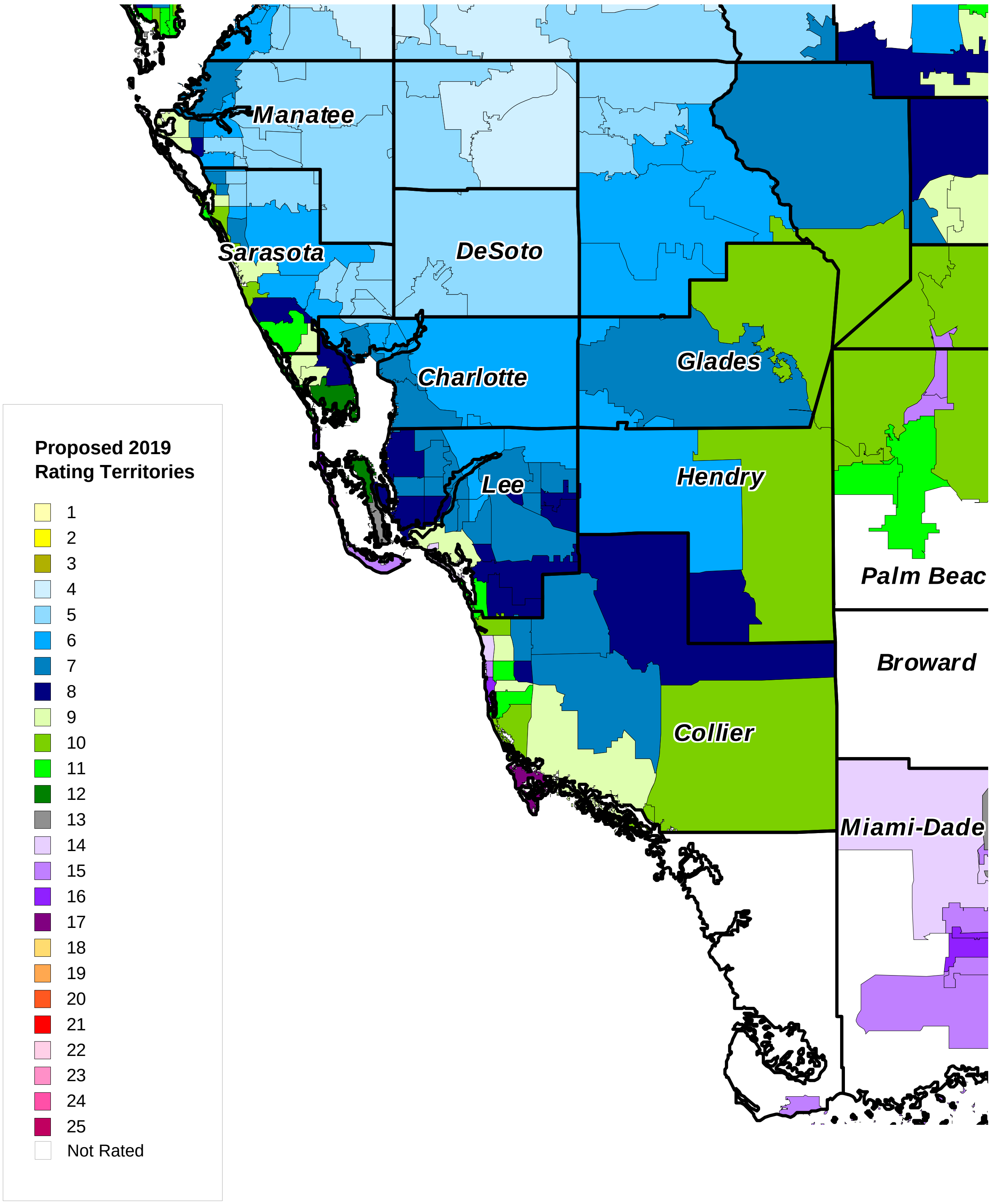
Miami and Surrounding Areas



Florida Hurricane Catastrophe Fund

Proposed 2019 Rating Territories by 5-Digit ZIP Code

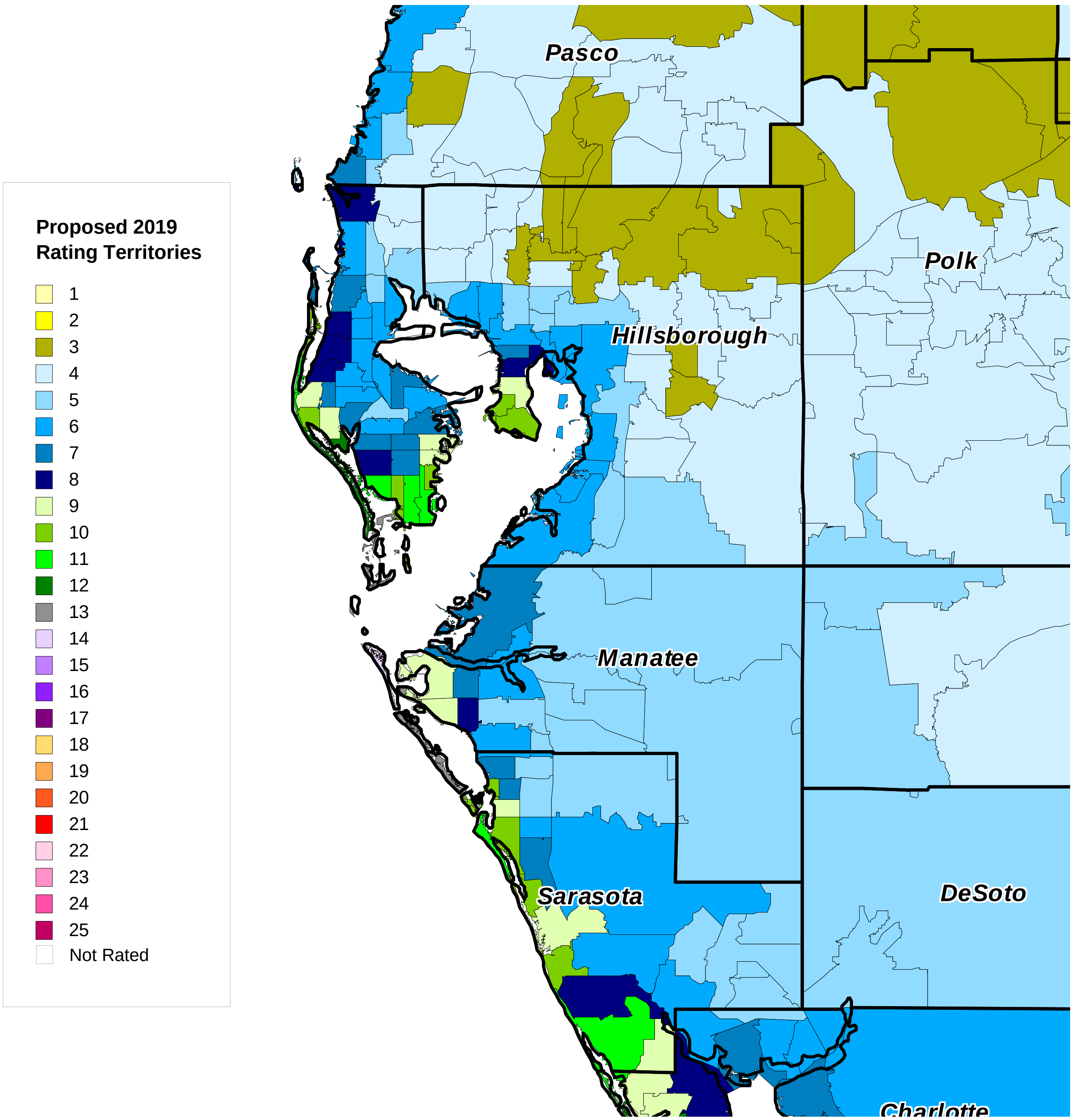
Fort Myers and Surrounding Areas



Florida Hurricane Catastrophe Fund

Proposed 2019 Rating Territories by 5-Digit ZIP Code

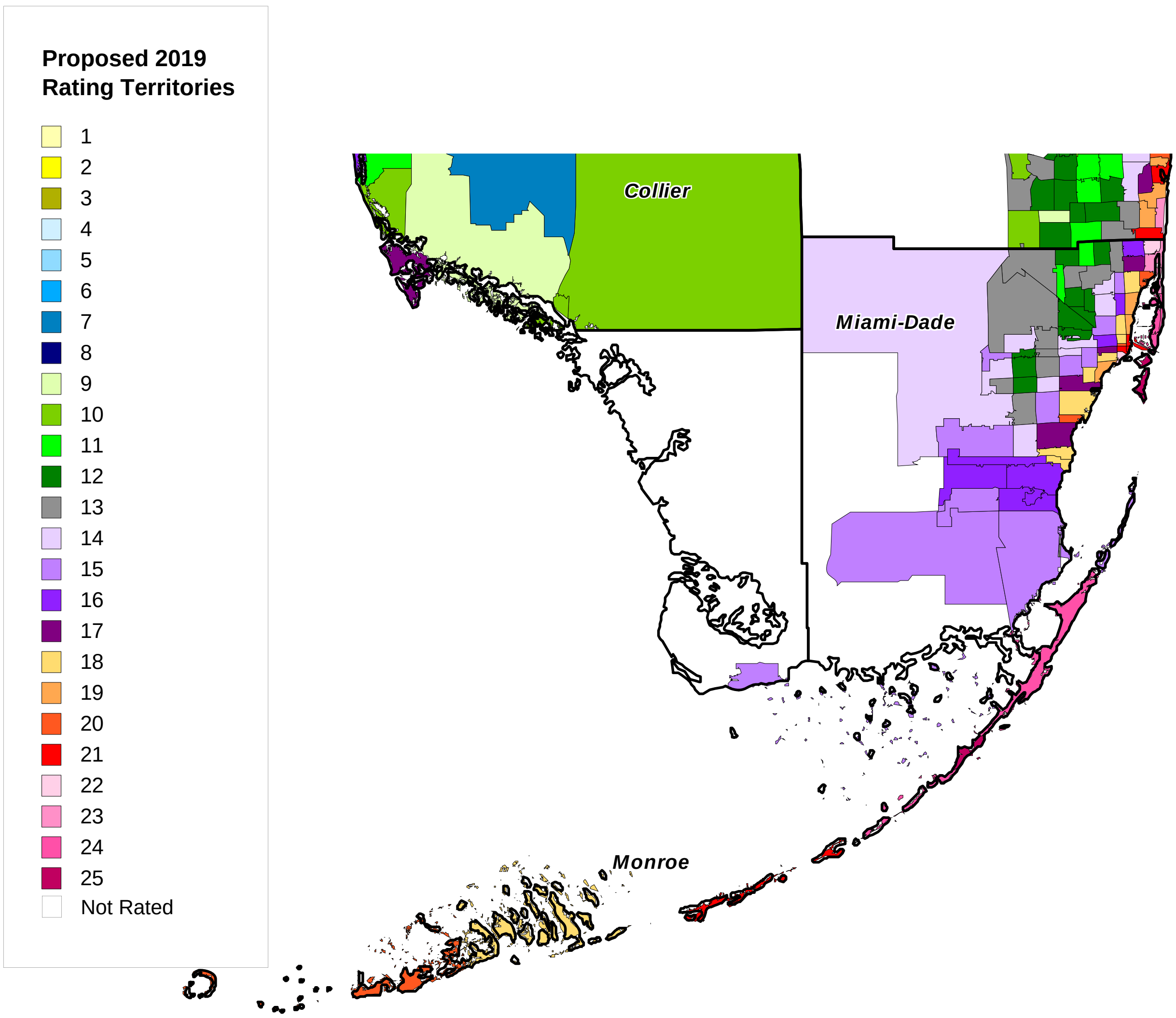
Tampa/Saint Petersburg and Surrounding Areas



Florida Hurricane Catastrophe Fund

Proposed 2019 Rating Territories by 5-Digit ZIP Code

Florida Keys



Rule 19-8.028, F.A.C., Reimbursement Premium Formula
2019-2020 Contract Year
Summary of Changes
(As of March 8, 2019)

Rule 19-8.028, Reimbursement Premium Formula

(3)(b) Adopts the FHCF Ratemaking Formula for the 2019-2020 Contract Year ("Florida Hurricane Catastrophe Fund 2019 Ratemaking Formula Report Presented to the State Board of Administration of Florida March 19, 2019"). Deletes as obsolete material existing language that adopted the FHCF Ratemaking Formula for Contract Year 2018-2019.

(4)(c) Deletes paragraph (4)(c), relating to specialized jewelry policies. This paragraph was adopted in the 2018 version of the rule to provide a special circumstances exemption from the FHCF for a policy solely covering jewelry which is not associated with a policy covering a residential structure in Florida and which is not issued by an insurer that writes policies covering residential structures in Florida. This provision has been superseded by revised Article VI(27) of the 2019 Reimbursement Contract, which provides a broader exclusion for stand-alone policies providing only personal property coverage.

Notice of Proposed Rule

STATE BOARD OF ADMINISTRATION
RULE NO.: RULE TITLE:

19-8.028: Reimbursement Premium Formula

PURPOSE AND EFFECT: This rule is promulgated to implement Section 215.555, Florida Statutes, regarding the Florida Hurricane Catastrophe Fund, for the 2019-2020 contract year.

SUMMARY: In accordance with Section 215.555(5), Florida Statutes, proposed amended Rule 19-8.028, F.A.C., Reimbursement Premium Formula, adopts the 2019-2020 reimbursement premium formula for the Florida Hurricane Catastrophe Fund ("Florida Hurricane Catastrophe Fund 2019 Ratemaking Formula Report Presented to the State Board of Administration of Florida March 19, 2019"). In addition, the proposed amended Rule deletes a "special circumstances" exemption for certain policies solely covering jewelry, which has been superseded by the 2019 Reimbursement Contract adopted as part of Rule 19-8.010.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COSTS AND LEGISLATIVE RATIFICATION:

The Agency has determined that this will not have an adverse impact on small business or likely increase directly or indirectly regulatory costs in excess of $200,000 in the aggregate within one year after the implementation of the rule. A SERC has not been prepared by the Agency.

The Agency has determined that the proposed rule is not expected to require legislative ratification based on the statement of estimated regulatory costs or if no SERC is required, the information expressly relied upon and described herein:

Any person who wishes to provide information regarding a statement of estimated regulatory costs, or provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

RULEMAKING AUTHORITY: 215.555(3), F.S.

LAW IMPLEMENTED: 215.555(2), (3), (4), (5), (6), (7), F.S.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE HELD AT THE DATE, TIME AND PLACE SHOWN BELOW:

DATE AND TIME: April 30, 2019, 9:00 a.m. to 11:00 a.m. (ET).

PLACE: Room 116 (Hermitage Conference Room), 1801 Hermitage Blvd., Tallahassee, Florida 32308.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 7 days before the workshop/meeting by contacting: Leonard Schulte, Florida Hurricane Catastrophe Fund, 1801 Hermitage Blvd., Tallahassee, FL 32308, 850-413-1335, leonard.schulte@sbafla.com. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Leonard Schulte at the number or email listed above.

THE FULL TEXT OF THE PROPOSED RULE IS:

19-8.028 Reimbursement Premium Formula.

(1) Purpose. This rule adopts the Premium Formula to determine the Actuarially Indicated Reimbursement Premium to be paid to the Florida Hurricane Catastrophe Fund, as required by section 215.555(5)(b), F.S.

(2) Definitions. The definitions in the Reimbursement Contract for the applicable Contract Year also apply to this

rule and the forms referenced in this rule. In addition, as used in this rule:

(a) “SBA” means the State Board of Administration of Florida.

(b) “Contract Year” is defined in section 215.555(2), F.S.

(c) “Independent Consultant” means the independent individual, firm, or organization with which the SBA contracts to prepare the Premium Formula and any other actuarial services for the FHCF, as determined under the contract with the Consultant.

(3) The Premium Formula.

(a) The Formula for determining the Actuarially Indicated Reimbursement Premium to be paid to the Fund, as required by section 215.555(5)(b), F.S., is the rate times the exposure per $1,000 of insured value and this equals the Premium to be paid in dollars. The premium rates are determined by taking into account geographic location by zip code; construction type; policy deductible; type of insurance and other such factors deemed by the SBA to be appropriate. The Formula is developed by an Independent Consultant selected by the SBA, as required by section 215.555(5)(b), F.S.

(b) For the 2019/2020 Contract Year, the Formula developed by the SBA’s Independent Consultant, “Florida Hurricane Catastrophe Fund 2019 Ratemaking Formula Report Presented to the State Board of Administration of Florida March 19, 2019, http://www.flrules.org/Gateway/reference.asp?No=Ref-XXXXX, and approved by the SBA on XXXX XX, 2019, is hereby adopted and incorporated by reference into this rule. The premium rates are developed in accordance with the Premium Formula methodology approved by the SBA.

~~(b) For the 2018/2019 Contract Year, the Formula developed by the SBA’s Independent Consultant, “Florida Hurricane Catastrophe Fund 2018 Ratemaking Formula Report Presented to the State Board of Administration of Florida March 21, 2018, Updated June 13, 2018,” http://www.flrules.org/Gateway/reference.asp?No=Ref-09601, and approved by the SBA on June 13, 2018, is hereby adopted and incorporated by reference into this rule. The premium rates are developed in accordance with the Premium Formula methodology approved by the SBA.~~

(4) Special Circumstances.

(a) Allocation of Premium. Premiums paid to the FHCF with reference to property covered by Quota Share Primary Insurance Arrangements, as that phrase is defined in section 627.351(6)(c)2.a.(I), F.S., will be allocated by the FHCF between the Company and Citizens in accordance with the percentages specified in the Quota Share Primary Insurance Arrangement for the purposes of premium billing, calculating retentions and determining reimbursement payments.

(b) Special Rating Circumstances. The Premium Formula for policies that, based upon sound actuarial principles, require individual ratemaking and which are not excluded by rule will be based on the use of computer modeling for each individual Company for which it is applicable, i.e., portfolio modeling. The Independent Consultant will recommend guidelines for individual Company portfolio reporting and modeling to estimate individual Company FHCF expected losses. Individual Company FHCF expected losses for portfolio modeling exposures will be loaded for investments and expenses on the same basis as the FHCF premium rates used for non-portfolio modeling exposures, but will also include a loading for the additional cost of individual Company modeling. The minimum exposure threshold for FHCF portfolio modeling rating will be sufficient to generate estimated FHCF premium greater than the cost of modeling and other considerations and will be calculated by the Independent Consultant for the separate coverage levels of 45%, 75%, and 90% using the premium rates established pursuant to subsection (3). The methodology used by the Independent Consultant will be based on sound actuarial principles to establish greater actuarial equity in the premium structure.

Special recognition is not given to Companies that do not have exposure for Covered Policies for an entire Contract Year, except for New Participants as required by Article X(1) and X(2) of the Reimbursement Contract.

~~(c) Specialized Jewelry Policies.~~

~~1. A policy solely covering jewelry which is not associated with a policy covering a Residential Structure located in Florida and is not issued by an insurer that provides coverage of Residential Structures in Florida is deemed to be a situation of an unusual nature or where undue hardship may result, and providing an exemption from the Fund for such policies would be consistent with sound insurance practices.~~

~~2. Pursuant to the authority provided in section 215.555(3), Florida Statutes, beginning with the 2018-2019~~

~~Contract Year, any policy solely covering jewelry which is not associated with a policy covering a Residential Structure located in Florida and is not issued by an insurer that provides coverage of Residential Structures in Florida is exempt from participation in the Fund.~~

(5) All the forms adopted and incorporated by reference in this rule may be obtained from the FHCF website at www.sbafla.com/fhcf, or from the Florida Hurricane Catastrophe Fund Administrator, Paragon Strategic Solutions Inc., at 8200 Tower, 5600 West 83rd Street, Suite 1100, Minneapolis, MN 55437.

Rulemaking Authority 215.555(3) FS. Law Implemented 215.555(2), (3), (4), (5), (6), (7) FS. History–New 9-20-99, Amended 7-3-00, 9-17-01, 7-17-02, 7-2-03, 7-29-04, 7-17-05, 7-6-06, 7-17-07, 6-16-08, 8-2-09, 7-8-10, 7-3-11, 6-25-12, 6-18-13, 6-10-14, 6-2-15, 5-18-16, 5-30-17, 8-1-18, X-XX-19.

NAME OF PERSON ORIGINATING PROPOSED RULE: Anne Bert, FHCF Chief Operating Officer, State Board of Administration of Florida.

NAME OF AGENCY HEAD WHO APPROVED THE PROPOSED RULE: The Trustees of the State Board of Administration of Florida.

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: April 2, 2019

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAR: March 5, 2019

Notice of Meeting/Workshop Hearing

STATE BOARD OF ADMINISTRATION

RULE NO.: RULE TITLE:

19-8.028: Reimbursement Premium Formula

The Florida Hurricane Catastrophe Fund announces a public meeting to which all persons are invited.

DATE AND TIME: April 2, 2019, 9:00 a.m. (ET) to conclusion of the meeting.

PLACE: Cabinet Meeting Room, Lower Level, The Capitol, Tallahassee, Florida.

GENERAL SUBJECT MATTER TO BE CONSIDERED: This is a meeting of the Trustees of the State Board of Administration to authorize the Florida Hurricane Catastrophe Fund (the Fund) to file a Notice of Proposed Rule for Rule 19-8.028, F.A.C., Reimbursement Premium Formula, and to file this rule for adoption if no member of the public timely requests a rule hearing or if a rule hearing is requested but no Notice of Change is needed. The rule and incorporated form are available on the Fund's website: www.sbafla.com/fhcf.

A copy of the agenda may be obtained by contacting: Not available.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 7 days before the workshop/meeting by contacting: Leonard Schulte, Florida Hurricane Catastrophe Fund, (850) 413-1335, leonard.schulte@sbafla.com. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

19-8.028 Reimbursement Premium Formula.

(1) Purpose. This rule adopts the Premium Formula to determine the Actuarially Indicated Reimbursement Premium to be paid to the Florida Hurricane Catastrophe Fund, as required by section 215.555(5)(b), F.S.

(2) Definitions. The definitions in the Reimbursement Contract for the applicable Contract Year also apply to this rule and the forms referenced in this rule. In addition, as used in this rule:

(a) "SBA" means the State Board of Administration of Florida.

(b) "Contract Year" is defined in section 215.555(2), F.S.

(c) "Independent Consultant" means the independent individual, firm, or organization with which the SBA contracts to prepare the Premium Formula and any other actuarial services for the FHCF, as determined under the contract with the Consultant.

(3) The Premium Formula.

(a) The Formula for determining the Actuarially Indicated Reimbursement Premium to be paid to the Fund, as required by section 215.555(5)(b), F.S., is the rate times the exposure per $1,000 of insured value and this equals the Premium to be paid in dollars. The premium rates are determined by taking into account geographic location by zip code; construction type; policy deductible; type of insurance and other such factors deemed by the SBA to be appropriate. The Formula is developed by an Independent Consultant selected by the SBA, as required by section 215.555(5)(b), F.S.

(b) For the 2019/2020 Contract Year, the Formula developed by the SBA's Independent Consultant, "Florida Hurricane Catastrophe Fund 2019 Ratemaking Formula Report Presented to the State Board of Administration of Florida March 19, 2019, http://www.flrules.org/Gateway/reference.asp?No=Ref-XXXXX, and approved by the SBA on XXXX XX, 2019, is hereby adopted and incorporated by reference into this rule. The premium rates are developed in accordance with the Premium Formula methodology approved by the SBA.

~~(b) For the 2018/2019 Contract Year, the Formula developed by the SBA's Independent Consultant, "Florida Hurricane Catastrophe Fund 2018 Ratemaking Formula Report Presented to the State Board of Administration of Florida March 21, 2018, Updated June 13, 2018," http://www.flrules.org/Gateway/reference.asp?No=Ref-09601, and approved by the SBA on June 13, 2018, is hereby adopted and incorporated by reference into this rule. The premium rates are developed in accordance with the Premium Formula methodology approved by the SBA.~~

(4) Special Circumstances.

(a) Allocation of Premium. Premiums paid to the FHCF with reference to property covered by Quota Share Primary Insurance Arrangements, as that phrase is defined in section 627.351(6)(c)2.a.(I), F.S., will be allocated by the FHCF between the Company and Citizens in accordance with the percentages specified in the Quota Share Primary Insurance Arrangement for the purposes of premium billing, calculating retentions and determining reimbursement payments.

(b) Special Rating Circumstances. The Premium Formula for policies that, based upon sound actuarial principles, require individual ratemaking and which are not excluded by rule will be based on the use of computer modeling for each individual Company for which it is applicable, i.e., portfolio modeling. The Independent Consultant will recommend guidelines for individual Company portfolio reporting and modeling to estimate individual Company FHCF expected losses. Individual Company FHCF expected losses for portfolio modeling exposures will be loaded for investments and expenses on the same basis as the FHCF premium rates used for non-portfolio modeling exposures, but will also include a loading for the additional cost of individual Company modeling. The minimum exposure threshold for FHCF portfolio modeling rating will be sufficient to generate estimated FHCF premium greater than the cost of modeling and other considerations and will be calculated by the Independent Consultant for the separate coverage levels of 45%, 75%, and 90% using the premium rates established pursuant to subsection (3). The methodology used by the Independent Consultant will be based on sound actuarial principles to establish greater actuarial equity in the premium structure.

Special recognition is not given to Companies that do not have exposure for Covered Policies for an entire Contract Year, except for New Participants as required by Article X(1) and X(2) of the Reimbursement Contract.

~~(c) Specialized Jewelry Policies.~~

~~1. A policy solely covering jewelry which is not associated with a policy covering a Residential Structure located~~

~~in Florida and is not issued by an insurer that provides coverage of Residential Structures in Florida is deemed to be a situation of an unusual nature or where undue hardship may result, and providing an exemption from the Fund for such policies would be consistent with sound insurance practices.~~

~~2. Pursuant to the authority provided in section 215.555(3), Florida Statutes, beginning with the 2018-2019 Contract Year, any policy solely covering jewelry which is not associated with a policy covering a Residential Structure located in Florida and is not issued by an insurer that provides coverage of Residential Structures in Florida is exempt from participation in the Fund.~~

(5) All the forms adopted and incorporated by reference in this rule may be obtained from the FHCF website at www.sbafla.com/fhcf, or from the Florida Hurricane Catastrophe Fund Administrator, Paragon Strategic Solutions Inc., at 8200 Tower, 5600 West 83rd Street, Suite 1100, Minneapolis, MN 55437.

Rulemaking Authority 215.555(3) FS. Law Implemented 215.555(2), (3), (4), (5), (6), (7) FS. History–New 9-20-99, Amended 7-3-00, 9-17-01, 7-17-02, 7-2-03, 7-29-04, 7-17-05, 7-6-06, 7-17-07, 6-16-08, 8-2-09, 7-8-10, 7-3-11, 6-25-12, 6-18-13, 6-10-14, 6-2-15, 5-18-16, 5-30-17, 8-1-18, X-XX-19.

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About the SBA

The State Board of Administration (SBA) of Florida is an agency of Florida state government that provides a variety of investment services to governmental entities. The SBA has three Trustees: the Governor, as Chairman, the Chief Financial Officer, as Treasurer, and the Attorney General, as Secretary. All three of the Trustees of the Board are elected statewide to their respective positions as Governor, Chief Financial Officer, and Attorney General. SBA Trustees are dedicated to ensuring that the SBA invests assets and discharges its duties in accordance with Florida law, guided by strict policies and a code of ethics to ensure integrity, prudent risk management and top-tier performance. The Board of Trustees appoints nine members to serve on the Investment Advisory Council (IAC). The IAC provides independent oversight of SBA's funds and major investment responsibilities.

The SBA is an investment fiduciary under law, and subject to the stringent fiduciary duties and standards of care defined by the Employee Retirement Income Security Act of 1974 (ERISA), as incorporated into Florida law.

The SBA strives to meet the highest ethical, fiduciary and professional standards while performing its mission, with a continued emphasis on keeping operating and investment management costs as low as possible for the benefit of Florida taxpayers.

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INTRODUCTION

The Florida State Board of Administration (SBA) manages the fourth largest U.S. pension fund and other non-pension trust funds with assets spanning domestic and international capital markets. Our primary function is to represent the interests of our beneficiaries so that they will see fair returns on their investment; therefore, we have a clear interest in promoting the success of companies in which we invest. To ensure returns for our beneficiaries, we support the adoption of internationally recognized governance structures for public companies. This includes a basic and unabridged set of shareowner rights, strong independent boards, performance-based executive compensation, accurate accounting and audit practices, and transparent board procedures and policies covering issues such as succession planning and meaningful shareowner participation. All proposals are evaluated through a common lens by considering both how the proposal might impact the company's financial health as well as its impact on shareowner rights.

Corporate Governance Principles

The SBA believes that, as a long-term investor, good corporate governance practices serve to protect and enhance our long-term portfolio values.[1] In accordance with the Department of Labor Interpretive Bulletin §2509.08-2, stock ownership rights, which include proxy votes, participation in corporate bankruptcy proceedings, and shareowner litigation, are financial assets. They must be managed with the same care, skill, prudence, and diligence as any other financial asset and exercised to protect and enhance long-term portfolio value, for the exclusive benefit of our pension plan participants, clients, and beneficiaries. Pursuant to the provisions set forth in the Employment Retirement Income Security Act of 1974, this is generally referred to as the "duty of loyalty" or the "exclusive purpose" rule. Under this rule, fiduciaries, defined as any person who, in part, "exercises any discretionary authority or discretionary control respecting management of such plan or exercises any authority or control respecting management or disposition of its assets" must act solely in the interest of plan participants and beneficiaries in making decisions concerning the management or disposition of plan assets.[2] While the SBA is exempt from most provisions of ERISA, we agree with this treatment of the value of proxy voting rights and follow the standard as a part of our fiduciary duty. Section 215.47(10) of the Florida Statutes encompass the prudent persons standards and fiduciary responsibilities of the SBA and its employees.

Another significant regulation affecting proxy voting is the U.S. Securities & Exchange Commission's (SEC) Rule 206(4)-6 under the Investment Advisors Act, promulgated in 2003. This SEC Rule made it, "fraudulent for an investment adviser to exercise proxy voting authority without having procedures reasonably designed to ensure that the adviser votes in the best interest of its clients. In the rule's adopting release, the SEC confirmed that an adviser owes fiduciary duties of care and loyalty to its clients with respect to all services undertaken on its client's behalf, including proxy voting."[3] The adopting release states, "The duty of care requires an adviser with proxy voting authority to monitor corporate events and to vote the proxies. To satisfy its duty of loyalty, the adviser must cast the proxy votes in a manner consistent with the best interest of its clients and must not subrogate client interests for its own."[4]

In 2014, the SEC issued a staff legal bulletin, providing guidance on investment advisers' responsibilities in voting client proxies and retaining proxy advisory firms, as well as on the availability and requirements of two exemptions to the federal proxy rules that are often relied upon by proxy advisory firms. In the Bulletin, the SEC outlined several new requirements for proxy advisors, including: 1) requirements to disclose significant relationships or material interests to the recipient of the advice; 2) clarified that advisors are not required to register with the SEC; and 3) clarified that advisors are not required to provide publicly-traded companies time to review proxy advisers' voting recommendations prior to client distribution. Additionally, the SEC outlined several new requirements for fund managers, including: 1) requirements to review their proxy voting policies at least annually to ensure proxies are voted in the best interests of investor clients; 2) requirements to determine whether the proxy advisers they use have the capacity and competency to adequately analyze proxy issues; and 3) clarified that investment advisers that vote client shares are not required to vote all proxies or all

[1] CFA Centre for Financial Market Integrity, "The Corporate Governance of Listed Companies: A Manual for Investors," 2009.
[2] Lannof, Ian D., "DOL Advisory Opinion 2007-07A." Groom Law Group, February 2008.
[3] The Conference Board, "The Separation of Ownership from Ownership," 2013.
[4] "Proxy Voting by Investment Advisers," SEC Final Rule adopted January 31, 2003, effective April 14, 2003; www.sec.gov/rules/final/ia-2106.htm.

proposals on ballots (clarifying SEC Rule 206(4)-6, and confirming existing Department of Labor (DOL) Interpretive Bulletin §2509.08-2).[5]

In 2016, the SEC issued Interpretive Bulletin 2016-1 which emphasized that a fiduciary's obligation to manage plan assets prudently extends to proxy voting, and that it is appropriate for plan fiduciaries to incur reasonable expenses in fulfilling those fiduciary obligations.

Managing stock ownership rights and the proxy vote includes the establishment of written proxy voting guidelines, which must include voting policies on issues likely to be presented, procedures for determining votes that are not covered or which present conflicts of interest for plan sponsor fiduciaries, procedures for ensuring that all shares held on record date are voted, and procedures for documentation of voting records. The following corporate governance principles and proxy voting guidelines are primarily designed to cover publicly traded equity securities. Other investment forms, such as privately held equity, limited liability corporations, privately held REITs, etc., are not specifically covered by individual guidelines, although broad application of the principles and guidelines can be used for these more specialized forms of equity investments.

The primary role of shareowners within the corporate governance system is in some ways limited, although critical. Shareowners have the duty to communicate with management and encourage them to align their processes with corporate governance best practices. This means shareowners have two primary obligations: 1) to monitor the performance of the company and 2) to protect their right to act when it is necessary.

In the 1930's, Benjamin Graham and David Dodd succinctly described the agenda for corporate governance activity by stating that shareowners should focus their attention on matters where the interest of the officer and the stockholders may be in conflict. This includes questions about preserving the full integrity and value of the characteristics of ownership appurtenant to shares of common stock. For example, the right to vote may be diluted by a classified board or by dual class capitalization, and the right to transfer the stock to a willing buyer at a mutually agreeable price may be abrogated by the adoption of a poison pill.

Since management and board composition change over time, while shareowners continue their investment, shareowners must ensure that the corporate governance structure of companies will allow them to exercise their ownership rights permanently. Good corporate management is not an excuse or rationale upon which institutional investors may relinquish their ownership rights and responsibilities.

The proxy voting system must be an even playing field. Neither management nor shareowners should be able to dominate or influence voting dynamics. A 2006 article analyzed the corporate governance implications of the decoupling of voting power and economic ownership through methods such as vote trading and equity swaps, methods largely hidden from public view and not captured by current regulation or disclosure rules. This method has been used by finance-savvy activist hedge funds, for example, who have borrowed shares just before the record date in order to better support proposals they favor, reversing the transactions after the record date. The SBA believes that enhanced disclosure rules are critical to reveal hidden control of voting power.[6]

Management needs protection from the market's frequent focus on the short-term in order to concentrate on long-term returns, productivity, and competitiveness. Shareowners need protection from coercive takeover tactics and directors with personal agendas. Ideal governance provisions should provide both sides with adequate protection. They should be designed to give management the flexibility and continuity it needs to make long-term plans, to permit takeover bids in cases where management performance is depressing long-term value, to ensure that management is accountable to shareowners, and to prevent coercive offers that force shareowners to take limited short-term gains.

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[5] Securities & Exchange Commission, Staff Legal Bulletin No. 20, "Proxy Voting: Proxy Voting Responsibilities of Investment Advisers and Availability of Exemptions from the Proxy Rules for Proxy Advisory Firms," June 30, 2014.

[6] Hu, Henry T.C. and Black, Bernard S., "Empty Voting and Hidden (Morphable) Ownership: Taxonomy, Implications, and Reforms". As published in Business Lawyer, Vol. 61, pp. 1011-1070, 2006 Available at SSRN: http://ssrn.com/abstract=887183. Also, Christoffersen, S.E.K., Geczy, C.C., Musto, D.K., and Reed, A.V. 2006, "Vote Trading and Information Aggregation."

A study on shareowner activism and corporate governance in the United States found that shareowner opposition has slowed the spread of takeover defenses, such as staggered boards, that require shareowner approval. However, shareowners have failed in their efforts to get companies to roll back takeover defenses and, perhaps more importantly, managers frequently ignore even a majority shareowner vote in favor of a proposal.[7]

Global Standards of Corporate Governance

The SBA believes strongly that good corporate governance practices are important to encourage investments in countries and companies in a globalized economy where gaining access to capital markets is increasingly viewed as critical. Empirical evidence demonstrates the relationship between corporate valuation and corporate governance structures, finding that foreign institutional investors invested lower amounts in firms with higher insider control, lower transparency, and are domiciled in countries with weak investor protections.[8] A comparative analysis of corporate governance in US and international firms shows that the ability of controlling shareowners to extract private benefits is strongly determined by a country's investor protection. Thus, if investor protection is weaker, improvements in firm-level governance will be costlier for the controlling shareowner.[9]

Over the last several years, many countries, international organizations, and prominent institutional investors have developed and implemented international policies on corporate governance and proxy voting issues (e.g., the Organization for Economic Co-operation and Development, and the International Corporate Governance Network).[10] Many of these promulgated guidelines recognize that each country need not adopt a "one-size-fits-all" code of practice. However, SBA expects all capital markets to exhibit basic and fundamental structures that include the following:

1. Corporate Objective

The overriding objective of the corporation should be to optimize the returns to its shareowners over time. Where other considerations affect this objective, they should be clearly stated and disclosed. To achieve this objective, the corporation should endeavour to ensure the long-term viability of its business, and to manage effectively its relationship with stakeholders.

2. Communications & Reporting

Corporations should disclose accurate, adequate and timely information, in particular meeting market guidelines where they exist, to allow investors to make informed decisions about the acquisition, ownership obligations and rights, and sale of shares. Material developments and foreseeable risk factors, and matters related to corporate governance should be routinely disseminated to shareowners. Shareowners, the board, and management should discuss corporate governance issues. Where appropriate, these parties should converse with government and regulatory representatives, as well as other concerned bodies, to resolve disputes, if possible, through negotiation, mediation, or arbitration. For example, investors should have the right to sponsor resolutions and convene extraordinary meetings. Formal procedures outlining how shareowners can communicate with board members should be implemented at all companies and be clearly disclosed.

3. Voting Rights

Corporations' ordinary shares should feature one vote for each share. Corporations should act to ensure the owners' rights to vote and apply this principle to all shareowners regardless of their size. Shareowners should be able to vote in person or in absentia, and equal effect should be given to votes whether cast in person or absentia. Votes should be cast by custodians or nominees, in a manner agreed upon with the beneficial owner of the shares. Impediments to cross border voting should be eliminated. Minority shareholders should be protected from abusive actions by, or in the interest of, controlling shareholders acting either directly or indirectly and should have effective means of redress.[11]

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[7] Black, B., 1998. "Shareowner Activism and Corporate Governance in the United States."
[8] Christian Leuz, Karl V. Lins, and Francis E. Warnock, "Do Foreigners Invest Less in Poorly Governed Firms?" The Review of Financial Studies, 22 (2009).
[9] Aggraval, Reena et al, 2007, "Differences in Governance Practices between US and Foreign Firms: Measurement, Causes, and Consequences", Charles A. Dice Center for Research in Financial Economics, Working Paper 2007-14.
[10] Organization for Economic Co-operation & Development (OECD), "Corporate Governance Factbook," February 2014.
[11] Organization for Economic Cooperation & Development (OECD), Role of Institutional Investors in Promoting Good Corporate Governance, January 11, 2012.

4. Corporate Boards

The Board of Directors, or Supervisory Board, as an entity, and each of its members, as individuals, is a fiduciary for all shareowners, and they should be accountable to the shareowner body as a whole. Each member should stand for election on a regular basis, preferably with annual election cycles. Corporations should disclose upon appointment to the board, and thereafter in each annual report or proxy statement, information on the identities, core competencies, professional or other backgrounds, factors affecting independence, other commitments, and overall qualifications of board members and nominees so as to enable investors to weigh the value that they add to the company. Information on the appointment procedure should also be disclosed annually. Boards should include a sufficient number of independent, non-executive members with appropriate qualifications. Responsibilities should include monitoring and contributing effectively to the strategy and performance of management, staffing key committees of the board, and influencing the conduct of the board as a whole. Accordingly, independent non-executives should comprise no fewer than three (3) members and as much as a substantial majority. Audit, Compensation and Nomination committees should be composed entirely of independent non-executives.

5. Executive & Director Compensation

Remuneration of corporate directors or supervisory board members and key executives should be aligned with the interests of shareowners. Corporations should disclose in each annual report or proxy statement the board's policies on remuneration and, preferably, the remuneration of individual board members and top executives; so that shareowners can judge whether corporate pay policies and practices meet this standard. Broad-based employee share ownership plans or other profit-sharing programs are effective market mechanisms that promote employee participation.

6. Strategic Planning

Major strategic modifications to the core business of a corporation should not be made without prior shareowner approval of the proposed modification. Equally, major corporate changes that, in substance or effect, materially dilute the equity or erode the economic interests or share ownership rights of existing shareowners should not be made without prior shareowner approval of the proposed change. Shareowners should be given sufficient information about any such proposal early enough to allow them to make an informed judgment and exercise their voting rights.

7. Voting Responsibilities

The exercise of ownership rights by all shareowners, including institutional investors should be facilitated. Institutional investors acting in a fiduciary capacity should disclose their overall corporate governance and voting policies with respect to their investments, including the procedures that they have in place for deciding on the use of their voting rights. Institutional investors acting in a fiduciary capacity should disclose how they manage material conflicts of interest that may affect the exercise of key ownership rights regarding their investments. Shareowners, including institutional investors, should be allowed to consult with each other on issues concerning their basic shareowner rights, subject to exceptions to prevent abuse. The corporate governance framework should be complemented by an effective approach that addresses and promotes the provision of analysis or advice by analysts, brokers, rating agencies, and others that is relevant to decisions by investors, free from material conflicts of interest that might compromise the integrity of their analysis or advice.

Active Strategies & Company Engagement

The objective of SBA corporate governance engagement is to improve the governance structures at companies in which the SBA owns significant shares in order to enhance the value of SBA equity holdings.

A study on the evolution of shareowner activism in the United States affirms that activism by investors has increased considerably since the mid-1980s due to the involvement of public pension funds and institutional shareowners. The study identifies the potential to enhance value of investments as the main motive for active participation in the monitoring of corporations. However, as shareowner activism entails concentrated costs and widely disbursed benefits, only investors with large positions are likely to obtain a large enough return on their investment to justify the costs.[12] One recent study

[12] Gillan, Stuart L. and Laura T. Starks, 2007, "The Evolution of Shareowner Activism in the United States", Journal of Applied Corporate Finance, Volume 19, Number 1, Winter 2007, Published by Morgan Stanley.

demonstrated strong relative market returns based on investor engagement activities.[13] Researchers found an abnormal one-year return of +1.8% in the year following investor engagements involving environmental, social, and corporate governance factors, with improvements in operating performance and profitability.

The two primary obligations of shareowners are to monitor the performance of the companies and to protect their right to act when necessary. The SBA has neither the time nor resources to micromanage companies in which it holds publicly traded stock. Furthermore, the legal duties of care and loyalty rest with the corporate Board of Directors, not with the shareowners. For these reasons, the SBA views its role as one of fostering improved management and accountability within the companies in which we own shares. Other recent SBA corporate governance activities have included dealing with conflicts of interest within organizations with which we do business.

Department of Labor (DOL) Interpretive Bulletin §2509.08 states that voting proxies is a fiduciary responsibility and that proxies should be treated like any other financial asset, executed in the best interest of beneficiaries in accordance with written guidelines. Additionally, Florida Law may prohibit investment in companies or mandate reporting on certain investments due to geopolitical, ethnic, religious, or other factors. Compliance with these laws and any related reporting requirements have similarities to corporate governance issues and are consolidated organizationally.

Consistent with prudent and responsible investment policy, all or some of the following measures may be instituted when a corporation is found by the SBA to be under-performing market indices or in need of corporate governance reform:

- The SBA will discuss the corporate governance deficiencies with a representative and/or the Board of Directors. Deficiencies may occur in the form of policies or actions, and often result from the failure to adopt policies that sufficiently protect shareowner assets or rights. The SBA may request to be informed of the progress in ameliorating such deficiencies.
- Under SEC Rule 14(a) 8, shareowner proposals may be submitted to companies with identified performance deficiencies. Shareowners proposals will be used to place significant issues on a company's meeting ballot in order to allow all shareowners to approve or disapprove of significant issues and voice the collective displeasure of company owners.[14]
- Any other strategies to achieve desired corporate governance improvements as necessary.

Investor engagement can be classified into three categories, including "Extensive," "Moderate," and "Basic." Extensive engagement is defined as multiple instances of focused interaction with a company on issues identified with a view to changing the company's behavior. The engagements were systematic and begun with a clear goal in mind. Moderate engagement is defined as more than one interaction with a company on issues identified. The engagement was somewhat systematic, but the specific desired outcome may not have been clear at the outset. Basic engagement is defined as direct contact with companies but engagement tended to be ad-hoc and reactive. Such engagement may not have pursued the issue beyond the initial contact with the company and includes supporting letters authored by other investors or groups.

In addition to overseeing the corporate governance of companies in which we invest, the SBA must also govern the accessibility of our own records by these companies. As a beneficial owner of over 10,000 publicly traded companies, the SBA has elected to be an objecting beneficial owner, or an "OBO." By being an OBO, the SBA does not give permission to a financial intermediary to release our name and address to public companies that we are invested in. This keeps our holdings or trading strategies confidential, and allows us to avoid unwanted solicitations.

Recent developments have led many to believe that the distinction between OBO and non-objecting beneficial owners or "NOBO's" should be eliminated. However, the SEC is likely to be cautious in seeking to change the current framework in significant ways.[15] Strong opponents to an elimination of OBO and NOBO distinction are brokers and banks, who have a large incentive to ward off this change due to fee income derived from forwarding proxy materials.

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[13] Elroy Dimson, Oguzhan Karakas, and Xi Li, "Active Ownership," December 2012, Moskowitz Prize winner in 2012 by the Berkely-Haas Center for Responsible Business.
[14] Rule 14a-8 is an SEC rulemaking promulgated under the Securities Exchange Act of 1934 and offers a set of procedural requirements governing how and when shareowners may submit resolutions for inclusion in a corporation's proxy statement.
[15] Beller, Alan L. and Janet L. Fisher. "The OBO/NOBO Distinction in Beneficial Ownership: Implications for Shareowner Communications and Voting." Council of Institutional Investors. February 2010.

While shareowner communication can be very important, a number of steps must be taken to address the distinction between OBO and NOBO companies and to respect the privacy of beneficial owners involved. Proposals that eliminate the possibility of anonymity are not supported. It is necessary for any changes made to the current system to accommodate the strong privacy interests of current OBO firms, such as SBA.

Disclosure of Proxy Voting Decisions

SBA discloses all proxy voting decisions once they have been made, typically seven to ten calendar days prior to the date of the shareowner meeting. Disclosing proxy votes prior to the meeting date improves the transparency of our voting decisions. Historical proxy votes are available electronically on the SBA's website.[16]

Proxy Voting and Securities Lending

SBA participates in securities lending in order to enhance the return on its investment portfolios. In the process of lending securities, the legal rights attached to those shares are transferred to the borrower of the securities during the period that the securities are on loan. As a result, SBA's right to exercise proxy voting on loaned securities is forfeited unless those affected shares have been recalled from the borrower in a timely manner (i.e. on, or prior to, the share's record date). SBA has a fiduciary duty to exercise its right to vote proxies and to recall shares on loan when it is in the best interest of our beneficiaries. The ability to vote in corporate meetings is an asset of the fund which needs to be weighed against the incremental returns of the securities lending program.

Although SBA shall reserve the right to recall the shares on a timely basis prior to the record date for the purpose of exercising voting rights for domestic as well as international securities, the circumstances required to recall loaned securities are expected to be atypical. Circumstances that lead SBA to recall shares include, but are not limited to, occasions when there are significant voting items on the ballot such as mergers or proxy contests or instances when SBA has actively pursued coordinated efforts to reform the company's governance practices, such as submission of shareholder proposals or conducting an extensive engagement. In each case, the direct monetary impact of recalled shares will be considered and weighed against the discernible benefits of recalling shares to exercise voting rights. However, because companies are not required to disclose an upcoming meeting and its agenda items in advance of the record date, it usually is not possible to recall shares on loan.

[16] Reporting is publicly available at www.sbafla.com, including real time voting decisions prior to shareowner meetings.

THE BOARD OF DIRECTORS

Of the voting items that come before shareowners, the matters of the board and its operation are the most pivotal. Shareowners must be able to elect and maintain a board of directors whose main charge is to monitor management on the behalf of shareowners, but who will also sufficiently heed majority shareowner input on matters of substantial importance. These voting items concern the election of the board members, as well as chairmanship and committee service, and the processes that govern the frequency, setting and outcome of elections. The nominees' qualifications, performance, and overall contribution to the board skillset are of great importance to shareowners casting votes on the elections of individuals, particularly in cases of proxy contests.

SBA votes with the intent of electing candidates who are qualified and able to effectively contribute, and we support election processes that allow shareowners in the aggregate to exercise meaningful control over who may serve as board members and under what circumstances. We favor transparent election procedures and structures that sufficiently allow for shareowners to elect and consequently hold directors accountable for their performance.

ELECTION OF DIRECTORS: CASE-BY-CASE

Director elections are of the most important voting decisions that shareowners make. Directors function as the representatives of shareowners and serve a critical role in monitoring management. The SBA generally considers a nominee's qualifications, relevant industry experience, independence, performance and overall contribution to the board when assessing election votes.[17] At the board level, we consider the need for diversity in gender, race, experience, and other appropriate categories. In cases where a proxy contest has resulted in more nominees than available board seats, it's important to assess each candidate's relative expertise and experience, as well as differences in strategic vision if applicable.

The SBA may vote against (i.e., "withhold" support for) director nominees for one or more of the following reasons:

> **Poor performance or oversight in duties of the board or board committees --** including poor performance in board service at other public companies. Board members exhibiting poor performance may have failed to appropriately monitor or discipline management in cases where failed strategies continue to be implemented or when the board refuses to consider views from a large majority of shareowners, analysts and market participants. In the case of a breakdown of proper board oversight, SBA is likely to vote against all or most members of the board, and in cases where a dissident has launched a proxy contest, SBA may be supportive of the dissident nominees if they present with appropriate qualifications and strategies, as discussed below. Shareowners sometimes target under-performing directors through "vote no" campaigns. An empirical study found that "vote no" campaigns are an effective tool to voice concerns with a particular director and often successfully pressure the company to take action.[18] This underscores that performance is an essential component of governance and should be considered when evaluating director elections.
>
> Boards are expected to conduct internal and external evaluations of their own functioning to assess how well they are performing their responsibilities.[19] These evaluations can be particularly helpful for committees as well, such as in assessing audit committee performance. The audit committee is responsible for independent oversight of the company's financial statements and, in the absence of a separate risk committee, is also often responsible for risk oversight.[20] Regular self-assessments are critical to a productive audit committee. The SBA will consider the audit com-

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[17] The SBA generally does not consider age as a rationale for withholding votes. Length of service on a board is sometimes a factor in determining independence for a director, but is not used to justify a withhold vote except in rare instances with unusual circumstances. See the guideline for "Limits on board service".
[18] Diane Del Guercio, Laura Seery, and Tracie Woidtke, "Do Boards Pay Attention when Institutional Investor Activists 'Just Vote No,'" available at http://ssrn.com/abstract=575242. The study finds a forced CEO turnover rate of 25 percent in firms targeted with "vote no" campaigns.
[19] A paper by the Global Corporate Governance Forum recommends using board evaluations as open communication to focus on inadequacies, identify strategic priorities and become more efficient through the review of policies and procedures [GCGF, Board Performance Evaluation].
[20] SEC Rule 10A-3 under the Exchange Act mandates that stock exchanges adopt listing standards that require that each member of the audit committee of a listed company has (1) not received compensation from the issuer other than for board services and (2) is not an "affiliated person" of the issuer that either controls, is controlled by, or is under common control with the issuer.

mittee's performance, especially as it relates to oversight and risk management, when voting on individual committee members. Evidence of poor audit committee performance are financial restatements, including as a result of option backdating, un-remediated material weaknesses, and attempts to limit auditor liability through auditor engagement contracts. The severity, breadth, chronological sequence and duration of financial restatements, and the company's efforts at remediation will be examined in determining whether withhold votes are warranted.

Likewise, the function of the nominating and governance committees will be assessed by considering how the committees have approached implementation of governance rules and the impact on shareowners' rights, particularly in cases of bylaw amendments or votes on shareowner and management proposals. When a company goes public with a dual or multi-class share structure without a sunset provision on unequal voting rights such as in the case of an IPO or spinoff, SBA may withhold votes from or vote against directors. Bylaws that create supermajority voting thresholds or limit shareowner rights are generally undesirable, but depends on the context of the individual company. This committee also is responsible for board nominations, and SBA judges this function by the qualifications and diversity of the nominees. This committee should make an effort to seek candidates that are diversified not only in experience, gender and race, but in all other aspects appropriate for the individual company and should disclose these efforts to shareowners.

Members of the compensation committee are judged in accordance with the aspects of the compensation philosophy, plan and implementation. Compensation that is out of line with respect to magnitude, peers, or performance is problematic, as are plans that reward compensation without appropriate performance-based conditions or feature undesirable elements such as gross-ups or single-trigger severance packages.

We may withhold support for individual directors if there are indications that directors are failing or failed to understand company risk exposures and/or take reasonable steps to mitigate the effects of the risk, leading to large losses.

Restricting shareowner rights or failing to sufficiently act on shareowner input -- such as ignoring a shareowner proposal that received majority support of votes cast or attempting to block or limit the ability of shareowners to file precatory or binding proposals or adopt or amend bylaws

Serving on too many boards ("over-boarding') – generally a director who serves on more than 3 company boards and who is employed in a full-time position.[21] Directors with significant outside responsibilities such as serving as CEO of a public company should not exceed one external board membership.[22] Surveys of directors have indicated that the average board membership requires over 200 hours of active, committed work, making service on multiple boards difficult for executives, particularly CEOs, and leading to many investors embracing similar limits as the SBA. -When seeking to improve diversity, boards should choose well-qualified, diverse candidates who are not already committed to three other boards. SBA does not support overextending a director's commitments via over-boarding just to satisfy or improve the diversity characteristics of the board.

Poor attendance at meetings without just cause – less than 75 percent attendance rate.

Lack of independence – most markets should have independent board representation that meets a minimum two-thirds threshold. Independence is defined as having no business, financial or personal affiliation with the firm other than being a member of its board of directors. Directors or nominees that are affiliated with outside companies that conduct business with the company, have significant outside links to senior management, were previously employed by the company or are engaged directly or indirectly in related-party transactions are highly likely to be considered non-independent, depending on the materiality of the circumstances. At controlled companies (where an investor

[21] See Fich, Eliezer M. and Anil Shivdasani, 2006, "Are Busy Boards Effective Monitors?," The Journal of Finance, Vol. 61, No. 2, pp. 689-724 (36), Blackwell Publishing. This study of U.S. industrial firms between 1989 and 1995, found that when a majority of outside directors serve on three or more boards, firms exhibit lower market-to-book ratios, as well as weaker operating profitability. When a majority of outside directors are over boarded, the sensitivity of CEO turnover to performance is significantly lower than when a majority of outside directors are not busy. Investors react positively to the departure of over boarded directors, while firms, whose directors acquire an additional board seat and become over boarded, end up experiencing negative abnormal returns.
[22] Neil Roland, "Directors at troubled companies overbooked, research firm claims" Financial Week, February 25, 2009. This article gives examples of over-boarding problems at struggling U.S. financial institutions.

controls a majority of a firm's equity capital); support may be withheld from directors at boards with less than a one-third proportion of independent directors.

Boards without adequate independence from management may suffer from conflicts of interest and impaired judgment in their decision-making. In addition to poor transparency, directors with ties to management may be perceived to be less willing and able to effectively evaluate and scrutinize company strategy and performance. SBA carefully scrutinizes management nominees to the board, because of the conflict of interest inherent in serving on the board, which in turn is charged with overseeing the performance of senior management. In most markets, we support the CEO of the company as the only reasonable management team member to serve on the board.

Lack of disclosures -- because there are differences in each market as to disclosures and voting procedures for director elections, SBA takes into account practices in the local market, but does not compromise on fundamental tenets such as the right to elect individual directors (as opposed to a slate as a whole) and the need for proof that director candidates can provide independent oversight of management. Global markets increasingly depend on the homogenization of better governance standards to increase shareowner value and liquidity in emerging markets. The protection of fundamental voting rights may be at odds with local market customs in the short run[23], but through voting the SBA aims to encourage companies to adopt minimum-level best practices throughout the portfolio of holdings.

In certain markets where the quality and depth of disclosures about the nominees are less than desirable, we work with other investors to advocate for improvements in these markets as a matter of course. In a few markets, the directors may be proposed as a group in a single bundled voting item, preventing a vote on each director, which is considered a very poor practice in developed economies.

When nominees are bundled or insufficient information is disclosed, we typically oppose the item. When appropriate information is disclosed, we make voting decisions based on the qualifications of the nominee, the performance of the nominee on this or other boards, if applicable, and the needs of the board considering the other nominees' overall skillset.

Minimal or no stock ownership -- in regard to industry or market peers. Companies should adopt a policy covering stock ownership for directors and annually review compliance among members. Certain markets have laws prohibiting ownership or discourage ownership among directors as a potential conflict of interest, so SBA is more nuanced in assessing directors on these markets.

Proxy contests are less typical election events, only occurring in a small fraction of director elections, but require shareowners to judge between competing views of strategic direction for the company. When analyzing proxy contests, the SBA focuses on two central questions: (1) Have the dissidents demonstrated that change is warranted at the company, and if so, (2) will the dissidents be better able to affect such change versus the incumbent board?

When dissidents seek board control with a majority of nominees, they face a high burden of proof and must provide a well-reasoned and detailed business plan, including the dissidents' strategic initiatives, a transition plan that describes how the dissidents will affect change in control, and the identification of a qualified and credible new management team. The SBA compares the detailed dissident plan against the incumbents' plan and compares the dissidents' proposed board and management team against the incumbent team.

Usually dissidents run a "short slate", which seeks to place just a few nominees on the board, not a majority. In these cases, the SBA places a lower burden of proof on the dissidents. In such cases, the SBA's policy does not necessarily require the dissidents to provide a detailed plan of action or proof that its plan is preferable to the incumbent plan. Instead, the dissidents must prove that change is preferable to the status quo and that the dissident slate will add value to board

[23] For instance, Italy amended its "Consolidated Financial Act" to mandate that Italian issuers reserve a certain number of board seats for candidates presented by minority shareowners. This mandate affects Board of Director elections, Supervisory Board elections, and Board of Statutory Auditor elections. See, "Italian Issuers- Guidelines for the election of the Board of Directors (or Supervisory Board) or Board of Statutory Auditors," Trevisan & Associati February 19, 2009 available at http://www.trevisanlaw.it/en_mask.html?5 (last visited March 2, 2009).

deliberations, including by considering the issues from a viewpoint different ~~than~~from current management, among other factors.

PROXY ACCESS: FOR

Proxy access is an important mechanism for shareowners with substantial holdings to nominate directors directly in the company's proxy materials. Generally, we support proposals that have reasonable share ownership (3% or less) and holding history (3 years or less) requirements, allow shareowners to aggregate holdings for joint nominations (permitting groups of at least 20 shareowners), cap the number of shareowner nominees at the greater of 2 or at least 20% of the board seats, and feature other procedural elements that are not unduly burdensome on shareowners seeking to make nominations. The SBA may vote against proposals which contain burdensome or otherwise restrictive requirements, such as ownership or holding thresholds which are set at impractical levels.

SEPARATE CHAIRMAN & CHIEF EXECUTIVE OFFICER (CEO): CASE-BY-CASE

Because the board's main responsibility is to monitor management on behalf of shareowners, it is generally desirable for the chairman of the board to be an independent director, as opposed to the current CEO or a non-independent director such as a former CEO. Most academic evidence concludes that there is more benefit to shareowners when the chair is an independent director.[24] SBA typically supports proposals to provide for an independent board chairman; however, in certain cases where strong performance and governance provisions are evident, SBA may support the status quo of a serving combined CEO and chairman.

When considering whether to support a separate CEO and chairman proposal, SBA takes into account factors such as if there is a designated, independent lead director with the authority to develop and set the agenda for meetings and to lead sessions outside the presence of the executive chair, as well as short and long-term corporate performance on an absolute and peer-relative basis. In order to maintain board accountability, the SBA will not endorse the combined role of CEO and chair unless there is a strong, empowered lead director, superior company performance, and exemplary governance practices in other areas such as shareowner rights and executive compensation.

MAJORITY VOTING FOR DIRECTOR ELECTIONS: FOR

Proxy contests are rare; most elections feature uncontested elections where the number of directors nominated equals the number of board seats. When plurality voting is used as the voting standard in uncontested elections, the members are guaranteed election, no matter how few shareowners supported them. The SBA supports a majority voting standard for uncontested elections because it adds the requirement that a majority of shareowners must vote for each member to be considered duly elected. We prefer for the board to make this requirement in the bylaws of the company, not as a board policy. Policies that require the board members failing to achieve majority support to offer a resignation, which in turn may or may not be accepted by the board or committee, are not acceptable alternatives to a true majority vote standard for uncontested elections.

The SBA strongly endorses the majority voting election standard for the meaningful accountability it affords shareowners and because it provides another element to the system of checks and balances of power within the corporate structure. In contested elections, however, plurality voting remains the most effective voting standards, so all bylaws should specify that the majority voting standard applies only to uncontested elections.

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[24] Grinstein, Yaniv and Valles Arellano, Yearim, "Separating the CEO from the Chairman Position: Determinants and Changes after the New Corporate Governance Regulation." March 2008; Lorsch, Jay and Zelleke, Andy, " Should the CEO Be the Chairman?" MIT Sloan Management Review, 2005; Ryan Krause, Semadeni, Matthew, "Apprentice, Departure, and Demotion: An Examination of the Three Types of CEO-Board Chair Separation," Academy of Management Journal 55(6), 2012; Tonello, Matteo, John C. Wilcox, and June Eichbaum, "The Role of the Board in Turbulent Times: CEO Succession Planning." The Corporate Board, August 2009; Lucier, Chuck, Steven Wheeler, and Rolf Habbel, "The Era of the Inclusive Leader." The Corporate Board, September/October 2007; "Chairing the Board: The Case for Independent Leadership in Corporate North America," Policy Briefing No. 4, Millstein Center for Corporate Governance & Performance, Yale School of Management, 2009.

ANNUAL ELECTIONS / NON-CLASSIFIED BOARD: FOR

A classified, or staggered, board is one in which directors are divided into three "classes" with each director serving three-year terms. All directors on a non-classified board serve one-year terms and the entire board is re-elected each year. The SBA opposes classified boards and their provisions because we believe that annual accountability will ultimately lead to increased corporate performance. Classified boards decrease corporate accountability by protecting directors from election on an annual basis. Alternatively, the SBA supports changing from a staggered board structure to annual elections for all directors.

Studies performed by economists at the SEC and by academics support the view that classified boards are contrary to shareowner interests, showing negative effects on share value for companies that adopt classified boards.[25] While classified board proponents cite stability, independence, and long-term strategic risk taking as justification for staggered boards, recent research has shown little evidence of such benefits.[26]

REQUIRE MAJORITY OF INDEPENDENT DIRECTORS: FOR

SBA supports a majority independence requirement because shareowners are best served when the board includes a significant number of independent outside directors who will represent their interests without personal conflict. The most important role of the board is to objectively evaluate the performance of senior management, so outside directors with relevant, substantial industry qualifications are most likely to perform well in this role.

SBA considers local market practices, but is likely to vote against current members if less than a majority of independent directors exists. In developed markets, we expect a supermajority of independent directors and consider a two-to-one ratio of independent directors to inside and affiliated directors to be a reasonable standard and will withhold support from individual director nominee who are not independent in those circumstances. Furthermore, SBA supports restricting service on compensation, audit, and governance/nominating committees to independent outside directors only.

ESTABLISH OR SET MEMBERSHIP OF BOARD COMMITTEES: CASE-BY-CASE

SBA supports the audit, compensation, and governance/nominating committees being composed solely of independent board members. Independent directors face fewer conflicts of interests and are better prepared to protect shareowner interests.[27]

Some proposals seek to add committees on specific issues such as risk management, sustainability issues, and even specific issues such as technology and cybersecurity. When voting on proposals suggesting the establishment of new board committees, we assess the rationale for the committee and the process for handling discussions and decisions on such topics currently in place at the company. We support formation of committees that would protect or enhance shareowner rights when the company's current practices are failing to do so adequately.

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[25] For example, the SEC studied the impact of 649 anti-takeover proposals submitted between 1979 and 1985. The proposals consisted of fair price provisions, institution of supermajority vote requirements, classified board proposals, and authorization of blank check preferred stock. Stocks within the group showed an average loss in value of 1.31 percent. The study also found that the proposals were most harmful when implemented at firms that have higher insider and lower institutional shareholdings.

[26] Faleye, Olubunmi, "Classified Boards, Stability, and Strategic Risk Taking." Financial Analysts Journal, Volume 65, No. 1, 2009. Also see, Lucian A. Bebchuk, "The Myth That Insulating Boards Serves Long-Term Value," Columbia Law Review, Vol. 113, October 2013 and Bebchuk, Lucian, Cohen, Alma, and Wang, Charles C.Y. ; "Staggered Boards and the Wealth of Shareholders: Evidence from a Natural Experiment," Harvard Law School John M. Olin Center Discussion Paper No. 694, June, 2010; Gompers, Paul A., Joy L. Ishii, and Andrew Metrick, "Corporate Governance and Equity Prices." National Bureau of Economic Research Working Paper No. W8449, August 2001; Bates, Thomas W., David A. Becher and Michael L. Lemmon, 2007, "Board Classification and Managerial Entrenchment from the Market for Corporate Control", electronic copy available at: http://ssrn.com/abstract=923408; Jiraporn, Pornsit and Yixin Liu, 2008, "Capital Structure, Staggered Boards, and Firm Value," Financial Analyst Journal, Volume 64, Number 1.

[27] T Aggraval, Reena et al, 2007, "Differences in Governance Practices between US and Foreign Firms: Measurement, Causes, and Consequences", Charles A. Dice Center for Research in Financial Economics, Working Paper 2007-14

In most markets, SBA expects board to have key committees such as compensation, nominating/governance and audit committees. SBA generally encourages companies, especially financial companies, to have a standing enterprise risk management committee of the board with formal risk management oversight responsibilities.[28] We may withhold support for individual directors if there are indications that directors failed to understand company risk exposures and/or failed to take reasonable steps to mitigate the effects of the risk, leading to large losses.

Shareowner advisory committees may advise the board on shareowner concerns and create formal means of communication between company stockholders and company management. SBA generally supports advisory committee proposals, particularly those intended to improve poor corporate governance practices.

SBA is typically unsupportive of proposals that specify establishment of a governmental party committee (as seen in certain proposals to add a Communist party committee for Chinese or Hong Kong state-owned entities) without disclosing board decision-making processes or the respective responsibilities of the party organization and the board. Companies should disclose as much relevant information on the interaction between the company and the government party committee as possible to help shareowners understand the company's decision-making process—particularly in those circumstances where the board allows the party committee to make material decisions. SBA generally votes against such proposals as they may erode the ability of shareowner-elected directors to govern the firm and sever the ties of accountability between the board and shareowners.

CUMULATIVE VOTING: CASE-BY-CASE

Cumulative voting generally is useful to minority shareowners at companies where a large or controlling shareowner or block of shareowners that may act in concert (such as a family-owned company) exists. It guarantees that minority shareowners will be able to elect at least one of their preferred candidates to the board of directors, even if the candidate does not win a majority vote. In contrast, only majority shareowners are guaranteed board representation at companies without cumulative voting.

The SBA will examine proposals to adopt cumulative voting in light of the company's ownership profile (particularly whether there is a majority or near majority voting block) and the presence of other governance provisions such as proxy access and majority voting election requirements that directly address the voting process. A majority vote election standard ensures board accountability in uncontested elections and in some cases mitigates the need for cumulative voting. Although majority voting is meaningful in uncontested elections, it can convolute voting outcomes in contested elections. Cumulative voting, on the other hand, is meaningful primarily in contested elections, and therefore pairs well with proxy access provisions at controlled companies.

The SBA is likely to support cumulative voting proposals at majority-controlled companies to ensure that a single shareowner or small group of shareowners is unable to control voting outcomes in full. The SBA may vote against proposals to adopt cumulative voting if the company has no large shareowner blocks that aggregate easily to majority control and has adopted a full majority voting in elections bylaw (not a resignation policy), as well as proxy access or a similar structure that proactively encourages shareowners to nominate directors to the company's ballot.

REIMBURSE SHAREOWNERS FOR PROXY EXPENSES: CASE-BY-CASE

SBA generally supports proposals requiring reimbursement of proxy solicitation costs for successful dissident nominees. The expenses associated with promoting incumbent directors in a proxy contest are paid by the company, and for parity, dissidents elected by shareowners should have this benefit as well.

[28] In 2004, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) defined Enterprise Risk Management (ERM) as, "a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives."

In some circumstances at firms with no reimbursement policy, dissidents are reimbursed only for proxy solicitation expenses if they gain control of the company and seek shareowner approval for the use of company funds to reimburse themselves for the costs of solicitation. SBA would typically support reimbursement of reasonable costs in these instances.

CONFIDENTIAL VOTING: FOR

SBA supports greater transparency in election tabulations and the use of independent tabulators and inspectors, and we support to concept of end-to-end vote confirmation so that shareowners can be confident that their vote was correctly cast and counted. However, we are respectful of shareowners who may prefer anonymity. In a confidential voting system, only vote tabulators and inspectors of elections may examine individual proxies and ballots—management and shareholders are given only voting totals. The SBA supports resolutions requesting that corporations adopt a policy of confidential voting combined with the use of independent vote tabulators and inspectors of elections because it is the best way to guarantee confidentially. However, the SBA generally does not support resolutions calling for confidential voting if they lack an independent inspector requirement.

In the absence of such policies, shareowners can vote confidentially by registering their shares with third-parties as objecting beneficial owners (OBOs), allowing anonymity in the voting process. In an open voting system, management can determine who has voted against its director nominees (or proposals) and then re-solicit those shareowners before the final vote count. As a result of the re-solicitation, shareowners may be pressured to change their vote. On the positive side, many companies are increasing their interactions with shareowners before the voting occurs through expanded proxy solicitation conversations and other paths of engagement.

MINIMUM STOCK OWNERSHIP: FOR

The SBA typically supports proposals that require directors to own a reasonable minimum amount of company stock.[29] The SBA will consider voting against directors who own no company stock and have served on the board for more than one year. One of the best ways for directors to align their interests with those of the shareowners is to own stock in the corporation, and since director fees are typically paid partially in stock, retention guidelines encourage long-term ownership of these shares. SBA typically expects non-employee directors to maintain ownership of a number of shares having a market value equal to five times their annual retainer.

Boards should establish a policy and annually review and identify the positions covered by directors and executives. The annual review should also provide information to shareowners on whether guidelines are met and describe any action taken for non-compliance. The guidelines should identify what compensation types may be considered as ownership and what holdings are not (such as hedged positions).

NOMINEE QUALIFICATIONS: CASE-BY-CASE

SBA may support proposals concerning nominee qualifications if there is justification for doing so and the criteria include reasonable limits, restrictions, or requirements.

Some boards of directors may unilaterally implement changes to their corporate bylaws or articles aimed at restricting the ability of shareowners to nominate director candidates who receive third-party compensation or payments for serving as a director candidate or for service as a director of the company. Such restrictive director qualification requirements may deter legitimate investor efforts to seek board representation via a proxy contest and could exclude highly qualified individuals from being candidates for board service. When such provisions are adopted without shareowner ratification, the SBA may withhold support from members of the full board of directors or members of the governance committee

[29] Executive stock ownership is covered in the executive compensation section of these guidelines.

serving at the time of the bylaw amendment. However, SBA does support disclosure of all compensation and payments made by a third-party to nominees or directors.

LIMITS ON BOARD SERVICE: AGAINST

The SBA generally votes AGAINST proposals to limit the service of outside directors. While refreshing a board with new outside directors often brings in fresh ideas and a healthy mix of director experience that benefit shareowners, we do not believe arbitrary limits such as tenure limits and mandatory retirement ages are appropriate ways to achieve that goal. They preclude a board's more nuanced examination of its members' contributions and could harm shareowners' interests by preventing some experienced and knowledgeable directors from serving on the board. Age limits in particular are a form of discrimination.

Boards of directors should evaluate director tenure as part of the analysis of a director's independence and overall performance. Some studies indicate a correlation between director tenure and firm performance. A study of companies in the U.S. found that the relationship between average director tenure and firm value was negatively correlated, but highly dependent on tenure levels over time.[30]

SET BOARD SIZE: CASE-BY-CASE

The voting decision for these proposals depends on who is making the proposal and why. On occasion, management proposals seek to limit a shareowner's ability to alter the size of the board, while at the same time, allowing management to increase or decrease the size of the board at its discretion. Corporate management argues that the purpose of such proposals is to prevent a dominant shareowner from taking control of the board by drastically increasing the number of directors and electing its own nominees to fill the newly created vacancies. Other scenarios may include a board's downsizing in response to business changes or acquisitions. The SBA generally supports such proposals when a reasonable rationale is presented for the change. We prefer a shareowner vote for any changes in board size because the directors serving are representatives of the shareowners, and they should collectively determine the size of the board. Often, state law supersedes corporate bylaws by specifying minimum and maximum board size, as well as the process governing changes in board size.

REQUIRE MORE NOMINEES THAN BOARD SEATS: AGAINST

SBA opposes shareowner proposals requiring two candidates per board seat. Proxy access is a preferable mechanism for shareowners to nominate directors when necessary.

DIRECTOR LIABILITY AND/OR INDEMNIFICATION: CASE-BY-CASE (AND ACCORDING TO STATE LAWS)

Indemnification literally means "to make whole." When a corporation indemnifies its directors and officers, the directors are covered by the company or insured by a purchased policy against certain legal expenses, damages and judgments incurred as a result of lawsuits relating to their corporate actions. SBA may vote in favor if the covered acts provide that a "good faith" standard was satisfied. The SBA votes against such proposals if coverage expands beyond legal expenses and to applies to acts that are more serious violations of fiduciary obligation, such as negligence or violating the duty of care.

SUPPORT SHAREOWNER COMMUNICATIONS WITH THE BOARD: FOR

30 Huang, Sterling, "Board Tenure and Firm Performance," INSEAD Business School, May 2013.

The SBA generally supports shareowners proposals requesting that the board establish a procedure for shareowners to communicate directly with the board, such as through creating an office of the board of directors, unless the company has done all of the following:

- Established a communication structure that goes beyond the exchange requirements to facilitate the exchange of information between shareowners and members of the board;
- Disclosed information with respect to this structure to its shareowners;
- Heeded majority-supported shareowner proposals or a majority withhold vote on a director nominee;
- Established an independent chairman or a lead/presiding director. This individual must be made available for periodic consultation and direct communication with major shareowners.

ADOPT TWO-TIERED (SUPERVISORY/MANAGEMENT) BOARD STRUCTURE: CASE-BY-CASE

Companies in some countries have a two-tiered board structure, comprising a supervisory board of non-executive directors and a management board with executive directors. The supervisory board oversees the actions of the management board, while the management board is responsible for the company's daily operations. At companies with two-tiered boards, shareowners elect members to the supervisory board only; the supervisory board appoints management board members. In Austria, Brazil, the Czech Republic, Germany, Peru, Poland, Portugal, and Russia, two-tiered boards are the norm. They are also permitted by Company law in France and Spain.

The merits of the new structure will be weighed against the merits of the old structure in terms of its ability to represent shareowners' interests adequately, provide for optimal governance structure, and also to generate higher shareowner value.

RATIFY ACTIONS TAKEN BY BOARD DURING PAST YEAR: CASE-BY-CASE

Many countries require that shareowners discharge the board or management for actions taken in the previous year. In most cases, discharge is a routine item and does not preclude future shareowner action in the event that wrongdoing is discovered.[31] Unless there is clear evidence of negligence or action counter to shareowners' interests, the SBA will typically support the proposals. However, in the United States, given the unusual nature of discharge proposals, the SBA will typically vote against proposals that would limit the board or management from any future legal options.

APPROVE PROPOSED/COMPLETED TRANSACTIONS BETWEEN DIRECTORS AND COMPANY: CASE-BY-CASE

Transactions between a parent company and its subsidiary, or a company's dealings with entities that employ the company's directors, are usually classified as related-party transactions and are subject to company law or stock exchange listing requirements that mandate shareowner approval. Shareowner approval of these transactions is critical as they are meant to protect shareowners against abuses of power. Transactions should be completed at arm's length and not benefit directors and/or insiders at company or shareowners' expense. We also support reviews of director transactions by independent committees.

[31] In June 2008, Manifest and Morley Fund Management analyzed governance practices in continental Europe and issued a report that emphasized the country-specific implications of discharging directors. "Directors' Liability Discharge Proposals: The Implications for Shareowners" stressed that the nature and scope of directors' liabilities vary by jurisdiction. "Each market has its own rules, regulations and best practice guidelines against which informed decisions should be measured and carefully weighed." One similarity noted in the report was that "in all the markets covered by the study, a failure to grant a discharge from liability does not have an immediate effect on the liability of directors, but merely leaves the possibility open for the company to initiate an action for liability."

INVESTOR PROTECTIONS

Investor protections encompass voting items that impact the ability of shareowners to access information needed to make prudent decisions about ownership and to exercise their rights to influence the board, election processes, and governance structure of the company. These items fall into categories relating to audits, disclosures, anti-takeover defenses and vote-related mechanisms. SBA is committed to strong investor rights across all of these domains and will exercise our votes to protect and strengthen the rights of shareowners in these crucial areas.

While SBA is deferential to the company and board on many issues affecting the operations of the firm whenever prudent, we are not deferential when it comes to the ability to exercise shareowner responsibilities, which includes monitoring the firm and the board of directors and acting to support change when it is warranted. We require and therefore will support strong audit functioning and detailed disclosures in a variety of areas. Strong investor rights, as well as policies that do not allow board entrenchment, are necessary for investors to protect share value.

Auditors

RATIFICATION OF AUDITORS: CASE-BY-CASE

Most major companies around the world use one of the major international auditing firms to conduct their audits. As such, concerns about the quality and objectivity of the audit are typically minimal, and the reappointment of the auditor is usually a routine matter. In the United States, companies are not legally required to allow shareowners to ratify the selection of auditors; however, a growing number are doing so. Typically, proxy statements disclose the name of the company's auditor and state that the board is responsible for selection of the firm.

The auditor's role in safeguarding investor interests is critical. Independent auditors have an important public trust, for it is the auditor's impartial and professional opinion that assures investors that a company's financial statements are accurate.[32] Therefore, the practice of auditors providing non-audit services to companies must be closely scrutinized. While large auditors may have internal barriers to ensure that there are no conflicts of interest, an auditor's ability to remain objective becomes questionable when fees paid to the auditor for non-audit services such as management consulting, general bookkeeping, and special situation audits exceed the standard annual audit fees. In addition to ensuring that the auditor is free from conflicts of interest with the company, it is also important to ensure the quality of the work that is being performed. [33]

One of the major threats to high quality financial reporting and audit quality is the risk of material financial fraud. Several studies have analyzed the nature, extent and characteristics of fraudulent financial reporting, as well as the negative consequences for investors and management.[34] The studies' authors noted that auditing standards place a responsibility on auditors to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud.

SBA generally supports proposals to ratify auditors unless there is reason to believe that the auditing firm has become complacent in its duties or its independence has been compromised.[35] SBA believes all publicly held corporations should

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[32] Hollis Ashbaugh-Skaife, et al, The Effect of SOX Internal Control Deficiencies on Firm Risk and Cost of Equity June 10, 2008.

[33] Joseph Carcello & Chan Li, "Costs and Benefits of Requiring an Engagement Partner Signature: Recent Experience in the United Kingdom," Corporate Governance Center at the University of Tennessee, Working Paper, 2012. This study found that when an audit partner's name is included within the audit report, the quality of the audit increases, along with auditor fees.

[34] Mark S. Beasley, Joseph V. Carcello, Dana R. Hermanson, and Terry L. Neal, "An Analysis of Alleged Auditor Deficiencies in SEC Fraud Investigation: 1998-2010," University of Tennessee Corporate Governance Center, May 2013. Also see, Committee of Sponsoring Organizations of the Treadway Commission (COSO), "Fraudulent Financial Reporting: 1998–2007, An Analysis of U.S. Public Companies," 2010.

[35] Jonath Stanley, Auburn University, "Is the Audit Fee Disclosure a Leading Indicator of Clients' Business Risk?," American Association of Accountants Quarterly Journal, 2011. For example, non-audit fees, primarily tax and other consulting fees, can exceed audit fee revenue by a large margin, impairing an audit firm's objectivity. This study examined about 5,000 small sized companies over a seven year period and concluded that rising audit fees were a leading indicator for future deterioration in financial performance as measured by firms' return on assets, determined by both earnings and cash flows.

rotate their choice of auditor's periodically. Shareowners should be given the opportunity to review the performance of the auditors annually and ratify the board's selection of an auditor for the coming year.[36]

The audit committee should oversee the firm's interaction with the external auditor and disclose any non-audit fees completed by the auditor. Audit committees should disclose all factors considered when selecting or reappointing an audit firm, information related to negotiating auditor fees, the tenure of the current external audit firm, and a description of how the audit committee oversees and evaluates the work of their external auditor. Serial or significant restatements are potential indications of a poorly performing auditor, audit committee, or both.

APPOINT INTERNAL STATUTORY AUDITORS (JAPAN, HONG KONG, SOUTH KOREA): FOR

Most votes for auditors in Japan are to approve internal statutory auditors (also known as corporate auditors) rather than external auditors. Statutory auditors have the right to attend board meetings, although not to vote, and the obligation to cooperate with the external auditor and to approve its audit. They are required by law to keep board members informed of the company's activities, but this has become a largely symbolic function. They do not have the ability to remove directors from office. Internal auditors serve for terms of four years, and may be renominated an indefinite number of times. While many investors view statutory auditors in a positive light, they are not substitutes for independent directors.

In Japan, at least half of internal auditors must be independent. While companies have complied with the technical requirements of the law, many have ignored its spirit. It is in shareowners' interests to improve the audit and oversight functions in Japan and to increase the accountability of companies to shareowners. Therefore, the SBA will not support internal auditors specified as independent but with a past affiliation with the company. When a statutory auditor attends fewer than 75 percent of board and auditor meetings, without a reasonable excuse, the SBA will generally vote against the auditor's appointment.

In other capital markets, such as South Korea, proposals seeking shareowner approval for statutory auditors' fees are not controversial. Generally, management should disclose details of all fees paid to statutory auditors well in advance of the meeting date so that shareowners can make informed decisions about statutory auditor remuneration requests. In any market, SBA may vote against the appointment of the auditor if necessary information about the auditors and fees has not been appropriately disclosed.

REMOVE/ACCEPT RESIGNATION OF AUDITORS: CASE-BY-CASE

SBA seeks to ensure auditors have not been pressured to resign in retaliation for their opinions or for providing full disclosure.

AUDITOR INDEMNIFICATION AND LIMITATION OF LIABILITY: CASE-BY-CASE

Auditor indemnification and limitation of liability are evaluated on an individual basis. Factors to be assessed by the SBA include:

- the terms of the auditor agreement and degree to which it impacts shareowners' rights;
- motivation and rationale for establishing the agreements;
- quality of disclosure; and
- historical practices in the audit area.

[36] Under Rule 10A-3(b)(2) of the Securities Exchange Act of 1934, as amended, the audit committee, "must be directly responsible for the appointment, compensation, retention and oversight," of the independent auditor. Section 303A.06 of the New York Stock Exchange Listed Company Manual requires that the audit committees of its listed companies satisfy the requirements of Rule 10A-3. As a result of these requirements, audit committee charters normally include the responsibility for and total discretion to select, evaluate, compensate and oversee the work of any registered public accounting firm engaged in preparing or issuing audit report(s).

SBA will consider voting against auditor ratification if the auditor engagement contract includes provisions for alternative dispute resolution, liability caps, and caps on punitive damages (or the exclusion of punitive damages). Such limitations on liability and indemnification shift the risk from the auditor to the company, and therefore, the shareowners. The staff of the Securities and Exchange Commission (SEC) has stated that it believes caps on punitive damages in audit contracts are not in the public interest and compromises auditor independence.[37] SBA will also consider voting against audit committee members if they have diminished the value or independence of the audit, such as when a company has entered into an agreement with its auditor requiring alternative dispute resolution or punitive liability caps.

APPROVE ACCOUNTING TRANSACTIONS (OTHER THAN DIVIDEND): CASE-BY-CASE

In many international markets, proposals to approve accounting transfers are common and are often required to maintain specified balances in accounts as required by relevant market law. Companies are required to keep specific amounts in each of their reserves. Additionally companies may, in some instances, be required by law to present shareowners with a special auditors' report confirming the presence or absence of any non-tax-deductible expenses, as well as the transfer of these to the company's taxable income if applicable. In the absence of any contentious matters, the SBA is generally in favor.

AUDIT FIRM ROTATION, TERM RESTRICTIONS, AND SCOPE OF ENGAGEMENT PROPOSALS: CASE-BY-CASE

These shareowner proposals typically ask companies to adopt practices that are thought to help preserve auditor independence, such as prohibiting the auditor from providing non-audit services or capping the level of non-audit services and/or requiring periodic rotation of the audit firm. These practices are expected to help maintain a neutral and independent auditor by making the auditor's relationship with the company less lucrative.[38]

While term limits may actually result in higher audit fees, the positive impact would be that a new auditor would periodically provide a fresh look at the company's accounting practices. A practice of term limits also ensures that the audit won't see the company as a never-ending client, and perhaps will be more inclined to flag questionable practices. Despite attracting a lot of attention, mandatory audit rotation has not been required by regulators or by exchange listing standards. [39] SBA weighs the aspects of the individual situation and proposal terms when making voting decisions concerning audit rotation, considering the length of tenure for the auditor, the level of audit and non-audit fees, and the history of audit quality. A history of restatements or atypical fees increases the likelihood of SBA supporting these proposals. Most companies seek shareowner ratification of the auditor, and the lack of this provision would also increase the likelihood of SBA supporting a reasonable proposal.

Disclosures

COMPANY REPORTS OR DISCLOSURES: CASE-BY-CASE

Often, shareowner proposals do not request that companies take a specific action, but instead simply request information in the form of reports or disclosures on their policies or actions. Disclosure requests cover a variety of topics. SBA considers supporting disclosure requests when there is a reasonable expectation that the information would help investors make better risk assessments and for topics that cover issues that could have a substantial impact on shareowner value. We evaluate the company's existing disclosures on the topic and weigh the benefit from additional disclosures against the

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[37] U.S. Securities and Exchange Commission, Office of the Chief Accountant: Application of the Commission's Rules on Auditor Independence – Frequently Asked Questions, December 13, 2004.

[38] Max H. Bazerman, George Loewenstein, and Don A. Moore, "Why Good Accountants Do Bad Audits." Harvard Business Review, Vol. 80, Issue 11, Nov. 1, 2002.

[39] The Conference Board Commission on Public Trust and Private Enterprise, "Corporate Governance: Principles, Recommendations and Specific Best Practice Suggestions." Parts 2 and 3, Jan. 9, 2003. PCAOB Concept Release No. 2011-006. August 16, 2011. http://pcaobus.org/Rules/Rulesmaking/Docket037/Release_2011-006.pdf. Jackson, Modrich, and Roebuck, "Mandatory Audit Firm Rotation and Audit Quality," 2007; Chung, H., "Selective Mandatory Rotation and Audit Quality: An Empirical Investigation of Auditor Designation Policy in Korea," 2004. Also see, Martinez and Reis, "Audit Firm Rotation and Earnings Management in Brazil," 2010.

cost to the company, which includes not just the direct cost of compiling information but potential of disclosing sensitive or competitively-damaging information. For each proposal, the SBA considers whether such information is already publicly provided by the company, and we do not support redundant proposal requests.

Common disclosure requests and SBA's evaluation process:

- Environmental and sustainability—SBA generally supports proposals seeking greater disclosure of a company's environmental practices and contingency plans. We also tend to support greater disclosure of a company's environmental risks and liabilities, as well as company opportunities and strengths in this area.
- Greenhouse gas emissions—Companies are already required by the Securities and Exchange Commission (SEC) to disclose material expected capital expenditures when operating in locales with greenhouse gas emission standards. Companies may also be required to disclose risk factors regarding existing or pending legislation that relates to climate change and assess whether such regulation will likely have any material effect on the company's financial condition or results, the impact of which is not limited to negative consequences but should include new opportunities as well.
- Energy efficiency—SBA considers the current level of disclosure related to energy efficiency policies, initiatives, and performance measures; the company's level of participation in voluntary energy efficiency programs and initiatives; the company's compliance with applicable legislation and/or regulations regarding energy efficiency; and the company's energy efficiency policies and initiatives relative to industry peers.
- Water supply and conservation—Companies should disclose crucial water supply issues, as well as contingency planning to ensure adequate supply for anticipated company demand levels. SBA often supports proposals seeking disclosure of water supply dependency or preparation of a report pertaining to sustainable water supply for company operations.
- Political contributions and expenditure—Companies should disclose the amount and rationales for making donations to political campaigns, political action committees (PACs), and other trade groups or special interest organizations. SBA typically considers the following factors:
  - Recent significant controversy or litigation related to the company's political contributions or governmental affairs;
  - The public availability of a company policy on political contributions and trade association spending, including the types of organizations supported;
  - The business rationale for supporting political organizations; and
  - The board oversight and compliance procedures related to such expenditures of corporate assets.
- Operations in protected or sensitive areas—such operations may expose companies to increased oversight and the potential for associated risk and controversy. The SBA generally supports requests for reports outlining potential environmental damage from operations in protected regions unless operations in the specified regions are not permitted by current laws or regulations, the company does not currently have operations or plans to develop operations in protected regions, or the company provides disclosure on its operations and environmental policies in these regions comparable to industry peers.
- Community impact assessments—Controversies, fines, and litigation can have a significant negative impact on a company's financials, public reputation, and even ability to operate. Companies operating in areas where potential impact is a concern often develop internal controls aimed at mitigating exposure to these risks by enforcing, and in many cases, exceeding local regulations and laws. SBA considers proposals to report on company policies in this area by evaluating the company's current disclosures, industry norms, and the potential impact and severity of risks associated with the company's operations.
- Supply chain risks—Often these proposals seek information for better understanding risks to the company through their materials purchasing and labor practices. For example, allegations of sweatshop labor or child labor can harm sales and reputation, so knowledge of the company's policies for preventing these practices are highly relevant to shareowners. SBA considers the terms of the proposal against the current company disclosures and industry standards, as well as the potential severity of risks.

- Corporate diversity—SBA will generally support requests for additional information and disclosures at companies where diversity across members of the board, management and employees lags those of peers or the population. Board members, management and employees with differing backgrounds, experiences and knowledge will enhance corporate performance.[40]

Anti-takeover Defenses

ADVANCE NOTICE REQUIREMENTS FOR SHAREOWNER PROPOSALS/NOMINATIONS: CASE-BY-CASE

SBA generally supports proposals that allow shareowners to submit proposals as close to the meeting date as reasonably possible and within the broadest window possible. Requests to shrink the window and/or move advance notice deadlines to as early as 150 days or 180 days prior to meetings have been presented by a number of company boards in recent years. Such early deadlines hinder shareowners' ability to make proposals and go beyond what is reasonably required for sufficient board notice. In addition, many companies now request shareowner approval of "second generation advance notice bylaws", which require shareowner nominees to submit company-prepared director questionnaires.[41] While the SBA appreciates increased disclosure of the qualifications of nominees (and incumbents), we disapprove of such requirements if they serve to frustrate shareowner-proposed nominees.

AMEND BYLAWS WITHOUT SHAREOWNER CONSENT: AGAINST

The SBA does not support proposals giving the board exclusive authority to amend the bylaws. We also discourage board members from taking such unilateral actions and may withhold votes from board members that do so. Shareowners should be party to any such decisions, a view supported by Delaware courts where a majority of U.S. firms are domiciled.[42] If unusual circumstances necessitate such action, at a minimum, unilateral adoption should incorporate a sunset provision or a near-term window for eventual shareowner approval.

RESTRICT LEGAL RECOURSE METHODS: AGAINST

The SBA generally opposes restrictions on shareowner ability to pursue options of legal recourse. This includes binding or forced arbitration, fee-shifting, and exclusive forum bylaws.[43] Standard access to the court system is considered to be a fundamental shareowner right. SBA generally votes against proposals to establish exclusive forum and supports proposals requesting that exclusive forum provisions be ratified by shareowners. SBA will critically examine the company's rationale for limiting shareowners' rights to legal remedy, including choice of venue and any material harm that may have been caused by related litigation outside its jurisdiction of incorporation in making a voting decision.

POISON PILLS: AGAINST

Poison pills used to be the most prevalent takeover defense among S&P 500 companies, but their utilization has steadily declined since 2002. The vast majority of pills were instituted after November 1985, when the Delaware Supreme Court upheld a company's right to adopt a poison pill without shareowner approval in Moran v. Household International, Inc. Poison pills are financial devices that, when triggered by potential acquirers, do one or more of the following: (1) dilute the acquirer's equity holdings in the target company; (2) dilute the acquirer's voting interests in the target company; or

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[40] Carter, David A., D'Souza, Frank, Simkins, Betty J., and Simpson, W. Gary, "The Diversity of Corporate Board Committees and Financial Performance," Oklahoma State University, 2007. Also see, Mijntje Lückerath-Rovers, "Women on Board and Firm Performance," April 2010.

[41] Weingarten, Marc and Erin Magnor, "Second Generation Advance Notification Bylaws" Harvard Law School Corporate Governance Forum, March 17, 2009.

[42] Claudia H. Allen, "Delaware Corporations – Can Delaware Forum Selection Clauses in Charters or Bylaws Keep Litigation in the Court of Chancery?," April 18. 2011. Early adopters of the exclusive forum provision chose to enact bylaw provisions without seeking shareowner approval. However, the Galaviz v. Berg decision by the U.S. District Court for Northern California provided that Oracle's exclusive forum provision was unenforceable, in part due to Oracle's failure to bring the provision before shareowners.

[43] In a March 2010 opinion, the Delaware Court of Chancery provided an opportunity for any Delaware corporation to establish the Court as the exclusive forum for "intra-entity" corporate disputes, such as claims of breach of fiduciary duty. Such claims have been used to overturn directors' business judgments on mergers, and other matters. Subsequently, a number of U.S. companies have decided to bring the exclusive forum provision to a shareowner vote, and others have amended their charter or by-law provisions.

(3) dilute the acquirer's equity holdings in a post-merger company. Generally, poison pills accomplish these tasks by issuing rights or warrants to shareowners that are essentially worthless unless triggered by a hostile acquisition attempt. They are often referred to by the innocuous but misleading name "shareowner rights plans".

The SBA supports proposals asking a company to submit its poison pill for shareowner ratification and generally votes against proposals approving or creating a poison pill. The best defense against hostile takeovers is not necessarily a poison pill, but an effective board making prudent financial and strategic decisions for the company.[44] SBA will consider voting against board members that adopt or renew a poison pill unless the pill is subject to shareowner ratification within a year of adoption or renewal.

LIMIT WRITTEN CONSENT: CASE-BY-CASE

The SBA votes against proposals to unduly restrict or prohibit shareowners' ability to take action by written consent and supports proposals to allow or make easier shareowner action by written consent. Most states allow shareowners to take direct action such as adopting a shareowner resolution or electing directors through a consent solicitation, which does not involve a physical meeting. Alternatively, consent solicitations can be used to call special meetings and vote on substantive items taking place at the meeting itself.

LIMIT SPECIAL MEETINGS: CASE-BY-CASE

The SBA votes against proposals that unduly restrict or prohibit a shareowner's ability to call special meetings. We generally support proposals that make it easier for shareowners to call special meetings. Most states' corporate statutes allow shareowners to call a special meeting when they want to present certain matters before the next annual meeting. The percentage of shareowner votes required to force the corporation to call the meeting often depends on the particular state's statutes, as does the corporation's ability to limit or deny altogether a shareowner's right to call a special meeting.

SUPERMAJORITY VOTE REQUIREMENTS: AGAINST

The SBA does not support shareowner proposals that require supermajority voting thresholds. Supermajority requirements can be particularly burdensome if combined with a requirement for the vote result to be calculated using the number of shares outstanding (rather than the votes cast). There have been many instances when a company's requirements called for a proposal to be supported by eighty percent of shares outstanding but failed because just under eighty percent of shares outstanding were voted. This can be particularly problematic for resolutions to approve mergers and other significant business combinations. Voting results should simply be determined by a majority vote of the disinterested shares.[45] SBA supports simple majority voting requirements based on shares voted for the passage of any resolution, ordinary or extraordinary, and regardless of whether proposed by management or shareowners.

ADOPT SUPERVOTING RIGHTS ("TIME-PHASED VOTING"): AGAINST

Time-phased voting involves the granting of super-voting rights to shareowners who have held their stock for some specified period of time, commonly for a period of 3-5 years.[46] The practice is intended to be a reward for long-term shareowners and to make the votes of entities with a short-term focus relatively less effective. However, differential voting rights distort the commensurate relationship between ownership and voting power, and however well-intentioned, the practice ultimately risks harm to companies and their shareowners. By undermining the fundamental connection between voting

[44] Srinidhi, Bin and Sen, Kaustav, "Effect of Poison Pills on Value Relevance of Earnings."
[45] Ravid, S. Abraham and Matthew I. Spiegel, "Toehold Strategies, Takeover Laws and Rival Bidders." Journal of Banking and Finance, Vol. 23, No. 8, 1999, pp. 1219-1242.
[46] Under SEC Rule 19c-4, firms are generally prohibited from utilizing several forms of stock that deviate from a one-share, one-vote standard. Such instances include tracking stocks, different stock classes with asymmetric voting rights (e.g. dual class shares), shares with time-phased voting rights as well as shares of stock with capped voting or even no rights whatsoever. However, under an amendment to the Rule made in 1994, most U.S. companies are exempted from such restrictions under particular circumstances.

power and economic interest, it increases risk to investors rather than reducing it. Further, it creates murkiness in the voting process where transparency is already lacking. While we value our right to vote and at times would even have increased rights under such a policy as a long-term owner, we do not wish to subvert the economic process for our own benefit, and we are concerned the practice has potential for significant harm and abuse. We do not endorse any practice that undermines the fundamental link between ownership and determination: one share, one vote.

LIMIT VOTING RIGHTS: AGAINST

The SBA supports maximization of shareowners' voting rights at corporations. Any attempts to restrict or impair shareowner-voting rights, such as caps on voting rights, holding period requirements, and restrictions to call special meetings, will be opposed.

ABSTENTION VOTING TABULATION: CASE-BY-CASE

Abstentions should count for quorum purposes but should be excluded from voting statistics reporting percentages for and against. Some companies request to count abstentions in with against votes when reporting tabulations. This practice makes for inaccurate voting statistics and defies the intentions of the shareowners casting their votes. We strongly support abstention tabulation for matters of quorum satisfaction only.

TABULATING VOTES: CASE-BY-CASE

The SBA supports proposals that allow for independent third parties to examine and tabulate ballots. We support practices of end-to-end vote confirmation for accuracy and security in casting votes.

ESTABLISH A DISTINCTION FAVORING REGISTERED HOLDERS/BENEFICIAL HOLDERS: AGAINST

An extremely small and shrinking percentage of shareowners hold shares in registered form, nearing only one percent of shares outstanding. SBA does not believe any preference or distinction in ownership holding mechanism is necessary or useful. We oppose the adoption of any policy using distinctions among shareowners based on how shares are held.

CORPORATE STRUCTURE

These proposals seek to make some change in the corporate structure and are often operational in nature. In every case, SBA makes a decision by considering the impact of the change on the financial value and health of the company, as well as its impact on shareowner rights.

These proposals include corporate restructurings, capital structure changes, changes to the articles of incorporation and other various operational items. While many of these proposals are considered to be routine, they are not inconsequential. Some have profound impact on shareowner value and rights. Shareowners should have the opportunity to approve any issuance of shares or securities that carry equity-like claims or rights. Furthermore, companies may bundle non-routine items with routine items in an attempt to obtain a more favorable outcome, so the SBA must examine these proposals on a case-by-case basis. SBA may vote against bundled items in any case if the bundle includes highly negative components.

MERGERS/ACQUISITIONS/SPINOFFS: CASE-BY-CASE

SBA evaluates these proposals based on the economic merits of the proposal and anticipated synergies or advantages. We also consider opinions of financial advisors. Support for the proposal may be mitigated by potential conflicts between management's interests and those of shareowners and negative impacts on corporate governance and shareowner rights. The SBA may oppose the proposal if there is a significant lack of information in order to make an informed voting decision.

For any proposal, the following items are evaluated:

- Economic merits and anticipated synergies;
- Independence of board, or special committee, recommending the transaction;
- Process for identifying, selecting, and negotiating with partners;
- Independence of financial advisor and financial opinion for the transaction;
- Tax and regulatory impacts;
- Corporate governance changes; and
- Aggregate valuation of the proposal.

APPRAISAL RIGHTS: FOR

SBA generally supports proposals to restore or provide shareowners with rights of appraisal. In many states, mergers and other corporate restructuring transactions are subject to appraisal rights. Rights of appraisal provide shareowners who are not satisfied with the terms of certain corporate transactions the right to demand a judicial review to determine a fair value for their shares. If a majority of shareowners approve a given transaction, the exercise of appraisal rights by a minority of shareowners will not necessarily prevent the transaction from taking place. Therefore, assuming that a small minority of shareowners succeed in obtaining what they believe is a fair value, appraisal rights may benefit all shareowners. If enough shareowners dissented and if the courts found a transaction's terms were unfair, such rights could prevent a transaction that other shareowners had already approved.

ASSET PURCHASES/SALES: CASE-BY-CASE

Boards may propose a shareowner vote on the sale or purchase of significant assets; sometimes these proposals are part of a strategy shift driven by changes in the marketplace, problematic corporate performance, or activist-investor campaigns. The SBA evaluates asset purchase proposals on a case-by-case basis, considering the following factors:

- Transaction price;
- Fairness opinion;
- Financial and strategic benefits;

- Impact on the balance sheet and working capital;
- The negotiation history and process;
- Conflicts of interest;
- Other alternatives for the business; and
- Non-completion risk.

APPROVE REORGANIZATION OF DIVISION OR DEPARTMENT/ARRANGEMENT SCHEME, LIQUIDATION: CASE-BY-CASE

Resolutions approving corporate reorganizations or restructurings range from the routine shuffling of subsidiaries within a group to major rescue programs for ailing companies. Such resolutions are usually supported unless there are clear conflicts of interest among the various parties or negative impact on shareowners' rights. In the case of routine reorganizations of assets or subsidiaries within a group, the primary focus with the proposed changes is to ensure that shareowner value is being preserved, including the impact of the reorganization on the control of group assets, final ownership structure, relative voting power of existing shareowners if the share capital is being adjusted, and the expected benefits arising from the changes.

Options are far more limited in the case of a distress restructuring of a company or group as shareowners often have few choices and little time. In most of these instances, the company has a negative asset value, and shareowners would have no value remaining after liquidation. SBA seeks to ensure that the degree of dilution proposed is consistent with the claims of outside parties and is commensurate with the relative commitments of other company shareowners.

APPROVE SPECIAL PURPOSE ACQUISITION COMPANY (SPAC) TRANSACTION: CASE-BY-CASE

A SPAC is a pooled investment vehicle designed to invest in private-equity type transactions, particularly leveraged buyouts. SPACs are shell companies that have no operations at the time of their initial public offering, but are intended to merge with or acquire other companies. Most SPACs grant shareowners voting rights to approve proposed business combinations. SBA evaluates these proposals based on their financial impact as well as their impact on shareowners' ability to maintain and exercise their rights.

FORMATION OF HOLDING COMPANY: CASE-BY-CASE

The SBA evaluates proposals to create a parent holding company on a case-by-case basis, considering the rationale for the change, any financial, regulatory or tax benefits, and impact on capital and ownership structure. SBA may vote against proposals that result in increases in common or preferred stock in excess of the allowable maximum or adverse changes in shareowner rights.

APPROVE A "GOING DARK" TRANSACTION: CASE-BY-CASE

Deregistrations, or "going-dark" transactions, occur rarely, whereby companies cease SEC reporting but continue to trade publicly. Such transactions are intended to reduce the number of shareowners below three hundred and are typically achieved either by a reverse stock split (at a very high ratio with fractional shares resulting from the reverse split being cashed out), by a reverse/forward stock split (with fractional shares resulting from the reverse split being cashed out), or through a cash buyout of shares from shareowners owning less than a designated number of shares (tender offer or odd-lot stock repurchase). Such transactions allow listed companies to de-list from their particular stock exchange and to terminate the registration of their common stock under the Securities & Exchange Act of 1934, so that, among other things, they do not have to comply with the requirements of the Sarbanes-Oxley Act of 2002. [47] Companies seeking this approval

[47] "Why Do Firms Go Dark? Causes and Economic Consequences of Voluntary SEC Deregistrations," Christian Leuz, Alexander Triantis and Tracy Wang, Finance Working Paper Number 155/2007, European Corporate Governance Institute, March 2008.

tend to be smaller capitalization firms and those with lower quality financial accounting. SBA would consider the impact of the lack of disclosure and oversight and loss of liquidity and shareowner rights in making a decision.

LEVERAGED BUYOUT (LBO): CASE-BY-CASE

A leveraged buyout is a takeover of a company using borrowed funds, normally by management or a group of investors. Most often, the target company's assets serve as security for the loan taken out by the acquiring firm, which repays the loan out of cash flow of the acquired company. SBA may support LBOs when shareowners receive a fair value including an appropriate premium over the current market value of their shares.

When the acquirer is a controlling shareowner, legal rulings have imposed a higher standard of review to ensure that this type of transaction, referred to as an entire fairness review, is fair to existing shareowners. Typically, investor protections include review by an independent committee of the board and/or approval by a majority of the remaining shareowners. Whether a buyout is pursued by a controlling shareowner can impact the valuation and premiums, with one study finding that buyouts in which an independent committee reviewed the deal terms produced 14 percent higher average premiums for investors.[48] However, deals requiring majority-of-the-minority ratification did not significantly impact the level of premium paid to investors. Researchers found that the size of the premium paid changed depending on who initiated the transaction, with significantly lower premiums associated with deals initiated by management. As well, the study's findings mimic other empirical evidence demonstrating that 'go-shop' provisions, whereby additional bidders are solicited, were ineffective and may be used to camouflage under-valued management buyouts.[49]

NET OPERATING LOSS CARRY-FORWARD (NOL) & ACQUISITION RESTRICTIONS: CASE-BY-CASE

Companies may seek approval of amendments to their certificate of incorporation intended to restrict certain acquisitions of its common stock in order to preserve net operating loss carry-forwards (or "NOLs"). NOLs can represent a significant asset for the company, one that can be effective at reducing future taxable income. Section 382 of the Internal Revenue Code of 1986 imposes limitations on the future use of the company's NOLs if the company undergoes an ownership change; therefore, some companies seek to limit certain transactions by adopting ownership limits. Firms often utilize a shareowner rights plan (poison pill) in conjunction with NOL-oriented acquisition restrictions.

While stock ownership limitations may allow the company to maximize use of its NOLs to offset future income, they may significantly restrict certain shareowners from increasing their ownership stake in the company. Such ownership limitations can be viewed as an anti-takeover device. Though these restrictions on shareowners are undesirable, SBA often supports proposals when firms seek restrictions solely in order to protect NOLs. We review the company's corporate governance structure and other control protections in conjunction with the proposal and weigh the negative impact of the restrictions against the financial value of the NOLs (relative to the firm's market capitalization) in making a decision.

CHANGE OF CORPORATE FORM (GERMANY, AUSTRALIA, NEW ZEALAND): CASE-BY-CASE

This proposal seeks shareowner approval to convert the company from one corporate form to another. Examples of different corporate forms include: Inc., LLP, PLP, LLC, AG, SE. The SBA generally votes FOR such proposals, unless there are concerns with the motivation or financial impact of a change to firm's corporate structure.

Capital Structure

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[48] Matthew Cain, and Steven Davidoff, "Form Over Substance? The Value of Corporate Process and Management Buyouts," August 2010.

[49] Adonis Antoniades, Charles Calomiris, and Donna M Hitscherich, "No Free Shop: Why Target Companies in MBOs and Private Equity Transactions Sometimes Choose Not to Buy 'Go-Shop' Options," November 2013; Guhan Subramanian, "Go-Shops vs. No-Shops in Private Equity Deals: Evidence and Implications," The Business Lawyer, Volume 63, May 2008.

CHANGE AUTHORIZED SHARE CAPITAL: CASE-BY-CASE

The SBA generally supports authorized share capital increases up to 100 percent of the current number of outstanding shares. We will consider additional increases if management demonstrates a reasonable use. It is important that publicly-held corporations have authorization for shares needed for ordinary business purposes, including raising new capital, funding reasonable executive compensation programs, business acquisitions, and facilitating stock splits and stock dividends. Increases beyond 100 percent of the current number of outstanding shares will be carefully scrutinized to ensure its use will benefit shareowners. We apply a stricter standard if the company has not stated a use for the additional shares or has significant levels of previously authorized shares still available for issue. Proposals that include shares with unequal voting rights will likely be opposed.

In the case of rights offerings, SBA considers the dilution and extent to which issued rights may be subscribed, both by SBA individually and other shareowners collectively, and how that may affect or adversely concentrate the level of control if a large single shareowner exists.

Proposals to reduce authorized share capital can result from a variety of corporate actions, ranging from routine accounting measures to reductions pertaining to a significant corporate restructuring in the face of bankruptcy. These proposals can vary significantly from market to market as a result of local laws and accounting standards. In all instances, the SBA considers whether the reduction in authorized share capital is for legitimate corporate purposes and not to be used as an anti-takeover tactic.

STOCK SPLIT OR REVERSE STOCK SPLIT: FOR

Typically SBA supports reasonable proposals for stock splits or reverse stock splits. These proposals often seek to scale back the cost of each share into what is traditionally thought of as a comfortable price and trading zone, which seeks to influence the psychology of the market's perception of price more than anything else. Reverse stock splits may be requested to ensure a company's shares will not be subject to delisting by their exchange's standards, often following a significant negative shock to the share price.

DUAL CLASS STOCK ~~AUTHORIZATION~~: AGAINST

SBA opposes dual-class share structures. The one share, one vote principle is essential to proper functioning of capitalism; dual class shares distort the commensurate relationship between economic interest and voting power and ultimately risk harm to companies and their shareowners.[50] A number of academic studies have documented an array of value-destroying effects stemming directly from dual class share structures.[51] SBA will support proposals asking companies to move away from dual class structures. SBA may withhold votes or cast votes against the election of directors in cases where a company completes an IPO with a dual or multi-class share structure without a reasonable sunset provision on the unequal voting rights. We will generally support proposals that provide for the disclosure of voting results broken down by share class when dual class structures exist.

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[50] Bebchuk, Lucian Arye, Kraakman, Reinier H. and Triantis, George G., "Stock Pyramids, Cross-Ownership, and Dual Class Equity: The Creation and Agency Costs of Separating Control from Cash Flow Rights". As published in CONCENTRATED CORPORATE OWNERSHIP, R. Morck, Ed., pp. 445-460, 2000 Available at SSRN: http://ssrn.com/abstract=147590. Masulis, Ronald W., Wang, Cong and Xie, Fei, "Agency Problems at Dual-Class Companies" (November 12, 2006). Available at SSRN: http://ssrn.com/abstract=961158. Tinaikar, Surjit, "The Voluntary Disclosure Effects of Separating Control Rights from Cash Flow Rights" (November 2006). Available at SSRN: http://ssrn.com/abstract=951547.

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APPROVE GENERAL SHARE ISSUANCE WITH PRE-EMPTIVE RIGHTS: CASE-BY-CASE

General issuance requests under both authorized and conditional capital systems allow companies to issue shares to raise funds for general financing purposes. Approval of such requests gives companies sufficient flexibility to carry out ordinary business activities without having to bear the expense of calling shareowner meetings for every issuance. Pre-emptive rights guarantee current shareowners the first opportunity to purchase shares of new issuances of stock in the class they own in an amount proportional to the percentage of the class they already own. SBA generally supports issuance requests with pre-emptive rights when the amount of shares requested is less than the unissued ordinary share capital or one-third of the issued ordinary share capital. Issuance authority should be limited to a ~~five year~~five-year timeframe. SBA also considers the issue price and any potential pricing discounts, as well as past issuance practices at the company, in judging the appropriateness of the terms and potential for misuse (such as granting large blocks at a discount to a third party). If insufficient information is disclosed about the issuance and conditions of its implementation, SBA may vote against authorization. Proposals that include shares with unequal voting rights will likely be opposed.

APPROVE GENERAL SHARE ISSUANCE WITHOUT PREEMPTIVE RIGHTS: CASE-BY-CASE

Companies may need the ability to raise funds for routine business contingencies without the expense of carrying out a rights issue. Such contingencies include, but are not limited to, facilitating stock compensation plans, small acquisitions, or payment for services. Recognizing that shareowners suffer dilution as a result of issuances, authorizations should be limited to a fixed number of shares or a percentage of capital at the time of issuance. The SBA generally supports issuance requests without pre-emptive rights up to a maximum of 20 percent above current levels of issued capital. Proposals that include shares with unequal voting rights will likely be opposed.

APPROVE ISSUE OF PREFERRED SHARES: CASE-BY-CASE

"Preferred share" typically refers to a class of stock that provides preferred dividend distributions and preferred liquidation rights as compared to common stock; however, preferred shares typically do not carry voting rights. SBA typically votes against preferred share issues that carry voting rights, include conversion rights, or have "blank check" ability. We typically support issuances without conversion or voting rights when the company demonstrates legitimate financial needs.

Blank check preferred stock gives the board of directors the power to issue shares of preferred stock at their discretion, with voting, conversion, distribution, and other rights set by the board at the time of issuance. Blank check preferred stock can be used for sound corporate purposes like raising capital, stock acquisition, employee compensation, or stock splits or dividends. However, blank check preferred stock is also suited for use as an entrenchment device. The company could find a "white knight," sell the knight a large block of shares, and defeat any possible takeover attempt. With such discretion outside the control of common stock shareowners, the SBA typically opposes any proposals to issue blank check preferred stock.

RESTRUCTURE/RECAPITALIZE: CASE-BY-CASE

These proposals deal with the alteration of a corporation's capital structure, such as an exchange of bonds for stock. The SBA is in favor of recapitalizations when our overall investment position is protected during the restructuring process.

TARGETED SHARE PLACEMENT: CASE-BY-CASE

SBA typically supports shareowner proposals requesting that companies first obtain shareowner authorization before issuing voting stock, warrants, rights or other securities convertible into voting stock, to any person or group, unless the voting rights at stake in the placement represent less than 5 percent of existing voting rights.

SHARE REPURCHASE: CASE-BY-CASE

When a company has excess cash, SBA's preferred method for distributing it to shareowners is through adopting a quarterly dividend. Dividends are an effective means for returning cash and serve as an important signal to the market of earnings stability. Because dividend adoptions and subsequent changes are scrutinized carefully, they serve as an important marker of a company's commitment to return cash to shareowners. Repurchases on the other hand require no commitment to ongoing return of profits to shareowners. Repurchased shares often end up being granted to executives as part of stock compensation packages; this common use of cash is in actuality paying compensation and not a form of profit return to owners. Because of this, SBA strongly prefers dividend adoption over share repurchases. We support repurchases only in cases of unusual cash accumulation, such as from a divestiture of assets. Cash flows from operations that have an expected long-term generation pattern should be committed to owners through quarterly dividends. Repurchases are also supported if the rationale is that management believes the stock is undervalued. Companies should not commit to long term repurchases at any market price; evidence shows that many companies tend to repurchase shares at market-highs with these plans and generally buy at inopportune times. Compensation programs should not depend upon metrics that are impacted by repurchases, or metrics should at least be adjusted to account for the impact of repurchases so that compensation is not affected by these programs.

DECLARE DIVIDENDS: FOR

Declaring a dividend is a preferred use of cash and method of releasing profits to shareowners. SBA generally supports dividend declarations unless the ~~pay-out~~payout is unreasonably low or the dividends are not sustainable by reserves and cash flow. Pay-outs less than 30 percent of net income for most markets are considered low.

TRACKING STOCK: CASE-BY-CASE

The SBA closely examines the issuance of tracking stock shares, particularly corporate governance rights attached to those shares. Normally, tracking stock is a separate class of common stock that "tracks" the performance of an individual business of a company. Tracking stock represents an equity claim on the cash flows of the tracked business as opposed to legal ownership of the company's assets. Tracking stock is generally created through a charter amendment and provides for different classes of common stock, subject to shareowner approval. Due to their unique equity structure, we examine closely all of the following issues when determining our support for such proposals: corporate governance features of tracking stock (including voting rights, if any), distribution method (share dividend or initial public offering), conversion terms and structure of stock-option plans tied to tracking stock.

APPROVE ISSUE OF BONDS, DEBENTURES, AND OTHER DEBT INSTRUMENTS: FOR

Generally, SBA supports debt issuance of reasonable amounts for the purpose of financing future growth and corporate needs. Debt issues may also add a beneficial monitoring component, making managers more accountable for corporate performance because if the company does not perform well financially, the company may not be able to meet its financial obligations. Studies have also examined the relationship between firms' capital structure and the quality of their corporate governance mechanisms, confirming that corporations use debt in place of corporate governance tools.[52] While the SBA recognizes the need to employ various tools to minimize agency costs and align management interests with shareowner interests, corporations must not abdicate their corporate governance duties by expanding leverage.

When companies seek to issue convertible debt or debt with warrants, SBA considers the impact of the potential conversion on existing shareowners' rights when making a decision. We may also support limits on conversion rights to prevent significant dilution of SBA's ownership.

[52] Marquardt, Carol, "Managing EPS Through Accelerated Share Repurchases: Compensation Versus Capital Market Incentives." Baruch College-CUNY, September 2007.

PRIVATE PLACEMENTS: CASE-BY-CASE

Private placement is a method of raising capital through the sale of securities to a relatively small number of investors rather than a public offering. Investors involved in private placement offerings typically include large banks, mutual funds, insurance companies and pension funds. Because the private placement is offered to a limited number of investors, detailed financial information is not always disclosed and the need for a prospectus is waived. Moreover, in the United States, the authority does not have to be registered with the Securities and Exchange Commission. The SBA evaluates private placements on a case-by-case basis, voting against if the private placement contains extraordinary voting rights or if it may be used in some other way as an anti-takeover defense.

Operational Items

ADJOURN MEETING: CASE-BY-CASE

SBA generally votes against proposals to provide management with the authority to adjourn an annual or special meeting absent compelling reasons to support the proposal. The SBA may support proposals that relate specifically to soliciting votes for a merger or transaction if we support that merger or transaction.

TRANSACT OTHER BUSINESS: AGAINST

This proposal provides a forum for addressing resolutions that may be brought up at the annual shareowner meeting. In most countries, the item is a formality and does not require a shareowner vote, but companies in certain countries include permission to transact other business as a voting item. This discretion is overly broad, and it is against the best interest of shareowners to give directors unbound permission to make corporate decisions without broad shareowner approval. Because most shareowners vote by proxy and would not know what issues will be raised under this item, SBA does not support this proposal.

AMEND SHAREOWNERS' MEETING QUORUM REQUIREMENTS: CASE-BY-CASE

SBA supports quorums of a simple majority. We do not support super-majority quorum requirements.

AMEND BYLAWS OR ARTICLES OF ASSOCIATION: CASE-BY-CASE

The SBA considers the merits of the proposed amendment and its potential impact on shareowner rights and value. Different amendments should not be presented in a bundled format, which would prevent shareowners from making individual decisions on each provision. We may not support a bundled proposal that contains a mix of desirable and undesirable features.

NAME CHANGE: FOR

Changing a company's name is a major step that has likely gone through extensive management consideration and/or marketing research. SBA generally supports these proposals.

RECEIVE/APPROVE/AMEND REPORTS AND AUDITED ACCOUNTS FOR PREVIOUS FINANCIAL REPORTING PERIODS: CASE-BY-CASE

Generally, SBA supports these proposals unless we are aware of serious concerns about the accounting principles used or doubt the integrity of the company's auditor. Annual audits of a firm's financial statements should be mandatory and carried out by an independent auditor.

CHANGE METHOD OF PREPARING ACCOUNTS/DISTRIBUTING FINANCIAL STATEMENTS TO SHAREOWNERS: CASE-BY-CASE

If the changes have been instituted by a nationwide regulation, they will be approved. Otherwise, they will be carefully scrutinized to ensure they are not damaging to our interests. For instance, managers may seek to reclassify accounts to enhance their perceived performance. If this is the case, then managers may earn more in performance-based compensation without adding actual value to the firm.

ADOPT OR CHANGE STAKE DISCLOSURE REQUIREMENT(S): CASE-BY-CASE

Proposals may be submitted to conform to recent changes in home market disclosure laws or other regulations. However, proposed levels that are below typical market standards are often only a pretext for an anti-takeover defense. Low disclosure levels may require a greater number of shareowners to disclose their ownership, causing a greater burden to shareowners and to the company. Positions of more than five percent are significant, however, and would be supported by SBA.

ACCESS TO PRELIMINARY VOTING TABULATIONS CONCERNING SHAREOWNER PROPOSALS: CASE-BY-CASE

The SBA supports equal access by management and shareowner proponents to preliminary voting results of shareowner proposals. Some proponents are concerned that companies may receive preliminary voting results and use the information to target shareowner engagement at a disadvantage to the proponent. Generally, the SBA will not support restricting access to this voting data to either party. Some proposals seek to restrict access while others may seek to place conditions on using the information.

RESTRICT INTER-SHAREOWNER COMMUNICATIONS: AGAINST

The ability to dialogue assists shareowners in seeing each other's perspective and helps owners exercise their rights in a free, capitalist market. SBA would not typically support restrictions beyond those of market regulators. In U.S. markets, the SEC has established enforceable guidelines that govern communications from shareowners or other parties for the purposes of soliciting proxies or pursuing corporate takeover measures.

CHANGE DATE OF FISCAL YEAR-END: FOR

Companies may seek shareowner approval to change their fiscal year end. Most countries require companies to hold their annual shareowners meeting within a certain period of time after the close of the fiscal year. While the SBA typically supports this routine proposal, opposition may be considered in cases where the company is seeking the change solely to postpone its annual meeting.

AUTHORIZE DIRECTORS TO MAKE APPLICATION FOR ONE OR MORE EXCHANGE LISTINGS: FOR

SBA generally supports proposals to authorize secondary share listings, absent evidence that important shareowner rights will not be harmed or restricted to an unreasonable extent. Secondary listings may provide additional funding in other capital markets and/or increase share liquidity.

SET OR CHANGE DATE OR PLACE OF ANNUAL MEETING: FOR

Flexibility is necessary in time and location of board meetings. As such, the SBA typically supports proposals that provide reasonable discretion to the board for scheduling a shareowner meeting. SBA would not support changes if their impact is expected to inhibit participation by shareowners.

CHANGE/SET PROCEDURE FOR CALLING BOARD MEETINGS: CASE-BY-CASE

The SBA embraces full disclosure regarding the procedures for calling board meetings. Therefore, we typically vote FOR improvements in these procedures and the disclosure of these procedures.

ALLOW DIRECTORS TO VOTE ON MATTERS IN WHICH THEY ARE INTERESTED: CASE-BY-CASE

Generally, SBA does not support these proposals unless it is shown that the directors' interests are not material or the proposal conforms to federal regulations or stock exchange requirements.

CHANGE QUORUM REQUIREMENT FOR BOARD MEETINGS: CASE-BY-CASE

SBA may support reasonable changes in quorum requirements for board meetings. We would not support a quorum of less than fifty percent.

REINCORPORATION TO A DIFFERENT STATE: CASE-BY-CASE

Corporations may change the state in which they are incorporated as a way of changing minimum or mandatory governance provisions. A corporation having no business contacts or connections in a state may nonetheless choose that state as its place of incorporation and that state's laws will determine certain aspects of its internal governance structure. The ability of corporations to choose their legal domicile has led many states to compete for revenue from corporate fees and taxes by enacting management-friendly incorporation codes. This competition has encouraged states to support an array of anti-takeover devices and provide wide latitude in restricting the rights of shareowners.

Many companies changed their state of incorporation to Delaware since the 1980s because they viewed it as having a predictable and favorable legal climate for management. In 2007, North Dakota changed its laws of incorporation in an effort to create an environment of corporate governance best practices and strong shareowner rights. SBA will support proposals to shift the state of incorporation to states with net improvements in shareowner protections; however, the opportunity to increase shareowner rights will be weighed against the costs and potential disruption of changing the state of incorporation.[53]

OFFSHORE REINCORPORATION: CASE-BY-CASE

In some circumstances the costs of a corporation's reincorporation may outweigh the benefits, primarily tax and other financial advantages. Reincorporation can also result in the loss of shareowner rights, financial penalties, future detrimental tax treatment, litigation, or lost business. The SBA evaluates reincorporation proposals by examining the economic costs and benefits and comparing governance and regulatory provisions between the locations.

CONTROL SHARE ACQUISITION PROVISIONS: CASE-BY-CASE

[53] Subramanian, Guhan, "The Influence of Anti-takeover Statutes on Incorporation Choice: Evidence on the 'Race' Debate and Anti-takeover Overreaching." Harvard NOM Research Paper No. 01-10, December 2001.

Control share acquisition statutes function by denying shares their voting rights when they contribute to ownership in excess of certain thresholds. Voting rights for those shares exceeding set ownership limits may only be restored by approval of either a majority or supermajority of disinterested shares. Thus, control share acquisition statutes effectively require a hostile bidder to put its offer to a shareowner vote or risk voting disenfranchisement if the bidder continues buying up a large block of shares. SBA supports proposals to opt out of control share acquisition statutes unless doing so would enable the completion of a takeover that would be detrimental to shareowners. SBA opposes proposals to amend the charter to include control share acquisition provisions or limit voting rights.

CONTROL SHARE CASH-OUT PROVISIONS: FOR

Control share cash-out statutes give dissident shareowners the right to "cash-out" of their position in a company at the expense of the shareowner who has taken a control position. When an investor crosses a preset threshold level, the remaining shareowners are given the right to sell their shares to the acquirer, who must buy them at the highest acquiring price. SBA typically supports proposals to opt out of control share cash-out statutes.

OPT-OUT OF DISGORGEMENT PROVISIONS: FOR

Disgorgement provisions require an acquirer or potential acquirer of more than a certain percentage of a company's stock to disgorge (or pay back) to the company any profits realized from the sale of that company's stock purchased 24 months before achieving control status. All sales of company stock by the acquirer occurring within a certain period of time (between 18 months and 24 months) prior to the investor's gaining control status are subject to these recapture-of-profits provisions. SBA supports proposals to opt out of state disgorgement provisions.

ANTI-GREENMAIL: FOR

Greenmail payments are targeted share repurchases by management of company stock from individuals or groups seeking control of the company. They are one of the most wasteful entrenchment devices available to management. Since only the hostile party receives payment, usually at a substantial premium over the market value of his shares, the practice is discriminatory to all other shareowners of the company. With greenmail, management transfers significant sums of corporate cash to one entity for the purpose of fending off a hostile takeover. SBA supports proposals to adopt anti-greenmail charter or bylaw amendments or otherwise restrict a company's ability to make greenmail payments.

FAIR PRICE AND SIMILAR PROVISIONS IN TWO-TIERED TENDER OFFERS: CASE-BY-CASE

SBA supports proposals to adopt a fair price provision as long as the shareowners' vote requirement embedded in the provisions is no more than a majority of the disinterested shares. The SBA will vote against all other management fair price proposals. SBA also will typically support shareowner proposals to lower the shareowners' vote requirement embedded in existing fair price provisions.

FAIR PRICE PROVISION: CASE-BY-CASE

Fair price provisions are a variation on standard supermajority voting requirements for mergers, whereby shareowners vote before a significant business combination can be affected. Fair price provisions add a third option, allowing a bidder to consummate a merger without board approval or a shareowner vote as long as the offer satisfies the price requirements stipulated in the provision. Fair price provisions are normally adopted as amendments to a corporation's charter. The provisions normally include a super majority lock-in, a clause requiring a super majority shareowner vote to alter or repeal the provisions itself. We typically support management proposals to adopt a fair price provision, as long as the shareowner vote requirement imbedded in the provision is no more than a majority of the disinterested shares. We generally support shareowner proposals to lower the shareowner vote requirement imbedded in existing fair price provisions.

OPT OUT OF ANTI-TAKEOVER LAW: FOR

The SBA does not support corporations opting into state anti-takeover laws (e.g. Delaware). Such laws may prohibit an acquirer from making a well-financed bid for a target, which provides a premium to shareowners. We support proposals to opt-out of state anti-takeover laws.

APPROVE STAKEHOLDER PROVISIONS: AGAINST

Stakeholder provisions or laws permit directors to weigh the interests of constituencies other than shareowners, including bondholders, employees, creditors, customers, suppliers, the surrounding community, and even society as a whole, in the process of corporate decision making. The SBA does not support proposals for the board to consider non-shareowner constituencies or other nonfinancial effects when evaluating making important corporate decisions, such as a merger or business combination.

Evaluating the impact on non-shareowner constituencies provides a board with an explicit basis, approved by the shareowners, which it may invoke to reject a purchase offer that may be attractive in purely financial terms. Some state laws also allow corporate directors to consider non-financial effects, whether or not the companies have adopted such a charter or bylaw provision. SBA would support proposals to opt-out of such provisions.

COMPENSATION

Compensation is an area that merits particular oversight from investors, as it exemplifies the delicate principal-agent relationship between shareowners and directors. Directors create compensation plans, often with the assistance of compensation consultants, which aim to motivate performance and retain management. Ultimately, it is the shareowners that bear the cost of these plans, and as average compensation packages have climbed steadily in value in recent years, shareowners have concern over the level of pay, the lack of disclosure, the role of compensation advisers, and the loyalty of board members to shareowners' interests over management's. Voting against plans with exorbitant pay or poor design is an important shareowner duty, and engagement with companies on their plans and features is a meaningful way for shareowners to protect value and contribute to oversight of their agents.[54]

ADOPT OR AMEND STOCK AWARD OR OPTION PLAN: CASE-BY-CASE

The SBA supports compensation structures that provide incentives to directors, managers, and other employees by aligning their performance and economic interests with those of the shareowners. Therefore, we evaluate incentive-based compensation plans on reasonableness of the total cost to shareowners and the incentive aspects of the plan, as well as the overall design and transparency of the program.

Stock-based incentive plans should require some financial risk. Proper and full disclosure is essential for shareowners to assess the degree of pay-for-performance inherent in plans. Some companies disclose metrics and thresholds that are inappropriately low and easy to attain; other companies refrain from disclosing metrics and/or thresholds at all. When there is insufficient disclosure on plan metrics and compensation levels appear out of line with peers or problematic pay practices are used, SBA will not support the plan.

For plans to provide proper incentives, executive compensation should be linked directly with the performance of the business. Typically, companies use peer groups when developing compensation packages to make peer-relative assessments of performance. A company's choice of peers can have a significant impact on the ultimate scope and scale of executive compensation, and in many cases, companies set executive compensation at or above the fiftieth percentile of the peer group.[55] Problematic issuer-developed peer groups may exhibit the following red flags: 1) too many firms listed (more than 15); 2) bias toward "peers" that are substantially larger and/or more profitable;[56,57] 3) peer groups with unusually high CEO pay, particularly if not direct competitors; 4) groups with too many industries and geographic markets included; and 5) unexplained year-to-year peer group changes. When the basis of compensation uses benchmarks and relative comparisons to an inappropriate peer group selection, SBA is unlikely to support the compensation plan.

When making voting decisions, we look for reasonable compensation levels, both on an absolute basis and relative to peers, alignment between pay and performance, disclosure of performance metrics and thresholds, and fair plan administration practices. We may vote against compensation plans for the following reasons:

- High compensation levels on an absolute or peer-relative basis
- Disconnect between pay and performance
- Poor disclosure of performance metrics, thresholds, and targets
- Heavy reliance on time-based instead of performance-based vesting
- Imbalance between long-term and short-term incentive program payments
- Large guaranteed payments
- Failure to modify compensation award metrics for accounting adjustments or the impact of stock repurchases (buybacks)
- "Long-term" plans with overly short performance measurement and payout periods

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[54] CFA Centre for Financial Market Integrity, "The Compensation of Senior Executives at Listed Companies: A Manual for Investors," 2007.
[55] Bizjak, M. John, Lemmon, L. Michael, and Naveen, Lalitha. 2000 "Has the Use of Peer Groups Contributed to Higher Pay and Less Efficient Compensation?"
[56] Faulkender, Michael W. and Yang, Jun, "Inside the Black Box: The Role and Composition of Compensation Peer Groups," (March 15, 2007). AFA 2008 New Orleans Meetings Paper.
[57] Albuquerque, Ana M., De Franco, Gus and Verdi, Rodrigo S., "Peer Choice in CEO Compensation," (July 21, 2009). Available at SSRN: http://ssrn.com/abstract=1362047.

- Excessive severance or single-trigger change-in-control packages
- Plans that cover non-employee consultants or advisors
- Inappropriate peer group selections resulting in out-sized or misaligned pay
- Excessive perquisites
- Lack of stock ownership guidelines for executives
- Tax gross-ups, evergreen issues, or option repricing practices are permitted
- Accelerated or unreasonable vesting provisions
- Dividend payments are made or allowed to accrue on unvested or unearned awards
- Lack of an independent compensation committee or egregious consultant practices
- Poor committee response to investor concerns, proposals or engagements, especially insufficient response to recent low vote outcomes on compensation plan items including say-on-pay votes.

ADVISORY VOTE ON EXECUTIVE COMPENSATION: CASE-BY-CASE

Say-on-pay votes are required in several markets, including the U.S., U.K., Australia, the Netherlands, Sweden, Norway, and Spain. These advisory votes allow investors to provide feedback on the administration of a company's pay program, typically on an annual basis (though in some markets, investors of some companies have voted for lesser frequencies of two or three years). Say-on-pay advisory votes add value because investors can seek accountability if the administration of an approved plan proves to be poor. The combination of compensation plan votes and annual say-on-pay advisory votes allow investors to approve the plans and still weigh in on the actual administration of those plans on a regular basis. SBA uses similar criteria for evaluating say-on-pay proposals as detailed in the "Adopt or amend stock incentive plan" guideline.

ADOPT BONUS 162(M) PLAN (U.S.): CASE-BY-CASE

SBA reviews proposals to adopt performance-based cash bonus plans for executives on a case-by-case basis. These plans are put to a shareowner vote to preserve the tax deductibility of compensation in excess of $1 million for the five most highly compensated executives, pursuant to section 162(m) of the Internal Revenue Code. A vote against these plans does not necessarily prevent the bonus from being paid, but only precludes the ability to take a tax deduction.[58] SBA will vote against these proposals under any of these conditions: misalignment of pay and performance, lack of defined or acceptable performance criteria, or unlimited or excessively high maximum pay-outs.

ADOPT OR AMEND EMPLOYEE STOCK PURCHASE PLAN: CASE-BY-CASE

Employee stock purchase plans (ESPP) are normally broad-based equity plans that allow employees to purchase stock via regular payroll deductions, often at a reduced price. Equity-based compensation can be a useful tool in aligning the interests of management and employees with those of the shareowners. ESPPs provide low cost financing for corporate stock and can improve employee productivity, both of which should, in theory, lead to increased shareowner value. Numerous studies favorably link ESPPs with improved corporate performance.[59] SBA considers the plan's salient features, such as use of evergreen provisions, purchase limits/discounts, pay deductions, matching contributions, holding requirements, tax deductibility, the size and cost of the plan, as well as the company's overall use of equity compensation, in making voting decisions. The plan is generally accepted if the combined amount of equity used across all programs is deemed reasonable.

LINKING PAY WITH PERFORMANCE: CASE-BY-CASE

[58] "Section 162(m) Requirements, Implications and Practical Concerns," Exequity, September 2008.
[59] 2006 Employee Stock Purchase Plan Report, Equilar, Inc., 2006.

These proposals would require the company to closely link pay with performance, using performance measures that are mandated in the proposal language or that must be presented to investors by the company for pre-approval.
When the performance measures are mandated by the proposal language, SBA typically supports proposals that reasonably and fairly align pay with specific performance metrics, require detailed disclosures, or mandate adherence to fair compensation practices. We are less likely to support proposals that require metrics that are a degree removed from ultimate performance measures, such as proposals that require pay to be linked to performance on specific social mandates, absent a compelling argument for their usage.

SBA supports meaningful investor oversight of executive compensation practices and generally supports proposals requiring shareowner approval of specific performance metrics in equity compensation plans. SBA supports prior disclosure of performance metrics including quantifiable performance measures, numerical formulas, and other payout schedules covering at least a majority of all performance-based compensation awards to any named executive officers.

OPTION REPRICING: CASE-BY-CASE, TYPICALLY AGAINST

Option repricing is a contravening of the incentive aspect of plans. If the company has a history of repricing underwater options, SBA is unlikely to vote in support. There are very rare instances where repricing is acceptable, but several strict conditions must be met including a dramatic decline in stock value due to serious macroeconomic or industry-wide concerns and the necessity to reprice options in order to retain and motivate employees.

RECOUP BONUSES OR INCENTIVE COMPENSATION THROUGH CLAWBACK PROVISIONS: CASE-BY-CASE

Most commonly, clawback provisions address situations where the company's restated financial statements show that an executive did not achieve the performance results necessary for the executive to receive a bonus or incentive compensation. SBA recognizes that clawback provisions are an important aspect of performance-based compensation plans. To align executive interests with the interests of shareowners, executives should be compensated for achieving performance benchmarks. Equally, an executive should not be rewarded if he or she does not achieve established performance goals. If restated financial statements reveal that the executive was falsely rewarded, he or she should repay any unjust compensation received.

SBA evaluates these proposals by taking into consideration the impact of the proposal in cases of fraud, misstatement, misconduct, and negligence, whether the company has adopted a formal recoupment policy, and if the company has chronic restatement history or material financial problems.

DISCLOSURE OF WORK BY COMPENSATION CONSULTANTS: FOR

External compensation consultants should be independent to ensure that advice is unbiased and uncompromised. Multiple business dealings or significant revenue from the company may impair the independence of a pay consultant's opinions, advice, or recommendations to the compensation committee. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 requires that compensation committees analyze the independence of their compensation consultants and advisers and disclose any conflicts of interest concerning such consultants and advisers. Item 407(e)(3)(iv) of Regulation S-K codifies the SEC's proxy disclosure requirement with respect to compensation consultant conflicts of interest, applicable to proxies filed in 2013 and thereafter.[60] Compensation committees are required to assess whether the consultant's work raises any conflicts of interest and, if so, disclose to investors information about the nature of any such conflict and how the conflict is being addressed.
SBA generally supports proposals seeking disclosure regarding the company, board, or compensation committee's use of compensation consultants, such as company name, business relationships, fees paid, and identification of any potential

[60] Securities and Exchange Commission Final Rule, "Listing Standards for Compensation Committees," adopted June 20, 2012, effective July 27, 2012.

conflicts of interest. Additionally, compensation consultants should not be eligible as consultants or advisors on any stock incentive plan at the company.

RESTRICT EXECUTIVE PAY: CASE-BY-CASE

SBA supports levels of compensation that are consistent with the goal of aligning management's interests with shareowners' interests. Absolute limits may inhibit the compensation committee's ability to fulfillfulfil its duties. When the company's executive compensation and performance have been reasonable and in line with that of peers, SBA is unlikely to support proposals seeking an arbitrary cap.

HEDGING AND PLEDGING COMPANY STOCK: CASE-BY-CASE

Companies are increasingly adopting policies that prohibit insiders, such as board directors and senior executives, from hedging the value of their company equity or pledging company shares as collateral to margin accounts. Hedging is a strategy to offset or reduce the risk of price fluctuations for an asset or equity. Stock-based compensation or open-market purchases of company stock should serve to align executives' or directors' interests with shareowners. Hedging of company stock through a covered call, 'cashless' collar, forward sale, equity swap, or other derivative transactions can sever the alignment with shareowners' interests. Some researchers have found negative stock price performance associated with certain hedging activities.[61] Pledging of company stock as collateral for a loan may have a detrimental impact on shareowners if the officer or director is forced to sell company stock, for example, to meet a margin call. The forced sale of significant amounts of company stock may negatively impact the company's stock price and may also violate a company's insider trading policies and 10b5-1 trading plans. In addition, pledging of shares may be utilized as part of hedging or monetization strategies that could potentially immunize an executive against economic exposure to the company's stock, even while maintaining voting rights. Such strategies may also serve to significantly alter incentives embedded within long-term compensation plans.

SBA generally supports proposals designed to prohibit named executive officers from engaging in derivative or speculative transactions involving company stock, including hedging, holding stock in a margin account, or pledging large amounts of stock as collateral for a loan. SBA will evaluate the company's historical practices, level of disclosure, and current policies on the use of company stock.

PROHIBIT TAX GROSS-UPS: FOR

Tax gross-ups are reimbursements to senior executives paid by the company to cover an executive's tax liability. Tax gross-ups are an unjustifiably costly practice to shareowners; it generally takes at least $2.50 and as much as $4 to cover each $1 of excise tax that must be "grossed-up."[62] SBA generally supports proposals for companies to adopt a policy of not providing tax gross-up payments to executives, except in situations where gross-ups are provided pursuant to a plan, policy, or arrangement applicable to management employees of the company, such as a relocation or expatriate tax equalization policy.

REQUIRE SUPERMAJORITY OF INDEPENDENT BOARD MEMBERS TO APPROVE CEO COMPENSATION: AGAINST

SBA generally votes against proposals to seek approval of an amendment to the bylaws in order to provide that a company's CEO's compensation must be approved by a supermajority of all independent directors of the board. Proponents of this proposal argue that approval of this proposal would ensure that the company provides a CEO pay package that is widely supported by its independent directors, increasing the likelihood that the company's independent directors are

[61] J. Carr Bettis, John M. Bizjak, and Swaminathan L. Kalpathy, "Why Do Insiders Hedge Their Ownership and Options? An Empirical Examination," Social Science Research Network, March 2010.
[62] "New Study on Tax Gross-ups," Risk & Governance Weekly, 12/5/08.

kept informed of and feel shared responsibility for CEO compensation decisions. However, SBA supports the compensation committee members as sufficient to be the knowledgeable arbiters of compensation plan terms, metrics and payouts.

MANDATORY HOLDING PERIODS: CASE-BY-CASE

SBA supports proposals asking companies to adopt substantial mandatory holding periods for their executives, as well as requiring executives to meet stock ownership retention of at least a majority of shares granted or otherwise transferred in executive compensation arrangements. When making voting decisions, SBA considers whether the company has any holding period or officer ownership requirements in place and how actual stock ownership of executive officers compares to the proposal's suggested holding period and the company's present ownership or retention requirements.

EXECUTIVE SEVERANCE AGREEMENTS OR GOLDEN PARACHUTES: CASE-BY-CASE

SBA examines a variety of factors that influence the voting decision in each circumstance, such as:

- The value of the pay-outs in relation to annual salary plus certain benefits for each covered employee as well as the equity value of the overall transaction;
- The scope of covered employees along with their tenures and positions before and after the transaction, as well as other new or existing employment agreements in connection with the transaction;
- The scope of change in control agreement as it relates to the nature of the transaction;
- The use of tax gross-ups;
- Features that allow accelerated vesting of prior equity awards or automatic removal of performance-based conditions for vesting awards;
- For new or outside executives, the lack of sunset provisions; and
- The type of "trigger" necessary for plan pay-outs. Single triggers involve just a change in control; double triggers require a change in control and termination of employment.

Ideally, a golden parachute should not incentivize the executive to sacrifice ongoing opportunities with the surviving firm and should be triggered by a mechanism that is outside of the control of management. Likewise, careful structuring can enhance shareowner value and result in higher takeover bids; exorbitant pay-outs may discourage acquirers from seeking the company as a target and result in a lower shareowner value. Plans that include excessive potential pay-outs, single triggers, overly broad change in control applications, and/or accelerated vesting features are typically not supported by the SBA. Occasionally, more detrimental features such as single triggers or overly broad application of the plan to lower level employees may warrant withholding votes from compensation committee members in addition to an against vote on the golden parachute plan. Some research indicates that firms adopting golden parachutes experience reductions in enterprise value, as well as negative abnormal stock returns, both during the inter-volume period of adoption and thereafter.[63]

Some executives may receive provision for severance packages, vested shares, salary, bonuses, perquisites and pension benefits even after death.[64] Most public companies include death benefits with other types of termination-related pay due their CEOs, with variations for whether the person is fired, becomes disabled or dies in office. Death benefits may be layered on top of pensions, vested stock awards and deferred compensation, which for most CEOs already amount to large sums. Though not all companies provide it, the most common posthumous benefit is acceleration of unvested stock options and grants of restricted stock; these accelerated vesting provisions are not supported by SBA proxy voting guidelines. SBA supports their removal from compensation frameworks.

[63] Lucian A Bebchuk, Alma Cohen, and Charles C. Y. Wang, "Golden Parachutes and the Wealth of Shareholders," Harvard Law and Economics Discussion Paper No. 683 (October 2012).
[64] "Companies Promise CEOs Lavish Posthumous Paydays," Wall Street Journal, June 10, 2008.

SUPPLEMENTAL EXECUTIVE RETIREMENT PLANS (SERPS): CASE-BY-CASE

SERPs are non-qualified, executive-only retirement plans under which the company provides an additional retirement benefit to supplement what is offered under the employee-wide plan where contribution levels are capped. SERPs are different from typical qualified pension plans in two ways. First, they do not receive the favorable tax deductions enjoyed by qualified plans. The company pays taxes on the income it must generate in order to pay the executive in retirement. Therefore, some critics contend that the executive's tax obligation is shifted to the company. Second, SERPs typically guarantee fixed payments to the executive for life. Unlike defined contribution plans, SERPs transfer the risk of investment performance entirely to the firm. Even if the company or its investment performs poorly, the executive is entitled to receive specified stream of payments.[65]

SBA may support proposals to limit their usage if there is evidence of abuse in the SERP program or post-employment benefits that indicate the company is operating the program in excess of peers. SBA also supports the limitation of SERP formulas to base compensation, rather than the extension to variable compensation or other enhancements, and we do not endorse the practice of granting additional years of service that were not worked.

PRE-ARRANGED TRADING PLANS (10B5-1 PLANS): CASE-BY-CASE

The SBA generally supports proposals calling for certain principles regarding the use of prearranged trading plans (10b5-1 plans) for executives. These principles include:

- Adoption, amendment, or termination of a 10b5-1 Plan are disclosed within two business days in a Form 8-K;
- Amendment or early termination of a 10b5-1 Plan is allowed only under extraordinary circumstances, as determined by the board;
- Multiple, overlapping 10b5-1 plans should be prohibited;
- Plans provide that ninety days must elapse between adoption or amendment of a 10b5-1 Plan and initial trading under the plan;
- Reports on Form 4 must identify transactions made pursuant to a 10b5-1 Plan;
- An executive may not trade in company stock outside the 10b5-1 Plan; and
- Trades under a 10b5-1 Plan must be handled by a broker who does not handle other securities transactions for the executive.

Boards of companies that have adopted 10b5-1 plans should adopt policies covering plan practices, periodically monitor plan transactions, and ensure that company policies cover plan use in the context of guidelines or requirements on equity hedging, pledging, holding, and ownership.

DIRECTOR COMPENSATION: CASE-BY-CASE

Non-employee director compensation should be composed of a mix of cash and stock awards, where market practices do not prohibit such a mix. Director compensation plans are evaluated by comparing the cash compensation plus the approximate value of the equity-based compensation per director to a peer group with similar size and enterprise value. The initial compensation that is provided to new directors is also considered. The cash retainer and equity compensation are adequate compensation for board service; therefore, SBA does not support retirement benefits for non-employee directors.

We encourage stock ownership by directors and believe directors should own an equity interest in the companies upon which boards they are members. However, we do not support a specific minimum or absolute ownership levels.

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[65] Bebchuk, Lucian Arye and Fried, Jesse M., "Pay without Performance: Overview of the Issues" . Journal of Corporation Law, Vol. 30, No. 4, pp. 647-673, 2005. Also see Bebchuk, Lucian A., Cohen, Alma, and Spamann, Holger, "The Wages of Failure" (Working Draft, November 22, 2009).

BUSINESS CONDUCT

SBA often engages with companies outside of the proxy voting process, speaking directly to corporate and board representatives about business conduct decisions relevant to shareowner value, such as in the guidelines discussed below. Most of the guidelines in this section cover proposals that are submitted by shareowners rather than management, but these issues impact the majority of companies regardless of whether they have had shareowner proposals submitted. Therefore, engagement is an extremely effective and important tool for mitigating the widespread and systematic risks inherent in these issues.

SBA considers the vote on these proposals to be an important part of the communication process with management. We support these proposals when their adoption seems prudent in light of the current circumstances and the proposed actions may reasonably be considered to have a cost-effective, protective impact on shareowner value. These topics cover risks such as product safety, environmental impact, and human rights abuses—areas where investors have experienced significant share value losses over time due to missteps in management of these risks. It is our fiduciary duty to engage companies and make prudent voting decisions in the presence of substantial risks, by supporting reasonable proposals and maintaining a dialogue with companies on these topics.

PRODUCT SAFETY: CASE-BY-CASE

Inadequate product safety standards can be catastrophic to brand and market value through lost sales, fines and legal liability. Failure to implement effective safety standards, and to enforce them throughout the supply chain, creates a risk that is difficult to overstate. Generally, SBA supports reasonable proposals requesting increased disclosure regarding oversight procedures, product safety risks, or the use of potentially dangerous or toxic materials in company products. Proposals asking the company to cease using certain production methods or materials will be evaluated based on the merits of the case supporting the actions called for in the proposal. SBA also considers current regulations, recent significant controversy, litigation and/or fines, and the current level of disclosure by the company.

FACILITY SAFETY (NUCLEAR AND CHEMICAL PLANT SAFETY): CASE-BY-CASE

Resolutions requesting that companies report on risks associated with their operations and/or facilities are examined on a case-by-case basis, by considering the company's compliance with applicable regulations and guidelines; the level of existing disclosure related to security and safety policies, procedures, and compliance monitoring; and the existence of recent, significant violations, fines, or controversy related to the safety and security of the company's operations or facilities.

Some shareowner-sponsored resolutions ask a company to cease production associated with the use of depleted uranium munitions or nuclear weapons components and delivery systems, including disengaging from current and proposed contracts. Such contracts are monitored by government agencies, serve multiple military and non-military uses, and withdrawal from these contracts could have a negative impact on the company's business. SBA evaluates these proposals on a case-by-case basis, but generally leaves decisions on the risk of engaging in certain lines of business up to the board, absent compelling a rationale to intervene.

ANIMAL TESTING AND WELFARE POLICIES: CASE-BY-CASE

Some resolutions ask companies to report on animal welfare conditions or to make changes in procedures relating to the treatment of animals. SBA examines each proposal in the context of current regulations, consumer sentiment, company disclosures, available technology and potential alternatives to the company's present procedures, and the feasibility and cost impact of the proposal when making a voting determination.

ENERGY AND ENVIRONMENT: CASE-BY-CASE

In conjunction with the Ceres principles[66], we are in favor of reasonable proposals for companies taking actions toward energy conservation and environmental solutions. We generally vote in favor of proposals that ask companies to disclose historical, current, or projected levels of pollutants emitted into the environment and to disclose any control measures to shareowners. The SBA evaluates such proposals, taking into account whether the company has clearly disclosed its current policies and plan of action, as well as an analysis of the potential for regulatory and business risks in their operations. Proposals that request a company engage in specific environmental actions are evaluated on the potential to contribute to long-term shareowner value.

Marketing, Sales, and Business Policies

RESTRICTIONS ON PRODUCT SALES, PRICING AND MARKETING: CASE-BY-CASE

Absent compelling arguments that product marketing or pricing has potential to cause damage such as through increased liability or reputational concern, SBA generally allows management to determine appropriate business strategies and marketing tactics.

PRIVACY AND CENSORSHIP: CASE-BY-CASE

As technology has changed, consumers have become more dependent on products that generate significant amounts of personal data, raising concerns over susceptibility to both government surveillance and invasive corporate marketing. In some markets, freedom to access information on the internet is impaired by government decree. Shareowners may make proposals asking companies to limit their own use of consumer-generated data or prohibit access to the data by other entities, such as governments. Proposals may also ask companies to cease certain business lines in countries where governments demand access to the data or the blocking of certain information. Such restrictions may not only violate human rights, but they also decrease the quality of service provided by companies and threaten the integrity of the industry as a whole. Proposals may also ask companies to provide reports on their practices and policies related to these concerns.

The SBA generally votes in favor of reasonable, disclosure-based resolutions relating to policies on data collection and internet access, unless the company already meets the disclosure provisions requested in the proposal. SBA considers the level of current applicable disclosure on the topic, the history of stakeholder engagement, nature and scope of the company's operations, applicable legislation, and the company's past history of controversy and litigation as it pertains to human rights. SBA generally does not support proposals asking companies to modify or restrict their business operations in certain markets, unless under extraordinary circumstances where a considerable threat to the company's operations or reputation exists.

OPERATIONS IN HIGH RISK MARKETS: CASE-BY-CASE

Shareowners may propose that companies adopt guidelines for doing business with or investing in countries where there is a pattern of ongoing egregious and systematic violations of human rights. Shareowners of companies operating in regions that are politically unstable, including terrorism-sponsoring states, sometimes propose ceasing operations or reporting on operations in high-risk markets. Such concerns focus on how these business activities or investment may, in truth or by perception, support potentially dangerous and/or oppressive governments, and further, may lead to potential company reputational, regulatory, or supply chain risks. In accordance with §215.471(2) of Florida Statutes, the SBA votes against all proposals advocating increased United States trade with Cuba~~, or~~ Syria or Venezuela, and SBA will not vote in favor of any proxy resolution advocating the support of the Maduro regime in Venezuela per resolution of the Trustees of the State Board of Administration.. SBA is also prohibited by state law from investing in companies doing certain types of business in Iran and Sudan. ~~SBA will not vote in favor of any proxy resolution advocating the support of the Maduro regime in Venezuela per resolution of the Trustees of the State Board of Administration.~~

[66] http://www.ceres.org/about-us/our-history/ceres-principles

SBA votes on a CASE-BY-CASE basis when evaluating requests to review and report on the company's potential financial and reputation risks associated with operations in high-risk markets, such as a terrorism-sponsoring state or otherwise, taking into account:

- Compliance with Florida state law;
- Compliance with U.S. sanctions and laws;
- Consideration of other international policies, standards, and laws;
- The nature, purpose, and scope of the operations and business involved that could be affected by social or political disruption;
- Current disclosure of applicable risk assessments and risk management procedures; and
- Whether the company has been recently involved in significant controversies or violations in high-risk markets.

CONFLICT MINERALS: CASE-BY-CASE

As a part of the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act, the SEC mandates that public companies using 'conflict minerals' annually report on the scope of their due diligence of their suppliers, in addition to making disclosures about any payments made to foreign governments for the acquisition or production of these resources. SBA evaluates the scope of proposals going beyond the reports required by the SEC, as well as the economic rationale, and compares it to the expected compliance costs in making a voting decision.

POLITICAL NEUTRALITY: CASE-BY-CASE

These resolutions call for companies to maintain political neutrality. They may also propose that appearance of coercion in encouraging its employees to make political contributions be avoided. The SBA examines proposals requesting the company to affirm political non-partisanship in the workplace on a case-by-case basis. We generally vote against such resolutions provided that the company is in compliance with laws governing corporate political activities and the company has procedures in place to ensure that employee contributions to company-sponsored political action committees (PACs) are strictly voluntary and not coercive.

Codes of Conduct

CODES OF CONDUCT: CASE-BY-CASE

Workplace codes of conduct are designed to safeguard workers' rights in the international marketplace. Advocates of workplace codes of conduct encourage corporations to adopt global corporate standards that ensure minimum wages and safe working conditions for workers at in developing countries. U.S. companies that outsource portions of their manufacturing operations to foreign companies are expected to ensure that the products received from those contractors do not involve the use of forced labor, child labor, or sweatshop labor. A number of companies have implemented vendor standards, which include independent monitoring programs with respected local human rights and religious organizations to strengthen compliance with international human rights norms. Failure to manage the risks to workers' safety and human rights can result in boycotts, litigation and stiff penalties.

When compliance is deemed necessary, SBA favors incorporation of operational monitoring, code enforcement, and robust disclosure mechanisms.[67] SBA prefers to see companies with supply-chain risks proactively engage an independent monitoring organization to provide objective oversight and publicly disclose such evaluation.

NORTHERN IRELAND (MACBRIDE PRINCIPLES): FOR

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[67] "Incorporating Labor and Human Rights Risk into Investment Decisions." Aaron Bernstein, Harvard Labor and Worklife Program, Occasional Paper Series No. 2, September, 2008.

The MacBride Principles call on companies with operations in Northern Ireland to promote fair employment practices. Signatories of the MacBride Principles agree to make reasonable, good faith efforts to abolish all differential employment criteria whose effect is discrimination on the basis of religion. SBA supports adoption and implementation of the MacBride Principles, along with fair and transparent employment practices by firms operating in Northern Ireland.

HOLY LAND PRINCIPLES: CASE-BY-CASE

SBA supports proposals that seek to end discrimination and underrepresentation in the workplace based on national, racial, ethnic and religious affiliations. When companies cannot reasonably show they are taking steps to accomplish this goal, SBA will support shareowner proposals seeking compliance with these principles.

MUTUAL FUND VOTING

Like shareowners of publicly-held corporations, shareowners of mutual funds are allowed a voice in fund governance. While some funds proscribe annual meetings in their charter documents, all funds must call special meetings of shareowners to amend substantive governance matters such as board composition, investment advisory agreements, distribution agreements, and changes to fundamental investment restrictions. To this end, mutual fund managers issue and solicit proxies similar to the way that stock corporations do.

Mutual fund proxies raise issues that differ substantially from those found in the proxies of public companies. Though mutual fund proxy holders are also frequently asked to elect trustees and ratify auditors, most of the other agenda items are related to the special nature of this type of security. As with elections of directors of corporations, it is preferable to see mechanisms that promote independence, accountability, responsiveness, and competence in regards to the mutual fund. There is evidence demonstrating a positive link between the quality of a mutual fund's board and its future performance and Sharpe ratio.[68] SBA's voting approach on mutual fund resolutions is similar to that of our approach on publicly-traded company resolutions in that votes are cast with an intention of maximizing value and preserving or enhancing investor rights.

Fund Objective and Structure

The principal investment strategy identifies the financial market asset class or sub-sector in which the fund typically invests, e.g. the fund normally invests at least eighty percent of its assets in stocks included in the S&P 500. A fundamental investment restriction identifies prohibited activities, e.g. the fund may not invest more than twenty-five percent of the value of its total assets in the securities of companies primarily engaged in any one industry.

Beyond a fund's investment objectives, fund structure may also affect shareowner value. The majority of investment funds are open-end investment companies, meaning that they have no set limit on the number of shares that they may issue. A change in fee structure or fundamental investment policy requires the approval of a majority of outstanding voting securities of the fund, which under the Federal Investment Company Act of 1940 is defined as the affirmative vote of the lesser of either sixty-seven percent or more of the shares of the fund represented at the meeting, if at least 50 percent of all outstanding shares are represented at the meeting, or fifty percent or more of the outstanding shares of the fund entitled to vote at the meeting. Failure to reach this "1940 Act majority" subjects the funds to additional solicitation and administrative expenses.

ELECTION OF DIRECTORS: CASE-BY-CASE

Similar to the election of directors of corporations, it is preferable to see mechanisms that promote independence, accountability, responsiveness, and competence within the mutual fund. Votes on director nominees should be determined on a case-by-case basis, considering the following factors:

- Director independence and qualifications, including relevant skills and experience;
- Past performance relative to its peers;
- Board structure;
- Attendance at board and committee meetings ;
- Number of mutual funds' boards and/or corporate boards (directorships) upon which a nominee sits; and
- If a proxy contest, Strategy of the incumbents versus the dissidents.

SBA typically withholds votes from directors if:

- They've attended less than 75 percent of the board and committee meetings without a valid reason for the absences;
- They've ignored a shareowner proposal that was approved by a majority of the shares voting;

[68] Carl R. Chen and Ying Huang, "Mutual Fund Governance and Performance: A Quantile Regression Analysis of Morningstar's Stewardship Grade," Corporate Governance: An International Review, 2011, 19(4): 311-333.

- They are non-independent directors and sit on the audit or nominating committees;
- They are non-independent directors, and the full board serves as the audit or nominating committee, or the company does not have one of these committees; or
- The audit committee did not provide annual auditor ratification, especially in the case of substantial non-audit fees or other poor governance practices.

CONVERTING CLOSED-END FUND TO OPEN-END FUND: CASE-BY-CASE

The SBA evaluates conversion proposals on a case-by-case basis, considering the following factors:

- Rationale for the change;
- Past performance as a closed-end fund;
- Market in which the fund invests;
- Measures taken by the board to address the discount; and
- Past shareowner activism, board activity, and votes on related proposals.

INVESTMENT ADVISORY AGREEMENTS: CASE-BY-CASE

Votes on investment advisory agreements are determined by considering the following factors:

- Proposed and current fee schedules;
- Fund category/investment objective;
- Performance benchmarks;
- Share price performance as compared with peers;
- Resulting fees relative to peers; and
- Assignments (where the advisor undergoes a change of control).

When considering a new investment advisory agreement or an amendment to an existing agreement, the proposed fee schedule should be compared with those fees paid by funds with similar investment objectives. Any increase in advisory fees of more than 10 percent of the prior year's fees are judged to determine the long-term impact on shareowner value, and management must offer a detailed, specific and compelling argument justifying such a request.

APPROVE NEW CLASSES OR SERIES OF SHARES: FOR

The SBA generally votes FOR the establishment of new classes or series of shares. Boards often seek authority for a new class or series of shares for the fund to grow the fund's assets. The ability to create classes of shares enables management to offer different levels of services linked to the class or series of shares that investors purchase. Also, fee structures can be varied and linked to the series of shares, which allows investors to choose the purchasing method best suited to their needs. The board can use separate classes and series of shares to attract a greater number of investors and increase the variety of services offered by the fund.

CHANGE FUND'S INVESTMENT OBJECTIVE OR CLASSIFICATION: CASE-BY-CASE

Votes on changes in a fund's objective or classification are determined on a case-by-case basis, considering the following factors:

- Potential competitiveness;
- Current and potential returns;
- Risk of concentration; and
- Consolidation in target industry.

AUTHORIZE THE BOARD TO HIRE OR TERMINATE SUB-ADVISORS WITHOUT SHAREOWNER APPROVAL: AGAINST

SBA generally opposes proposals authorizing the board to hire or terminate sub-advisors without shareowner approval. Typically, the management company will seek authority, through the investment advisor, to hire or terminate a new sub-advisor, modify the length of a contract, or modify the sub-advisory fees on behalf of the fund. These investment decisions are normally made with majority shareowner approval, as determined by Section 15 of the Investment Company Act of 1940. However, funds may apply to the SEC for exemptions to this rule, and the SEC often grants these exemptions. These exemptions are usually structured so that they do not apply to the investment sub-advisory agreement that is in place at the time, but apply to any future sub-advisory agreement into which the fund enters.

MERGERS: CASE-BY-CASE

The SBA generally evaluates mergers and acquisitions on a case-by-case basis, determining whether the transaction enhances shareowner value by giving consideration to:

- Resulting fee structure;
- Performance of both funds;
- Continuity of management personnel; and
- Changes in corporate governance and the impact on shareowner rights.

CHANGE DOMICILE: CASE-BY-CASE

The SBA votes on fund re-incorporations on a case-by-case basis by considering the regulations and fundamental policies applicable to management investment companies in both states. Shareowner rights can be particularly limited in certain states, including Delaware, Maryland, and Massachusetts.[69]

AMENDMENTS TO THE CHARTER: CASE-BY-CASE

The SBA votes on changes to the charter document on a case-by-case basis, considering the following factors:

- The potential impact and/or improvements, including changes to competitiveness or risk;
- The standards within the state of incorporation; and
- Other regulatory standards and implications.

The SBA generally opposes of the following changes:

- Removal of shareowner approval requirement to reorganize or terminate the trust or any of its series;
- Removal of shareowner approval requirement for amendments to the new declaration of trust;
- Removal of shareowner approval requirement to amend the fund's management contract, allowing the contract to be modified by the investment manager and the trust management, as permitted by the 1940 Act;
- Allow the trustees to impose other fees in addition to sales charges on investment in a fund, such as deferred sales charges and redemption fees that may be imposed upon redemption of a fund's shares;
- Removal of shareowner approval requirement to engage in and terminate sub-advisory arrangements; and
- Removal of shareowner approval requirement to change the domicile of the fund.

SHAREOWNER PROPOSALS TO ESTABLISH DIRECTOR OWNERSHIP REQUIREMENT: CASE-BY-CASE

The SBA generally favors the establishment of a director ownership requirement and considers a director nominee's investment in the fund as a critical factor in evaluating his or her candidacy. This decision should be made on an individual

[69] Lucian Bebchuk and Alma Cohen, "Firms' Decisions Where to Incorporate." National Bureau of Economic Research Working Paper 9107, August 2002.

basis and not according to an inflexible standard. If the director has invested in one fund of the family, he/she is considered to own stock in the fund.

SHAREOWNER PROPOSALS TO TERMINATE INVESTMENT ADVISOR: CASE-BY-CASE

Votes on shareowner proposals to terminate the investment advisor considering the following factors:

- Performance of the fund;
- The fund's history of shareowner relations; and
- Performance of other funds under the advisor's management.

ASSIGN TO THE USUFRUCTUARY (BENEFICIARY), INSTEAD OF THE TRUSTEE, THE VOTING RIGHTS APPURTENANT TO SHARES HELD IN TRUST: CASE-BY-CASE

The SBA votes against if the company assigns voting rights to a foundation allied to management.

SHAREOWNER PROPOSALS TO ADOPT A POLICY TO REFRAIN FROM INVESTING IN COMPANIES THAT SUBSTANTIALLY CONTRIBUTE TO GENOCIDE OR CRIMES AGAINST HUMANITY: CASE-BY-CASE

The SBA will evaluate such proposals with an adherence to the requirements and intent of Florida law, including but not limited to the Protecting Florida's Investments Act, which prohibits investment in companies involved in proscribed activities in Sudan or Iran, and other laws covering companies with policies on or investments in countries such as Cuba, Northern Ireland, and Israel.

STATE BOARD OF ADMINISTRATION
OF FLORIDA

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POST OFFICE BOX 13300
32317-3300

Date:	January 28, 2019
To:	Board of Trustees
From:	Kimberly Ferrell, Audit Committee Chair KF
Subject:	Quarterly Audit Committee Report

The State Board of Administration's Audit Committee met on January 28, 2019. Please see the attached agenda for the items discussed. Also please see the attached Office of Internal Audit Quarterly Report presented to the Audit Committee at the meeting.

STATE BOARD OF ADMINISTRATION
Audit Committee Open Meeting
Agenda
January 28, 2019
9:30 A.M. – Conclusion of Business

1. Call to Order

2. Approve minutes of closed and open meeting held on November 26, 2018

3. SBA Executive Director & CIO status report
   - SBA Update: investment performance, risks, opportunities and challenges

4. Presentation on the results of the SBA Local Government Surplus Funds Trust Fund (Florida PRIME)

5. Office of Internal Audit Quarterly Report

6. Election of the Committee's Chair and Vice Chair

7. Approval of the Committee's annual independence statement

8. Chief Risk & Compliance Officer Quarterly Report

9. Presentation of Real Estate Title Holding Entity audits

10. Other items of interest

11. Closing remarks of the Audit Committee Chair and Members

12. Adjournment

Office of Internal Audit (OIA) Quarterly Report to the Audit Committee

January 28, 2019

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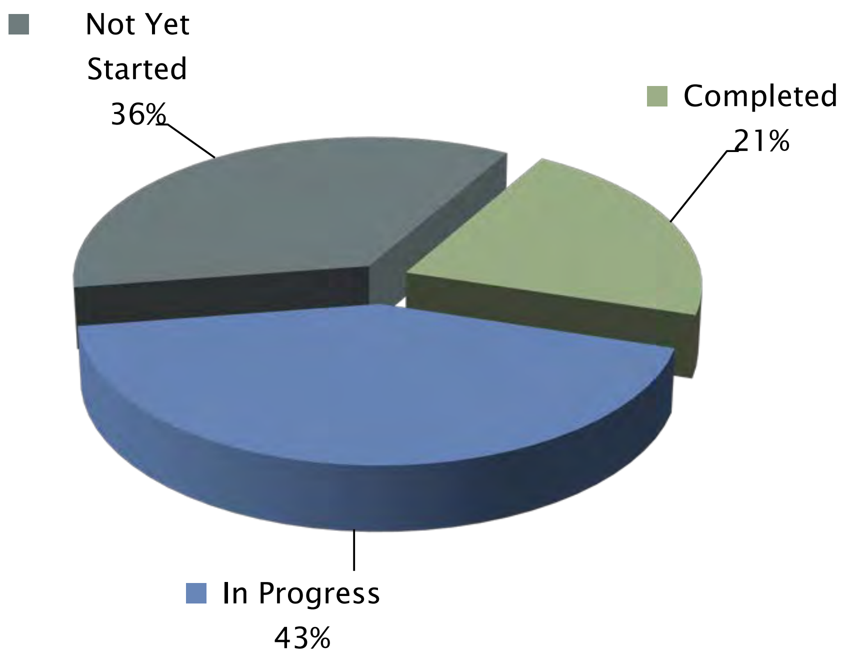
Status of the FY 2018-19 Annual Audit Plan

Status of the FY 2018-19 Annual Audit Plan

Internal Audit and Advisory Engagements



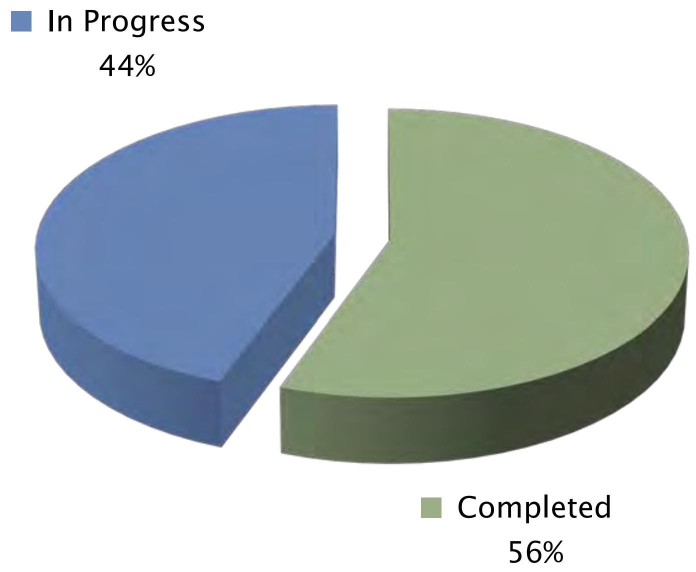
Highlighted: Completed since prior quarterly report.

Projects Status	Type	Planned Timing
Completed		
Externally Managed Derivatives Audit (carryover)	OIA Operational Audit	Q2
ACH Advisory FHCF (carryover)	OIA Advisory	Q2
Proxy Voting Data Analytics	OIA Advisory	Q3
In Progress		
Continuous Monitoring - General	OIA Advisory	Ongoing
Action Plan Monitoring	Project Management	Ongoing
Performance and Risk Analytics	OIA Operational Audit	Q3
Continuous Monitoring - Accounts Payable	OIA Advisory	Q3
Continuous Monitoring - Travel & Expense	OIA Advisory	Q3
Strategic Investments	OIA Operational Audit	Q3/Q4
Not Started		
Business Continuity Program Peer Survey	OIA Advisory	Q3/Q4
CIS CSC Framework Gap Assessment*	OIA Advisory	Q3/Q4
Network and Application Change Control	OIA Operational Audit	Q4
Review of Critical Financial Reporting Spreadsheets	OIA Advisory	Q4
Real Estate - Direct Owned	OIA Operational Audit	Q4

*Includes Incident Management Framework Gap Follow-up

Status of the FY 2018-19 Annual Audit Plan

External Engagement Oversight

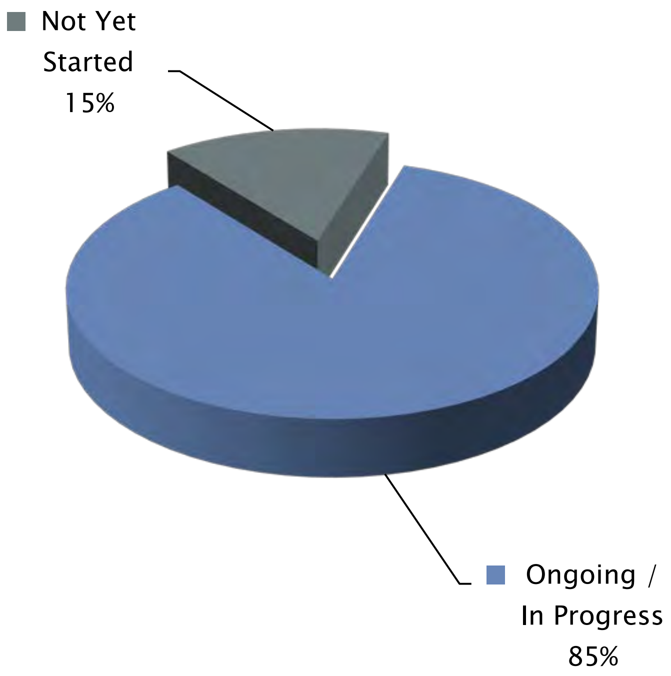


Project Status	Service Provider	Type	Planned Timing
Completed			
Network Security, outsourced	BDO	External IT Audit	Q1/Q2
Florida Retirement System (FRS) Trust Fund	Crowe	External Financial Statement Audit	Q1/Q2
FRS Investment Plan Trust Fund	Crowe	External Financial Statement Audit	Q1/Q2
Florida PRIME	Auditor General	External Financial Statement Audit	Q1/Q2
Florida Hurricane Catastrophe Fund	KPMG	External Financial Statement Audit	Q1/Q2
In Progress			
Part of the Statewide CAFR	Auditor General	External Financial Statement Audit	Q2/Q3
Florida Growth Fund Initiative	OPPAGA	External Review	Q1/Q2
Biennial Review	OPPAGA	External Review	Q2/Q3
External Validation of OIA's self-assessment	IIA Quality Services	External Review	Q3
Not Started			
None			

Highlighted: Completed since prior quarterly report.

Status of the FY 2018-19 Annual Audit Plan

Special Projects, Risk Assessments, and Other Activities



Project Status	Type	Planned Timing
Completed		
None		
Ongoing/In Progress		
Data Analytics Tools Enhancements	OIA Special Projects	Ongoing
Special requests from SBA management and/or Audit Committee	OIA Special Projects	
WorkSmart Portal Enhancements	OIA Special Projects	
Audit Committee Related Activities	OIA Audit Committee	
Annual Quality Assessment Review - Self-Assessment	OIA Quality Assurance	Q1/Q2
Integrated Risk Management Solution ITN	OIA Special Projects	Q2/Q3
Annual Risk Assessment	OIA Risk Assessment	Q2/Q3
Continuous Risk Assessment with Data Analytics/Risk Assessment Updates	OIA Quality Assurance	Q3/Q4
CFO/COO Key Metrics	OIA Special Projects	Q3/Q4
Assistance with Aladdin Implementation	OIA Special Projects	Q3
OIA process improvement initiatives, including QAR identified initiatives	OIA Quality Assurance	Q3/Q4
Not Yet Started		
Annual Audit Plan	OIA Risk Assessment	Q3
Teacher Retirement System of Texas Peer Review	OIA Special Projects	Q4

OIA Projects Completed and Status of Management Action Plans/Recommendations

Proxy Voting Data Analytics

The Investment Programs and Governance (IP&G) department engaged the OIA to assist in developing ongoing data analytics for proxy voting. Our primary objectives were as follows:

1. Develop analytics dashboards using Tableau
2. Determine how to best obtain data to enable ongoing analyses
3. Identify potential solutions for viewing and distribution of dashboards

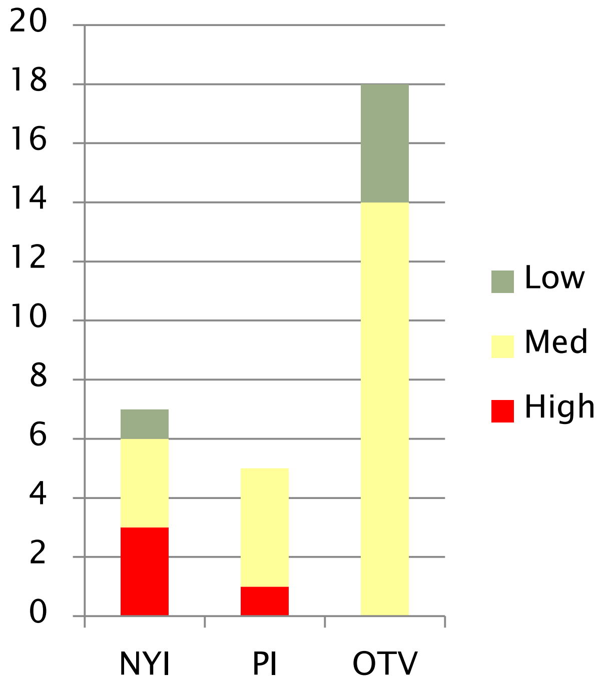
The OIA completed this engagement and provided Tableau dashboards, along with research results, to IP&G. The dashboards included various analytics, including trends and "drill-downs" related to contested votes, issues, companies voted, countries voted, and more.

New/Closed Action Plans & Recommendations

Audit and Advisory Engagements

# of Recs	Source
New recommendations:	
44	Network Security Assessment 2018 (BDO)
44	Total action plans/recommendations added to the database
Closed action plans and recommendations:	
0	Total action plans/recommendations closed in the database
44	Total change for both audit and advisory action plans/recommendations

Status of Management Action Plans–Audits



For details, see Appendix A.

Report Title	Report Date	Risk Rating				Status			
Report Title	Report Date	High	Med	Low	**Total**	NYI	PIRP	OTV	**Total**
Accounts Payable Continuous Audit	8/7/2015		1		**1**			1	**1**
Fixed Income Trading Activities Operational Audit	1/29/2016		1		**1**		1		**1**
Trust Services Operational Audit	7/25/2016	1			**1**		1		**1**
Global Equity Internal Trading Operational Audit	1/18/2017	1	1		**2**	1		1	**2**
Internally Managed Derivatives Operational Audit	3/31/2017	1	1		**2**	2			**2**
AG - Operational Audit 2017	11/13/2017		1	1	**2**			2	**2**
AG - IT Operational Audit 2017	4/5/2017		9		**9**			9	**9**
Incentive Compensation Program Operational Audit Report	4/10/2018		4	2	**6**	1	3	2	**6**
Externally Managed Derivatives Operational Audit	10/31/2018	1	3	2	**6**	3		3	**6**
		4	21	5	30	7	5	18	30
		13%	70%	17%		23%	17%	60%	

Legend:
NYI - Not Yet Implemented
PIRP - Partially Implemented and the Remainder is in Progress
OTV - OIA to Verify

Management Action Plans relating to findings from audits performed by internal or external auditors. The OIA monitors and performs follow-up procedures on the management action plans in accordance with the IIA Standard 2500. A1. In certain cases, follow-up procedures are performed by external auditors.

Status of Recommendations – Advisory Projects

Report Title	Report Date	NYI	PI	IMP	Total
Information Technology General Controls Advisory Engagement (OIA)[1]	01/20/2017	1	2	8	**11**
Internal Controls Over Financial Reporting Advisory – FRS Investment Plan (OIA)[1]	09/28/2017	1			**1**
Governance, Risk Management, and Compliance Assessment (Funston)[1]	01/15/2018	75	1	2	**78**
Real Estate Cash Transfers Advisory (OIA)[1]	01/16/2018	1			**1**
SHBW Gap Analysis 2018 Advisory (SHBW)[1]	06/08/2018	7			**7**
ACH Advisory for FHCF[1]	08/16/2018	2			**2**
Network Security Assessment 2018 (BDO)[2]	11/15/2018	38		6	**44**
		125	3	16	**144**

Status (NYI, PI, IMP, Total)

Legend:
NYI - Not yet implemented
PI - Partially Implemented, as represented by SBA management
IMP - Implemented, as represented by SBA management

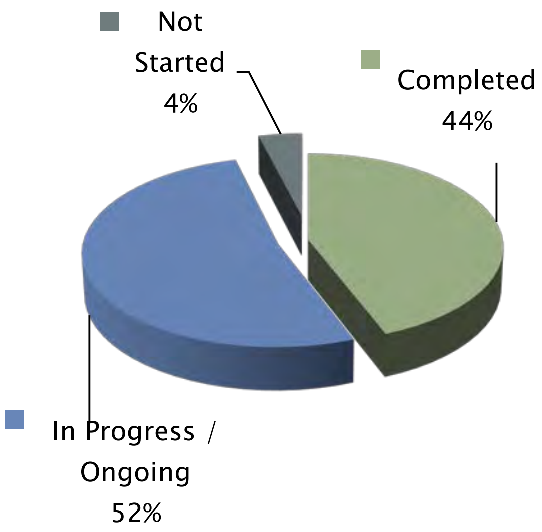
Advisory Recommendations made by OIA or external consultants resulting from an assessment of a program or activity such as governance, risk management, compliance, ethics, disaster recovery preparedness program, etc. The OIA monitors the disposition of these recommendations in accordance with the IIA Standard 2500.C1.

[1]At the advice of the Audit Committee, the OIA closes Advisory Recommendations that management represented as "complete" once the OIA has considered those in the annual risk assessment. The next annual risk assessment will occur during Fiscal Year 2018-19.

[2]Recommendations will be reviewed for remediation and closure by BDO as part of the 2019 Network Security Assessment.

Other OIA Activities

Status of FY 2018-19 OIA Department Goals



Highlighted: Completed since prior quarterly report.

Topic	Activities
Complete/Closed	
Annual Audit Plan	Flexibility was built into the Annual Audit Plan for FY 2018-19 and was approved at the April 2018 AC meeting.
	We signed a contract with ITCI to perform a Strategic Investments audit in FY2018-19. We also signed the SOW for BDO's 2nd Network Security Assessment.
IA Process	Included hours in the AAP for internal process improvements to enable OIA to continue to enhance its processes.
	Using SBA's contracting process, contracted with the IIA to perform OIA's external validation of our QA self-assessment.
	An anonymous survey was conducted by the IIA as part of their external validation of OIA's self-assessment.
Use of Technology	Requested IT manpower resources (Approximately 4 weeks of assistance from applications staff) for the activities related to IIAMS, IDEA and Tableau.
	Requested 2 portable monitors for laptops for OIA to share. (approximately $100 each) This request was declined for FY 2018-19.
People	Based on knowledge gaps in the OIA staff developed a training plan for each member for 2018-19 to close those gaps. The training budget request was approved.
	Had at least one team building event during the fiscal year to enhance the team.
	Requested an additional FTE for an IT Senior Audit Analyst III. This request was declined for FY 2018-19.
	Our intern left in December and we decided not to hire another intern for the remainder of this fiscal year.
In Progress/Ongoing	
Annual Audit Plan	Continue to formalize our Data Analytics Program both project-based as well as a Continuous Auditing/Monitoring dashboards.
	Continue to determine where advisory initiatives may assist the SBA with process improvements, document controls, mapping processes, etc.
	Determine the number of management action plans implemented each month. OIA will perform a follow-up audit if there are at least 5 action plans implemented.
IA Process	Performing our quality assurance self-assessment to ensure OIA is in compliance with the IIA Standards. Identify OIA process improvement initiatives during the QA.
	As part of our annual review of the charters, we considered the updated IIA pro-forma charters to determine if the OIA charter needs to be updated and we updated the AC charter based on certain Funston recommendations. Both charters approved by the AC. Trustees approved the AC charter.
	Hold periodic OIA staff meetings discussing project lessons learned and status as well as any other issues of concern.
	Continue to review results from client surveys for projects for areas of OIA potential process improvements.
	Utilize Lean Six Sigma tools to the extent possible for audits and advisory projects.
Use of Technology	Continue to determine how we can use data analytics tools to test 100% of a population instead of testing samples, at the planning stage of each audit.
	In collaboration with ERM and BC, issued an ITN for an Integrated Risk Management Solution, we will select the vendor through an evaluation process.
People	Consider loaning staff to other departments. Elizabeth is currently providing assistance to PMC for the Aladdin green package.
	OIA team members to attend the APPFA meetings. Two members attended the November 2018 meeting.
	OIA will develop relevant trainings to be held during our staff meetings and invite other business units to our meetings to enhance our knowledge over SBA initiatives.
Not Started	
Annual Audit Plan	Consider reviewing exit interviews as a part of the annual risk assessment process in assessing the control environment and potential risks.

Integrated Risk Management Solution

ITN Response Deadline	January 16, 2019
Selection of Finalist(s)	January 31, 2019
Interviews/Presentations at SBA	Week of February 18, 2019
Final Selection by SBA	February 27, 2019

Other Items for Discussion

- IIA Quality Services contracted to perform the independent validation of the OIA quality self-assessment

- 2019 Audit Committee Meeting Dates
  - Monday, April 29
  - Monday, August 5
  - Monday, November 25

Questions/Comments

OFFICE OF INTERNAL AUDIT
OIA
SBA
FLORIDA
STATE BOARD OF ADMINISTRATION

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MEMORANDUM

To: Ash Williams
From: Michael McCauley
Date: March 8, 2019
Subject: Quarterly Standing Report - Investment Programs & Governance

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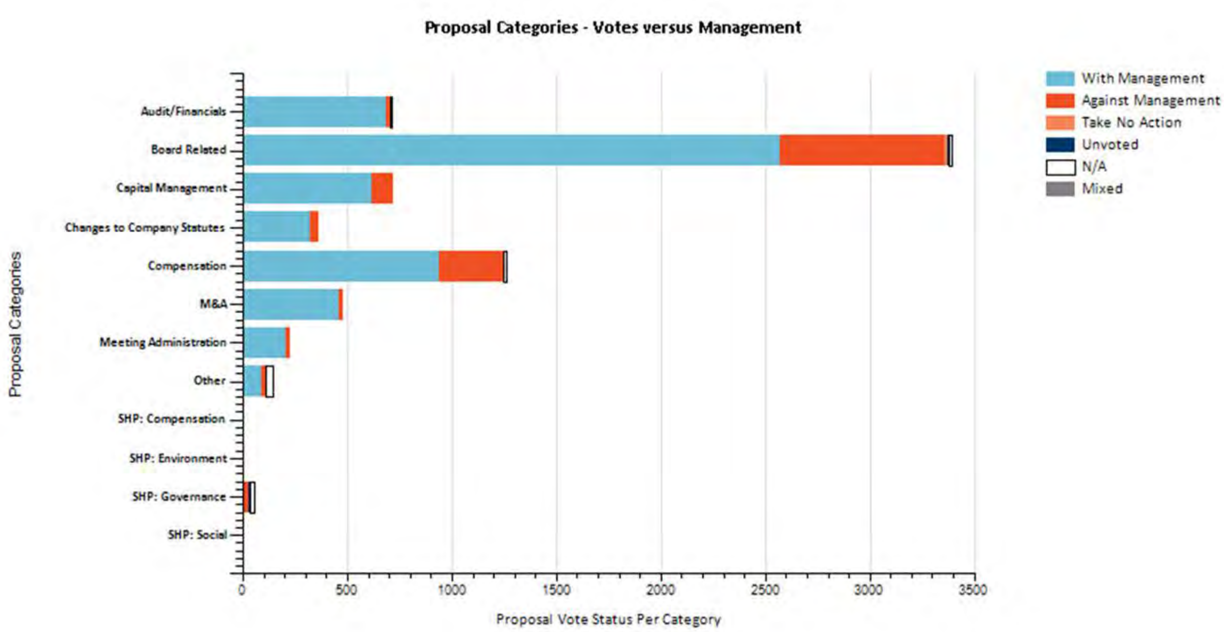
GLOBAL PROXY VOTING & OPERATIONS

During the fourth quarter of 2018, SBA staff cast votes at 1,181 companies worldwide, voting on ballot items including director elections, audit firm ratification, executive compensation plans, merger & acquisitions, and a variety of other management and shareowner proposals. These votes involved 7,368 distinct voting items—voting 80.5% "For'' and 17.4% "Against", with the remaining 2.1% involving abstentions. Of all votes cast, 18.2% were "Against" the management-recommended vote. SBA proxy voting occurred within 53 distinct global markets, with the top five countries comprised of the United States (208), Australia (192), China (140), Japan (52), and India (49). The chart below provides the SBA voting breakdown across all major proposal categories during the fourth quarter of 2018.



CORPORATE GOVERNANCE & PROXY VOTING OVERSIGHT GROUP

The most recent meeting of the Corporate Governance & Proxy Voting Oversight Group (Proxy Committee) occurred on December 18, 2018, and the Committee will meet next on March 14, 2019. The Proxy Committee continues to review ongoing governance issues including the volume and trends for recent SBA proxy votes, company-specific voting scenarios, corporate governance policies, governance-related investment factors, major regulatory developments and individual company research related to the Protecting Florida's Investments Act (PFIA) and other statutory investment requirements related to Israel and Venezuela. The next meeting will review annual updates to the proxy voting policies.

ACTIVE OWNERSHIP & CORPORATE ENGAGEMENT

From November 2018 through early March 2019, SBA staff conducted engagement meetings with companies owned within Florida Retirement System (FRS) portfolios, including Telefonica, Bank of America, and the Southern Co.

LEADERSHIP & SPEAKING EVENTS

Staff periodically participates in investor and corporate governance conferences. Typically, these events include significant involvement by corporate directors, senior members of management, and other key investor or regulatory stakeholders. The following items detail involvement at events that occurred recently:

- In February, SBA staff participated in the International Corporate Governance Network (ICGN) spring mid-year conference. The meetings covered general corporate governance topics, with a focus on proposed takeover regulations in the Netherlands.
- In early March, SBA staff participated in the Council of Institutional Investors (CII) spring conference, speaking on several panels. The event covered a variety of corporate governance issues such as governance in emerging markets, comparative ownership structures, block-chain voting ledgers, and current SEC and stock exchange proposals.

HIGHLIGHTED PROXY VOTES

Innovate Biopharmaceuticals—the December 4, 2018 annual meeting of Innovate Biopharmaceuticals included a number of management proposals to significantly reduce shareowner rights and protections. Despite a significant drop in share price since a 2018 reverse merger with Monster Digital Inc., all proposals received majority support due to the large number of shares controlled by insiders. While a de minimis holding in the overall portfolio, the meeting shows some of the cautions for minority shareowners. SBA staff voted against the management proposals to classify the board, limit special meetings, eliminate written consent, prohibit director removal without cause, and require a supermajority vote of shareowners.

American Funds—for their November 28, 2018 annual meetings, SBA staff voted shares owned within the FRS Investment Plan. For American Funds mutual funds New Perspective and Euro-pacific Growth, SBA staff cast votes in support of all director nominees with the exception of Ms. Chang, Mr. Gonzalez Guajardo, and Mr. Ovi—each director had support withheld due to concerns with the high number of outside directorships and overall time commitment of their management service. Applied to both the FRS Pension Plan and FRS Investment Plan is the SBA corporate governance principle and proxy voting guideline covering multiple simultaneous directorships (a.k.a. "over-boarded" directors). The SBA's policy limits simultaneous board service to less than four directorships. Trustee elections were the only ballot item up for a vote and this was the first shareowner meeting held by the funds since 2009.

FCB Financial Holdings and LaSalle Hotel Properties—for the November 29, 2018 and November 27, 2018 annual meetings respectively, investors roundly rejected the advisory vote on "golden parachutes", which are compensation packages related to mergers and acquisitions. More than 70% and 66% of investors voted against the plans at the companies, respectively. Golden parachute plans often have excessive terms that take a large chunk of shareowner value for senior executives, leading to many failed votes. The plan at FCB Financial Holdings was recently revised to change provisions to allow executives a windfall of tens of millions in compensation despite them keeping their employment in the merged company. Originally, the plan terms permitted the payments only if the executives departed the company, which is a standard practice. The plan at LaSalle Hotel Properties was rejected by investors due to several poor practices, including over $60 million in payouts to three executives, including company payment of taxes (known as gross-up payments), bonus payments of more than 100% of target, accelerated vesting of equity awards provided at above-target payouts, and generally poor alignment between compensation amounts and company performance. Unfortunately, say-on-pay votes for golden parachute plans are legally non-binding, and quite often the payments are made to executives regardless of the voting results.

Hain Celestial Group—for their December 5, 2018 annual meeting Hain Celestial's advisory vote on executive compensation passed by a slim margin, with 50.6% support. SBA staff voted against the annual say on pay agenda item because of poor alignment between pay and performance, poor disclosure, and excessive severance pay to the outgoing CEO. We also voted against two directors for holding too many directorships, including a CEO who is on three public company boards, and we voted against an additional director for engaging in material related party transactions that personally enrich the director. The company is also under SEC investigation due to its accounting and audit practices and is the subject of multiple class action and derivative lawsuits over materially false or misleading statements and breach of fiduciary duty, among other complaints.

REGULATORY ACTIONS

Securities & Exchange Commission (SEC)

Originally proposed in February 2015, the SEC adopted final rules requiring companies to disclose in their proxy statements their employee and director hedging policies and practices. New Item 407(i) of Regulation S-K requires a company to describe any practices or policies it has adopted regarding the ability of its employees (including officers) or directors to purchase securities or other financial instruments, or otherwise engage in transactions, that hedge or offset, or are designed to hedge or offset, any decrease in the market value of equity securities granted as compensation, or held directly or indirectly by the employee or director. Companies must comply with the new disclosure requirements during fiscal years beginning on or after July 1, 2019, with eased implementation for certain smaller firms. SEC Chairman Jay Clayton stated, "The new rules will provide for clear and straightforward disclosure of company policies regarding hedging. These disclosures in themselves, and in combination with our officer and director purchase and sale disclosure requirements, should bring increased clarity to share ownership and incentives that will benefit our investors, registrants, and our markets."

International Organization of Securities Commissions (IOSCO)

On January 18, 2019, IOSCO published a statement setting out the importance for issuers of considering the inclusion of environmental, social and governance (ESG) matters when disclosing information material to investors' decisions. IOSCO Principle 16 states that issuers should provide "*full, accurate, and timely disclosure of financial results, risk, and other information which is material to investors' decisions.*" With regard to this Principle, IOSCO emphasized that ESG matters, though sometimes characterized as non-financial, may have a material short-term and long-term impact on the business operations of the issuers as well as on risks and returns for investors and their investment and voting decisions. IOSCO's statement notes that ESG information in the market has increased in recent years. Examples of ESG matters that issuers are disclosing include environmental factors related to sustainability and climate change, social factors including labor practices and diversity, and general governance-related factors that have a material impact on the issuer's business. Such information includes how ESG matters affect the issuer's approach to long-term value creation, the nature of strategic and financial risks, and the way the issuer intends to manage them. They also ask issuers to report on the impacts (either potential or realized) resulting from ESG matters. IOSCO also recently established a Sustainable Finance Network of securities regulators to share their experiences and engage in focused discussions about developments in the market and across jurisdictions.

NOTABLE RESEARCH & GOVERNANCE TRENDS

Activist Investors Successful in 2018—a review by Activist Insight (AI) found that activist investors (including activist hedge funds) won more contested elections for board seats in 2018, largely due to a deeper understanding of the companies they target and an overall shift in shareowner sentiment. Activist Insight noted that activists won a board seat in at least 47% of proxy contests worldwide in 2018. That marked a considerable improvement on 39% support in 2017 and 45% support in 2016, which was the previous high mark of the last five years.

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MEMORANDUM

To: Ashbel C. Williams, Executive Director & CIO

From: Maureen M. Hazen, General Counsel Maureen M. Hazen

Date: March 4, 2019

Subject: Office of General Counsel: Standing Report
For Period November 9, 2018 – February 28, 2019

SBA Agreements.

During the period covered by this report, the General Counsel's Office drafted, reviewed and negotiated: (i) 34 new agreements – including 2 Transition Management Agreements and 1 Investment Management Agreement for Global Equity, 5 Private Equity transactions, 8 Strategic Investments, 3 Real Estate investments and 1 new investment consulting agreement; (ii) 132 contract amendments, addenda or renewals; and (iii) 2 contract terminations.

SBA Litigation.

(a) Passive. As of February 28, 2019, the SBA was monitoring (as an actual or putative passive member of the class) 650 securities class actions. During the period from November 8, 2018 – January 31, 2019, the SBA collected recoveries in the amount of $2,115,760.73 as a passive member in 42 securities class actions.

(b) Active.

In re Tribune Litigation. On January 24, 2012, the SBA was served a complaint (along with other defendants) now pending in the U.S. Bankruptcy Court, Southern District of New York by the Official Committee of Unsecured Creditors of the Tribune Company alleging damages for fraudulent conveyance and requesting the return of proceeds received by all defendant investors in a leveraged buy-out of the Tribune Company (which subsequently declared bankruptcy). Pursuant to a plan approved in the bankruptcy proceeding, the claim was transferred to the U.S. District Court, Southern District of New York (the "Court") and consolidated with additional parallel cases for multi-district litigation. The SBA received approximately $11 million in connection with this leveraged buy-out. Several amended complaints have been filed in the action in which the SBA was originally served in January, 2012 (the

"FitzSimons Action"). In early 2017, the Court dismissed the intentional fraudulent transfer count (the only claim applicable to the SBA), and the SBA (and other defendants) are monitoring for a possible appeal. The Plaintiffs recently extended a settlement offer which the SBA rejected.

(ii) *Valeant* Opt-Out Action. During a previous period, the OGC recommended to the Trustees and you that the SBA file the opt-out with the group of plaintiffs being represented by Bernstein Litowitz. The SBA may have incurred more than $62 million in recoverable damages. The Trustees approved filing of the action on November 6, 2017, and the SBA subsequently filed the Complaint. On November 29, 2017, the Court issued a stay in discovery in the case pending the conclusion of the trial in the criminal case filed by the U.S. Department of Justice. In January 2018, the criminal trial concluded with a conviction, and the stay has been lifted. The SBA filed its Initial Disclosures for purposes of commencing discovery and is currently working on a response to a request for production.

(iii) LIBOR Litigation. The Attorney General's Office has commenced an investigation against several banks with respect to the alleged manipulation of LIBOR. The OGC and other SBA staff (e.g. Fixed Income, Financial Operations and Accounting) have been working with the Attorney General's Office since September, 2012. Since then, the Attorney General (representing the SBA) and the class counsel has settled the case with Barclays Bank and Deutsche Bank, and the SBA has recovered over $12,000,000 in settlement proceeds. The plaintiffs also recently settled with UBS but have yet to receive recovery proceeds.

(c) FRS Investment Plan. During the period covered by this report, the General Counsel's Office monitored and/or managed the following cases for the Florida Retirement System Investment Plan (the "Investment Plan"). The SBA issued 8 Final Orders, received notice of filing of 10 new cases, and continued to litigate 7 cases (including 1 appellate case) that were pending during the periods covered by previous reports.

Other Matters.

(a) Public Records. During the period covered by this report, the General Counsel's Office received 33 new public records requests and provided responses to 34 requests. As of the date of this report, the General Counsel's Office continues to work on 9 open requests.

(b) SBA Rule Activities. On December 4, 2018, the Trustees approved the filing of amendments to Rule 19-7.002, F.A.C. and various rules in Rule Chapter 19-11, F.A.C., as set forth below. Notices of Proposed Rulemaking for the proposed changes were filed in the Florida Administrative Register on December 20, 2018, and the proposed changes were filed with the Joint Administrative Procedures Committee ("JAPC") on the same day. JAPC approved the changes and indicated that the SBA could file the changes with the Bureau of Administrative Code (BAC). BAC accepted the changes and made the changes effective February 19, 2019. The changes are as follows:

(i) Rule Chapter 19-7: Rule 19-7.002, F.A.C.:

Rule 19-7.002, F.A.C., (Investment Policy Statements) was amended to adopt the most recent revised Investment Policy Statement approved and made effective by the Trustees on June 13, 2018 for the Local Government Surplus Funds Trust Fund (Non-Qualified).

(ii) Rule Chapter 19-11: Amendments have been made to the following rules:

19-11.001 Definitions
19-11.004 Excessive Trading in the FRS Investment Plan
19-11.005 Florida Retirement System (FRS) State Board of Administration Complaint Procedures
19-11.006 Enrollment Procedures for New Hires
19-11.007 Second Election Enrollment Procedures for the FRS Retirement Programs
19-11.009 Reemployment with an FRS-covered Employer after Retirement
19-11.011 Employer and Employee Contributions and ABO or Present Value Transfer Procedures
19-11.012 Rollovers or Plan to Plan Transfers to or from the FRS Investment Plan

- Rule 19-11.001 has been amended to add a definition for "electronic signatures" and to state that an electronic signature is the functional equivalent of a handwritten signature.

- New forms have been adopted by amendments to Rules 19-11.005, 19-11.006, 19-11.007, 19-11.009, and 19-11.012, F.A.C.

- Rule 19-11.009, F.A.C. has been amended to indicate that retired law enforcement officers who are reemployed by an FRS-participating employer as school resource officers may receive both a salary and retirement benefits once such individuals have been retired for 6 months.

- Rule 19-11.0011 has been amended to reflect the fact that Treasury Regulation 1.415-6(b)(6) no longer is effective and has been replaced by Revenue Procedure 2018-52.

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MEMORANDUM

DATE: March 4, 2019

TO: Board of Trustees

KC
FROM: Ken Chambers, Inspector General

SUBJECT: Quarterly Report on SBA Inspector General Activities

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The SBA Inspector General (IG) is responsible for serving as the organization's ethics officer; conducting internal investigations; overseeing Investment Protection Principles compliance; and handling special projects as directed by the Executive Director & CIO.

Ethics and Training

- Mandatory ethics training and certification of compliance are required for all SBA employees on an annual basis. The on-line training covers gifts, conflicts of interest, financial disclosure, outside employment, lobbyist/principal restrictions, honorarium related events, etc. In addition to ethics training, mandatory training is required annually for all employees in the areas of harassment prevention, personal investment activity, insider trading, incident management framework, and cybersecurity awareness. The deadline for completing the courses is June 30, 2019. Every other year, employees are also required to complete training courses for public records and the Sunshine Law. All new employees are required to take all of the mandatory training courses (which also includes a fiduciary responsibility course) within 30 days of their start date.

- During the period from November 15, 2018 to March 4, 2019, one instance was reported to the Inspector General concerning non-compliance with the SBA gift policy. The violation was self-reported by the employee, and the provider was reimbursed for the gift in accordance with the policy.

Investment Protection Principles Compliance

In September 2002, the Trustees of the SBA adopted Investment Protection Principles (IPPs) for broker-dealers and investment managers in the wake of Wall Street scandals involving tainted equity research and conflicts of interest. The IPPs are geared toward promoting independence, transparency and regulatory compliance, and adherence to the highest standards of ethics and professionalism. On an annual basis, written certification is required from equity, fixed income and real estate investment managers, and broker-dealers. Additionally, annual certifications have been developed for the investment services related consulting firms engaged by the SBA. These consulting firms are required to certify their compliance with certain independence and disclosure principles.

Consultant Independence and Disclosure Certifications for 2018 were submitted to all applicable SBA consultants in January. The certifications have been received from all consultants, indicating full compliance with the principles. The IPP certifications for the equity, fixed income and real estate investment managers were disseminated in February. Many of the certifications have been completed and returned, and the compliance results for all of the investment managers will be included in the next Trustees' report.

SBA Fraud Hotline

Since July 2006, The Network Inc. has been the independent provider of SBA Fraud Hotline services. Through an 800 number, SBA employees may anonymously report tips or information related to fraud, theft, or financial misconduct. The telephone number and information is prominently displayed on the SBA intranet home page. Additionally, the hotline information is available on the SBA internet site as part of the SBA Internal Control and Fraud Policy.

To date, no reports or tips have been received by the Hotline for 2019.

Investment Advisory Council Disclosures

As per Chapter 215.444, Florida Statutes, all current IAC members are required to complete an annual Conflict Disclosure Statement. The disclosure statements were recently disseminated to the current council members, and all but one have been completed and returned.

cc: Ash Williams

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DATE: March 4, 2019

TO: Ash Williams, Executive Director & CIO

FROM: Sooni Raymaker, Chief Risk & Compliance Officer SR

SUBJECT: Trustee Update – March 2019

The role of the Risk Management and Compliance (RMC) unit is to assist the Executive Director & CIO in maintaining an appropriate and effective risk management and compliance program to identify, monitor and mitigate key investment and operational risks. RMC plays a critical role in developing and enhancing the enterprise-wide system of internal controls. RMC proactively works with the Executive Director & CIO and designees to ensure issues are promptly and thoroughly addressed by management.

SBA senior management has created a culture of risk management and compliance through the governance structure, allocation of budgetary resources, policies and associated training and awareness. Management is committed to ethical practices and to serving the best interests of the SBA's clients.

Included below is a brief status report of RMC activities and initiatives completed or in progress during the period November 14, 2018 to March 4, 2019.

Compliance Exceptions
No material compliance exceptions were reported during the period.

Risk Assessments and Management Plans
During November and December 2018, the SBA Enterprise Risk Management (ERM) annual assessment was completed in conjunction with the Office of Internal Audit. The assessment was done based on oral interviews wherein key senior management and business unit leaders were asked to identity key risks and concerns that most significantly threaten the achievement of their business unit or the SBA's strategic objectives. The results were compiled, reviewed and analyzed for top risks, themes and common causes. The major themes and top risks were shared with the Risk and Compliance Committee and the assessment methodology was approved. ERM will continue to analyze the results and prepare an analysis of possible root causes to assist in formulation of management plans and modification of any risk appetites based on the feedback received in the assessment. The ERM is continuing to build out a risk framework that is aligned with the business model of the SBA.

Operational Due Diligence (ODD)
Fiscal year-to-date, as part of the SBA internal investment approval process, the External Investment Manager Oversight (EIMO) team has reviewed 41 new funds/properties/managers across all SBA asset classes and 160 investment contracts. EIMO also conducted two on-site visits with one new manager and one existing manager. EIMO team members work with the asset class portfolio managers to coordinate the investment approval process to manage expectations and workflow. The current process consists of the asset class sending the EIMO Operational Due Diligence Questionnaire (ODDQ) to the investment manager during the investment due diligence process. EIMO reviews the ODDQ along with other supporting documentation and prepares an Operational Due Diligence Risk Assessment report ("ODD RA"). The ODD RA is reviewed by the Senior

Investment Officer for the applicable asset class prior to advancement of the investment approval workflow. Each investment/manager is unique and processes may vary, so the ODD process remains flexible while still trying to be thorough. The ODD process is evolving and will be enhanced by including the review conducted by external ODD consultants. The SBA currently has an external ODD consultant agreement in place for the Public Market Asset Classes and Real Estate. To further enhance the SBA's ODD processes, the SBA recently issued a solicitation for Operational Due Diligence services for Private Equity and Strategic Investments and the ITN is currently in process.

The Florida Asset Manager Evaluation (FLAME) System was implemented in July 2018. To date, approximately 99% of the External Investment Managers have successfully registered in the system and 99% of them have successfully completed and submitted their annual certification. The EIMO team is currently reviewing certifications submitted and working with the asset classes to reach out to Managers who have yet to complete their obligation to submit an annual certification.

Compliance Systems

The primary focus of the Public Market Compliance (PMC) team this period continued to be the implementation of Blackrock's Aladdin system for holdings-based compliance. The project is in the eighth week of a possible 12 week testing phase. This process consists of PMC staff reviewing detailed compliance reports for each portfolio to determine if results are accurate, providing written feedback to Blackrock on issues identified, and verifying that tests are rendering correctly after revisions have been made.

Late in the period, PMC began the process to contract with Bloomberg to provide an additional Bloomberg service to build and code 200 compliance rules in the Bloomberg compliance system. The acquisition of this service will increase the efficiency and effectiveness of automated pre-trade and post-trade compliance for internally managed Fixed Income portfolios maintained on Bloomberg. This project is slated to begin when the Aladdin implementation is completed.

In conjunction with the Aladdin project, advancements in automation continued to be made, utilizing the BNY Mellon Compliance Monitor, Charles River Development and Compliance and Bloomberg systems. In the BNY Mellon system, the permitted securities rules for 6 Fixed Income accounts were developed and scheduled for automated, daily testing and reporting. Compliance rules for 9 Global Equity accounts were also reviewed, updated as needed for enhanced monitoring, and scheduled for daily automated testing and reporting. In the Bloomberg system, 5 rules were automated to test various parameters on a new Fixed Income account. Additionally, in response to an audit recommendation, account guidelines for two transition accounts were coded for automated pre-trade compliance in the Charles River compliance system.

Counterparty Monitoring

ERM is currently working with BNY Mellon to enhance all counterparty reporting and associated production tools. The goal is ensure the availability of relevant exposure reporting that provides clear visibility, data linkages and trend reporting to traders, senior management and oversight functions. Additional key risk indicators are being developed for operational processes affecting counterparty exposure.

Performance and Risk Analytics

Performance and Risk Analytics (PRA) successfully completed fiscal year-end processes and provided responses to requests from OPPAGA and CEM Benchmarking. PRA is working with the Office of Internal Audit to strengthen existing controls and implement new ones. Excel spreadsheets used to reconcile custodian bank data are in the process of being converted to Crystal Reports as a part of this effort. The Senior Quantitative Analysts are working to document existing code and are working with the IT department to implement version control for the Counterparty Monitoring and Performance and Risk dashboards.

Policy Activity
During the period there was one newly developed policy (CAT Fund), 5 revised policies, and 10 revised Investment Portfolio Guidelines. There are several Policies and Investment Portfolio guidelines currently in staffing with finalization anticipated during the months of March and April. Work also continues on evaluation of policies as a whole to determine continued relevance as well as possible integration of like policies into one unified policy.

Personal Investment Activity
During the period there were sixty requests for pre-clearance by SBA employees and there were no violations of the SBA's Personal Investment Activity policy. Eight new employees submitted Initial Holdings Reports and seven employees left the SBA.

On February 14th, the SBA Personal Investment Activity policy was revised to include some additional reporting requirements to be in better conformance with section 112.313(3) which prohibits an employee from doing business with one's agency when they have a material ownership in that business entity. Materiality is defined in s. 112.312(5) as ownership interest of more than 5 percent. We have maintained the policy amount of $20,000 but also want any disclosure relative to the 5% threshold for statutory compliance. If a disclosure is made by an employee, RMC will do a conflict analysis based on the security, the employee's position, ability to influence, etc. and reach out to the SBA General Counsel and Inspector General as appropriate. The SBA Ethics policy was also updated to reflect this additional disclosure.

State Board of Administration of Florida

Major Mandate Review
Fourth Quarter 2018

Table of Contents

Aon Hewitt | Retirement and Investment
Investment advice and consulting services provided by Aon Hewitt Investment Consulting, Inc., an Aon Company.

Empower Results®

Executive Summary

- The major mandates each produced generally strong returns relative to their respective benchmarks over both short- and long-term time periods ending December 31, 2018.
- The Pension Plan outperformed its Performance Benchmark during the quarter and over the trailing one-, three-, five-, ten-, and fifteen-year periods.
  - Over the trailing five-year period, Private Equity is the leading source of value added, followed by Global Equity, Strategic Investments, and Real Estate.
  - Over the trailing ten-year period, the Pension Plan's return ranked in the top quartile of the TUCS Top Ten Defined Benefit Plan universe.
- The FRS Investment Plan outperformed the Total Plan Aggregate Benchmark over the trailing one-, three-, five-, and ten-year periods.
- The Lawton Chiles Endowment Fund outperformed its benchmark over the trailing one-, three-, five-, and ten-year periods.
- The CAT Funds' performance is strong over both short-term and long-term periods, outperforming the benchmark over the trailing three-, five-, and ten-year periods.
- Florida PRIME has continued to outperform its benchmark over both short- and long-term time periods.

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Pension Plan: Executive Summary

- The Pension Plan assets totaled $150.6 billion as of December 31, 2018 which represents a $12.6 billion decrease since last quarter.
- The Pension Plan, when measured against the Performance Benchmark, outperformed over the quarter and the trailing one-, three-, five-, ten-, and fifteen-year periods.
- Relative to the Absolute Nominal Target Rate of Return, the Pension Plan underperformed over the trailing one-, five-, fifteen-, twenty-year period, and outperformed over the trailing ten-, twenty-five-, and thirty-year time periods.
- The Pension Plan is well-diversified across six broad asset classes, and each asset class is also well-diversified.
  - Public market asset class investments do not significantly deviate from their broad market-based benchmarks, e.g., sectors, market capitalizations, global regions, credit quality, duration, and security types.
  - Private market asset classes are well-diversified by vintage year, geography, property type, sectors, investment vehicle/asset type, and investment strategy.
  - Asset allocation is monitored on a daily basis to ensure that the actual asset allocation of the Pension Plan remains close to the long-term policy targets set forth in the Investment Policy Statement.
- Aon Hewitt Investment Consulting and SBA staff revisit the plan design annually through informal and formal asset allocation and asset liability reviews.
- Adequate liquidity exists within the asset allocation to pay the monthly obligations of the Pension Plan consistently and on a timely basis.

FRS Pension Plan Change in Market Value
Periods Ending 12/31/2018

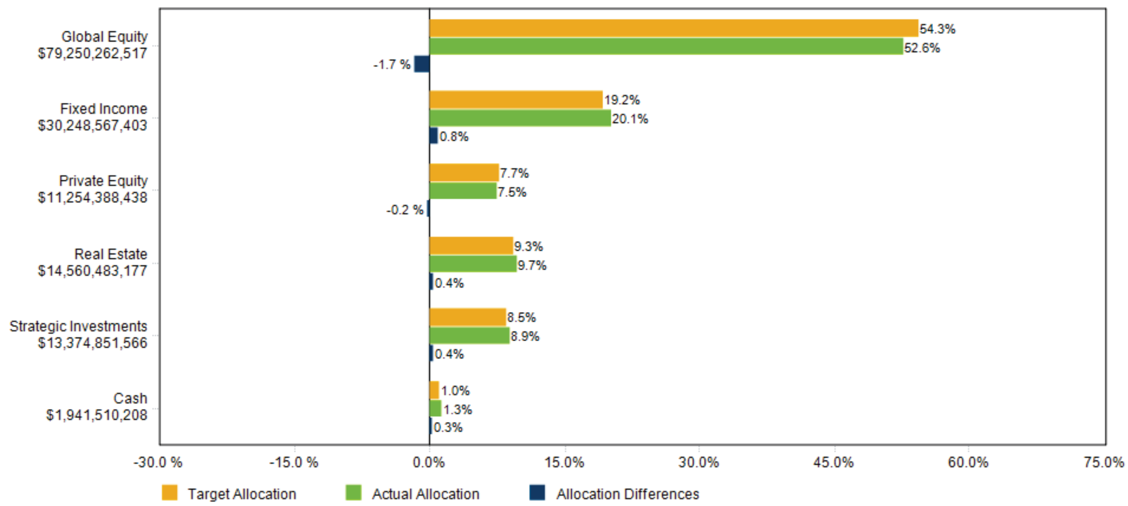
Summary of Cash Flows

	Fourth Quarter	Fiscal YTD*
Beginning Market Value	$163,236,430,001	$160,439,358,858
+/- Net Contributions/(Withdrawals)	$(57,241,303)	$(1,971,208,916)
Investment Earnings	$(12,549,125,389)	$(7,838,086,633)
= Ending Market Value	$150,630,063,309	$150,630,063,309
Net Change	$(12,606,366,692)	$(9,809,295,549)

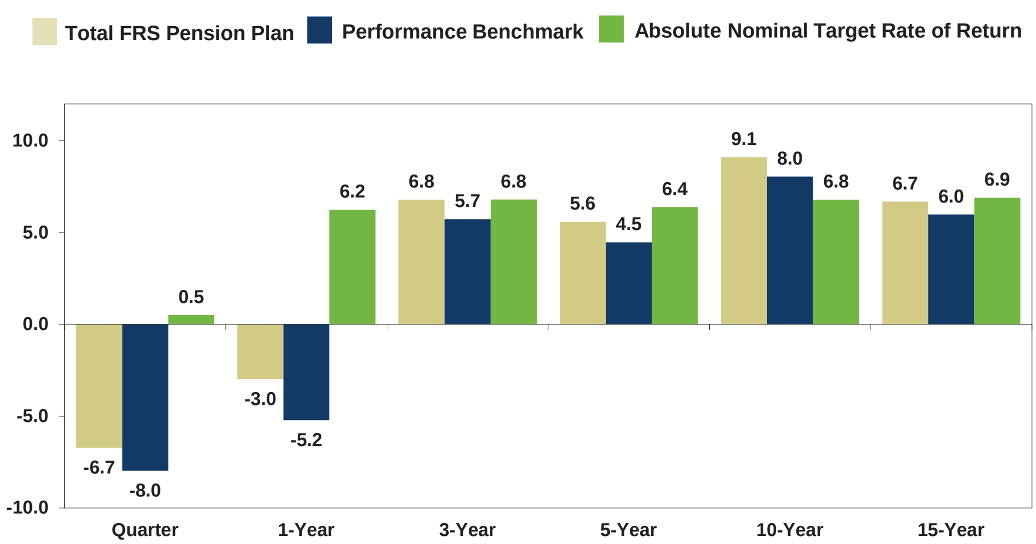
*Period July 2018 – December 2018

Asset Allocation as of 12/31/2018
Total Fund Assets = $150.6 Billion

	Market Value ($)	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
Total Fund	150,630,063,309	100.0	100.0		
Global Equity	79,250,262,517	52.6	54.3	45.0	70.0
Fixed Income	30,248,567,403	20.1	19.2	10.0	26.0
Private Equity	11,254,388,438	7.5	7.7	2.0	9.0
Real Estate	14,560,483,177	9.7	9.3	4.0	16.0
Strategic Investments	13,374,851,566	8.9	8.5	0.0	16.0
Cash	1,941,510,208	1.3	1.0	0.3	5.0

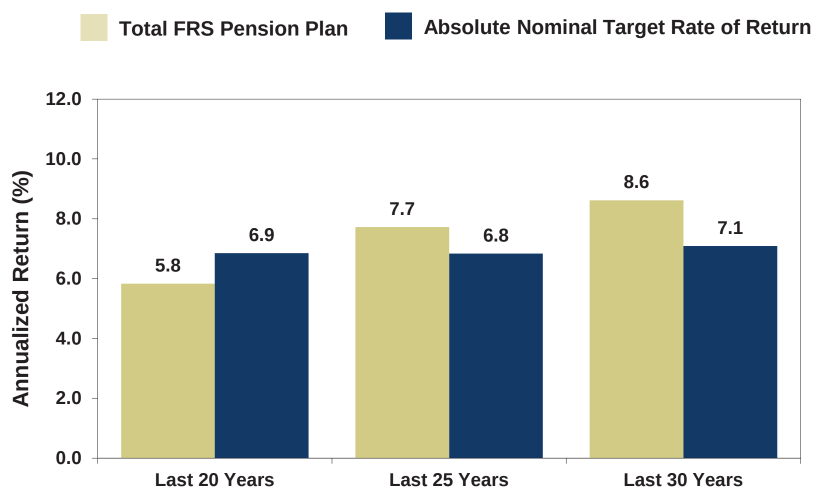


FRS Pension Plan Investment Results
Periods Ending 12/31/2018



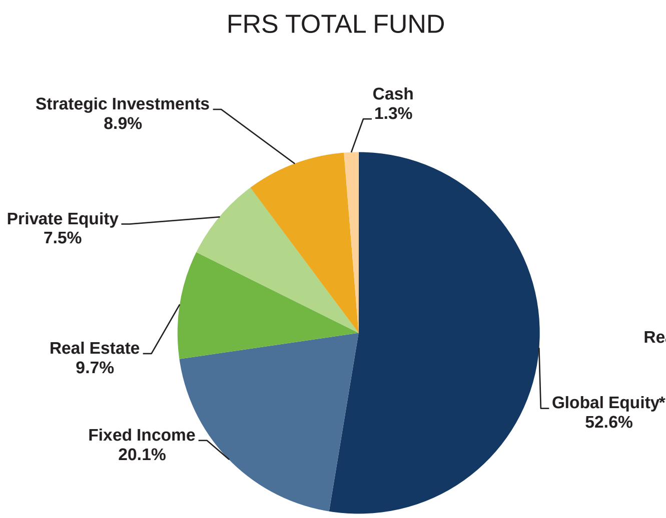
FRS Pension Plan Investment Results
Periods Ending 12/31/2018

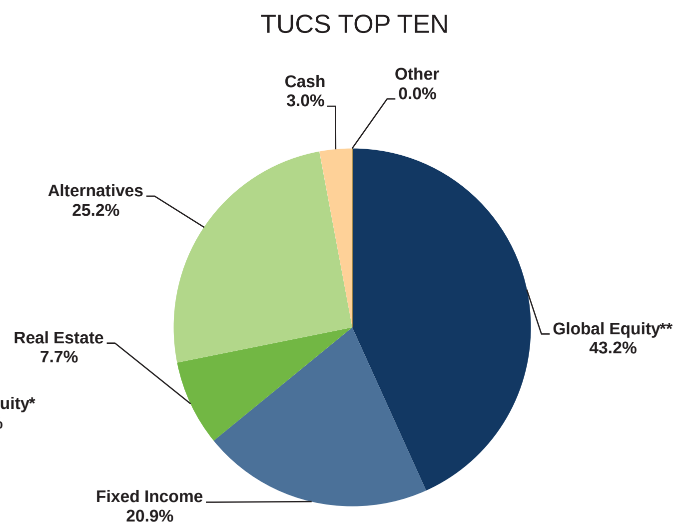
Long-Term FRS Pension Plan Performance Results vs. SBA's Long-Term Investment Objective



Comparison of Asset Allocation (TUCS Top Ten)
As of 12/31/2018

FRS Pension Plan vs. Top Ten Defined Benefit Plans



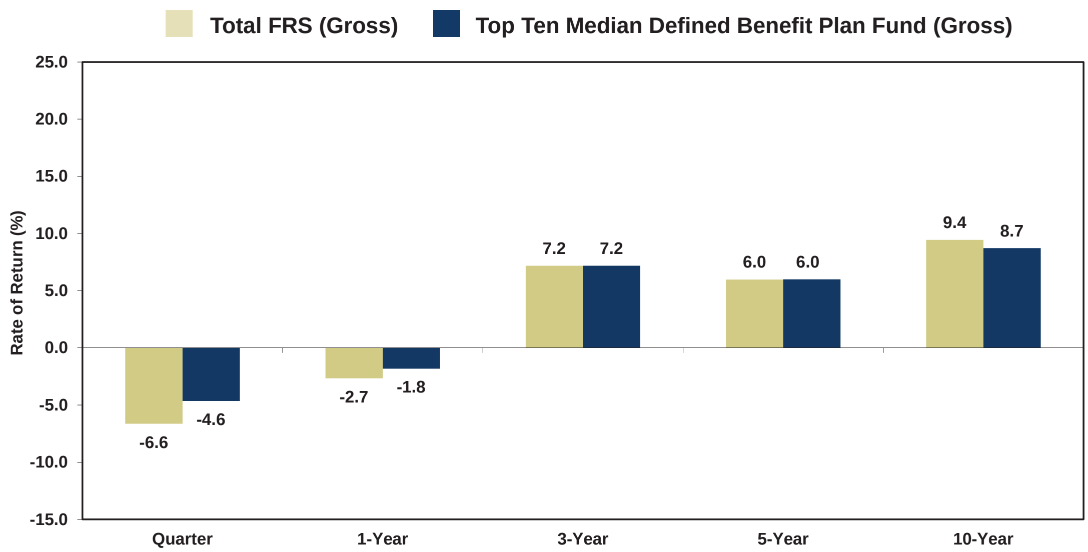


*Global Equity Allocation: 24.9% Domestic Equities; 21.5% Foreign Equities; 5.2% Global Equities; 1.0% Global Equity Liquidity Account. Percentages are of the Total FRS Fund.

**Global Equity Allocation: 26.9% Domestic Equities; 16.3% Foreign Equities.

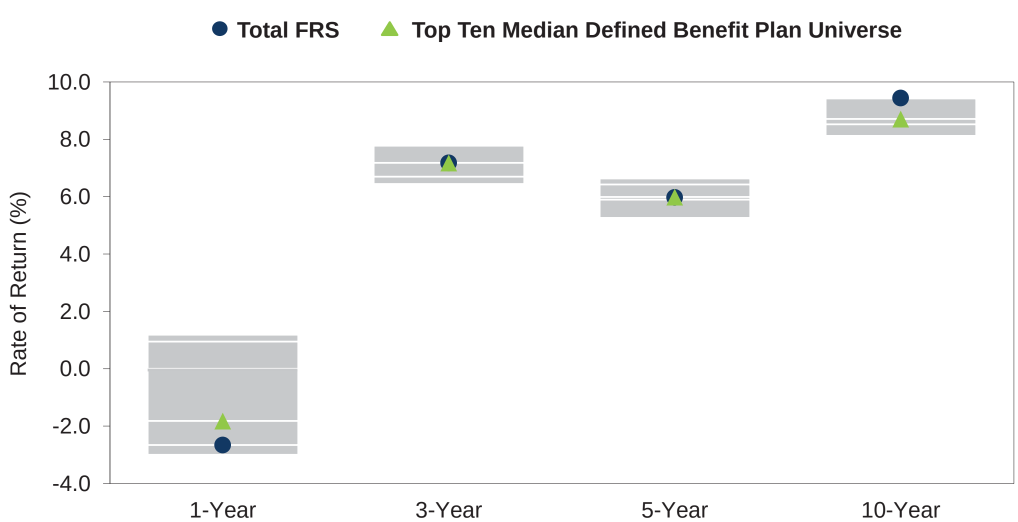
Note: The TUCS Top Ten Universe includes $1,465.3 billion in total assets. The median fund size was $145.4 billion and the average fund size was $146.5 billion.
Note: Due to rounding, percentage totals displayed may not sum perfectly.

FRS Results Relative to TUCS Top Ten Defined Benefit Plans
Periods Ending 12/31/2018



Note: The TUCS Top Ten Universe includes $1,465.3 billion in total assets. The median fund size was $145.4 billion and the average fund size was $146.5 billion.

Top Ten Defined Benefit Plans FRS Universe Comparison (TUCS)
Periods Ending 12/31/2018



	1-Year	3-Year	5-Year	10-Year
FRS Percentile Ranking	75	50	62	5

Note: The TUCS Top Ten Universe includes $1,465.3 billion in total assets. The median fund size was $145.4 billion and the average fund size was $146.5 billion.

Investment Plan: Executive Summary

- The FRS Investment Plan outperformed the Total Plan Aggregate Benchmark over the trailing one-, three-, five-, and ten-year periods. This suggests strong relative performance of the underlying fund options in which participants are investing.

- The FRS Investment Plan's total expense ratio is slightly higher, on average, when compared to a defined contribution peer group and is lower than the average corporate and public defined benefit plan, based on year-end 2017 data. The total FRS Investment Plan expense ratio includes investment management fees, as well as administration, communication and education costs. Communication and education costs are not charged to FRS Investment Plan members; however, these and similar costs may be charged to members of plans within the peer group.

- Management fees are lower than the median as represented by Morningstar's mutual fund universe for every investment category.

- The FRS Investment Plan offers an appropriate number of fund options that span the risk and return spectrum.

- The Investment Policy Statement is revisited periodically to ensure that the structure and guidelines of the FRS Investment Plan are appropriate, taking into consideration the FRS Investment Plan's goals and objectives.

Total Investment Plan Returns & Cost

Periods Ending 12/31/2018*

	One-Year	Three-Year	Five-Year	Ten-Year
FRS Investment Plan	**-5.7%**	**5.8%**	**4.3%**	**7.5%**
*Total Plan Aggregate Benchmark***	-5.8%	5.7%	4.1%	7.1%
FRS Investment Plan vs. Total Plan Aggregate Benchmark	0.1	0.1	0.2	0.4

Periods Ending 12/31/2017***

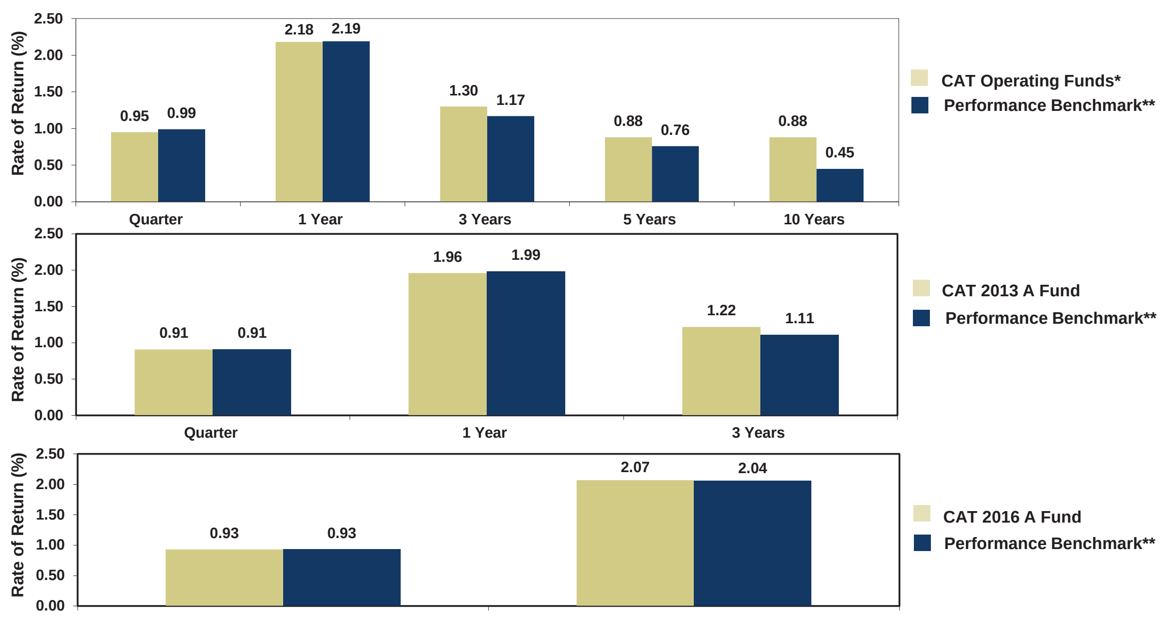
	Five-Year Average Return****	Five-Year Net Value Added	Expense Ratio
FRS Investment Plan	**8.3%**	**0.2%**	**0.30%*******
Peer Group	9.6	0.2	0.28
FRS Investment Plan vs. Peer Group	-1.3	0.0	0.02

*Returns shown are net of fees.
**Aggregate benchmark returns are an average of the individual portfolio benchmark returns at their actual weights.
***Source: 2017 CEM Benchmarking Report. Peer group for the Five-Year Average Return and Value Added represents the U.S. Median plan return based on the CEM 2017 Survey that included 123 U.S. defined contribution plans with assets ranging from $93 million to $60.3 billion. Peer group for the Expense Ratio represents a custom peer group for FSBA of 17 DC plans including corporate and public plans with assets between $2.3 - $18.6 billion.
****Returns shown are gross of fees.
*****The total FRS Investment Plan expense ratio includes investment management fees, as well as administration, communication and education costs. These latter costs are not charged to FRS Investment Plan members; however, these and similar costs may be charged to members of plans within the peer group utilized above.

CAT Fund: Executive Summary

- Returns on an absolute basis continue to be modest given the current low interest rate environment.
- Over long-term periods, the relative performance of the CAT Operating Funds has been favorable as they have outperformed the Performance Benchmark over the trailing three-, five-, and ten-year time periods.
- The CAT 2013 A Fund has generated mixed results relative to its Performance Benchmark, outperforming over the trailing three-year period, and performing in-line with and slightly below its Performance Benchmark over the quarter and trailing one-year periods, respectively.
- The CAT 2016 A Fund has a short performance history thus far, and has performed in line with and slightly ahead of its Performance Benchmark over the quarter and one-year periods.
- All CAT Funds are adequately diversified across issuers within the short-term bond market.
- The Investment Portfolio Guidelines appropriately constrain the CAT Funds to invest in short-term and high quality bonds to minimize both interest rate and credit risk.
- Adequate liquidity exists to address the cash flow obligations of the CAT Funds.
- The Investment Portfolio Guidelines are revisited periodically to ensure that the structure and guidelines of the CAT Funds are appropriate, taking into consideration the CAT Funds' goals and objectives.

CAT Funds Investment Results
Periods Ending 12/31/2018



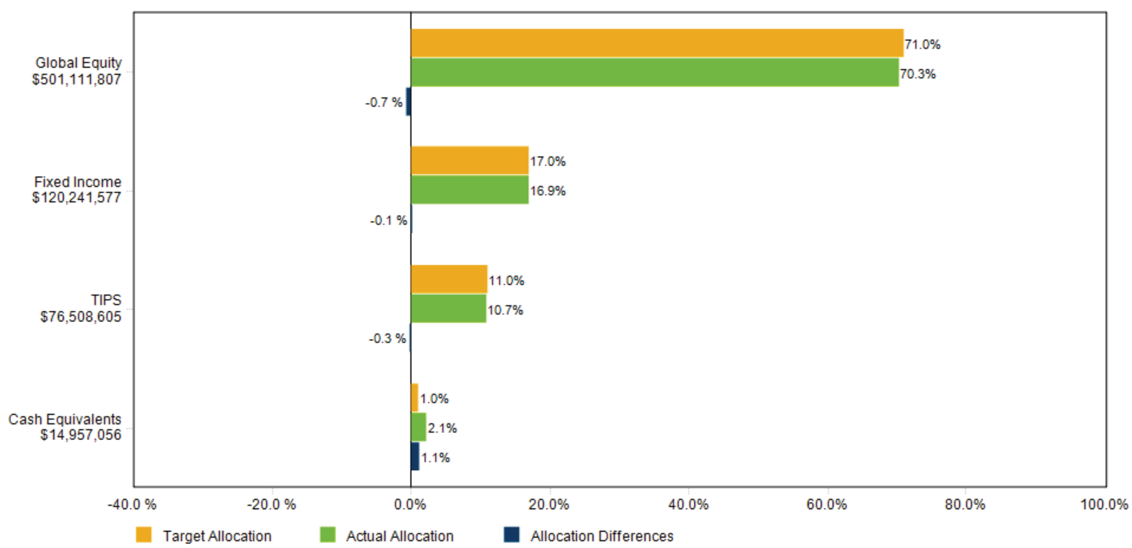
*CAT Operating Funds: Beginning March 2008, the returns for the CAT Operating Funds reflect marked-to-market returns. Prior to that time, cost-based returns are used.
**Performance Benchmark: The CAT Operating Funds were benchmarked to the IBC First Tier through February 2008. From March 2008 to December 2009, it was the Merrill Lynch 1-Month LIBOR. From January 2010 to June 2010, it was a blend of the average of the 3-Month Treasury Bill rate and the iMoneyNet First Tier Institutional Money Market Funds Gross Index. From July 2010 to September 2014, it was a blend of the average of the 3-Month Treasury Bill rate and the iMoneyNet First Tier Institutional Money Market Funds Net Index. Effective October 2014, it is a blend of the average of the Merrill Lynch 1-Yr US Treasury Bill Index and the iMoneyNet First Tier Institutional Money Market Funds Net Index. Beginning February 2018, the CAT Operating Funds were split into two different sub funds, the CAT Fund Operating Liquidity Fund and the CAT Fund Operating Claims Paying Fund. Beginning February 2018, the CAT Fund Operating Liquidity Fund was benchmarked to the B of A Merrill Lynch 3-6 Month US Treasury Bill Index, and the CAT Fund Operating Claims Paying Fund benchmark is a blend of 35% of the Bank of America Merrill Lynch 1-3 Year AA U.S. Corporate Bond Index and 65% of Bank of America Merrill Lynch 1-3 Year U.S. Treasury Index. Beginning February 2018, the CAT 2013 A and 2016 A Funds were benchmarked to themselves.

Lawton Chiles Endowment Fund: Executive Summary

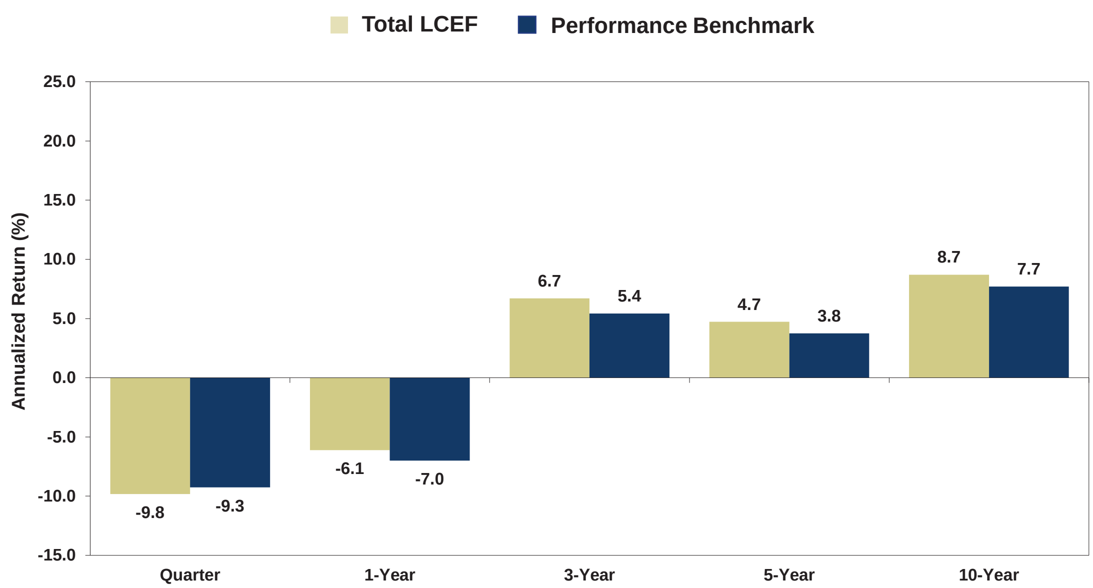
- Established in July 1999, the Lawton Chiles Endowment Fund (LCEF) was created to provide a source of funding for child health and welfare programs, elder programs and research related to tobacco use.
  - The investment objective is to preserve the real value of the net contributed principal and provide annual cash flows for appropriation.
  - The Endowment's investments are diversified across various asset classes including global equity, fixed income, inflation-indexed bonds (TIPS) and cash.
- The Endowment assets totaled $712.8 million as of December 31, 2018.
- The Endowment's return outperformed its Target over the trailing one-, three-, five-, and ten-year time periods and underperformed its Target over the trailing quarter.

Asset Allocation as of 12/31/2018
Total LCEF Assets = $712.8 Million

	Market Value ($)	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
LCEF Total Fund	712,819,046	100.0	100.0		
Global Equity	501,111,807	70.3	71.0	61.0	81.0
Fixed Income	120,241,577	16.9	17.0	12.0	22.0
TIPS	76,508,605	10.7	11.0	6.0	16.0
Cash Equivalents	14,957,056	2.1	1.0	0.0	10.0



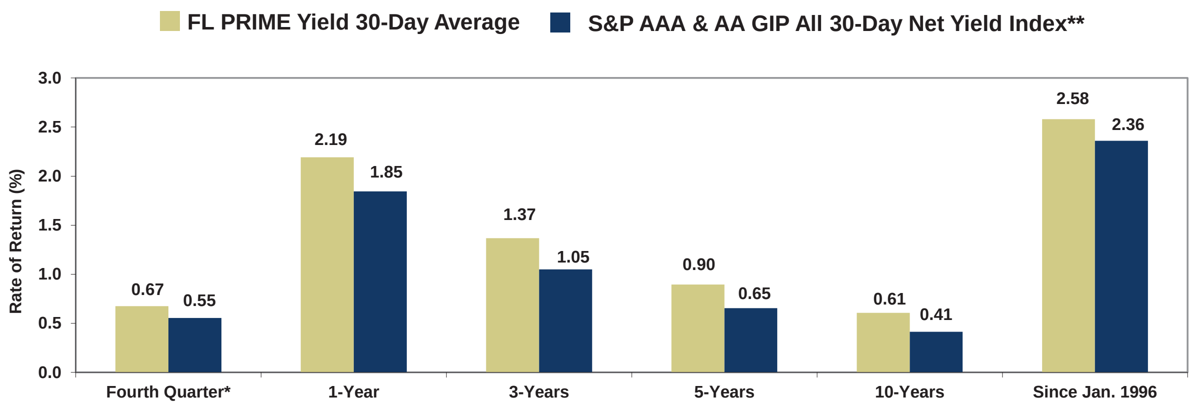
LCEF Investment Results
Periods Ending 12/31/2018



Florida PRIME: Executive Summary

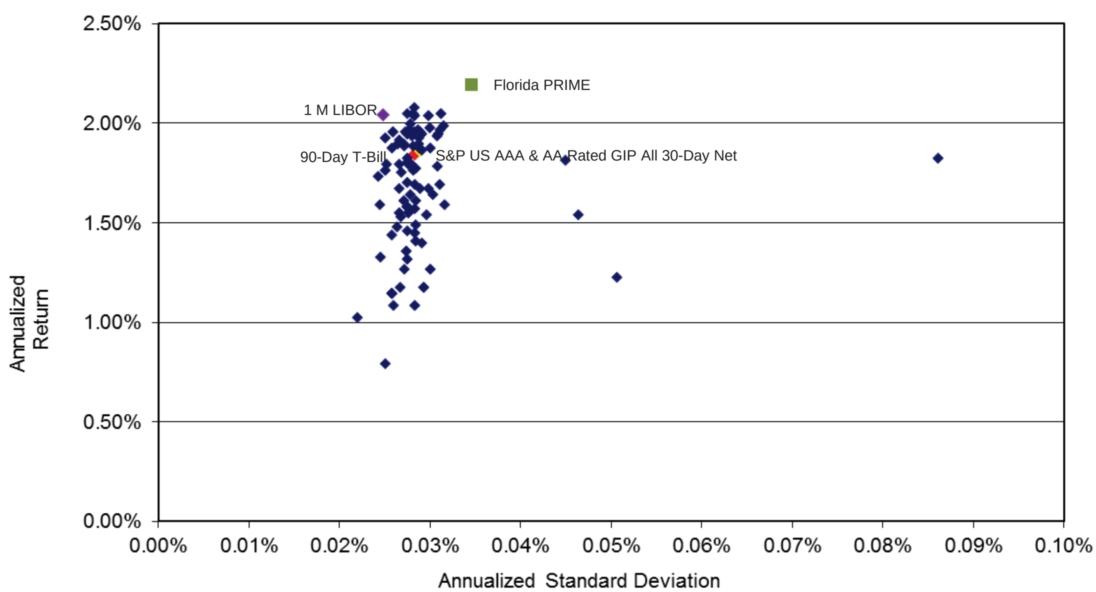
- The purpose of Florida PRIME is safety, liquidity, and competitive returns with minimal risk for participants.
- The Investment Policy Statement appropriately constrains Florida PRIME to invest in short-term and high quality bonds to minimize both interest rate and credit risk.
- Florida PRIME is adequately diversified across issuers within the short-term bond market, and adequate liquidity exists to address the cash flow obligations of Florida PRIME.
- Performance of Florida PRIME has been strong over short- and long-term time periods, outperforming its performance benchmark during the quarter and over the trailing one-, three-, five-, and ten-year time periods.
- As of December 31, 2018, the total market value of Florida PRIME was $13.8 billion.
- Aon Hewitt Investment Consulting, in conjunction with SBA staff, compiles an annual best practices report that includes a full review of the Investment Policy Statement, operational items, and investment structure for Florida PRIME.

Florida PRIME Investment Results
Periods Ending 12/31/2018

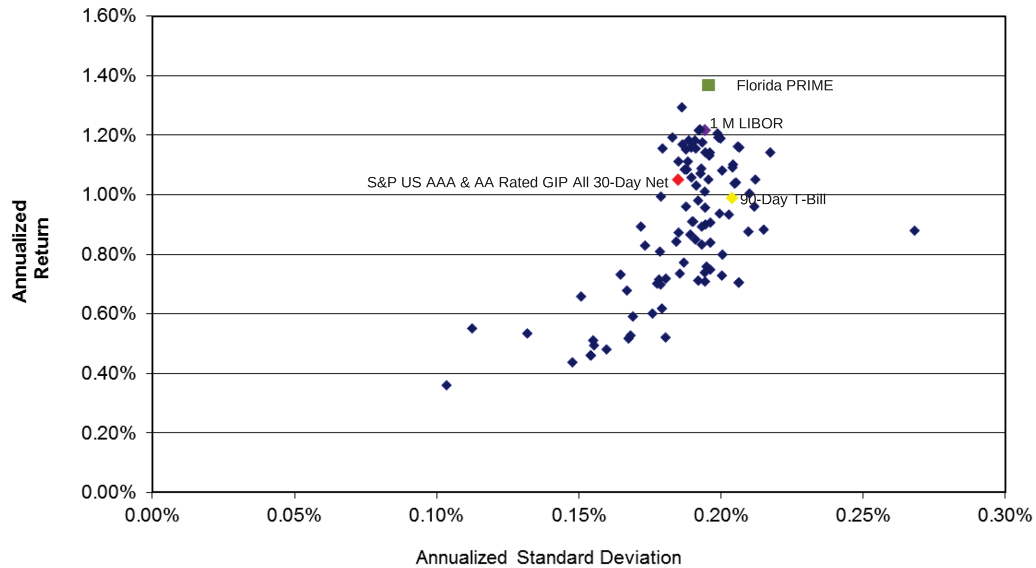


*Returns less than one year are not annualized.
**S&P AAA & AA GIP All 30-Day Net Yield Index for all time periods shown.

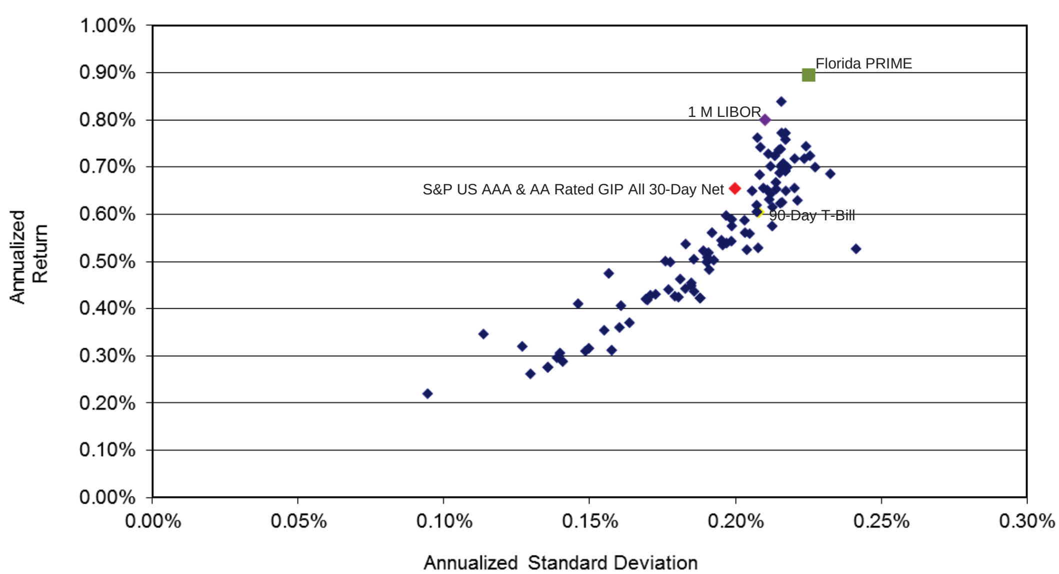
Florida PRIME Risk vs. Return
1 Year Ending 12/31/2018



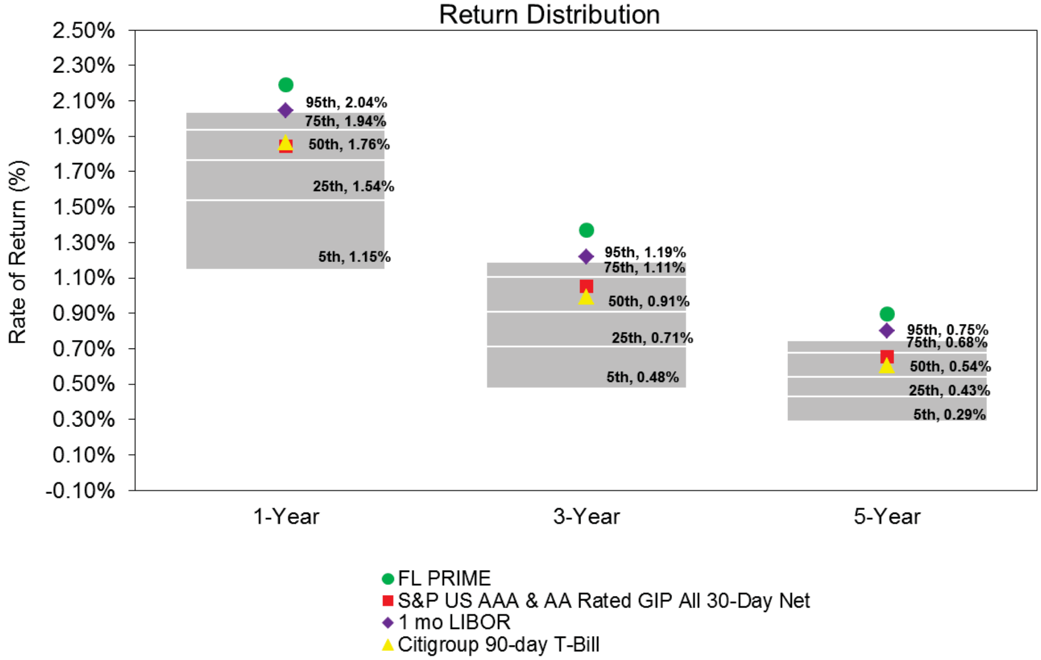
Florida PRIME Risk vs. Return
3 Years Ending 12/31/2018



Florida PRIME Risk vs. Return
5 Years Ending 12/31/2018



Return Distribution
Periods Ending 12/31/2018



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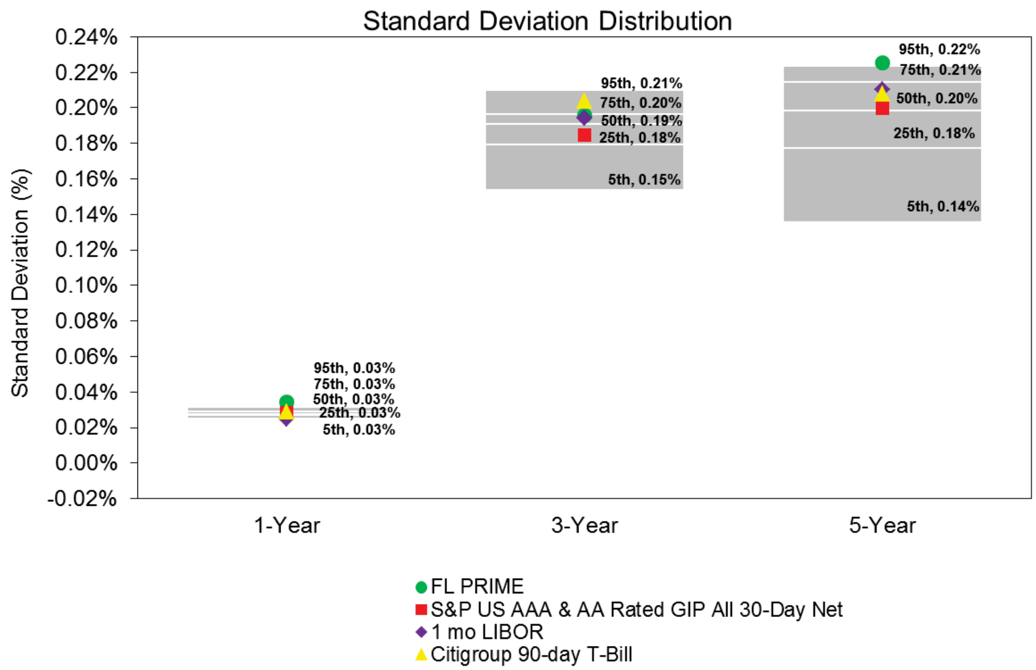
Standard Deviation Distribution
Periods Ending 12/31/2018



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Appendix

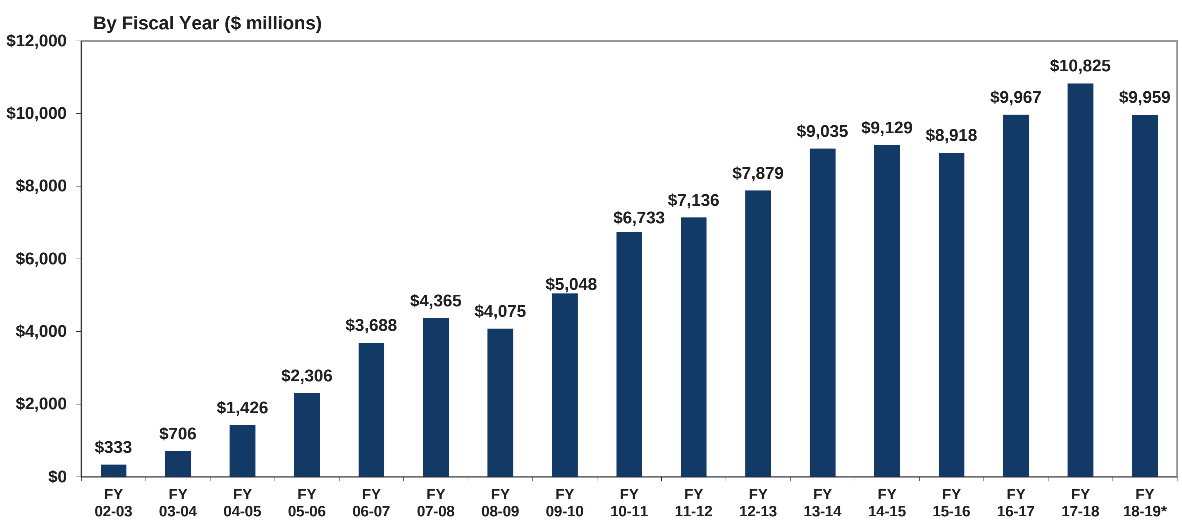
FRS Investment Plan Costs

Investment Category	Investment Plan Fee*	Average Mutual Fund Fee**
Large Cap Equity	0.15%	0.81%
Small-Mid Cap Equity	0.59%	0.95%
International Equity	0.31%	0.97%
Diversified Bonds	0.15%	0.52%
Target Date	0.15%	0.56%
Money Market	0.06%	0.31%

*Average fee of multiple products in category as of 12/31/2018.

**Source: AHIC's annual mutual fund expense analysis as of 12/31/2017.

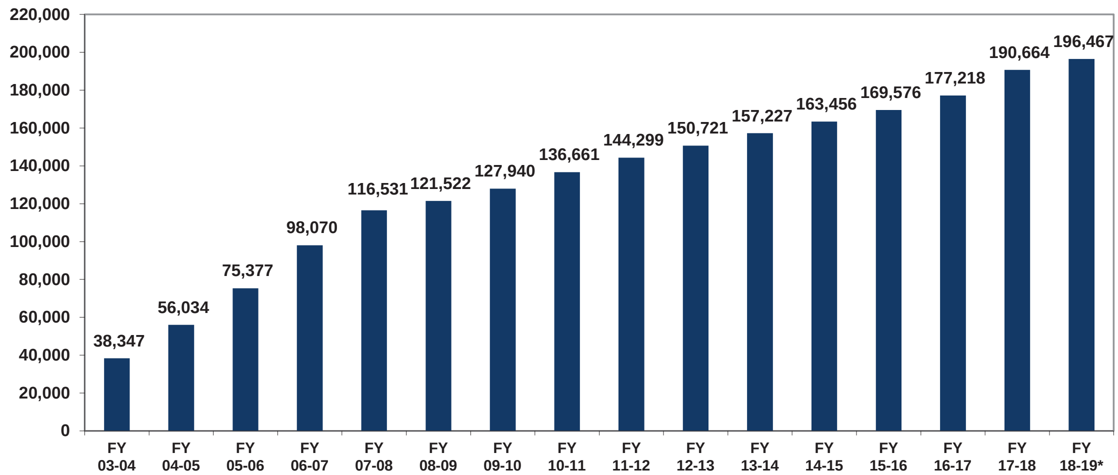
Investment Plan Fiscal Year End Assets Under Management



*Period Ending 12/31/2018

Source: Investment Plan Administrator

Investment Plan Membership



***Period Ending 12/31/2018**

Source: Investment Plan Administrator

Florida Hurricane Catastrophe Fund Background

- The purpose of the Florida Hurricane Catastrophe Fund (FHCF) is to provide a stable, ongoing and timely source of reimbursement to insurers for a portion of their hurricane losses.
- The CAT Operating Funds, along with CAT 2016 A Fund and CAT 2013 A Fund are internally managed portfolios.
- As of December 31, 2018, the total value of:
  - The CAT Operating Funds was $14.6 billion
  - The CAT 2016 A Fund was $1.2 billion
  - The CAT 2013 A Fund was $1.0 billion

CAT Operating Funds Characteristics
Period Ending 12/31/2018

Maturity Analysis	
1 to 30 Days	4.86%
31 to 60 Days	5.94
61 to 90 Days	10.34
91 to 120 Days	2.06
121 to 150 Days	5.49
151 to 180 Days	3.62
181 to 270 Days	5.51
271 to 365 Days	3.41
366 to 455 Days	2.32
>= 456 Days	56.45
Total % of Portfolio:	100.00%

Bond Rating Analysis	
AAA	73.20%
AA	11.70
A	15.10
Baa	0.00
Other	0.00
Total % of Portfolio	100.00%

CAT 2013 A Fund Characteristics
Period Ending 12/31/2018

Maturity Analysis	
1 to 30 Days	0.52%
31 to 60 Days	0.00
61 to 90 Days	4.58
91 to 120 Days	2.86
121 to 150 Days	0.00
151 to 180 Days	0.00
181 to 270 Days	11.47
271 to 365 Days	5.10
366 to 455 Days	10.55
>= 456 Days	64.92
Total % of Portfolio:	100.00%

Bond Rating Analysis	
AAA	88.23%
AA	9.88
A	1.89
Baa	0.00
Other	0.00
Total % of Portfolio	100.00%

CAT 2016 A Fund Characteristics
Period Ending 12/31/2018

Maturity Analysis	
1 to 30 Days	0.25%
31 to 60 Days	0.00
61 to 90 Days	0.00
91 to 120 Days	0.00
121 to 150 Days	0.00
151 to 180 Days	44.23
181 to 270 Days	0.11
271 to 365 Days	0.53
366 to 455 Days	5.11
>= 456 Days	49.77
Total % of Portfolio:	100.00%

Bond Rating Analysis	
AAA	70.28%
AA	22.27
A	7.45
Baa	0.00
Other	0.00
Total % of Portfolio	100.00%

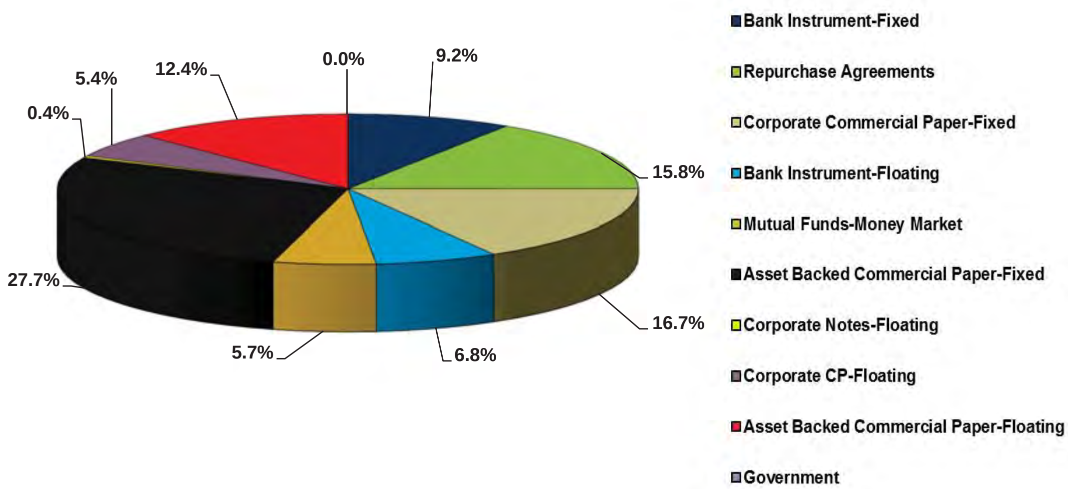
Florida PRIME Characteristics
Quarter Ending 12/31/2018

Cash Flows as of 12/31/2018	Fourth Quarter	Fiscal YTD*
Opening Balance	$9,463,357,981	$10,512,100,060
Participant Deposits	$11,899,166,275	$15,479,535,270
Gross Earnings	$65,938,010	$128,974,209
Participant Withdrawals	($7,589,604,649)	($12,280,886,215)
Fees	($884,208)	($1,749,915)
Closing Balance (12/31/2018)	$13,837,973,408	$13,837,973,408
Change	**$4,374,615,427**	**$3,325,873,348**

*Period July 2018 – December 2018

Florida PRIME Characteristics
Quarter Ending 12/31/2018

Portfolio Composition



Florida PRIME Characteristics
Period Ending 12/31/2018

Effective Maturity Schedule	
1-7 Days	46.4%
8 - 30 Days	15.9%
31 - 90 Days	27.0%
91 - 180 Days	8.6%
181+ Days	2.1%
Total % of Portfolio:	**100.0%**

S & P Credit Quality Composition	
A-1+	61.8%
A-1	38.2%
Total % of Portfolio:	**100.0%**

FRS Pension Plan | Fourth Quarter 2018

Quarterly Investment Review

Visit the Aon Retirement and Investment Blog *(http://retirementandinvestmentblog.aon.com); sharing our best thinking.*

Empower Results®

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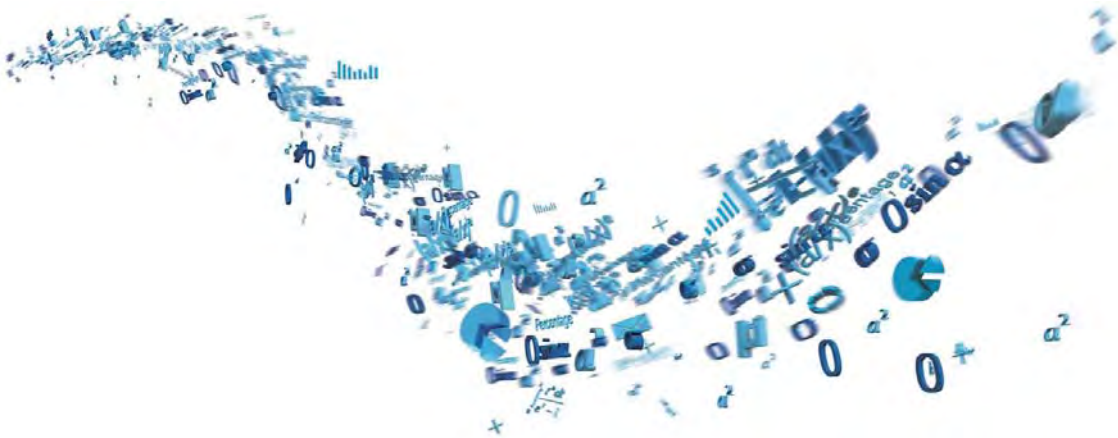
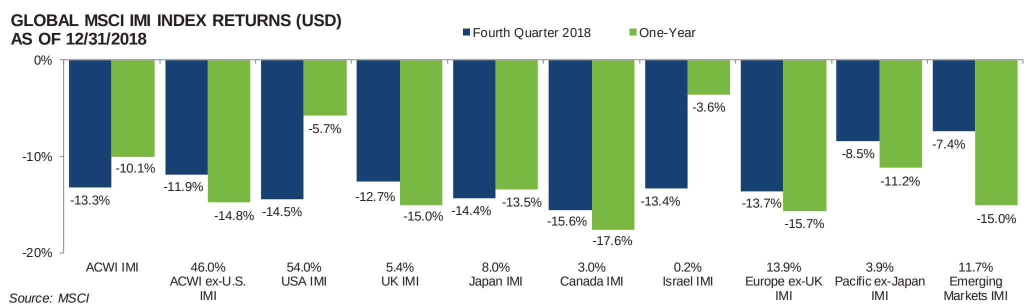


Market Environment

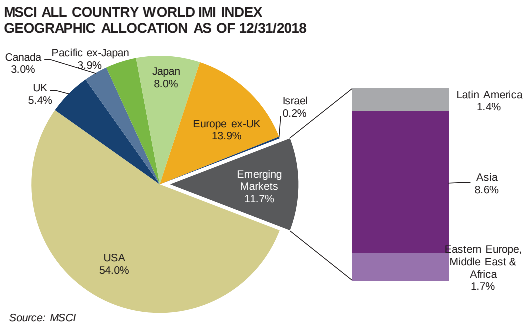
Global Equity Markets

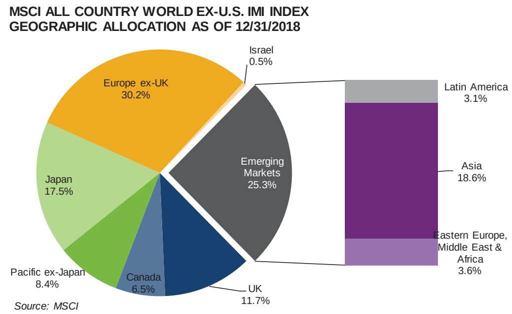


Source: MSCI

- Global equities were rocked by rising concerns of slowing global growth and trade wars in Q4 2018. Economic releases continued to underwhelm with measures of economic activity reflecting a slowing global growth environment. In local currency terms, the MSCI AC World Investable Market Index returned -13.1% while U.S. dollar strength led to a slightly lower return of -13.3% in U.S. dollar terms.
- Falling oil prices and poor performance from Canadian Financials, combined with a weakening of the Canadian dollar on the back of a more dovish stance from the Bank of Canada, resulted in the Canadian equity market being the weakest performer over the quarter.
- Emerging market equities outperformed relative to their developed market peers. This is despite the ongoing U.S.-China trade saga and building concerns over global growth. In Brazil, the election win for Jair Bolsonaro came as a surprise and was welcomed by markets due to his party's pro-market focus and reform agenda. From a sector perspective, financial stocks were the main outperformers with a comparatively small decline of -0.9% over the quarter.

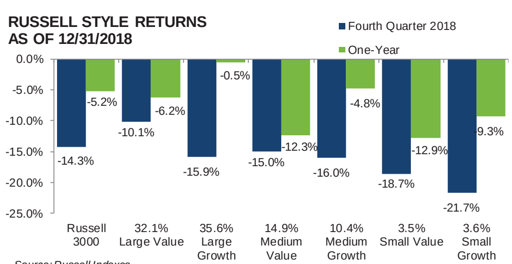
Global Equity Markets

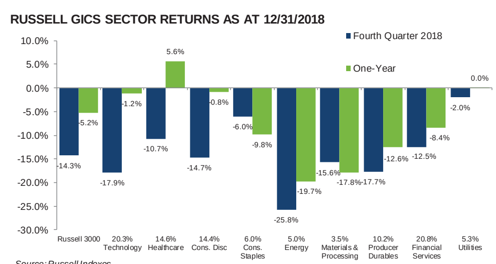




- The two exhibits on this slide illustrate the percentage that each country/region represents of the global and international equity markets as measured by the MSCI All Country World IMI Index and the MSCI All Country World ex-U.S. IMI Index, respectively.

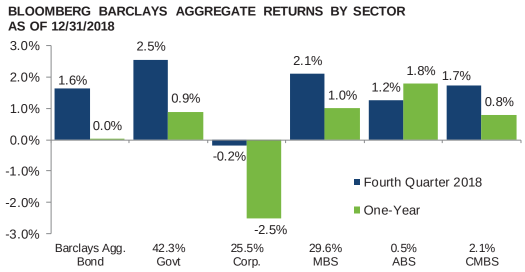
U.S. Equity Markets



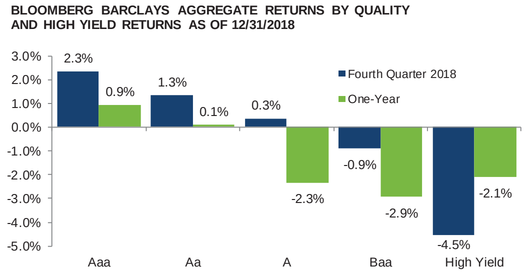


- Up until November 2018, U.S. equities had generated high single-digit returns. However, all the gains were reversed towards the end of the quarter. The Dow Jones Total Stock Market Index dropped by 14.4% in the fourth quarter, translating into an overall 5.3% fall for the year. Most notably, Information Technology stocks, which had been such a strong driver for the U.S. market, moved sharply lower over the quarter. Earnings growth expectations, particularly in the tech sector where optimism was perhaps excessive, were revised down.
- The Russell 3000 Index fell 14.3% during the fourth quarter and 5.2% over the one-year period.
- All sectors generated negative returns over the quarter. In particular, Energy (-25.8%) and Technology (-17.9%) were the worst performing sectors in Q4 2018.
- Performance was negative across the market capitalization spectrum over the quarter. In general, small cap stocks underperformed both medium and large cap stocks over the quarter. Growth stocks underperformed their Value counterparts in Q4 2018. Over the last 12 months, Value stocks continued to lag their Growth stock equivalents significantly.

U.S. Fixed Income Markets

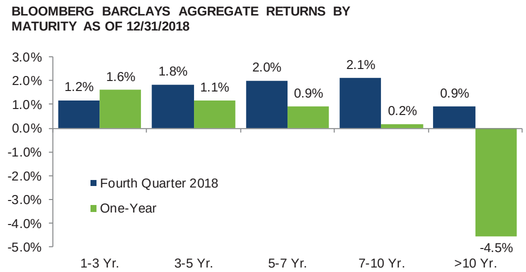


Source: FactSet



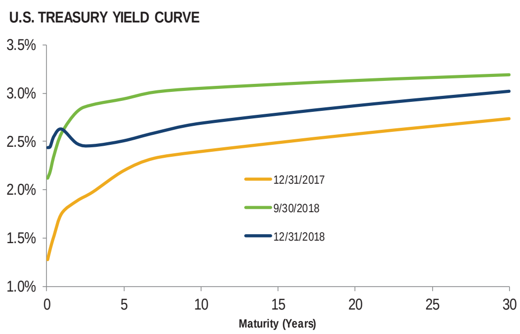
Source: FactSet

- The Bloomberg Barclays U.S. Aggregate Bond Index rose over the quarter. Government bonds were the best performer at 2.5% whilst corporate bonds were the worst performer at -0.2%.
- Performance was positive across all investment-grade credit qualities, with the exception of Baa bonds which fell 0.9%. High yield bonds fell the most at -4.5%. In investment grade bonds, Aaa bonds was the major outperformer with a return of 2.3%.
- Intermediate maturity bonds outperformed short and long maturity bonds over the quarter. Intermediate maturity bonds returned 1.8-2.1% while short and long maturity bonds returned 1.2% and 0.9%, respectively, in Q4 2018.

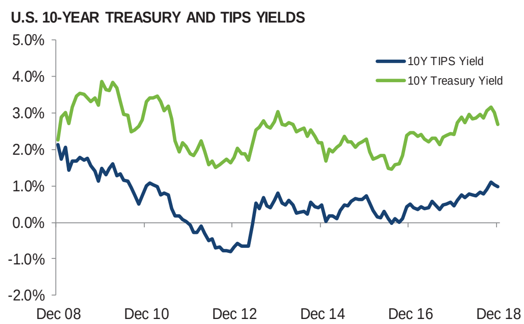


Source: FactSet

U.S. Fixed Income Markets



Source: U.S. Department of Treasury

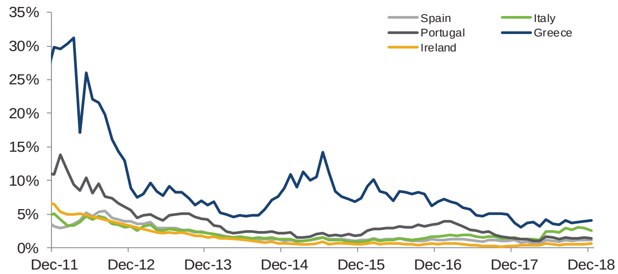


Source: U.S. Department of Treasury

- The U.S. nominal yield curve continued to flatten in the fourth quarter. Amidst rising short-end yields and falling long-end yields, the U.S. yield curve flattened the most since 2007 and the spread between the U.S. 2-year and 5-year treasury yields dropped below zero for the first time since 2007. The spread between the 2-year and 10-year yields also touched its lowest level since 2007. The spread between 10-year and 2-year yields ended the quarter at just 21bps.
- The 10-year U.S. Treasury yield ended the quarter at 2.69%, 36bps lower than at the start of the quarter in which the U.S. Federal Reserve (Fed) hiked its federal funds rate by 25bps to a range of 2.25-2.5%. While starting the quarter with a more hawkish stance and indicating that several more hikes would be needed in the future, the Fed later back-tracked with comments intimating U.S. rates are not far from reaching the Fed's neutral rate estimate.
- The 10-year TIPS yield rose by 7bps over the quarter and ended the period at 0.98%.

European Fixed Income Markets

EUROZONE PERIPHERAL BOND SPREADS
(10-YEAR SPREADS OVER GERMAN BUNDS)



Source: FactSet

- Bond spreads over 10-year German bunds rose across the eurozone (except for Italy). The European Central Bank (ECB) kept its policy rate unchanged but ended their quantitative easing programme which has seen trillions of euros used to purchase European debt and cheapen financing in the bloc.
- Italian government bond yields fell by 43bps to 2.75% over the quarter as the Italian Government succumbed to the European Commission and lowered its budget target to 2.04% instead of the initially proposed 2.4%. At their peak, spreads between 10-year Italian and German bonds briefly reached their highest level since 2013 at 319bps.
- Portuguese sovereign bond yields fell by 16bps to 1.71% supported by Moodys' upgrade of the country's credit rating to investment grade.
- Greek government bond yields rose by 21bps to 4.35% as fears grew over the ability of the Greek banks to reduce their large portfolios of bad debt and tensions increased between the ruling Syriza party and their coalition partner, Independent Greeks (Anel), over a naming deal with neighboring Macedonia.

Credit Spreads

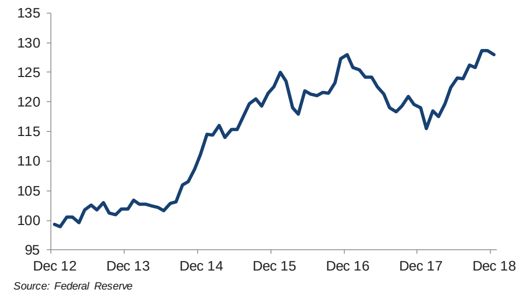
Spread (bps)	12/31/2018	9/30/2018	12/31/2017	Quarterly Change (bps)	1-Year Change (bps)
U.S. Aggregate	54	39	36	15	18
Long Gov't	2	2	2	0	0
Long Credit	200	153	139	47	61
Long Gov't/Credit	113	90	83	23	30
MBS	35	28	25	7	10
CMBS	86	60	62	26	24
ABS	53	38	36	15	17
Corporate	153	106	93	47	60
High Yield	526	316	343	210	183
Global Emerging Markets	330	273	215	57	115

Source: FactSet, Bloomberg Barclays

- During the fourth quarter, spreads over U.S. Treasuries generally widened across all maturities. Much of the move occurred in December as investors sought to switch to less-risky assets, such as U.S. treasuries, as fears over tightening financial conditions and ongoing global trade tensions took over.
- High Yield bond spreads widened the most over the quarter, widening by 210bps, followed by Global Emerging Markets bonds spreads which widened by 57bps. Unlike the 2015/6 high yield shakeout, spread widening was not dominated by poor returns from the energy sector but was more widespread.

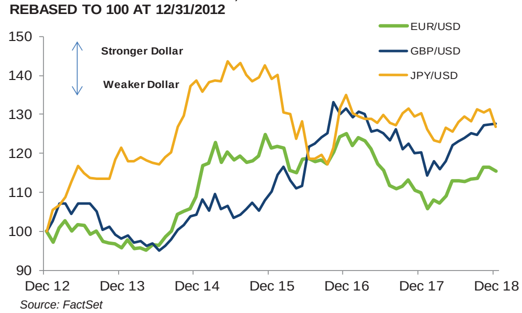
Currency

TRADE WEIGHTED U.S. DOLLAR INDEX
(1973 = 100)



Source: Federal Reserve

U.S. DOLLAR RELATIVE TO EUR, GBP AND JPY
REBASED TO 100 AT 12/31/2012

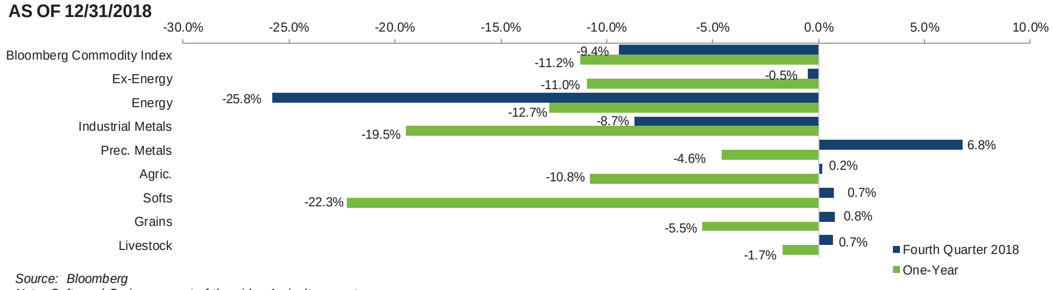


Source: FactSet

- The U.S. dollar continued on an upward trend as it rose 1.8% on a trade-weighted basis over the quarter.
- Benefiting from the relative strength of the U.S. economy and tightening monetary policy, the U.S. dollar appreciated against most major currencies with the exception of the Japanese yen, which appreciated strongly across the board – benefiting from the risk-off environment.
- With time ticking precariously down to 29 March (the day in which the UK leaves the EU, subject to no extension or removal of Article 50) and no resolution in sight, sterling was generally weak.
- Both the Bank of England and Bank of Japan kept their monetary policy unchanged at their respective meetings during the quarter. In Europe, the ECB confirmed that it would end its quantitative easing program at its December meeting despite a weakening in European economic data.

Commodities

COMMODITY RETURNS
AS OF 12/31/2018

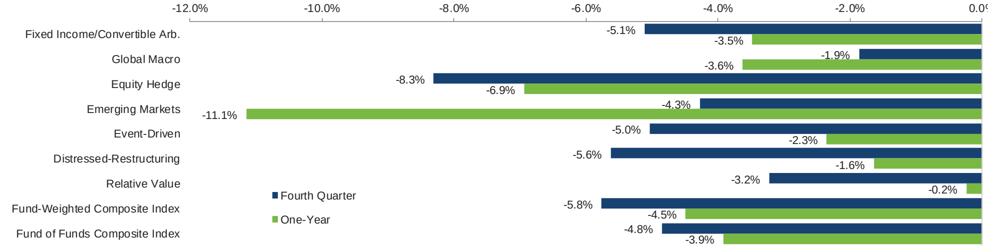


Source: Bloomberg
Note: Softs and Grains are part of the wider Agriculture sector

- Commodities fell significantly over the quarter with the Bloomberg Commodity Index returning -9.4%.
- Energy was the worst performing sector over the quarter with a return of -25.8% as crude oil prices fell sharply. The agreement to cut crude oil production by OPEC and Russia late in the quarter was not enough to stymie tumbling crude oil prices, brought lower by U.S. inventories rising faster than expected, a slowdown in the Chinese economy, the unexpected waiver on Iranian oil importer sanctions and of course the weaker outlook for global growth. The price of Brent crude oil fell by 35.0% to $54/bbl and the price of WTI crude oil fell by 38.0% to $45/bbl.
- Precious Metals was the best performing sector in Q4 2018 with a return of 6.8%. The price of gold increased 7.3% to $1,278.30$/ozt as investors moved towards 'safe-haven' assets.
- The Agriculture sector returned 0.2% over the quarter. Within the Agriculture sector, Softs and Grains returned 0.7% and 0.8%, respectively.

Hedge Fund Markets Overview

HEDGE FUND PERFORMANCE
AS OF 12/31/2018

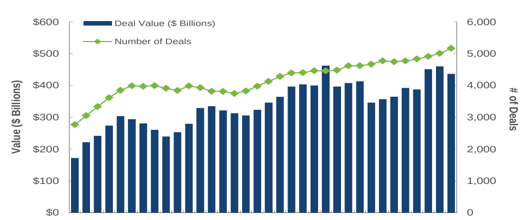


Note: Latest 5 months of HFR data are estimated by HFR and may change in the future.
Source: HFR

- Hedge fund performance was negative across all strategies in the fourth quarter. Over the quarter, Equity Hedge and Distressed-Restructuring were the worst performers with a return of -8.3% and -5.6%, respectively, whilst Global Macro and Relative Value were the best performers at -1.9% and -3.2%, respectively.
- In October, Equity Hedge was the worst performer, led lower by poor Energy/Basic Materials Index and Technology Index returns. Relative Value strategies, in particular fixed-income-based funds, were able to benefit from the volatility and fell the least over the month.
- In November, Relative Value strategies continued to outperform led by Credit Multi-strategy and Volatility funds. However, Emerging Markets were the best performer led higher by Asian equities. Global Macro funds underperformed, driven lower by falling commodity prices.
- In December, Equity Hedge was again the worst performer as the strategies, with the notable exception of Market Neutral funds, followed global equity markets lower. Global Macro funds were the best performer, buoyed by strong performance from short equity and commodity positions within Systematic Diversified funds.

Private Equity Market Overview – Q3 2018

LTM Global Private Equity-Backed Buyout Deal Volume



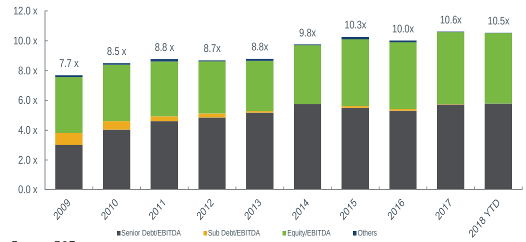
Source: Preqin

- **Fundraising:** In Q3 2018, $181.9 billion was raised by 299 funds, which was up 20.8% on a capital basis but down 22.9% by number of funds from the prior quarter.[1] This also marks a decline of 30.0% by number of funds but an increase of 2.3% by capital raised over Q3 2017. Dry powder stood at $1.84 trillion at the end of the quarter, up 14.3% and 35.3% compared to year-end 2017 and the five year average, respectively.[1]
- **Buyout:** Global private equity-backed buyout deals totaled $97.7 billion in Q3 2018, which was down 22.5% from the prior quarter but up 26.7% from the five year average.[1] At the end of Q3 2018, the average purchase price multiple for all U.S. LBOs was 10.5x EBITDA, down from 10.6x as of the end of 2017.[2] Large cap purchase price multiples stood at 10.5x, up compared to the full-year 2017 level of 10.4x.[2] The weighted average purchase price multiple across all European transaction sizes averaged 10.7x EBITDA in Q3 2018, equal to the 10.7x seen at year-end 2017. Purchase prices for transactions of €1.0 billion or more decreased from 11.7x at Q2 2018 to 11.3x in Q3 2018. Transactions between €500.0 million and €1.0 billion were flat from Q2 2018, and stood at 10.8x at the end of Q3 2018.[2] Globally, exit value totaled $90.5 billion during the quarter, significantly lower than the $111.8 billion in exits during Q2 2018. Q3's total was primarily driven by trade sales ($64.1 billion, up quarter-over-quarter) and through sales to GPs ($20.7 billion, down quarter-over-quarter).
- **Venture:** During the third quarter, 1,325 venture backed transactions totaling $28.0 billion were completed, which was an increase on a capital basis over the prior quarter's total of $24.0 billion across 1,564 deals. This was 62.4% higher than the five-year quarterly average of $17.2 billion, but 9.4% lower than the five-year quarterly average by number of deals.[3] Total U.S. venture backed exit activity totaled approximately $20.9 billion across 182 completed transactions in Q3 2018, down from $31.8 billion across 225 exits in Q2 2018.[3]
- **Mezzanine:** Ten funds closed on $1.4 billion during the quarter, significantly down from Q2 2018's total of $15.3 billion raised by eight funds and the five year quarterly average of $5.4 billion.[1] Estimated dry powder was $58.0 billion at the end of Q3 2018, up by $7.0 billion from Q4 2017 and higher than the $53.1 billion high seen at year-end 2016.[1] Fundraising remains robust with an estimated 76 funds in market targeting $21.3 billion of commitments.[1]

Sources: [1] Preqin [2] Standard & Poor's [3] PwC/CB Insights MoneyTree Report [4] PitchBook/NVCA Venture Monitor [5] Fitch Ratings [6] Thomson Reuters [7] UBS
Notes: FY=Fiscal year ended 12/31; YTD=Year to date; LTM=Last 12 months (aka trailing 12 months); PPM=Purchase Price Multiples: Total Purchase Price ÷ EBITDA.

Private Equity Market Overview – Q3 2018

U.S. LBO Purchase Price Multiples – All Transactions Sizes



Source: S&P

- **Distressed Debt:** The LTM U.S. high-yield default rate was 2.02% as of September 2018, which was up from December 2017's LTM rate of 1.27%.[4] During the quarter, $6.8 billion was raised by 13 funds, significantly lower than the $18.5 billion raised during Q2 2018. This was the lowest amount raised since Q3 2016.[1] Dry powder was estimated at $119.5 billion at the end Q3 2018, which was up 14.5% from Q4 2017. This remained above the five-year annual average level of $97.2 billion.[1]
- **Secondaries:** Seven funds raised $4.0 billion during the third quarter, up from $3.1 billion raised by twelve funds in Q2 2018, but lower than the $13.4 billion raised in Q3 2017.[1] At the end of Q3 2018, there were an estimated 46 secondary and direct secondary funds in market, targeting approximately $56.8 billion.[1] Dry powder stood at $64.0 billion through 1H 2018, down from Q4 2017's total of $77.0 billion.[5]
- **Infrastructure:** $46.6 billion of capital was raised by 26 funds in Q3 2018 compared to $18.9 billion of capital raised by 17 partnerships in Q2 2018. At the end of the quarter, dry powder stood at an estimated $173.3 billion, up from the prior quarter's total of $161.0 billion. Infrastructure managers completed 506 deals with an estimated aggregate deal value of $238.7 billion in Q3 2018 compared to 663 deals totaling $238.2 billion a quarter ago.[1]
- **Natural Resources:** During Q3 2018, seven funds closed on $6.4 billion compared to seven funds having raised $2.7 billion in Q2 2018. Energy & utilities industry managers completed approximately 104 deals totaling an estimated $30.2 billion through Q3 2018. Dry powder is estimated at $59.3 billion for Q3 2018, down 5.7% from Q2 2018's level.[1]

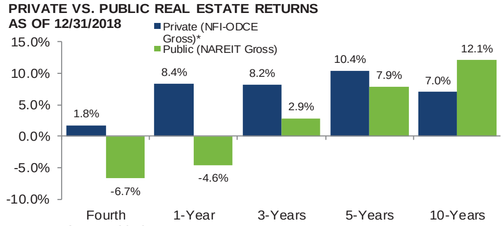
Sources: [1] Preqin [2] Standard & Poor's [3] PwC/CB Insights MoneyTree Report [4] PitchBook/NVCA Venture Monitor [5] Fitch Ratings [6] Thomson Reuters [7] UBS

Notes: FY=Fiscal year ended 12/31; YTD=Year to date; LTM=Last 12 months (aka trailing 12 months); PPM=Purchase Price Multiples: Total Purchase Price ÷ EBITDA.

Empower Results®

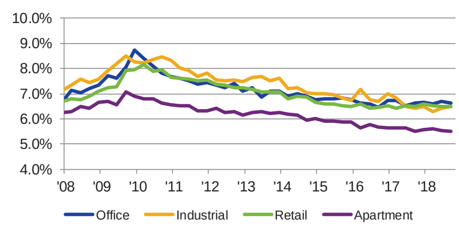
U.S. Commercial Real Estate Markets

PRIVATE VS. PUBLIC REAL ESTATE RETURNS AS OF 12/31/2018



**Fourth quarter returns are preliminary*
Sources: NCREIF, FactSet

CAP RATES BY SECTOR



Sources: RCA, Aon

- U.S. Core real estate returned 1.76%* over the fourth quarter, equating to 8.4% total gross return year-over-year, including a 4.2% income return. Net income growth is expected to be the larger driver of the total return on a go forward basis given the current point of the real estate cycle.
- Global property markets, as measured by the FTSE EPRA/NAREIT Global Developed Real Estate Index, fell 5.5% (USD) in aggregate during the fourth quarter, declining 4.7% for the full year. Sector weakness was largely attributed to a broader equity market decline in Q4 (MSCI World Index down 13.3%) due to a host of macro concerns which resulted in a broad-based sell-off which also negatively impacted listed real estate share prices. Asia/Pacific was the top performing region with a slight loss of 0.3%, followed by North America declining 5.9% and Europe which fell 10.0%. The U.S. REIT markets (FTSE NAREIT Equity REITs Index) declined 6.7% in the fourth quarter, falling 4.6% for 2018. The sector declined 8.2% in December alone, which was generally on par with the broader U.S. equity market (S&P 500 lost 9.0%). While the 10-year U.S. Treasury bond yield fell to 2.7% after starting the quarter above 3.0%, the movement was unable to support REIT share prices. As of quarter end, the U.S. REIT dividend yield stood at 4.6%.
- According to RCA, through August 2018 the U.S. property market has experienced price growth of 7.7% year-over-year across major sectors. Further, transaction volume was up 46% over the same period.
- Return expectations have normalized, with go forward expectations in line with historical norms. Rising interest rates have led to asset value correction fears across various asset classes. However, according to Preqin, there remains a record amount of dry powder ($295 billion) in closed-end vehicles seeking real estate exposure, which should continue to lend support to valuations and liquidity in the commercial real estate market.
- Aon prefers investments that offer relatively strong rental income growth, or value-add potential with near-term income generation prospects. It is critical to identify sub-sector and sub-market driven themes in the current environment; unlike the last 6-7 year period, as assets are no longer trading at deep discounts to replacement value. Real estate investments should seek levers of NOI growth that are not predicated on continued market uplift. For example, an investment thesis can focus towards sectors benefiting from secular changes (e.g., Industrial and e-commerce), acquiring in-place rents below current market terms, and improving operational efficiency.

*Indicates preliminary NFI-ODCE data gross of fees

Empower Results®

Total Fund

As of December 31, 2018

Highlights

Executive Summary

- Performance of the Pension Plan, when measured against the Performance Benchmark, has been strong over short- and long-term time periods.
- Performance relative to peers is also competitive over short- and long-term time periods.
- The Pension Plan is well-diversified across six broad asset classes, and each asset class is also well-diversified.
- Public market asset class investments do not significantly deviate from their broad market based benchmarks, e.g., sectors, market capitalizations, global regions, credit quality, duration, and security types.
- Private market asset classes are well-diversified by vintage year, geography, property type, sectors, investment vehicle/asset type, or investment strategy.
- Asset allocation is monitored on a daily basis to ensure the actual asset allocation of the plan remains close to the long-term policy targets set forth in the Investment Policy Statement.
- Aon Hewitt Investment Consulting and SBA staff revisit the plan design annually through informal and formal asset allocation and asset liability reviews.
- Adequate liquidity exists within the asset allocation to pay the monthly obligations of the Pension Plan consistently and on a timely basis.

Performance Highlights

- During the quarter, the Total Fund outperformed the Performance Benchmark. The Total Fund outperformed the Performance Benchmark during the trailing one-, three-, five-, and ten-year periods.

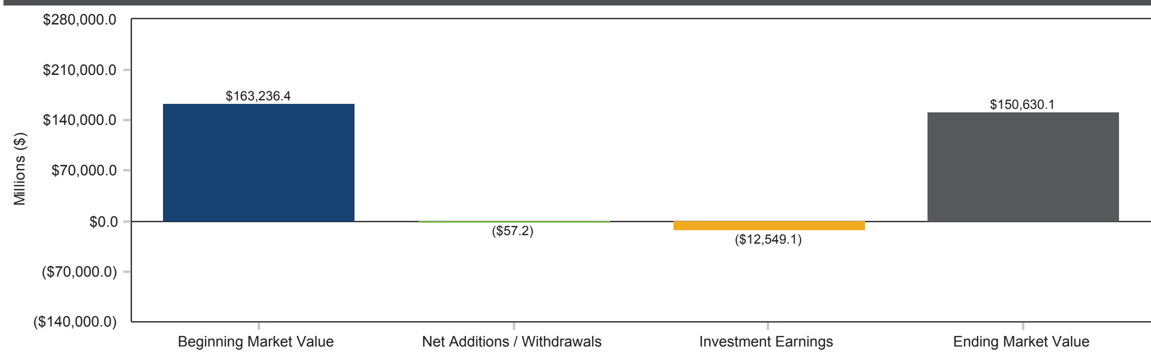
Asset Allocation

- The Fund assets total $150.6 billion as of December 31, 2018, which represents a $12.6 billion decrease since last quarter.
- Actual allocations for all asset classes were within their respective policy ranges at quarter-end.
- The Fund was modestly underweight to global equity, with a corresponding overweight to fixed income.

Total Fund As of December 31, 2018

Total Plan Asset Summary

Change in Market Value
From October 1, 2018 to December 31, 2018



Summary of Cash Flow

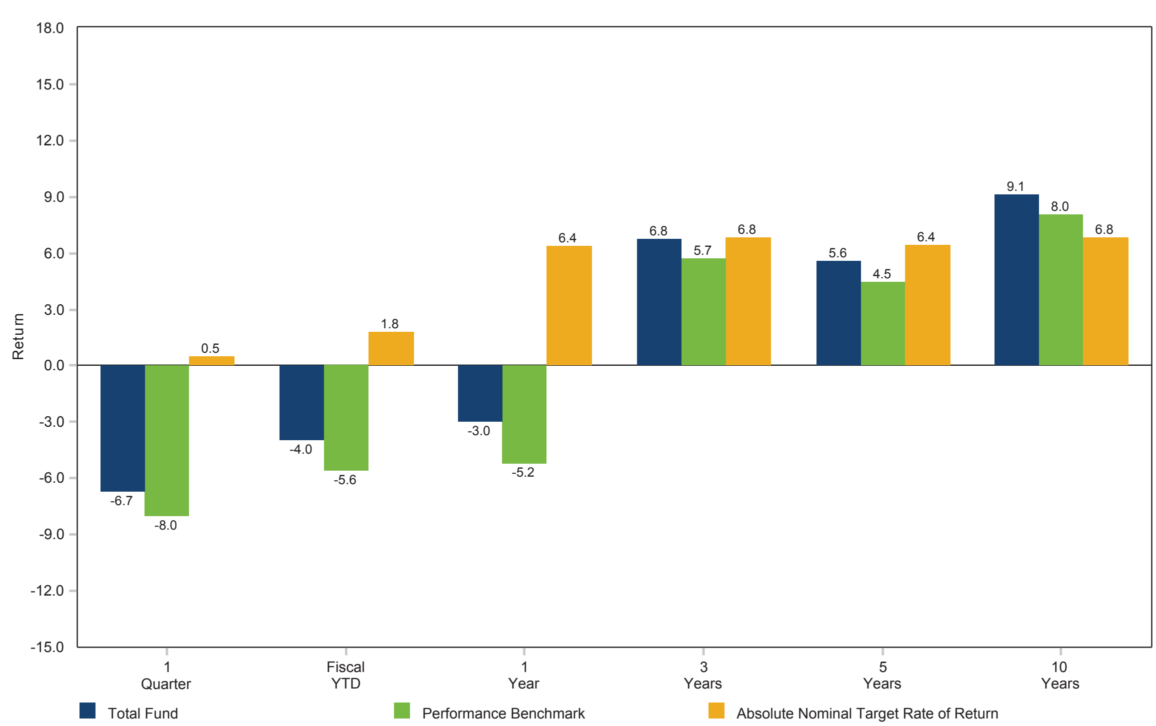
	1 Quarter	Fiscal YTD*
Total Fund		
Beginning Market Value	163,236,430,001	160,439,358,858
+ Additions / Withdrawals	-57,241,303	-1,971,208,916
+ Investment Earnings	-12,549,125,389	-7,838,086,633
= Ending Market Value	150,630,063,309	150,630,063,309

*Period July 2018 - December 2018

Total Fund As of December 31, 2018

Total Plan Performance Summary

Return Summary



As of December 31, 2018

Asset Allocation & Performance

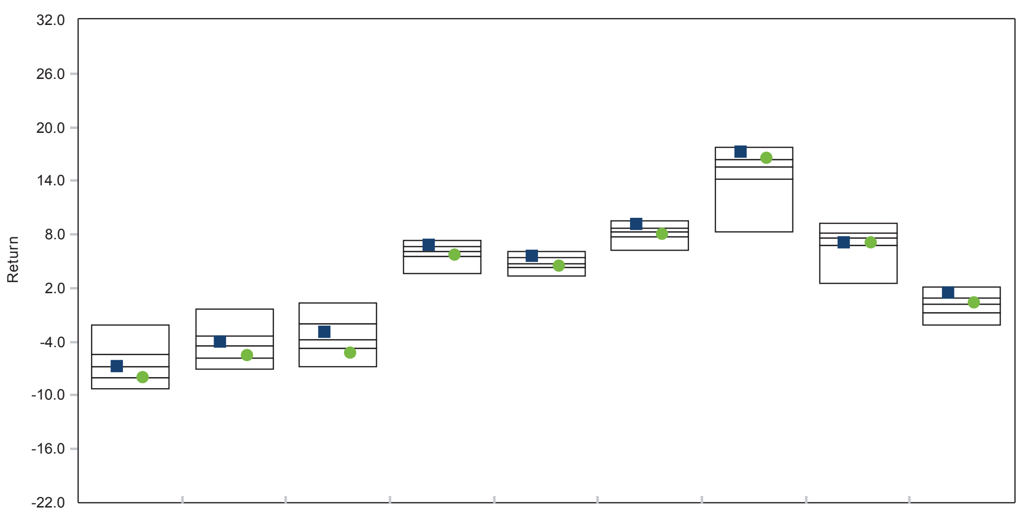
	Allocation			Performance(%)					
	Market Value ($)	%	Policy(%)	1 Quarter	Fiscal YTD	1 Year	3 Years	5 Years	10 Years
Total Fund	150,630,063,309	100.0	100.0	-6.7 (49)	-4.0 (37)	-3.0 (37)	6.8 (18)	5.6 (12)	9.1 (15)
Performance Benchmark				-8.0 (75)	-5.6 (74)	-5.2 (80)	5.7 (69)	4.5 (64)	8.0 (66)
Absolute Nominal Target Rate of Return				0.5 (3)	1.8 (1)	6.4 (1)	6.8 (16)	6.4 (2)	6.8 (93)
Global Equity*	79,250,262,517	52.6	54.3	-13.2	-9.8	-9.8	6.9	4.8	10.4
Asset Class Target				-13.3	-9.9	-10.1	6.5	4.2	9.6
Domestic Equities	37,541,173,223	24.9		-14.4 (45)	-8.2 (19)	-5.2 (22)	8.8 (30)	7.8 (18)	13.3 (18)
Asset Class Target				-14.3 (44)	-8.2 (19)	-5.2 (25)	9.0 (27)	7.9 (16)	13.2 (29)
Foreign Equities	32,452,783,876	21.5		-11.9 (43)	-12.0 (66)	-14.9 (73)	4.9 (37)	1.6 (37)	8.0 (10)
Asset Class Target				-11.9 (42)	-11.6 (56)	-14.8 (72)	4.4 (51)	0.9 (72)	7.0 (66)
Global Equities	7,788,890,340	5.2		-12.3	-8.0	-7.9	6.4	4.8	9.8
Benchmark				-13.3	-9.1	-8.8	6.4	4.5	9.9
Fixed Income	30,248,567,403	20.1	19.2	1.7 (3)	1.9 (5)	1.0 (9)	1.9 (84)	2.3 (76)	4.6 (52)
Asset Class Target				1.8 (3)	1.9 (2)	0.9 (9)	1.7 (89)	2.1 (81)	3.3 (95)
Private Equity	11,254,388,438	7.5	7.7	3.9	9.3	19.1	15.9	15.7	11.7
Asset Class Target				-11.2	-8.9	-7.1	9.5	7.4	14.4
Real Estate	14,560,483,177	9.7	9.3	1.4 (67)	3.0 (62)	6.4 (72)	8.3 (47)	10.1 (48)	7.2 (1)
Asset Class Target				1.2 (73)	2.8 (65)	6.6 (66)	7.6 (72)	9.4 (73)	5.6 (52)
Strategic Investments	13,374,851,566	8.9	8.5	-0.4	2.2	5.5	7.1	6.8	10.1
Short-Term Target				-2.6	-1.3	1.2	4.3	4.1	6.8
Cash	1,941,510,208	1.3	1.0	0.6	1.1	1.9	1.1	0.8	0.7
Bank of America Merrill Lynch 3-Month US Treasury Index				0.6	1.1	1.9	1.0	0.6	0.4

Benchmark and universe descriptions can be found in the Appendix.
* Global Equity became an asset class in July 2010. The historical return series prior to July 2010 was derived from the underlying Domestic Equities, Foreign Equities, and Global Equities components.

As of December 31, 2018

Plan Sponsor Peer Group Analysis

All Public Plans > $1B-Total Fund

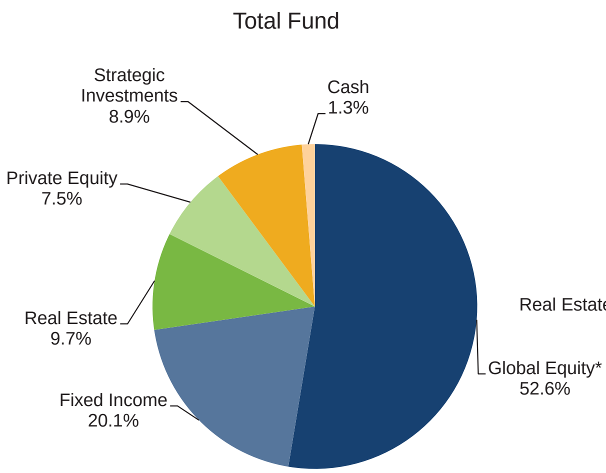


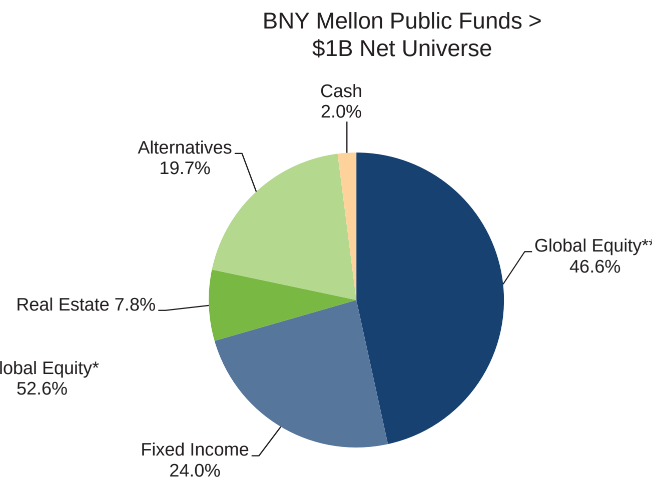
	1 Quarter	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015
■ Total Fund	-6.7 (49)	-4.0 (37)	-3.0 (37)	6.8 (18)	5.6 (13)	9.1 (16)	17.2 (10)	7.1 (68)	1.4 (14)
● Performance Benchmark	-8.0 (75)	-5.6 (74)	-5.2 (80)	5.7 (69)	4.5 (64)	8.0 (66)	16.5 (25)	7.1 (69)	0.3 (42)
5th Percentile	-2.1	-0.3	0.3	7.4	6.0	9.6	17.8	9.3	2.1
1st Quartile	-5.5	-3.3	-2.0	6.6	5.4	8.8	16.4	8.1	1.0
Median	-6.8	-4.4	-3.7	6.1	4.7	8.3	15.6	7.6	0.2
3rd Quartile	-8.0	-5.8	-4.8	5.6	4.3	7.7	14.1	6.8	-0.8
95th Percentile	-9.2	-7.0	-6.8	3.7	3.3	6.2	8.2	2.5	-2.1
Population	132	132	131	130	128	121	102	107	86

Parentheses contain percentile rankings.

Total Fund **As of December 31, 2018**

Universe Asset Allocation Comparison



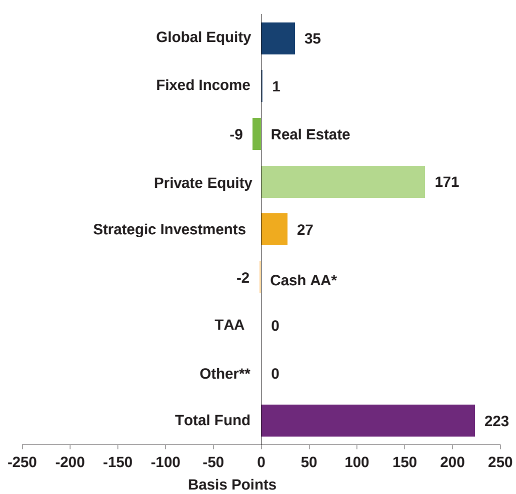


*Global Equity Allocation: 24.9% Domestic Equities; 21.5% Foreign Equities; 5.2% Global Equities; 1.0% Global Equity Liquidity Account. Percentages are of the Total FRS Fund.

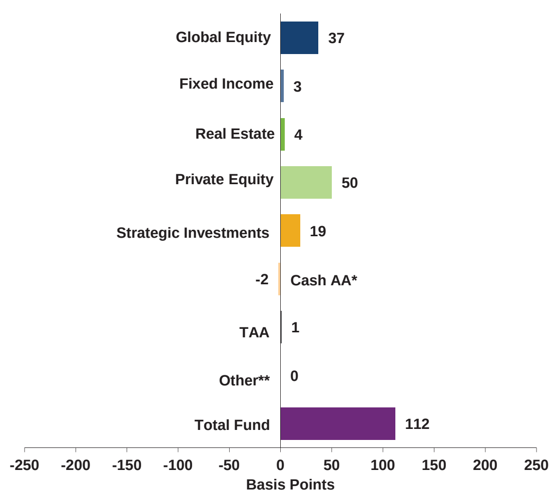
**Global Equity Allocation: 27.3% Domestic Equities; 19.3% Foreign Equities.

Total Fund **As of December 31, 2018**

Attribution



1-Year Ending 12/31/2018



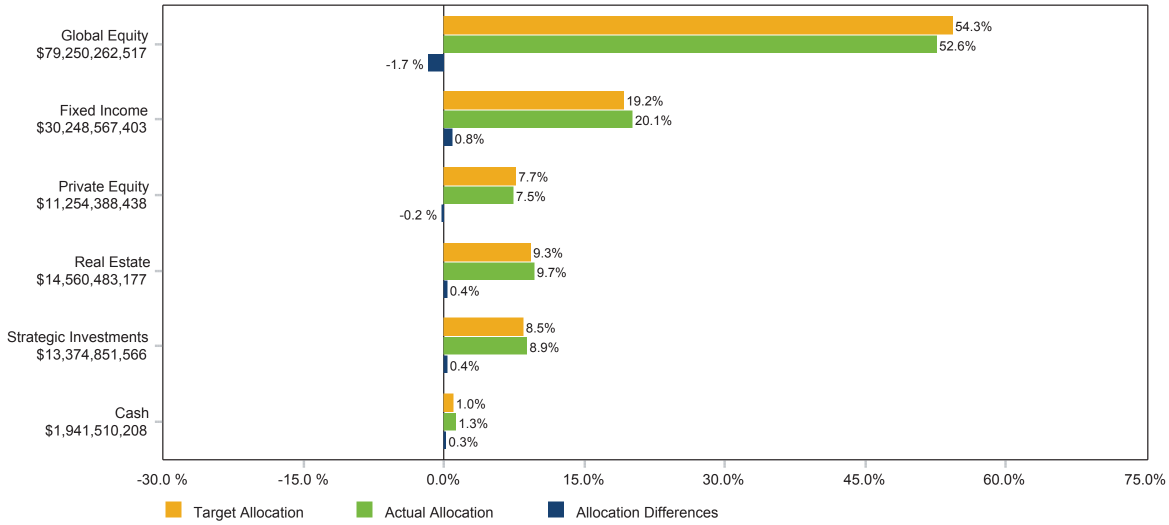
5-Year Ending 12/31/2018

*Cash AA includes Cash and Central Custody, Securities Lending Account income from 12/2009 to 3/2013 and unrealized gains and losses on securities lending collateral beginning June 2013, TF STIPFRS NAV Adjustment Account, and the Cash Expense Account.

**Other includes legacy accounts and unexplained differences due to methodology.

Asset Allocation Compliance

	Market Value ($)	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
Total Fund	150,630,063,309	100.0	100.0		
Global Equity	79,250,262,517	52.6	54.3	45.0	70.0
Fixed Income	30,248,567,403	20.1	19.2	10.0	26.0
Private Equity	11,254,388,438	7.5	7.7	2.0	9.0
Real Estate	14,560,483,177	9.7	9.3	4.0	16.0
Strategic Investments	13,374,851,566	8.9	8.5	0.0	16.0
Cash	1,941,510,208	1.3	1.0	0.3	5.0



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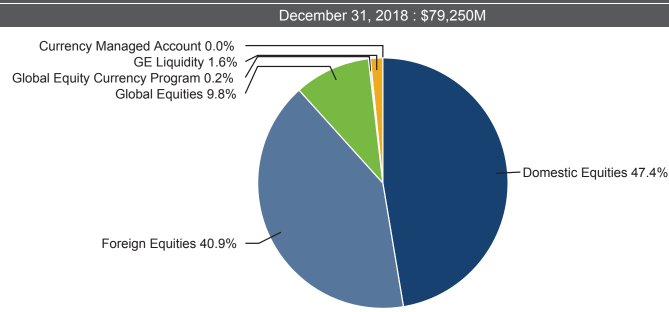
Global Equity

Global Equity* As of December 31, 2018

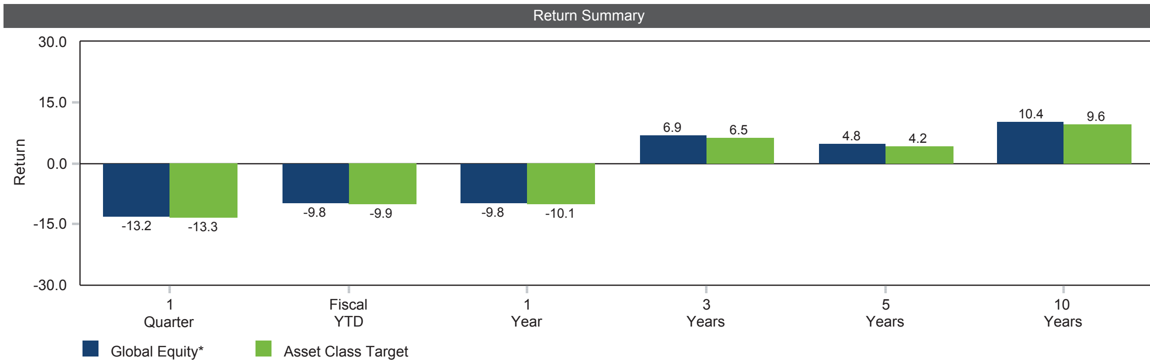
Global Equity* Portfolio Overview

Current Allocation

December 31, 2018 : $79,250M



Return Summary



* Global Equity became an asset class in July 2010. The historical return series prior to July 2010 was derived from the underlying Domestic Equities, Foreign Equities, and Global Equities components.

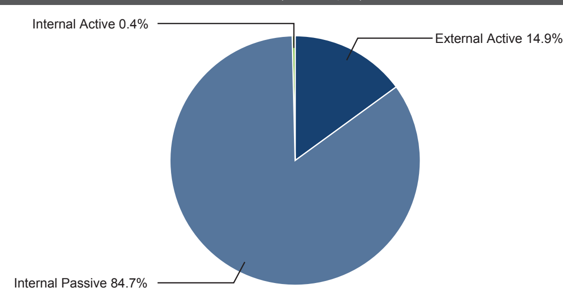
Domestic Equit ies

Domestic Equities As of December 31, 2018

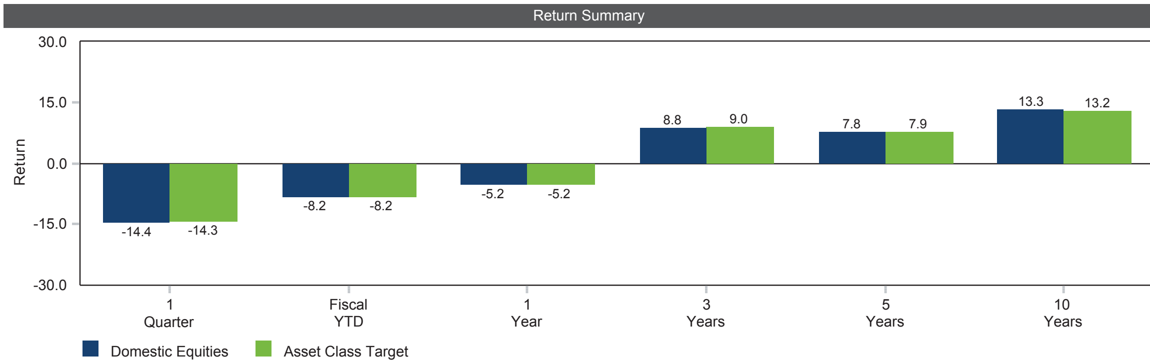
Domestic Equities Portfolio Overview

Current Allocation

December 31, 2018 : $37,541M



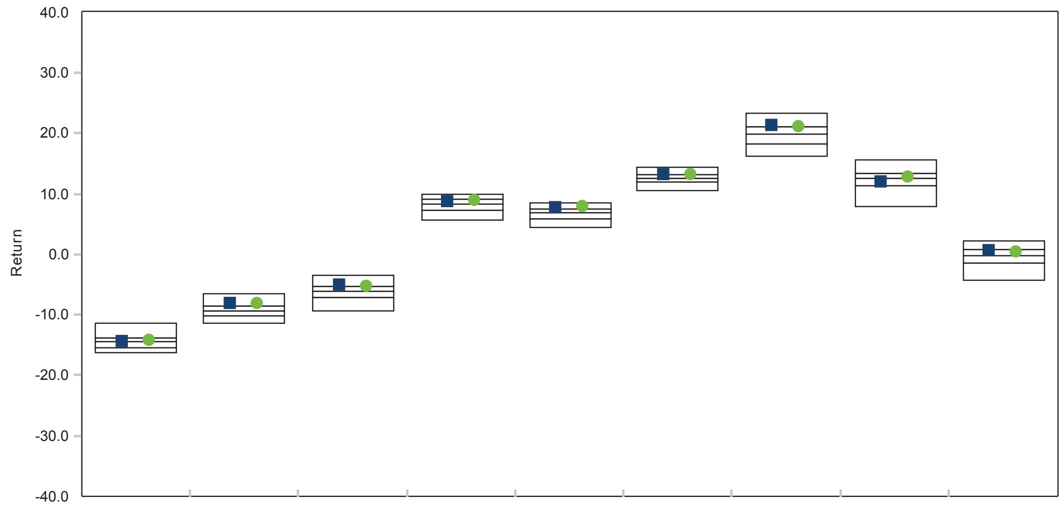
Return Summary



As of December 31, 2018

Plan Sponsor Peer Group Analysis

All Public Plans > $1B-US Equity Segment



	1 Quarter	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015
■ Domestic Equities	-14.4 (45)	-8.2 (19)	-5.2 (22)	8.8 (30)	7.8 (18)	13.3 (18)	21.2 (22)	11.9 (63)	0.6 (31)
● Asset Class Target	-14.3 (44)	-8.2 (19)	-5.2 (25)	9.0 (27)	7.9 (16)	13.2 (29)	21.1 (26)	12.7 (46)	0.5 (33)
5th Percentile	-11.4	-6.4	-3.4	9.9	8.6	14.4	23.3	15.6	2.3
1st Quartile	-13.8	-8.5	-5.3	9.1	7.6	13.2	21.1	13.4	0.8
Median	-14.5	-9.4	-6.1	8.2	7.0	12.6	19.9	12.5	-0.3
3rd Quartile	-15.4	-10.2	-7.1	7.4	5.9	12.0	18.3	11.3	-1.5
95th Percentile	-16.3	-11.4	-9.4	5.6	4.5	10.6	16.3	7.9	-4.2
Population	59	58	54	52	50	34	57	56	45

Parentheses contain percentile rankings.

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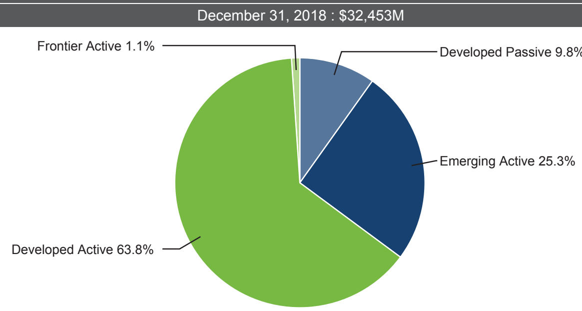
Foreign Equit ies

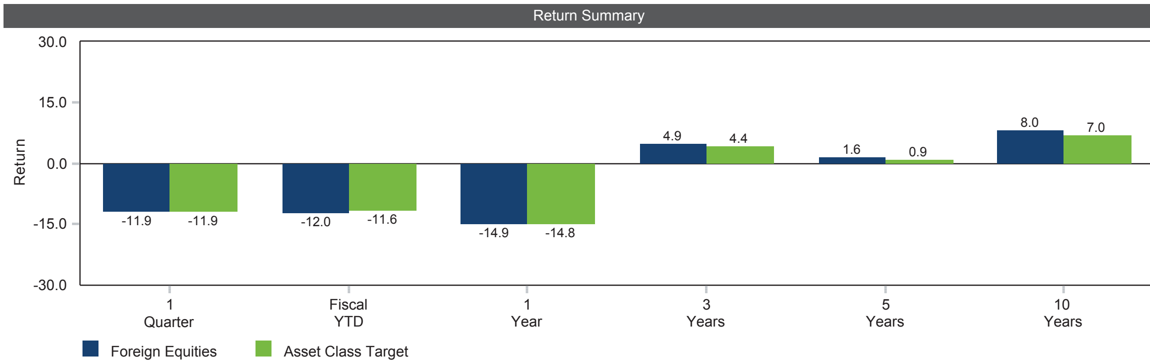
Foreign Equities Portfolio Overview

Current Allocation

December 31, 2018 : $32,453M



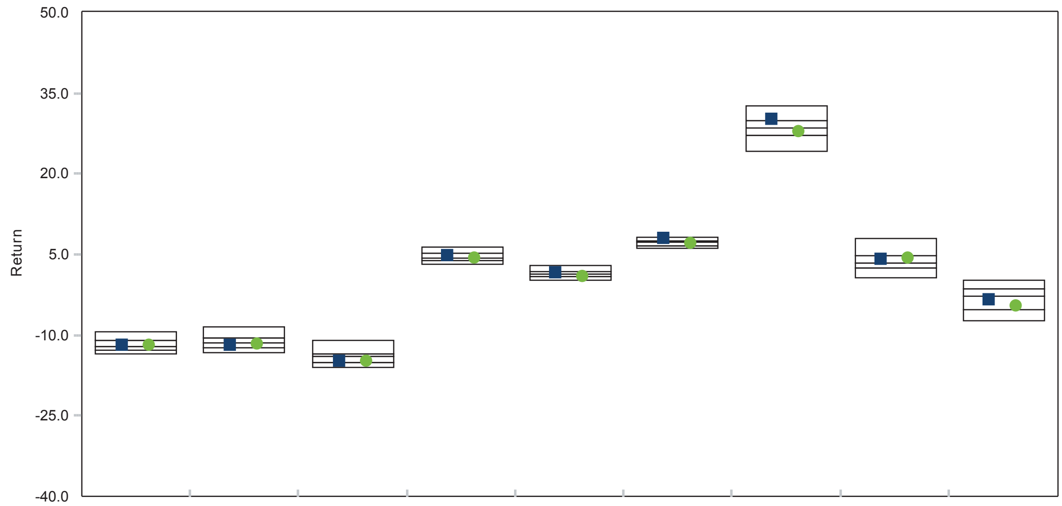
Return Summary



As of December 31, 2018

Plan Sponsor Peer Group Analysis

All Public Plans > $1B-Intl. Equity Segment



	1 Quarter	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015
■ Foreign Equities	-11.9 (43)	-12.0 (66)	-14.9 (73)	4.9 (37)	1.6 (37)	8.0 (10)	30.2 (19)	4.1 (38)	-3.4 (59)
● Asset Class Target	-11.9 (42)	-11.6 (56)	-14.8 (72)	4.4 (51)	0.9 (72)	7.0 (66)	27.9 (62)	4.3 (34)	-4.5 (73)
5th Percentile	-9.5	-8.4	-10.9	6.4	3.0	8.2	32.7	8.1	0.1
1st Quartile	-11.1	-10.6	-13.4	5.3	1.9	7.6	29.8	4.7	-1.3
Median	-12.1	-11.4	-14.0	4.4	1.2	7.2	28.6	3.4	-2.8
3rd Quartile	-12.7	-12.3	-15.0	3.8	0.8	6.7	27.2	2.5	-5.3
95th Percentile	-13.5	-13.4	-15.9	3.1	0.3	6.1	24.2	0.6	-7.3
Population	57	57	56	54	50	32	58	57	40

Parentheses contain percentile rankings.

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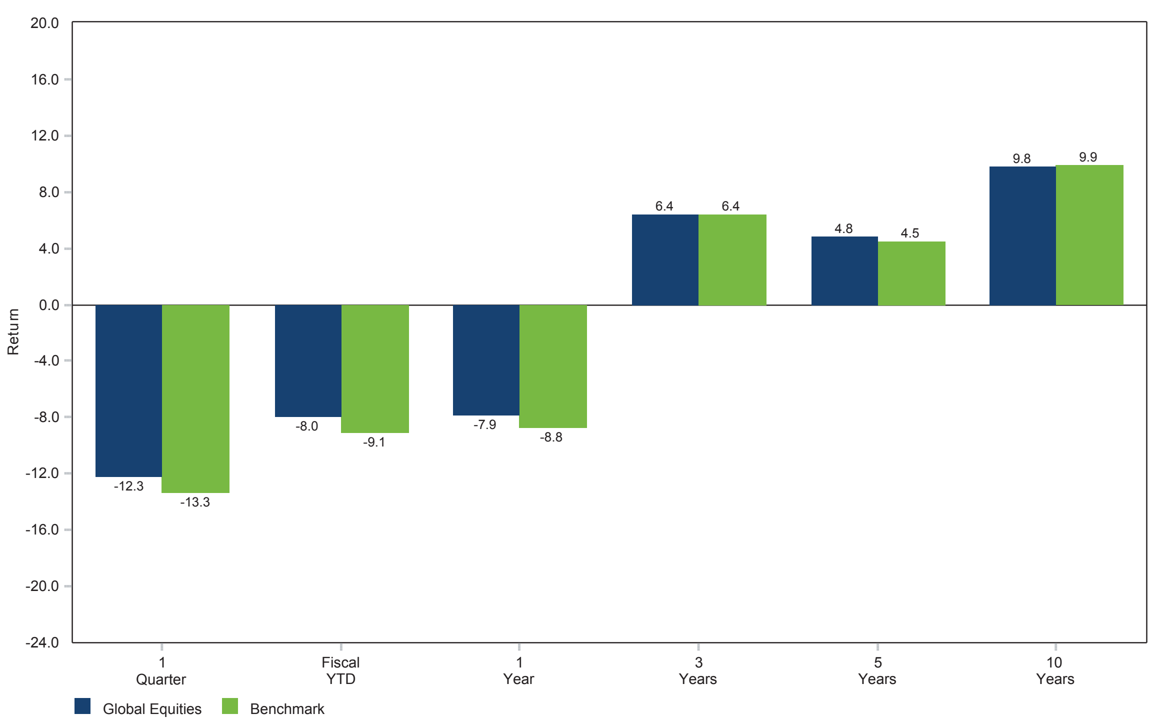
Global Equities

Global Equities As of December 31, 2018

Global Equities Performance Summary

Return Summary

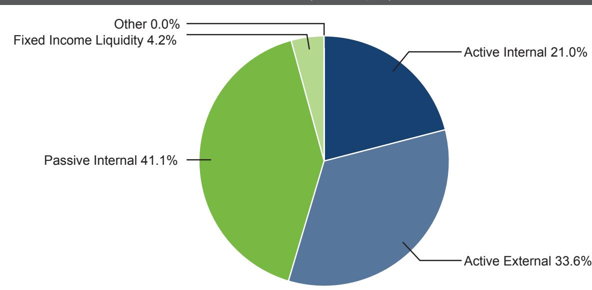


Fixed Income

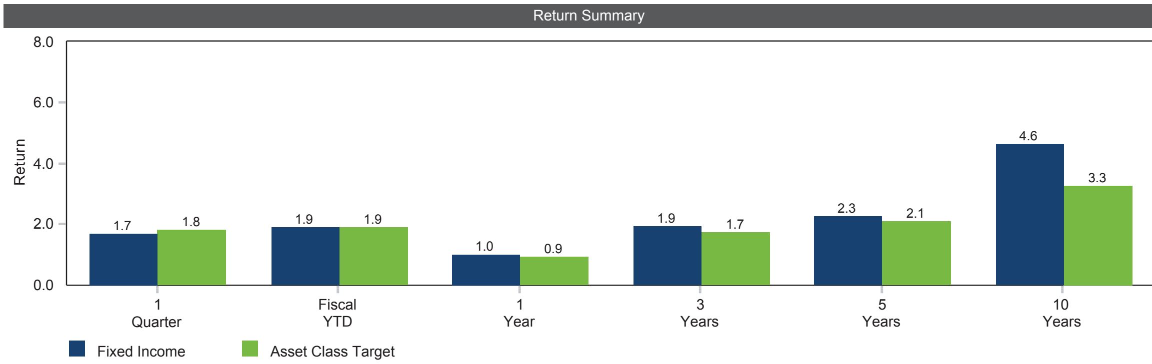
Fixed Income Portfolio Overview

Current Allocation

December 31, 2018 : $30,249M



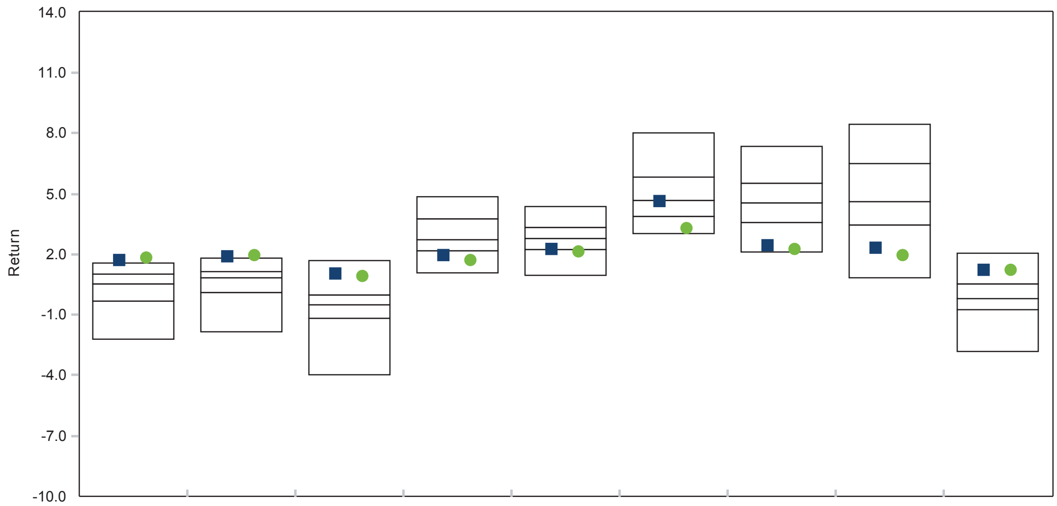
Return Summary



As of December 31, 2018

Plan Sponsor Peer Group Analysis

All Public Plans > $1B-US Fixed Income Segment



	1 Quarter	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015
■ Fixed Income	1.7 (3)	1.9 (5)	1.0 (9)	1.9 (84)	2.3 (76)	4.6 (52)	2.4 (93)	2.3 (88)	1.2 (11)
● Asset Class Target	1.8 (3)	1.9 (2)	0.9 (9)	1.7 (89)	2.1 (81)	3.3 (95)	2.3 (94)	2.0 (92)	1.2 (11)
5th Percentile	1.6	1.8	1.7	4.9	4.4	8.0	7.4	8.5	2.0
1st Quartile	1.0	1.2	0.0	3.8	3.4	5.8	5.5	6.5	0.5
Median	0.5	0.8	-0.5	2.7	2.8	4.7	4.6	4.6	-0.2
3rd Quartile	-0.3	0.1	-1.2	2.2	2.3	3.9	3.6	3.5	-0.8
95th Percentile	-2.2	-1.9	-4.0	1.1	1.0	3.0	2.1	0.8	-2.8
Population	58	58	57	56	54	36	60	60	43

Parentheses contain percentile rankings.

AON Empower Results®

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AON Empower Results®

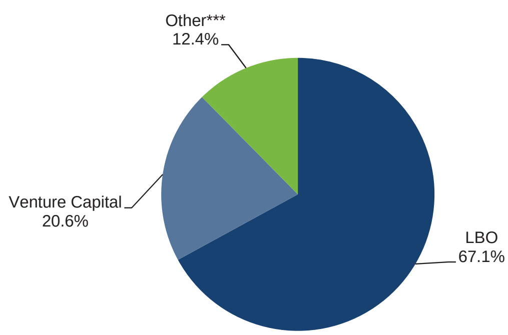
Private Equity

AON
Empower Results®

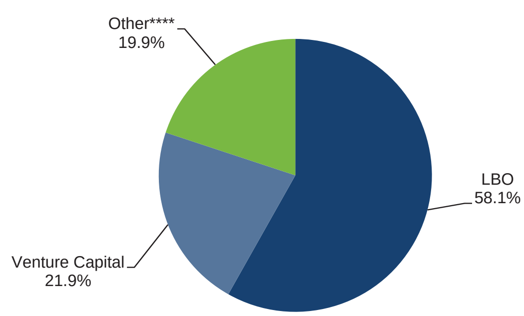
Private Equity As of December 31, 2018

Overview

FRS Private Equity by Market Value*



Preqin Private Equity Strategies by Market Value**



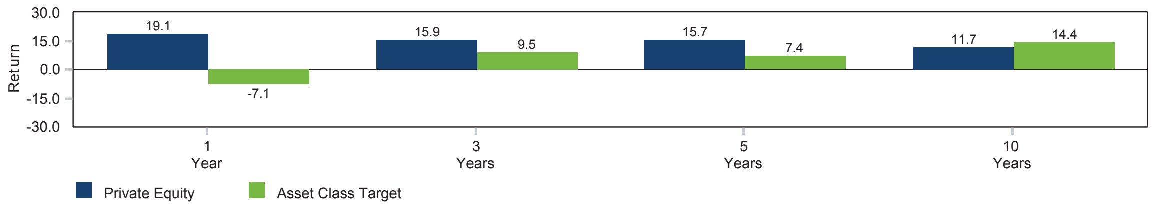
*Allocation data is as of December 31, 2018.
**Allocation data is as of June 30, 2017, from the Preqin database.
***Other for the FRS Private Equity consists of Growth Capital, Secondary, PE Cash, and PE Transition.
****Other for the Preqin data consists of Distressed PE, Growth, Mezzanine, and other Private Equity/Special Situations.
Preqin universe is comprised of 10,000 private equity funds representing $3.8 trillion.

AON
Empower Results®

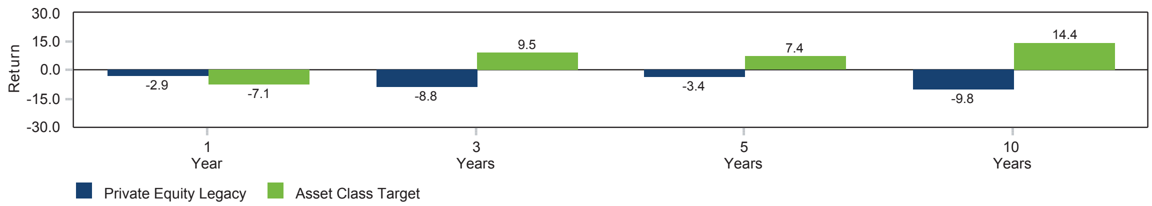
Private Equity

Time-Weighted Investment Results

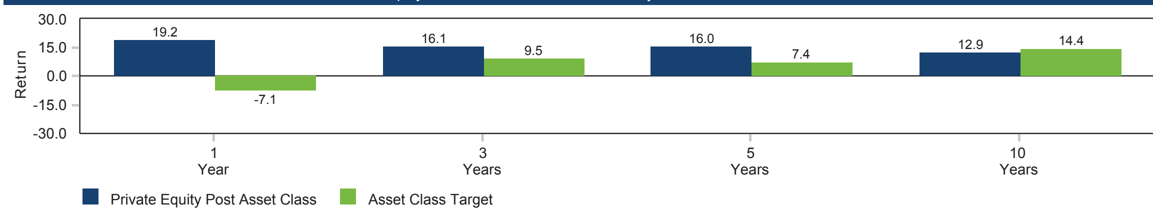
Private Equity Return Summary as of December 31, 2018



Private Equity Legacy Return Summary as of December 31, 2018



Private Equity Post Asset Class Return Summary as of December 31, 2018

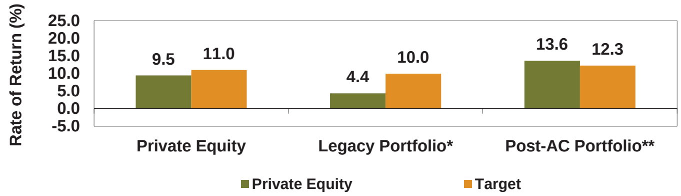


Private Equity

Dollar-Weighted Investment Results

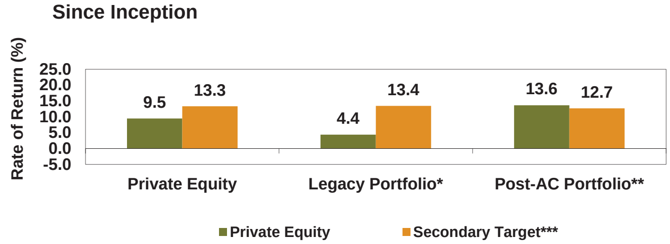
As of September 30, 2018

Since Inception



As of September 30, 2018

Since Inception

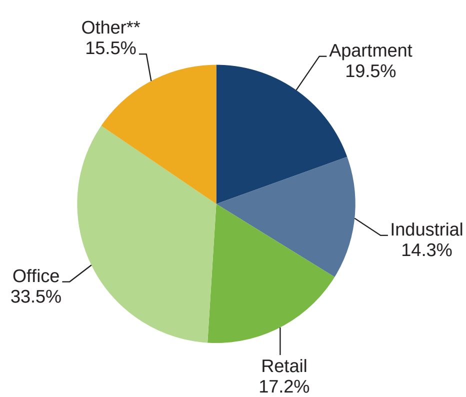


*The Inception Date for the Legacy Portfolio is January 1989.
**The Inception Date for the Post-AC Portfolio is September 2000.
***The Secondary Target is a blend of the Cambridge Associates Private Equity Index and the Cambridge Associates Venture Capital Index based on actual ABAL weights. Secondary Target data is on a quarterly lag.

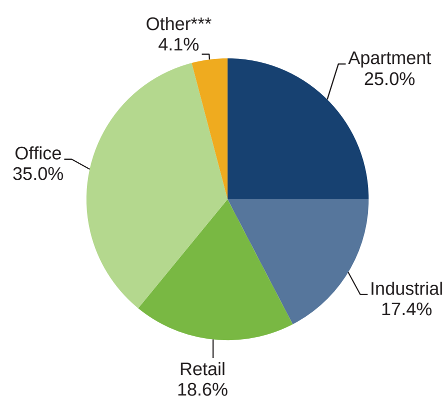
Real Estate

Overview

FRS*



NFI-ODCE Index*

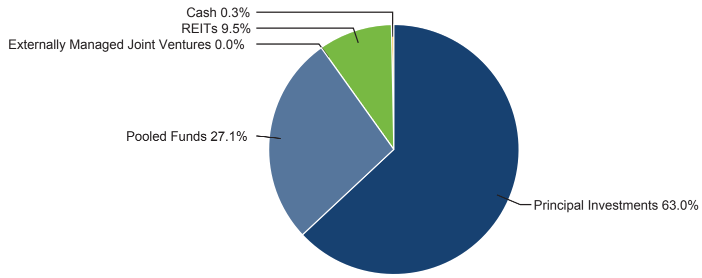


*Property Allocation data is as of September 30, 2018. The FRS chart includes only the FRS private real estate assets. Property type information for the REIT portfolios is not included.
**Other for the FRS consists of Hotel, Land, Preferred Equity, Agriculture, Self-Storage and Senior Housing.
***Other for the NFI-ODCE Index consists of Hotel, Senior Living, Health Care, Mixed Use, Single Family Residential, Parking, Timber/Agriculture, Land and Infrastructure.

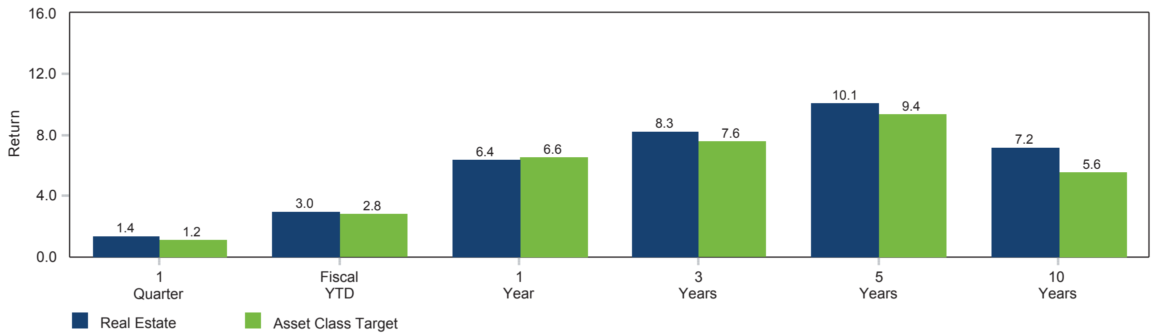
Real Estate Portfolio Overview

Current Allocation

December 31, 2018 : $14,560M

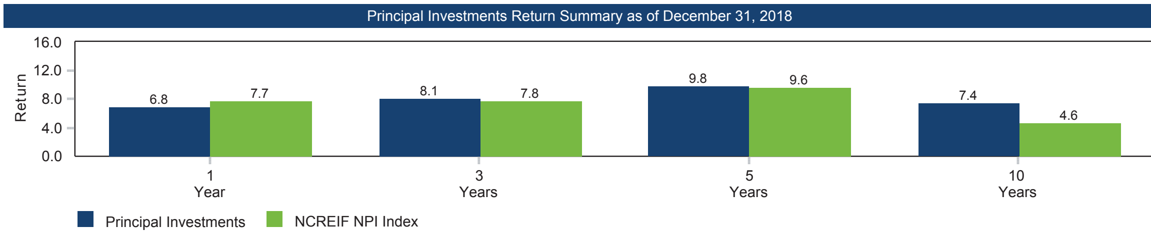


Return Summary

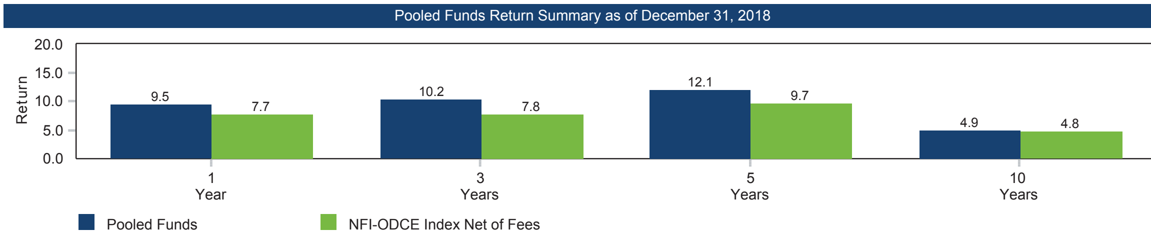


Real Estate

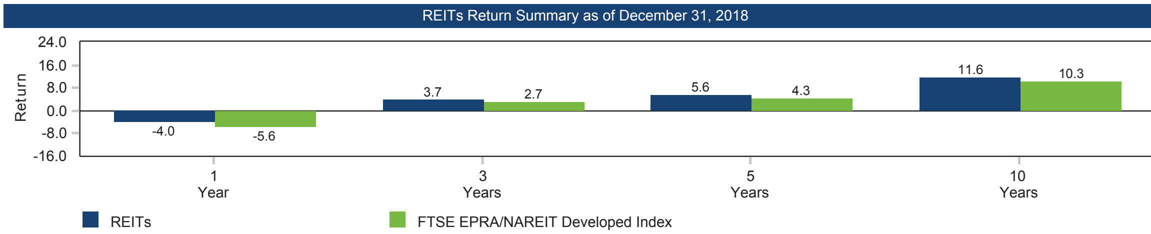
Principal Investments Return Summary as of December 31, 2018



Pooled Funds Return Summary as of December 31, 2018



REITs Return Summary as of December 31, 2018

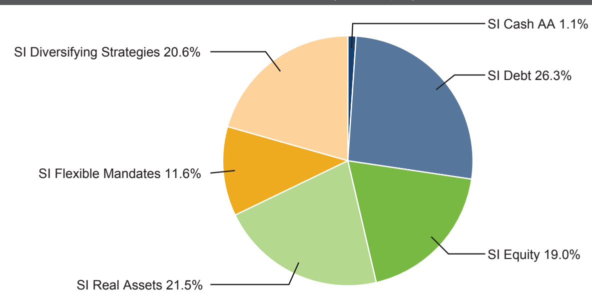


Strategic Investments

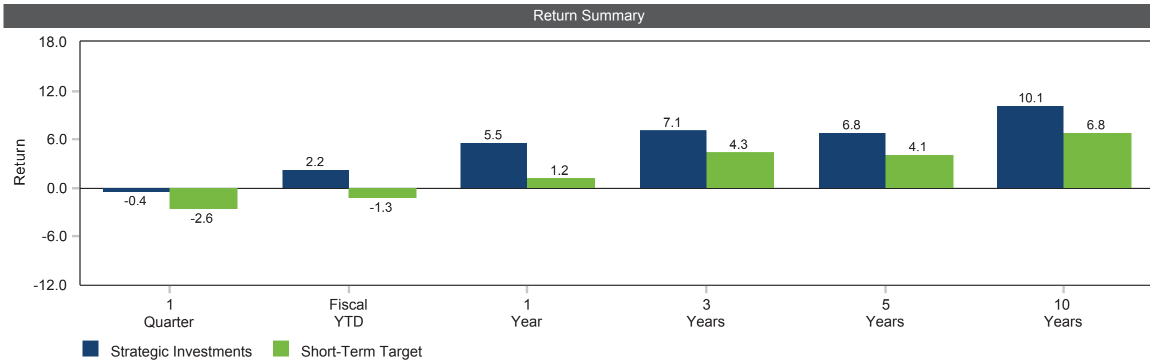
Strategic Investments Portfolio Overview

Current Allocation

December 31, 2018 : $13,375M



Return Summary

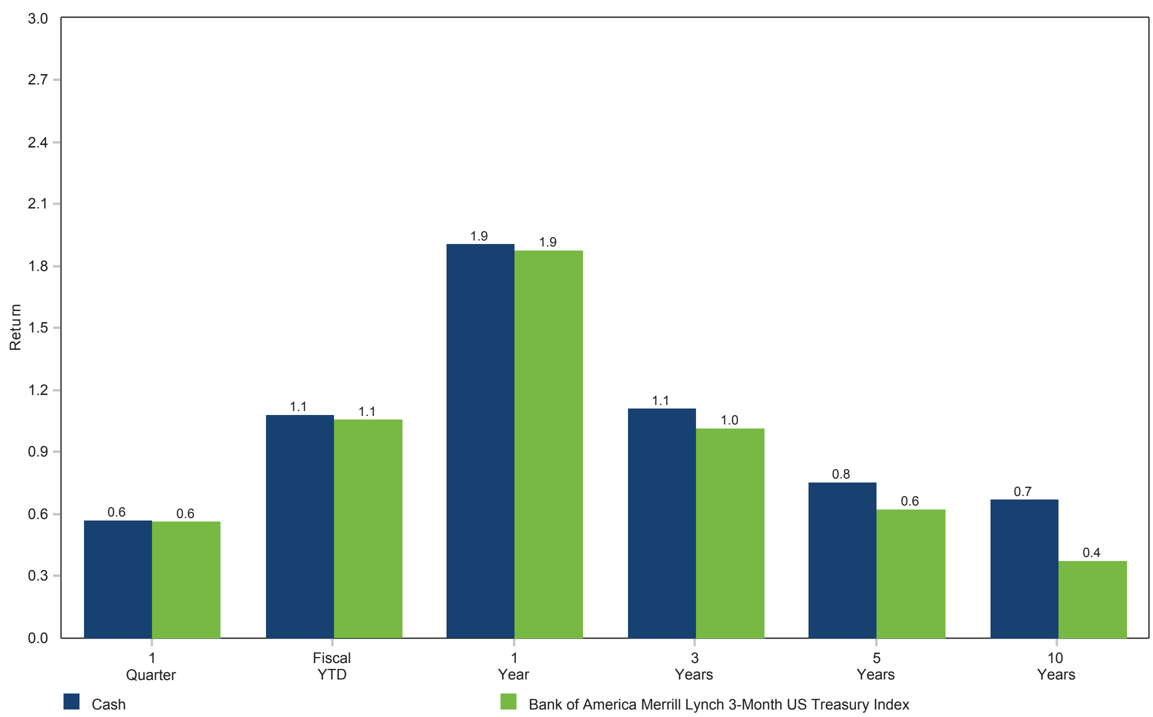


Cash

Cash As of December 31, 2018

Cash Performance Summary

Return Summary



Appendix

Appendix

Total FRS Assets

Performance Benchmark- A combination of the Global Equity Target, the Barclays Capital U.S. Intermediate Aggregate Index, the Private Equity Target Index, the Real Estate Investments Target Index, the Strategic Investments Target Benchmark, and the Bank of America Merrill Lynch 3-Month US Treasury Index. The short-term target policy allocations to the Strategic Investments, Real Estate and Private Equity asset classes are floating and based on the actual average monthly balance of the Global Equity asset class. Please refer to section VII. Performance Measurement in the FRS Defined Benefit Plan Investment Policy Statement for more details on the calculation of the Performance Benchmark. Prior to October 1, 2013, the Performance benchmark was a combination of the Global Equity Target, the Barclays Aggregate Bond Index, the Private Equity Target Index, the Real Estate Investments Target Index, the Strategic Investments Target Benchmark, and the iMoneyNet First Tier Institutional Money Market Funds Net Index. The short-term target policy allocations to the Strategic Investments, Real Estate and Private Equity asset classes are floating and based on the actual average monthly balance of the Global Equity asset class. Prior to July 2010, the Performance Benchmark was a combination of the Russell 3000 Index, the Foreign Equity Target Index, the Strategic Investments Target Benchmark, the Barclays Aggregate Bond Index, the Real Estate Investments Target Index, the Private Equity Target Index, the Barclays U.S. High Yield Ba/B 2% Issuer Capped Index, and the iMoneyNet First Tier Institutional Money Market Funds Gross Index. During this time, the short-term target policy allocations to Strategic Investments, Real Estate and Private Equity asset classes were floating and based on the actual average monthly balance of the Strategic Investments, Real Estate and Private Equity asset classes. The target weights shown for Real Estate and Private Equity were the allocations that the asset classes were centered around. The actual target weight floated around this target month to month based on changes in asset values.

Total Global Equity

Performance Benchmark- A custom version of the MSCI All Country World Investable Market Index, adjusted to exclude companies divested under the provisions of the Protecting Florida's Investments Act (PFIA). Prior to July 2010, the asset class benchmark is a weighted average of the underlying Domestic Equities, Foreign Equities and Global Equities historical benchmarks.

Total Domestic Equities

Performance Benchmark- The Russell 3000 Index. Prior to July 1, 2002, the benchmark was the Wilshire 2500 Stock Index. Prior to January 1, 2001, the benchmark was the Wilshire 2500 Stock Index ex-Tobacco. Prior to May 1, 1997, the benchmark was the Wilshire 2500 Stock Index. Prior to September 1, 1994, the benchmark was the S&P 500 Stock Index.

Total Foreign Equities

Performance Benchmark- A custom version of the MSCI ACWI ex-U.S. Investable Market Index adjusted to exclude companies divested under the PFIA. Prior to April 1, 2008, it was the MSCI All Country World Index ex-U.S. Investable Market Index. Prior to September 24, 2007, the target was the MSCI All Country World ex-U.S. Free Index. Prior to November 1, 1999, the benchmark was 85% MSCI Europe, Australasia and Far East (EAFE) Foreign Stock Index and 15% IFCI Emerging Markets Index with a half weight in Malaysia. Prior to March 31, 1995, the benchmark was the EAFE Index.

Total Global Equities

Performance Benchmark- Aggregated based on each underlying manager's individual benchmark. The calculation accounts for the actual weight and the benchmark return. The benchmarks used for the underlying managers include both the MSCI FSB All Country World ex-Sudan ex-Iran Net Index and MSCI FSB All Country World ex-Sudan ex-Iran Net Investable Market Index (IMI).

Appendix

Total Fixed Income

Performance Benchmark- The Barclays Capital U.S. Intermediate Aggregate Index. Prior to October 1, 2013, it was the Barclays U.S. Aggregate Bond Index. Prior to June 1, 2007, it was the Fixed Income Management Aggregate (FIMA). Prior to July 1, 1999, the benchmark was the Florida High Yield Extended Duration Index. Prior to July 31, 1997, the benchmark was the Florida Extended Duration Index. Prior to July 1, 1989, the Salomon Brothers Broad Investment-Grade Bond Index was the benchmark. For calendar year 1985, the performance benchmark was 70% Shearson Lehman Extended Duration and 30% Salomon Brothers Mortgage Index.

Total Private Equity

Performance Benchmark- The MSCI All Country World Investable Market Index (ACWI IMI), adjusted to reflect the provisions of the Protecting Florida's Investments Act, plus a fixed premium return of 300 basis points per annum. Prior to July 1, 2014, the benchmark was the domestic equities target index return (Russell 3000 Index) plus a fixed premium return of 300 basis points per annum. Prior to July 1, 2010, it was the domestic equities target index return plus a fixed premium return of 450 basis points per annum. Prior to November 1, 1999, Private Equities was part of the Domestic Equities asset class and its benchmark was the domestic equities target index return plus 750 basis points.

Total Real Estate

Performance Benchmark- The core portion of the asset class is benchmarked to an average of the National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index- Open-ended Diversified Core Equity, net of fees, weighted at 76.5%, and the non-core portion of the asset class is benchmarked to an average of the National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index- Open-ended Diversified Core Equity, net of fees, weighted at 13.5%, plus a fixed return premium of 150 basis points per annum, and the FTSE EPRA/NAREIT Developed Index, in dollar terms, net of withholding taxes on non-resident institutional investors, weighted at 10%. Prior to July 1, 2014, the benchmark was a combination of 90% NCREIF ODCE Index, net of fees, and 10% FTSE EPRA/NAREIT Developed Index, net of fees. Prior to July 1, 2010, it was a combination of 90% NCREIF ODCE Index, gross of fees, and 10% Dow Jones U.S. Select RESI. Prior to June 1, 2007, it was the Consumer Price Index plus 450 basis points annually. Prior to July 1, 2003, the benchmark was the Dow Jones U.S. Select Real Estate Securities Index Un-Levered. Prior to November 1, 1999, the benchmark was the Russell-NCREIF Property Index.

Total Strategic Investments

Performance Benchmark- Long-term, 4.0% plus the contemporaneous rate of inflation or CPI. Short-term, a weighted aggregation of individual portfolio level benchmarks.

Total Cash

Performance Benchmark- Bank of America Merrill Lynch 3-Month US Treasury Index. Prior to July 1, 2018 it was the iMoneyNet First Tier Institutional Money Market Funds Net Index. Prior to July 1, 2010, it was the iMoneyNet First Tier Institutional Money Market Funds Gross Index. Prior to June 1, 2007, it was the return of the Merrill Lynch 90-Day (Auction Average) Treasury Bill Yield Index.

Appendix

Description of Benchmarks

Bank of America Merrill Lynch 3-Month US Treasury Index- Consists of U.S. Treasury Bills maturing in 90 days.

Barclays Capital U.S. Intermediate Aggregate Bond Index - A market value-weighted index consisting of U.S. Treasury securities, corporate bonds and mortgage-related and asset-backed securities with one to ten years to maturity and an outstanding par value of $250 million or greater.

Consumer Price Index (CPI) - The CPI, an index consisting of a fixed basket of goods bought by the typical consumer and used to measure consumer inflation.

FTSE EPRA/NAREIT Developed Index - An index designed to represent general trends in eligible real estate equities worldwide. Relevant real estate activities are defined as the ownership, disposure and development of income-producing real estate. This index covers the four primary core asset classes (Industrial, Retail, Office, and Apartment).

MSCI All Country World Investable Market Index - A free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of developed and emerging markets. This investable market index contains constituents from the large, mid, and small cap size segments and targets a coverage range around 99% of free-float adjusted market capitalization.

NCREIF ODCE Property Index - The NCREIF ODCE is a capitalization-weighted, gross of fee, time-weighted return index. The index is a summation of open-end funds, which NCREIF defines as infinite-life vehicles consisting of multiple investors who have the ability to enter or exit the fund on a periodic basis, subject to contribution and/or redemption requests.

Russell 3000 Index - A capitalization-weighted stock index consisting of the 3,000 largest publicly traded U.S. stocks by capitalization. This represents most publicly traded, liquid U.S. stocks.

Description of Universes

Total Fund - A universe comprised of 86 total fund portfolio returns, net of fees, of public defined benefit plans calculated and provided by BNY Mellon Performance & Risk Analytics and Investment Metrics. Aggregate assets in the universe comprised $1.6 trillion as of quarter-end and the average market value was $19.1 billion.

Domestic Equity - A universe comprised of 58 total domestic equity portfolio returns, net of fees, of public defined benefit plans calculated and provided by BNY Mellon Performance & Risk Analytics. Aggregate assets in the universe comprised $1.1 trillion as of quarter-end and the average market value was $19.8 billion.

Foreign Equity - A universe comprised of 56 total international equity portfolio returns, net of fees, of public defined benefit plans calculated and provided by BNY Mellon Performance & Risk Analytics. Aggregate assets in the universe comprised $1.2 trillion as of quarter-end and the average market value was $20.6 billion.

Fixed Income - A universe comprised of 57 total fixed income portfolio returns, net of fees, of public defined benefit plans calculated and provided by BNY Mellon Performance & Risk Analytics. Aggregate assets in the universe comprised $1.1 trillion as of quarter-end and the average market value was $19.0 billion.

Real Estate - A universe comprised of 38 total real estate portfolio returns, net of fees, of public defined benefit plans calculated and provided by BNY Mellon Performance & Risk Analytics. Aggregate assets in the universe comprised $1.0 trillion as of quarter-end and the average market value was $26.5 billion.

Private Equity - An appropriate universe for private equity is unavailable.

Strategic Investments - An appropriate universe for strategic investments is unavailable.

Explanation of Exhibits

Quarterly and Cumulative Excess Performance - The vertical axis, excess return, is a measure of fund performance less the return of the primary benchmark. The horizontal axis represents the time series. The quarterly bars represent the underlying funds' relative performance for the quarter.

Ratio of Cumulative Wealth Graph - An illustration of a portfolio's cumulative, un-annualized performance relative to that of its benchmark. An upward-sloping line indicates superior fund performance versus its benchmark. Conversely, a downward-sloping line indicates underperformance by the fund. A flat line is indicative of benchmark-like performance.

Performance Comparison - Plan Sponsor Peer Group Analysis - An illustration of the distribution of returns for a particular asset class. The component's return is indicated by the circle and its performance benchmark by the triangle. The top and bottom borders represent the 5th and 95th percentiles, respectively. The solid line indicates the median while the dotted lines represent the 25th and 75th percentiles.

Notes

- The rates of return contained in this report are shown on an after-fees basis unless otherwise noted. They are geometric and time-weighted. Returns for periods longer than one year are annualized.
- Universe percentiles are based upon an ordering system in which 1 is the best ranking and 100 is the worst ranking.
- Due to rounding throughout the report, percentage totals displayed may not sum to 100%. Additionally, individual fund totals in dollar terms may not sum to the plan total.

Disclaimer

Past performance is not necessarily indicative of future results.

Unless otherwise noted, performance returns presented reflect the respective fund's performance as indicated. Returns may be presented on a before-fees basis (gross) or after-fees basis (net). After-fee performance is net of each respective sub-advisor's investment management fees and includes the reinvestment of dividends and interest as indicated on the notes page within this report or on the asset allocation and performance summary pages. Actual returns may be reduced by AHIC's investment advisory fees or other trust payable expenses you may incur as a client. AHIC's advisory fees are described in Form ADV Part 2A. Portfolio performance, characteristics and volatility also may differ from the benchmark(s) shown.

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FRS Investment Plan | Fourth Quarter 2018

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FRS Investment Plan

As of December 31, 2018

Asset Allocation & Performance

	Allocation		Performance(%)				
	Market Value ($)	%	1 Quarter	1 Year	3 Years	5 Years	10 Years
FRS Investment Plan	9,959,214,528	100.0	-9.8	-5.7	5.8	4.3	7.5
Total Plan Aggregate Benchmark			-9.4	-5.8	5.7	4.1	7.1
Retirement Date	4,416,657,260	44.3					
FRS Retirement Fund	354,016,566	3.6	-4.8 (57)	-3.7 (53)	4.3 (58)	2.9 (74)	6.2 (79)
Retirement Custom Index			-4.5 (54)	-3.8 (55)	4.1 (60)	2.8 (76)	5.9 (87)
FRS 2015 Retirement Date Fund	286,323,723	2.9	-5.1 (43)	-3.8 (54)	4.7 (35)	3.2 (80)	6.7 (90)
2015 Retirement Custom Index			-4.8 (32)	-3.9 (57)	4.4 (65)	3.0 (87)	6.5 (92)
FRS 2020 Retirement Date Fund	551,437,535	5.5	-6.1 (41)	-4.4 (53)	5.4 (10)	3.7 (56)	7.6 (56)
2020 Retirement Custom Index			-5.8 (36)	-4.5 (55)	5.1 (36)	3.5 (65)	7.3 (72)
FRS 2025 Retirement Date Fund	655,299,406	6.6	-7.3 (42)	-5.2 (46)	6.0 (4)	4.1 (43)	8.3 (84)
2025 Retirement Custom Index			-7.1 (31)	-5.3 (51)	5.6 (34)	3.8 (58)	8.1 (93)
FRS 2030 Retirement Date Fund	609,873,712	6.1	-8.4 (34)	-6.0 (44)	6.4 (10)	4.4 (45)	9.1 (47)
2030 Retirement Custom Index			-8.2 (29)	-6.0 (45)	6.0 (27)	4.1 (61)	8.9 (62)
FRS 2035 Retirement Date Fund	570,070,924	5.7	-9.4 (16)	-6.7 (37)	6.8 (5)	4.6 (40)	9.8 (45)
2035 Retirement Custom Index			-9.2 (14)	-6.8 (38)	6.3 (28)	4.3 (68)	9.5 (69)
FRS 2040 Retirement Date Fund	493,384,742	5.0	-10.4 (15)	-7.5 (39)	6.9 (8)	4.7 (50)	9.8 (48)
2040 Retirement Custom Index			-10.2 (12)	-7.5 (39)	6.5 (25)	4.4 (68)	9.6 (63)
FRS 2045 Retirement Date Fund	475,764,217	4.8	-11.1 (16)	-8.0 (49)	6.9 (8)	4.7 (56)	9.8 (76)
2045 Retirement Custom Index			-10.9 (14)	-8.0 (49)	6.7 (24)	4.5 (61)	9.6 (89)
FRS 2050 Retirement Date Fund	275,648,033	2.8	-11.5 (29)	-8.4 (55)	6.8 (14)	4.6 (59)	9.8 (70)
2050 Retirement Custom Index			-11.4 (27)	-8.4 (55)	6.6 (36)	4.4 (65)	9.6 (72)
FRS 2055 Retirement Date Fund	131,507,753	1.3	-11.5 (19)	-8.4 (53)	6.8 (21)	4.6 (62)	-
2055 Retirement Custom Index			-11.4 (16)	-8.4 (53)	6.6 (42)	4.4 (71)	-
FRS 2060 Retirement Date Fund	13,330,651	0.1	-11.5 (19)	-8.3 (52)	-	-	-
2060 Retirement Custom Index			-11.4 (16)	-8.4 (53)	-	-	-

As of December 31, 2018

Asset Allocation & Performance

	Allocation		Performance(%)				
	Market Value ($)	%	1 Quarter	1 Year	3 Years	5 Years	10 Years
Cash	948,056,607	9.5	0.6 (1)	2.2 (1)	1.3 (1)	0.9 (1)	0.6 (1)
FRS Money Market Fund	948,056,607	9.5	0.6 (1)	2.2 (1)	1.3 (1)	0.9 (1)	0.6 (1)
iMoneyNet 1st Tier Institutional Net Index			0.5 (36)	1.8 (17)	1.0 (18)	0.6 (18)	0.4 (15)
Real Assets	101,251,303	1.0					
FRS Inflation Adjusted Multi-Assets Fund	101,251,303	1.0	-6.0	-5.5	2.7	0.6	3.6
FRS Custom Multi-Assets Index			-4.8	-5.5	2.8	1.0	3.5
Fixed Income	592,789,006	6.0	0.7 (61)	-0.1 (94)	3.0 (5)	2.8 (1)	4.4 (25)
Total Bond Index			0.9 (40)	-0.1 (94)	2.7 (9)	2.6 (2)	3.9 (41)
FRS U.S. Bond Enhanced Index Fund	215,431,775	2.2	1.6 (91)	0.0 (63)	2.1 (22)	2.6 (38)	3.6 (13)
Blmbg. Barc. U.S. Aggregate			1.6 (90)	0.0 (63)	2.1 (22)	2.5 (39)	3.5 (19)
FRS Intermediate Bond Fund	94,720,861	1.0	1.3 (17)	0.7 (63)	2.1 (23)	2.1 (6)	3.9 (42)
Blmbg. Barc. U.S. Intermediate Aggregate			1.8 (1)	0.9 (53)	1.7 (54)	2.1 (6)	3.1 (65)
FRS Core Plus Bond Fund	282,636,371	2.8	0.3 (59)	-0.5 (45)	3.5 (22)	3.0 (36)	6.2 (26)
FRS Custom Core-Plus Fixed Income Index			0.6 (49)	-0.4 (38)	2.9 (44)	2.8 (49)	5.7 (37)
Domestic Equity	2,640,884,845	26.5	-15.6 (59)	-6.5 (45)	8.7 (26)	7.6 (27)	13.7 (21)
Total U.S. Equities Index			-15.1 (54)	-6.5 (45)	8.7 (25)	7.3 (31)	13.0 (34)
FRS U.S. Stock Market Index Fund	932,579,435	9.4	-14.3 (55)	-5.2 (58)	9.1 (39)	8.0 (42)	13.3 (37)
Russell 3000 Index			-14.3 (55)	-5.2 (58)	9.0 (41)	7.9 (44)	13.2 (40)
FRS U.S. Large Cap Stock Fund	900,630,135	9.0	-15.9 (77)	-7.0 (63)	8.4 (42)	8.1 (34)	13.9 (23)
Russell 1000 Index			-13.8 (45)	-4.8 (39)	9.1 (28)	8.2 (31)	13.3 (31)
FRS U.S. Small/Mid Cap Stock Fund	807,675,276	8.1	-18.1 (48)	-8.2 (34)	8.6 (23)	6.6 (18)	14.7 (18)
FRS Custom Small/Mid Cap Index			-18.5 (55)	-10.0 (45)	7.9 (29)	5.4 (34)	11.0 (88)

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As of December 31, 2018

Asset Allocation & Performance

	Allocation		Performance(%)				
	Market Value ($)	%	1 Quarter	1 Year	3 Years	5 Years	10 Years
International/Global Equity	664,924,614	6.7	-12.2 (53)	-13.5 (29)	5.2 (39)	1.9 (31)	7.6 (41)
Total Foreign and Global Equities Index			-12.0 (51)	-14.0 (33)	4.7 (41)	1.3 (40)	6.8 (52)
FRS Foreign Stock Index Fund	264,642,353	2.7	-12.0 (51)	-14.7 (40)	4.9 (40)	1.0 (45)	6.6 (56)
MSCI All Country World ex-U.S. IMI Index			-11.9 (50)	-14.8 (41)	4.4 (45)	0.8 (52)	6.5 (61)
FRS Global Stock Fund	253,505,807	2.5	-13.1 (51)	-5.6 (20)	7.6 (20)	6.4 (14)	11.7 (19)
MSCI All Country World Index Net			-12.8 (46)	-9.4 (46)	6.6 (36)	4.3 (41)	9.2 (51)
FRS Foreign Stock Fund	146,776,453	1.5	-12.6 (42)	-14.9 (56)	4.1 (9)	1.9 (1)	7.7 (1)
MSCI All Country World ex-U.S. Index			-11.5 (11)	-14.2 (37)	4.7 (5)	1.0 (1)	6.2 (25)
FRS Self-Dir Brokerage Acct	594,650,894	6.0					

The returns for the Retirement Date Funds, Inflation Adjusted Multi-Assets Fund, Core Plus Bond Fund, U.S. Large Cap Stock Fund, and U.S. Small/Mid Cap Stock Fund use prehire data for all months prior to 7/1/2014, actual live data is used thereafter.
Note: The SDBA opened for members on 1/2/14. No performance calculations will be made for the SDBA.

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As of December 31, 2018

Asset Allocation & Performance

	Performance(%)								
	2018	2017	2016	2015	2014	2013	2012	2011	2010
FRS Investment Plan	-5.7	16.4	8.0	-0.9	4.9	15.2	10.5	0.7	10.6
Total Plan Aggregate Benchmark	-5.8	15.5	8.5	-1.3	4.9	14.6	9.7	0.9	10.2
Retirement Date									
FRS Retirement Fund	-3.7 (53)	10.8 (52)	6.2 (59)	-2.6 (100)	4.4 (82)	3.5 (96)	10.7 (59)	3.4 (10)	11.5 (55)
Retirement Custom Index	-3.8 (55)	10.4 (58)	6.2 (59)	-1.8 (98)	3.6 (89)	3.4 (96)	8.5 (78)	5.0 (1)	9.9 (84)
FRS 2015 Retirement Date Fund	-3.8 (54)	12.0 (39)	6.7 (44)	-2.5 (97)	4.4 (77)	5.5 (88)	11.3 (45)	2.1 (21)	11.5 (61)
2015 Retirement Custom Index	-3.9 (57)	11.2 (60)	6.5 (52)	-1.8 (89)	3.7 (92)	5.7 (88)	9.6 (87)	3.2 (1)	10.4 (85)
FRS 2020 Retirement Date Fund	-4.4 (53)	14.0 (24)	7.4 (22)	-2.1 (91)	4.4 (78)	9.6 (74)	12.4 (39)	0.6 (40)	12.2 (63)
2020 Retirement Custom Index	-4.5 (55)	13.3 (47)	7.1 (32)	-1.6 (79)	3.9 (87)	9.7 (74)	11.0 (74)	1.5 (21)	11.2 (86)
FRS 2025 Retirement Date Fund	-5.2 (46)	16.1 (26)	8.0 (14)	-1.7 (80)	4.5 (86)	13.7 (73)	13.5 (45)	-0.7 (36)	12.5 (88)
2025 Retirement Custom Index	-5.3 (51)	15.5 (39)	7.6 (20)	-1.5 (76)	4.2 (91)	13.8 (73)	12.4 (72)	-0.3 (27)	11.8 (93)
FRS 2030 Retirement Date Fund	-6.0 (44)	18.0 (30)	8.5 (18)	-1.3 (62)	4.5 (82)	18.1 (52)	14.6 (35)	-2.1 (52)	13.0 (85)
2030 Retirement Custom Index	-6.0 (45)	17.3 (48)	8.0 (33)	-1.5 (66)	4.4 (83)	18.2 (51)	13.8 (55)	-2.0 (51)	12.5 (91)
FRS 2035 Retirement Date Fund	-6.7 (37)	19.8 (27)	9.1 (17)	-1.4 (50)	4.4 (84)	22.0 (39)	15.8 (24)	-3.0 (48)	13.7 (79)
2035 Retirement Custom Index	-6.8 (38)	18.9 (54)	8.3 (43)	-1.7 (66)	4.3 (84)	22.0 (39)	15.2 (48)	-3.1 (50)	13.3 (89)
FRS 2040 Retirement Date Fund	-7.5 (39)	20.9 (28)	9.2 (17)	-1.4 (54)	4.4 (83)	22.3 (49)	15.8 (37)	-3.0 (39)	13.7 (78)
2040 Retirement Custom Index	-7.5 (39)	20.4 (45)	8.6 (43)	-1.7 (69)	4.3 (84)	22.4 (49)	15.2 (51)	-3.1 (39)	13.3 (84)
FRS 2045 Retirement Date Fund	-8.0 (49)	21.5 (26)	9.4 (18)	-1.5 (51)	4.4 (82)	22.3 (62)	15.8 (40)	-3.0 (27)	13.7 (86)
2045 Retirement Custom Index	-8.0 (49)	21.2 (39)	8.9 (36)	-1.7 (63)	4.3 (82)	22.4 (62)	15.2 (71)	-3.1 (28)	13.3 (89)
FRS 2050 Retirement Date Fund	-8.4 (55)	21.6 (32)	9.5 (20)	-1.5 (57)	4.4 (81)	22.3 (54)	15.8 (37)	-3.0 (20)	13.7 (83)
2050 Retirement Custom Index	-8.4 (55)	21.3 (52)	8.9 (37)	-1.7 (64)	4.3 (82)	22.4 (54)	15.2 (59)	-3.1 (21)	13.3 (87)
FRS 2055 Retirement Date Fund	-8.4 (53)	21.5 (47)	9.3 (27)	-1.4 (54)	4.4 (81)	22.3 (72)	15.8 (45)	-	-
2055 Retirement Custom Index	-8.4 (53)	21.3 (55)	8.9 (33)	-1.7 (63)	4.3 (81)	22.4 (71)	15.2 (75)	-	-
FRS 2060 Retirement Date Fund	-8.3 (52)	-	-	-	-	-	-	-	-
2060 Retirement Custom Index	-8.4 (53)	-	-	-	-	-	-	-	-

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As of December 31, 2018

Asset Allocation & Performance

	Performance(%)								
	2018	2017	2016	2015	2014	2013	2012	2011	2010
Cash	2.2 (1)	1.2 (1)	0.6 (1)	0.2 (1)	0.1 (1)	0.2 (1)	0.3 (1)	0.2 (1)	0.3 (2)
FRS Money Market Fund	2.2 (1)	1.2 (1)	0.6 (1)	0.2 (1)	0.1 (1)	0.2 (1)	0.3 (1)	0.2 (1)	0.3 (2)
iMoneyNet 1st Tier Institutional Net Index	1.8 (17)	0.9 (17)	0.3 (19)	0.0 (20)	0.0 (23)	0.0 (23)	0.1 (23)	0.1 (23)	0.2 (7)
Real Assets									
FRS Inflation Adjusted Multi-Assets Fund	-5.5	8.1	6.0	-7.9	3.2	-9.1	9.1	7.4	11.7
FRS Custom Multi-Assets Index	-5.5	8.1	6.2	-5.0	1.8	-8.9	6.6	4.6	13.0
Fixed Income	-0.1 (94)	4.4 (2)	4.7 (8)	0.3 (81)	4.7 (1)	-1.1 (84)	6.0 (36)	6.7 (1)	7.6 (30)
Total Bond Index	-0.1 (94)	3.9 (3)	4.3 (9)	0.1 (89)	4.9 (1)	-1.2 (87)	4.8 (62)	7.4 (1)	7.0 (35)
FRS U.S. Bond Enhanced Index Fund	0.0 (63)	3.6 (30)	2.7 (1)	0.7 (36)	6.2 (35)	-2.0 (16)	4.4 (12)	7.9 (66)	6.7 (47)
Blmbg. Barc. U.S. Aggregate	0.0 (63)	3.5 (31)	2.6 (1)	0.5 (46)	6.0 (36)	-2.0 (17)	4.2 (14)	7.8 (66)	6.5 (48)
FRS Intermediate Bond Fund	0.7 (63)	2.4 (20)	3.1 (22)	0.9 (25)	3.4 (13)	-0.5 (63)	4.9 (59)	5.9 (12)	7.0 (35)
Blmbg. Barc. U.S. Intermediate Aggregate	0.9 (53)	2.3 (33)	2.0 (68)	1.2 (9)	4.1 (1)	-1.0 (82)	3.6 (79)	6.0 (11)	6.1 (48)
FRS Core Plus Bond Fund	-0.5 (45)	5.3 (25)	5.7 (27)	0.1 (48)	4.6 (88)	0.8 (20)	11.1 (16)	4.6 (89)	10.1 (27)
FRS Custom Core-Plus Fixed Income Index	-0.4 (38)	4.2 (61)	4.9 (40)	0.2 (42)	5.1 (79)	0.8 (20)	7.8 (51)	7.6 (32)	9.1 (43)
Domestic Equity	-6.5 (45)	20.8 (48)	13.7 (28)	0.7 (34)	11.5 (43)	35.2 (44)	16.9 (33)	0.3 (38)	20.4 (21)
Total U.S. Equities Index	-6.5 (45)	19.6 (56)	14.9 (22)	-0.5 (44)	11.1 (47)	34.0 (55)	16.5 (37)	-0.1 (41)	19.3 (27)
FRS U.S. Stock Market Index Fund	-5.2 (58)	21.2 (56)	12.9 (26)	0.6 (54)	12.6 (34)	33.6 (39)	16.5 (39)	1.0 (39)	17.1 (19)
Russell 3000 Index	-5.2 (58)	21.1 (57)	12.7 (26)	0.5 (55)	12.6 (34)	33.6 (40)	16.4 (39)	1.0 (39)	16.9 (21)
FRS U.S. Large Cap Stock Fund	-7.0 (63)	25.5 (24)	9.3 (58)	2.7 (30)	12.8 (42)	36.4 (22)	17.2 (24)	1.2 (45)	17.8 (19)
Russell 1000 Index	-4.8 (39)	21.7 (43)	12.1 (33)	0.9 (43)	13.2 (33)	33.1 (47)	16.4 (31)	1.5 (41)	16.1 (31)
FRS U.S. Small/Mid Cap Stock Fund	-8.2 (34)	16.3 (55)	19.9 (25)	-1.1 (36)	8.6 (28)	37.1 (46)	18.7 (26)	-0.9 (37)	29.6 (25)
FRS Custom Small/Mid Cap Index	-10.0 (45)	16.8 (51)	19.6 (26)	-4.2 (71)	7.7 (34)	22.0 (98)	15.3 (53)	1.1 (22)	21.3 (85)

Empower Results®

As of December 31, 2018

Asset Allocation & Performance

	Performance(%)								
	2018	2017	2016	2015	2014	2013	2012	2011	2010
International/Global Equity	-13.5 (29)	28.6 (50)	4.5 (42)	-2.6 (49)	-3.2 (42)	21.6 (33)	18.6 (53)	-11.3 (23)	10.1 (73)
Total Foreign and Global Equities Index	-14.0 (33)	27.3 (60)	4.9 (38)	-4.4 (56)	-3.0 (41)	20.6 (39)	16.6 (72)	-11.3 (23)	10.1 (73)
FRS Foreign Stock Index Fund	-14.7 (40)	28.3 (54)	5.3 (37)	-4.4 (56)	-4.5 (55)	20.5 (39)	17.6 (63)	-11.8 (27)	9.2 (77)
MSCI All Country World ex-U.S. IMI Index	-14.8 (41)	27.8 (56)	4.4 (42)	-4.6 (56)	-4.2 (51)	21.0 (36)	16.4 (72)	-12.2 (30)	8.9 (78)
FRS Global Stock Fund	-5.6 (20)	29.3 (17)	2.2 (81)	5.6 (13)	3.7 (44)	27.1 (41)	21.0 (15)	-7.4 (47)	13.0 (55)
MSCI All Country World Index Net	-9.4 (46)	24.0 (39)	7.9 (46)	-2.4 (56)	4.2 (40)	22.8 (60)	16.3 (37)	-5.5 (35)	11.8 (60)
FRS Foreign Stock Fund	-14.9 (56)	31.2 (5)	1.0 (63)	-0.5 (27)	-2.3 (17)	20.6 (60)	19.6 (37)	-13.3 (59)	9.8 (27)
MSCI All Country World ex-U.S. Index	-14.2 (37)	27.2 (22)	5.0 (10)	-5.3 (76)	-3.4 (19)	15.8 (80)	17.4 (67)	-13.3 (60)	11.6 (14)
FRS Self-Dir Brokerage Acct									

The returns for the Retirement Date Funds, Inflation Adjusted Multi-Assets Fund, Core Plus Bond Fund, U.S. Large Cap Stock Fund, and U.S. Small/Mid Cap Stock Fund use prehire data for all months prior to 7/1/2014, actual live data is used thereafter.
Note: The SDBA opened for members on 1/2/14. No performance calculations will be made for the SDBA.

Empower Results®

FRS Investment Plan **As of December 31, 2018**

Asset Allocation

Asset Allocation as of 12/31/2018	U.S. Equity	Non-U.S. Equity	U.S. Fixed Income	Real Assets	Cash	Brokerage	Total	% of Total
FRS Retirement Fund	52,040,435	47,792,236	116,117,434	138,066,461			354,016,566	3.6%
FRS 2015 Retirement Date Fund	45,239,148	41,803,264	90,478,296	108,803,015			286,323,723	2.9%
FRS 2020 Retirement Date Fund	111,390,382	102,567,381	158,814,010	178,665,761			551,437,535	5.5%
FRS 2025 Retirement Date Fund	170,377,845	157,271,857	170,377,845	157,271,857			655,299,406	6.6%
FRS 2030 Retirement Date Fund	188,450,977	174,423,882	137,831,459	109,167,394			609,873,712	6.1%
FRS 2035 Retirement Date Fund	201,805,107	185,843,121	107,743,405	74,679,291			570,070,924	5.7%
FRS 2040 Retirement Date Fund	194,393,588	179,098,661	74,007,711	45,884,781			493,384,742	5.0%
FRS 2045 Retirement Date Fund	199,820,971	184,596,516	51,382,535	39,964,194			475,764,217	4.8%
FRS 2050 Retirement Date Fund	120,458,190	111,086,157	20,122,306	23,981,379			275,648,033	2.8%
FRS 2055 Retirement Date Fund	57,468,888	52,997,624	9,600,066	11,441,174			131,507,753	1.3%
FRS 2060 Retirement Date Fund	5,825,494	5,372,252	973,138	1,159,767			13,330,651	0.1%
Total Retirement Date Funds	**$ 1,341,445,533**	**$ 1,237,480,701**	**$ 936,475,068**	**$ 887,925,308**	**$ -**	**$ -**	**$ 4,416,657,260**	**44.3%**
FRS Money Market Fund					948,056,606		948,056,607	9.5%
Total Cash	**$ -**	**$ -**	**$ -**	**$ -**	**$ 948,056,606**	**$ -**	**$ 948,056,607**	**9.5%**
FRS Inflation Adjusted Multi-Assets Fund				101,251,303	-		101,251,303	1.0%
Total Real Assets	**$ -**	**$ -**	**$ -**	**$ 101,251,303**	**$ -**	**$ -**	**$ 101,251,303**	**1.0%**
FRS U.S. Bond Enhanced Index Fund			215,431,775				215,431,775	2.2%
FRS Intermediate Bond Fund			94,720,861				94,720,861	1.0%
FRS Core Plus Bond Fund			282,636,371				282,636,371	2.8%
Total Fixed Income	**$ -**	**$ -**	**$ 592,789,006**	**$ -**	**$ -**	**$ -**	**$ 592,789,006**	**6.0%**
FRS U.S. Stock Market Index Fund	932,579,435						932,579,435	9.4%
FRS U.S. Large Cap Stock Fund	900,630,135						900,630,135	9.0%
FRS U.S. Small/Mid Cap Stock Fund	807,675,276						807,675,276	8.1%
Total Domestic Equity	**$ 2,640,884,846**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,640,884,845**	**26.5%**
FRS Foreign Stock Index Fund		264,642,353					264,642,353	2.7%
FRS Global Stock Fund		253,505,807					253,505,807	2.5%
FRS Foreign Stock Fund		146,776,453					146,776,453	1.5%
Total International/Global Equity	**$ -**	**$ 664,924,613**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 664,924,614**	**6.7%**
FRS Self-Dir Brokerage Acct						594,650,894	594,650,894	6.0%
Total Self-Dir Brokerage Acct						**$ 594,650,894**	**$ 594,650,894**	**6.0%**
Total Portfolio	**$ 3,982,330,378**	**$ 1,902,405,314**	**$ 1,529,264,074**	**$ 989,176,611**	**$ 948,056,606**	**$ 594,650,894**	**$ 9,959,214,528**	**100.0%**
Percent of Total	**40.1%**	**19.1%**	**15.4%**	**9.9%**	**9.5%**	**6.0%**	**100.0%**	

The returns for the Retirement Date Funds, Inflation Adjusted Multi-Assets Fund, Core Plus Bond Fund, U.S. Large Cap Stock Fund, and U.S. Small/Mid Cap Stock Fund use prehire data for all months prior to 7/1/2014, actual live data is used thereafter.
Note: The SDBA opened for members on 1/2/14. No performance calculations will be made for the SDBA.

Empower Results®

As of December 31, 2018

Multi Timeperiod Statistics

	3 Years Return	3 Years Standard Deviation	3 Years Sharpe Ratio	3 Years Tracking Error	3 Years Information Ratio	3 Years Up Market Capture	3 Years Down Market Capture
FRS Investment Plan	5.83	7.53	0.65	0.50	0.37	102.10	101.15
FRS Retirement Fund	4.25	4.45	0.72	0.36	0.37	101.11	98.92
FRS 2015 Retirement Date Fund	4.75	4.82	0.77	0.37	0.85	102.54	97.52
FRS 2020 Retirement Date Fund	5.40	5.63	0.78	0.39	0.85	103.04	99.31
FRS 2025 Retirement Date Fund	5.97	6.52	0.76	0.45	0.81	102.37	98.32
FRS 2030 Retirement Date Fund	6.35	7.35	0.73	0.47	0.72	102.50	99.58
FRS 2035 Retirement Date Fund	6.82	8.17	0.72	0.53	0.95	103.94	100.50
FRS 2040 Retirement Date Fund	6.88	8.77	0.68	0.54	0.61	102.02	99.62
FRS 2045 Retirement Date Fund	6.93	9.13	0.67	0.63	0.35	100.58	98.43
FRS 2050 Retirement Date Fund	6.84	9.34	0.64	0.62	0.42	100.94	98.66
FRS 2055 Retirement Date Fund	6.79	9.32	0.64	0.62	0.33	100.54	98.59
FRS 2060 Retirement Date Fund	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FRS Money Market Fund	1.33	0.19	6.38	0.03	13.28	133.93	N/A
FRS Inflation Adjusted Multi-Assets Fund	2.70	5.15	0.34	1.33	-0.03	103.91	107.16
FRS U.S. Bond Enhanced Index Fund	2.10	2.87	0.39	0.07	0.68	100.64	99.49
FRS Intermediate Bond Fund	2.07	2.12	0.50	0.61	0.56	104.42	91.17
FRS Core Plus Bond Fund	3.45	2.78	0.86	0.64	0.87	112.51	103.69
FRS U.S. Stock Market Index Fund	9.06	11.34	0.73	0.04	1.88	100.31	99.77
FRS U.S. Large Cap Stock Fund	8.44	12.57	0.63	2.65	-0.16	105.82	115.72
FRS U.S. Small/Mid Cap Stock Fund	8.59	14.07	0.58	1.33	0.46	100.01	95.40
FRS Foreign Stock Index Fund	4.85	11.44	0.38	1.39	0.30	99.02	95.54
FRS Global Stock Fund	7.65	11.33	0.62	3.41	0.31	107.20	101.71
FRS Foreign Stock Fund	4.08	11.90	0.31	3.37	-0.15	96.83	99.38

The returns for the Retirement Date Funds, Inflation Adjusted Multi-Assets Fund, Core Plus Bond Fund, U.S. Large Cap Stock Fund, and U.S. Small/Mid Cap Stock Fund use prehire data for all months prior to 7/1/2014, actual live data is used thereafter.

As of December 31, 2018

Multi Timeperiod Statistics

	5 Years Return	5 Years Standard Deviation	5 Years Sharpe Ratio	5 Years Tracking Error	5 Years Information Ratio	5 Years Up Market Capture	5 Years Down Market Capture
FRS Investment Plan	4.28	7.40	0.52	0.47	0.46	101.72	99.83
FRS Retirement Fund	2.87	4.74	0.49	0.69	0.11	102.62	102.68
FRS 2015 Retirement Date Fund	3.17	5.10	0.51	0.63	0.26	102.96	101.61
FRS 2020 Retirement Date Fund	3.65	5.88	0.53	0.51	0.37	102.72	101.15
FRS 2025 Retirement Date Fund	4.10	6.71	0.54	0.46	0.53	101.47	98.84
FRS 2030 Retirement Date Fund	4.40	7.55	0.52	0.43	0.55	101.51	99.28
FRS 2035 Retirement Date Fund	4.64	8.47	0.50	0.48	0.77	102.50	99.63
FRS 2040 Retirement Date Fund	4.66	8.96	0.48	0.50	0.52	101.27	99.19
FRS 2045 Retirement Date Fund	4.68	9.19	0.48	0.56	0.34	100.26	98.43
FRS 2050 Retirement Date Fund	4.63	9.31	0.46	0.56	0.38	100.47	98.56
FRS 2055 Retirement Date Fund	4.61	9.30	0.46	0.55	0.35	100.29	98.50
FRS 2060 Retirement Date Fund	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FRS Money Market Fund	0.87	0.22	5.17	0.03	7.72	142.76	N/A
FRS Inflation Adjusted Multi-Assets Fund	0.58	5.84	0.02	1.68	-0.20	108.58	115.35
FRS U.S. Bond Enhanced Index Fund	2.63	2.79	0.71	0.09	1.21	101.61	99.20
FRS Intermediate Bond Fund	2.10	2.05	0.72	0.54	0.02	99.78	99.02
FRS Core Plus Bond Fund	3.00	2.80	0.84	0.59	0.39	108.54	108.98
FRS U.S. Stock Market Index Fund	8.00	11.17	0.69	0.04	2.07	100.31	99.76
FRS U.S. Large Cap Stock Fund	8.11	12.14	0.65	2.58	0.01	104.48	107.77
FRS U.S. Small/Mid Cap Stock Fund	6.58	13.41	0.50	1.75	0.67	102.95	96.18
FRS Foreign Stock Index Fund	1.03	11.71	0.09	1.29	0.18	98.32	96.64
FRS Global Stock Fund	6.42	11.12	0.56	3.19	0.66	104.55	88.81
FRS Foreign Stock Fund	1.86	11.36	0.16	3.74	0.22	91.14	84.82

The returns for the Retirement Date Funds, Inflation Adjusted Multi-Assets Fund, Core Plus Bond Fund, U.S. Large Cap Stock Fund, and U.S. Small/Mid Cap Stock Fund use prehire data for all months prior to 7/1/2014, actual live data is used thereafter.

Appendix

As of December 31, 2018

Benchmark Descriptions

Retirement Date Benchmarks - A weighted average composite of the underlying components' benchmarks for each fund.

iMoneyNet 1st Tier Institutional Net Index - An index made up of the entire universe of money market mutual funds. The index currently represents over 1,300 funds, or approximately 99 percent of all money fund assets.

FRS Custom Multi-Assets Index - A monthly weighted composite of underlying indices for each TIPS and Real Assets fund. These indices include Barclays U.S. TIPS Index, MSCI AC World Index and the Bloomberg Commodity Total Return Index, NAREIT Developed Index, S&P Global Infrastructure Index, S&P Global Natural Resources Index.

Total Bond Index - A weighted average composite of the underlying benchmarks for each bond fund.

Barclays Aggregate Bond Index - A market value-weighted index consisting of government bonds, SEC-registered corporate bonds and mortgage-related and asset-backed securities with at least one year to maturity and an outstanding par value of $250 million or greater. This index is a broad measure of the performance of the investment grade U.S. fixed income market.

Barclays Intermediate Aggregate Bond Index - A market value-weighted index consisting of U.S. Treasury securities, corporate bonds and mortgage-related and asset-backed securities with one to ten years to maturity and an outstanding par value of $250 million or greater.

FRS Custom Core-Plus Fixed Income Index - A monthly rebalanced blend of 80% Barclays U.S. Aggregate Bond Index and 20% Barclays U.S. High Yield Ba/B 1% Issuer Constrained Index.

Total U.S. Equities Index - A weighted average composite of the underlying benchmarks for each domestic equity fund.

Russell 3000 Index - A capitalization-weighted index consisting of the 3,000 largest publicly traded U.S. stocks by capitalization. This index is a broad measure of the performance of the aggregate domestic equity market.

Russell 1000 Index - An index that measures the performance of the largest 1,000 stocks contained in the Russell 3000 Index.

FRS Custom Small/Mid Cap Index - A monthly rebalanced blend of 25% S&P 400 Index, 30% Russell 2000 Index, 25% Russell 2000 Value Index, and 20% Russell Mid Cap Growth Index.

Total Foreign and Global Equities Index - A weighted average composite of the underlying benchmarks for each foreign and global equity fund.

MSCI All Country World ex-U.S. IMI Index - A capitalization-weighted index of stocks representing 22 developed country stock markets and 24 emerging countries, excluding the U.S. market.

MSCI All Country World Index - A capitalization-weighted index of stocks representing approximately 47 developed and emerging countries, including the U.S. and Canadian markets.

MSCI All Country World ex-U.S. Index - A capitalization-weighted index consisting of 23 developed and 24 emerging countries, but excluding the U.S.

Descriptions of Universes

Retirement Date Funds - Target date universes calculated and provided by Lipper.

FRS Money Market Fund - A money market universe calculated and provided by Lipper.

FRS U.S. Bond Enhanced Index Fund - A long-term bond fixed income universe calculated and provided by Lipper.

FRS Intermediate Bond Fund - A broad intermediate-term fixed income universe calculated and provided by Lipper.

FRS Core Plus Bond Fund - A core plus bond fixed income universe calculated and provided by Lipper.

FRS U.S. Stock Market Index Fund - A large cap blend universe calculated and provided by Lipper.

FRS U.S. Large Cap Stock Fund - A large cap universe calculated and provided by Lipper.

FRS U.S. Small/Mid Cap Stock Fund - A small/mid cap universe calculated and provided by Lipper.

FRS Foreign Stock Index Fund - A foreign blend universe calculated and provided by Lipper.

FRS Global Stock Fund - A global stock universe calculated and provided by Lipper.

FRS Foreign Stock Fund - A foreign large blend universe calculated and provided by Lipper.

Notes

- The rates of return contained in this report are shown on an after-fees basis unless otherwise noted. They are geometric and time-weighted. Returns for periods longer than one year are annualized.
- Universe percentiles are based upon an ordering system in which 1 is the best ranking and 100 is the worst ranking.
- Due to rounding throughout the report, percentage totals displayed may not sum to 100%. Additionally, individual fund totals in dollar terms may not sum to the plan total.

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Disclaimer

Past performance is not necessarily indicative of future results.

Unless otherwise noted, performance returns presented reflect the respective fund's performance as indicated. Returns may be presented on a before-fees basis (gross) or after-fees basis (net). After-fee performance is net of each respective sub-advisor's investment management fees and includes the reinvestment of dividends and interest as indicated on the notes page within this report or on the asset allocation and performance summary pages. Actual returns may be reduced by AHIC's investment advisory fees or other trust payable expenses you may incur as a client. AHIC's advisory fees are described in Form ADV Part 2A. Portfolio performance, characteristics and volatility also may differ from the benchmark(s) shown.

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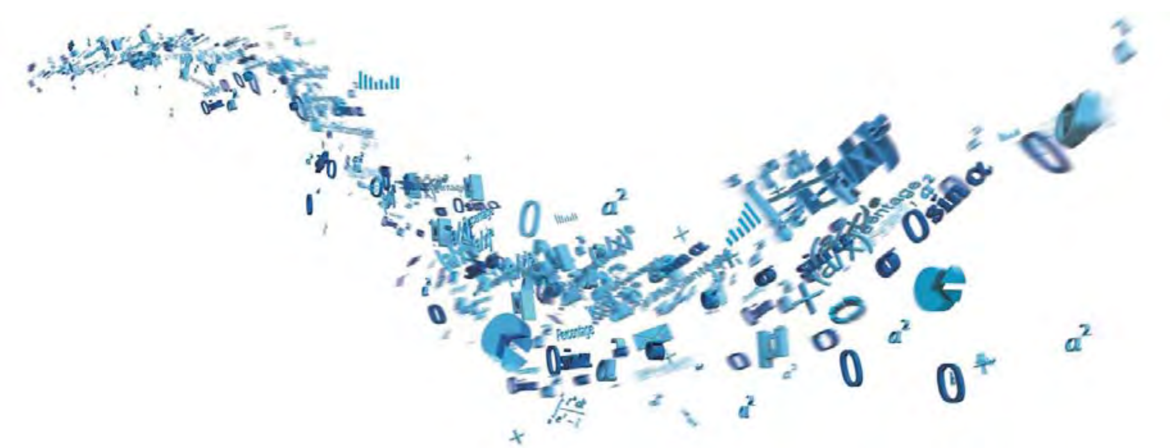

Lawton Chiles Endowment Fund | Fourth Quarter 2018

Quarterly Investment Review

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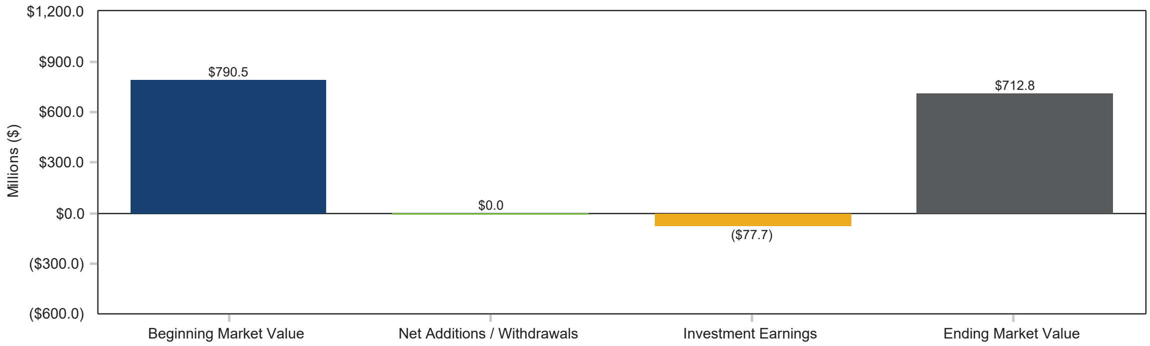
LCEF Total Fund

LCEF Total Fund As of December 31, 2018

Total Plan Asset Summary

Change in Market Value
From October 1, 2018 to December 31, 2018



Summary of Cash Flow

	1 Quarter	FYTD*
LCEF Total Fund		
Beginning Market Value	790,504,502	763,121,861
+ Additions / Withdrawals	-	-
+ Investment Earnings	-77,685,457	-50,302,815
= Ending Market Value	712,819,046	712,819,046

*Period July 2018 - December 2018

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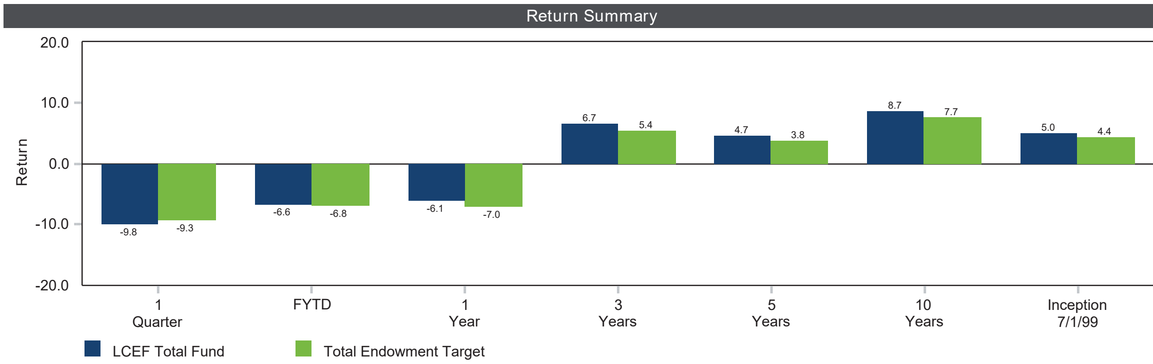
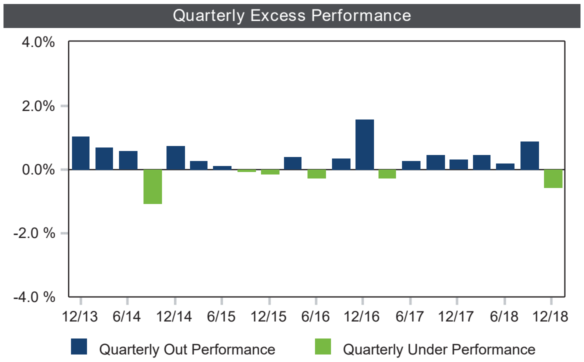
LCEF Total Fund As of December 31, 2018

Total Plan Performance Summary

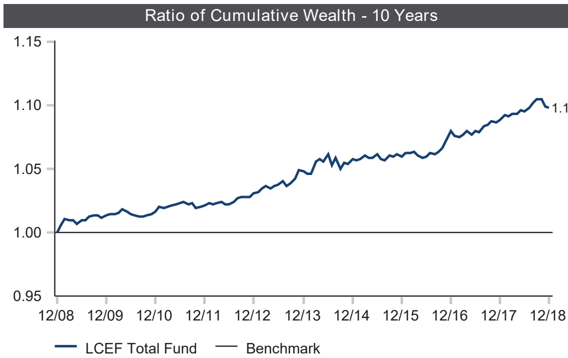
Return Summary



Quarterly Excess Performance



Ratio of Cumulative Wealth - 10 Years



AON Empower Results®

As of December 31, 2018

Asset Allocation & Performance

	Allocation			Performance(%)					
	Market Value ($)	%	Policy(%)	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years
LCEF Total Fund	712,819,046	100.0	100.0	-9.8 (92)	-6.6 (76)	-6.1 (68)	6.7 (17)	4.7 (31)	8.7 (24)
Total Endowment Target				-9.3 (81)	-6.8 (81)	-7.0 (85)	5.4 (57)	3.8 (56)	7.7 (57)
Global Equity*	501,111,807	70.3	71.0	-13.7	-9.3	-8.5	8.3	5.6	11.8
Global Equity Target				-13.3	-9.8	-9.8	6.6	4.2	10.4
Fixed Income	120,241,577	16.9	17.0	1.6 (8)	1.7 (5)	0.1 (56)	2.1 (63)	2.6 (43)	3.5 (81)
Blmbg. Barc. U.S. Aggregate				1.6 (8)	1.7 (5)	0.0 (57)	2.1 (68)	2.5 (49)	3.5 (81)
TIPS	76,508,605	10.7	11.0	-0.4	-1.2	-1.1	2.3	1.8	3.9
Barclays U.S. TIPS				-0.4	-1.2	-1.3	2.1	1.7	3.6
Cash Equivalents	14,957,056	2.1	1.0	0.6	1.3	2.3	1.4	1.0	1.1
S&P US AAA & AA Rated GIP 30D Net Yield Index				0.6	1.1	1.8	1.0	0.7	0.5

Benchmark and universe descriptions are provided in the Appendix.

*Global Equity became an asset class in September 2012 by merging the Domestic Equities and Foreign Equities asset classes. The return series prior to September 2012 is a weighted average of Domestic Equities' and Foreign Equities' historical performance.

As of December 31, 2018

Calendar Year Performance

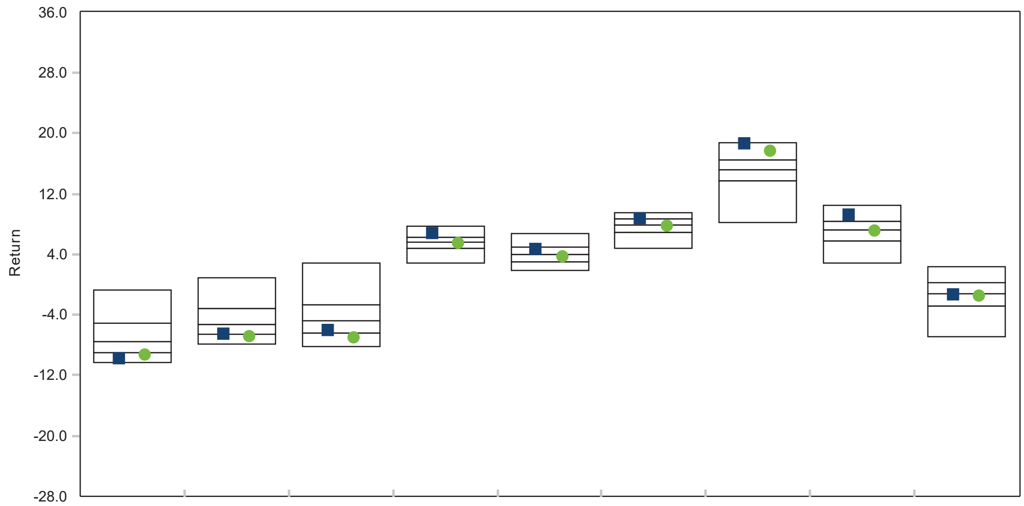
	Performance(%)									
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
LCEF Total Fund	-6.1 (68)	18.5 (7)	9.2 (15)	-1.4 (54)	5.2 (49)	14.7 (47)	13.2 (36)	1.9 (21)	14.0 (19)	21.2 (46)
Total Endowment Target	-7.0 (85)	17.7 (11)	7.0 (55)	-1.6 (57)	4.3 (62)	12.8 (62)	12.2 (63)	1.5 (25)	13.7 (25)	19.6 (56)
Global Equity*	-8.5	24.5	11.4	-1.9	5.3	27.1	20.4	-1.1	17.0	30.8
Global Equity Target	-9.8	24.1	8.4	-2.4	3.9	24.1	19.4	-2.2	16.1	30.5
Fixed Income	0.1 (56)	3.7 (42)	2.7 (67)	0.6 (39)	6.0 (27)	-1.8 (74)	4.6 (86)	7.6 (41)	7.0 (85)	4.6 (98)
Blmbg. Barc. U.S. Aggregate	0.0 (57)	3.5 (49)	2.6 (67)	0.5 (40)	6.0 (27)	-2.0 (75)	4.2 (89)	7.8 (40)	6.5 (93)	5.9 (94)
TIPS	-1.1	3.2	4.8	-1.2	3.5	-8.7	7.2	13.6	6.1	13.3
Barclays U.S. TIPS	-1.3	3.0	4.7	-1.4	3.6	-8.6	7.0	13.6	6.3	11.4
Cash Equivalents	2.3	1.2	0.7	0.5	0.2	0.2	1.3	0.1	2.0	2.6
S&P US AAA & AA Rated GIP 30D Net Yield Index	1.8	0.9	0.4	0.1	0.0	0.1	0.1	0.2	0.3	0.7

*Global Equity became an asset class in September 2012 by merging the Domestic Equities and Foreign Equities asset classes. The return series prior to September 2012 is a weighted average of Domestic Equities' and Foreign Equities' historical performance.

As of December 31, 2018

Plan Sponsor Peer Group Analysis

All Endowments-Total Fund



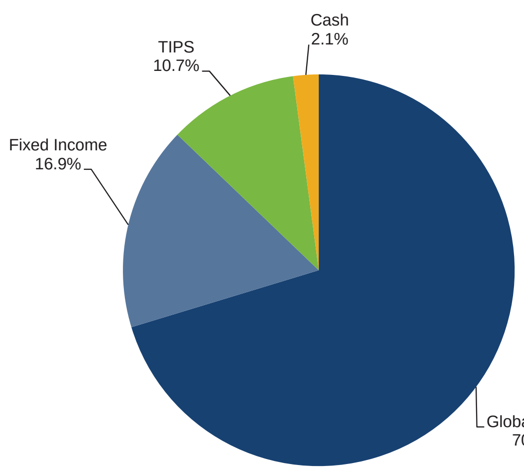
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015
■ LCEF Total Fund	-9.8 (92)	-6.6 (76)	-6.1 (68)	6.7 (17)	4.7 (31)	8.7 (24)	18.5 (7)	9.2 (15)	-1.4 (54)
● Total Endowment Target	-9.3 (81)	-6.8 (81)	-7.0 (85)	5.4 (57)	3.8 (56)	7.7 (57)	17.7 (11)	7.0 (55)	-1.6 (57)
5th Percentile	-0.6	1.0	2.9	7.8	6.8	9.6	18.8	10.5	2.4
1st Quartile	-5.2	-3.2	-2.6	6.3	5.0	8.7	16.4	8.4	0.2
Median	-7.6	-5.3	-4.8	5.6	4.0	7.8	15.2	7.2	-1.2
3rd Quartile	-9.0	-6.6	-6.4	4.8	3.0	7.0	13.7	5.9	-2.9
95th Percentile	-10.2	-7.9	-8.2	2.9	1.9	4.7	8.2	2.9	-6.9
Population	292	290	283	253	228	147	293	288	276

Parentheses contain percentile rankings.

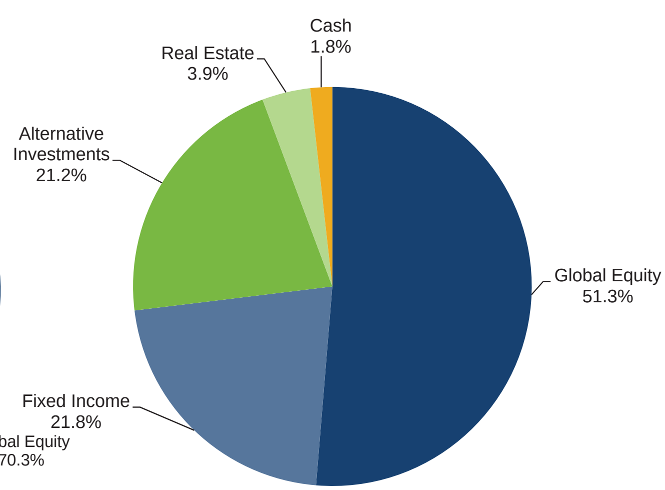
LCEF Total Fund **As of December 31, 2018**

Universe Asset Allocation Comparison

LCEF Total Fund



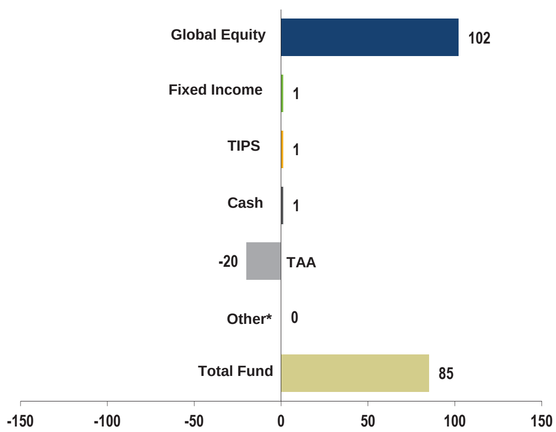
BNY Mellon Endowment Universe



LCEF Total Fund

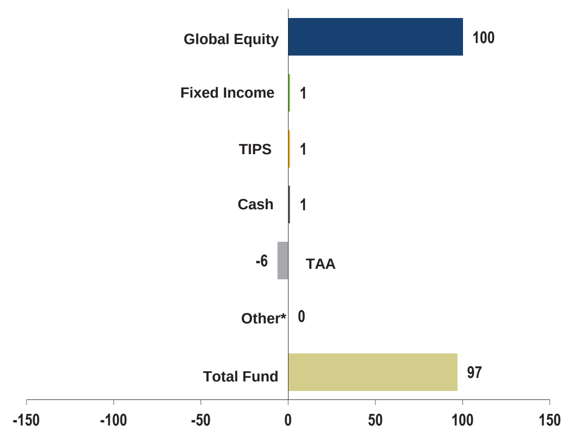
As of December 31, 2018

Attribution



Basis Points

1-Year Ending 12/31/2018



Basis Points

5-Year Ending 12/31/2018

*Other includes differences between official performance value added due to methodology and extraordinary payouts.

AON Empower Results®

Appendix

AON Empower Results®

As of December 31, 2018

Benchmark Descriptions

LCEF Total Fund

Total Endowment Target - A weighted blend of the individual asset class target benchmarks.

Total Global Equity

MSCI ACWI IMI ex-Tobacco - From 7/1/2014 forward, a custom version of the MSCI ACWI IMI excluding tobacco-related companies. From 10/1/2013 to 6/30/2014, a custom version of the MSCI ACWI IMI adjusted to reflect a 55% fixed weight in the MSCI USA IMI and a 45% fixed weight in the MSCI ACWI ex-USA IMI, and excluding certain equities of tobacco-related companies. From 9/1/2012 to 9/30/2013, a custom version of the MSCI ACWI IMI excluding tobacco-related companies. Prior to 9/1/2012, the benchmark is a weighted average of both the Domestic Equities and Foreign Equities historical benchmarks.

Total Domestic Equities

Russell 3000 Index ex-Tobacco - Prior to 9/1/2012, an index that measures the performance of the 3,000 stocks that make up the Russell 1000 and Russell 2000 Indices, while excluding tobacco companies.

Total Foreign Equities

MSCI ACWI ex-US IMI ex-Tobacco - Prior to 9/1/2012, a capitalization-weighted index representing 46 countries, but excluding the United States. The index includes 23 developed and 24 emerging market countries, and excludes tobacco companies.

Total Fixed Income

Barclays Aggregate Bond Index - A market value-weighted index consisting of the Barclays Credit, Government, and Mortgage-Backed Securities Indices. The index also includes credit card, auto, and home equity loan-backed securities. This index is the broadest available measure of the aggregate investment grade U.S. fixed income market.

Total TIPS

Barclays U.S. TIPS - A market value-weighted index consisting of U.S. Treasury Inflation-Protected Securities with one or more years remaining until maturity with total outstanding issue size of $500 million or more.

Total Cash Equivalents

S&P U.S. AAA & AA Rated GIP 30-Day Net Yield Index - An unmanaged, net-of-fees, market index representative of the Local Government Investment Pool. On 10/1/2011, the S&P U.S. AAA & AA Rated GIP 30-Day Net Yield Index replaced the S&P U.S. AAA & AA Rated GIP 30-Day Gross Yield Index, which was previously used from 4/30/08 - 9/30/11. Prior to 4/30/08, it was the average 3-month T-bill rate.

As of December 31, 2018

Universe Descriptions

LCEF Total Fund

A universe comprised of 634 total endowment portfolio returns, net of fees, calculated and provided by BNY Mellon Performance & Risk Analytics and Investment Metrics. Aggregate assets in the universe comprised $368.2 billion as of quarter-end and the average market value was $580.8 million.

Total Fixed Income

A universe comprised of 41 total fixed income portfolio returns, net of fees, of endowment plans calculated and provided by BNY Mellon Performance & Risk Analytics and Investment Metrics. Aggregate assets in the universe comprised $285.0 billion as of quarter-end and the average market value was $7.0 billion.

Explanation of Exhibits

Quarterly and Cumulative Excess Performance - The vertical axis, excess return, is a measure of fund performance less the return of the primary benchmark. The horizontal axis represents the time series. The quarterly bars represent the underlying funds' relative performance for the quarter.

Ratio of Cumulative Wealth Graph - An illustration of a portfolio's cumulative, un-annualized performance relative to that of its benchmark. An upward-sloping line indicates superior fund performance versus its benchmark. Conversely, a downward-sloping line indicates underperformance by the fund. A flat line is indicative of benchmark-like performance.

Performance Comparison - Plan Sponsor Peer Group Analysis - An illustration of the distribution of returns for a particular asset class. The component's return is indicated by the circle and its performance benchmark by the triangle. The top and bottom borders represent the 5th and 95th percentiles, respectively. The solid line indicates the median while the dotted lines represent the 25th and 75th percentiles.

Notes

- The rates of return contained in this report are shown on an after-fees basis unless otherwise noted. They are geometric and time-weighted. Returns for periods longer than one year are annualized.
- Universe percentiles are based upon an ordering system in which 1 is the best ranking and 100 is the worst ranking.
- Due to rounding throughout the report, percentage totals displayed may not sum to 100%. Additionally, individual fund totals in dollar terms may not sum to the plan total.

Empower Results®

Disclaimer

Past performance is not necessarily indicative of future results.

Unless otherwise noted, performance returns presented reflect the respective fund's performance as indicated. Returns may be presented on a before-fees basis (gross) or after-fees basis (net). After-fee performance is net of each respective sub-advisor's investment management fees and includes the reinvestment of dividends and interest as indicated on the notes page within this report or on the asset allocation and performance summary pages. Actual returns may be reduced by AHIC's investment advisory fees or other trust payable expenses you may incur as a client. AHIC's advisory fees are described in Form ADV Part 2A. Portfolio performance, characteristics and volatility also may differ from the benchmark(s) shown.

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